INTEGRATED PLANNING GRANT SUMMARY REPORT

FLEISCHER PROPERTY

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PREFACE

On behalf of Clark County, Washington (the County), Maul Foster & Alongi, Inc. (MFA) has prepared this Integrated Planning Grant (IPG) summary report for three properties located at 9109 and 9115 Northeast 94th Avenue in Vancouver, Washington (referred to in this report as the Fleischer Property).

The County has begun a master planning process that will help guide decisions about the future use of multiple properties associated with the closed Leichner Brothers Municipal Landfill (landfill) located in unincorporated Clark County, Washington. The Leichner Campus and Fields Master Planning Area (the Planning Area) includes four County-owned properties as well as the privately owned Fleischer Property, comprising approximately 137 acres in total.

This report summarizes the planning process completed for the County, specifically related to the Property, in its effort to evaluate potential acquisition of the Property in support of redevelopment of the Planning Area.

The planning process integrated technical analyses with public involvement and conceptual site planning to formulate a redevelopment vision that addresses physical, regulatory, and economic realities and meets community needs and desires. The process involved the following major steps:

- Environmental Due Diligence—assessment of the nature and extent of contamination on the Property and evaluation of cleanup options
- Physical Conditions Assessment—evaluation of existing physical conditions and available infrastructure
- Regulatory Analysis—review of land use and regulatory framework for redevelopment
- Public Involvement—community meetings to listen to the concerns and ideas of the public and provide opportunities to review study findings and draft plans
- Conceptual Planning—incorporating the information developed in the study to illustrate a site plan for adaptive reuse of the Property
- Implementation Strategy—work program for successful redevelopment

This planning effort was funded by the Washington State Department of Ecology (Ecology), Toxics Cleanup Program, through an IPG (Grant number G1400585). IPGs provide funding for local governments to conduct the necessary studies and to plan for acquiring and redeveloping underperforming, contaminated property. The grants support planning for adaptive reuse of a property, integrating economic development, environmental cleanup and restoration, and community benefit. The IPG Program is funded through the Model Toxics Control Account, which uses revenues from a fee on the first possession of imported hazardous substances in the state to support environmental cleanup, pollution prevention, and waste management efforts. The Model Toxics Control Act was approved by a voter referendum in 1988.

CONTENTS

ACKNOWLEDGMENTS III

PREFACE IV

TABLES AND FIGURES VII

ACRONYMS AND ABBREVIATIONS VIII

1 PLANNING FRAMEWORK 1
- 1.1 BACKGROUND 1
- 1.2 PLANNING AREA GOALS 2
- 1.3 ACTIONS COMPLETED 2

2 PROPERTY ASSESSMENT 3
- 2.1 LOCATION AND AREA CONTEXT 3
- 2.2 EXISTING CONDITIONS 3
- 2.3 LAND USE FRAMEWORK 5
- 2.4 MARKET CONTEXT 5

3 ENVIRONMENTAL CONDITIONS 7
- 3.1 SITE HISTORY 7
- 3.2 ENVIRONMENTAL IMPACTS 7
- 3.3 IMPLICATIONS FOR REDEVELOPMENT 7

4 SITE PLANNING 9
- 4.1 STAKEHOLDER INPUT 9
- 4.2 MARKET OPPORTUNITY 9
- 4.3 CONCEPTUAL SITE PLAN 11

5 IMPLEMENTATION STRATEGY 13
- 5.1 PROPERTY ACQUISITION 13
- 5.2 REMEDIATION RISK MANAGEMENT STRATEGY 14
- 5.3 REDEVELOPMENT WORK PROGRAM 16

LIMITATIONS

FIGURES

APPENDIX A
REUSE ANALYSIS

APPENDIX B
OPEN HOUSE MEETING NOTES

APPENDIX C
SITE ASSESSMENT WORK PLANS

APPENDIX D
REMEDIAL ASSESSMENT

APPENDIX E
CONCEPTUAL REDEVELOPMENT SITE LAYOUT OPTIONS

CONTENTS (CONTINUED)

APPENDIX F
PROPERTY APPRAISAL

APPENDIX G
MARKET ANALYSIS OF SITE REUSE CONCEPTS

APPENDIX H
DRAFT CLEANUP ACTION PLAN

TABLES AND FIGURES

TABLES

1 TARGET INDUSTRIES AND SITE CONSIDERATIONS

2 FLEISHER PROPERTY REDEVELOPMENT WORK PROGRAM

FIGURES AT THE END OF THE REPORT

1 PLANNING AREA OVERVIEW

2 SITE LOCATION

3 SITE TOPOGRAPHY

4 TRANSPORTATION

5 UTILITIES AND INFRASTRUCTURE

6 INVESTIGATION LOCATIONS

7 PCB CONCENTRATIONS

8 PRELIMINARY SITE REDEVELOPMENT PLAN

9 PRELIMINARY SITE REDEVELOPMENT RENDERING

ACRONYMS AND ABBREVIATIONS

CNG	compressed natural gas
County	Clark County, Washington
CRWWD	Clark County Regional Wastewater District
CUL	cleanup level
FARF	Financial Assurance Reserve Fund
IPG	Integrated Planning Grant
landfill	Leichner Brothers Municipal Landfill
mg/kg	milligrams per kilogram
MTCA	Model Toxics Control Act
NFA	No Further Action
PCB	polychlorinated biphenyl
Planning Area	Leichner Campus and Fields Master Planning Area
PPCD	prospective purchaser consent decree
Fleischer Property	vacant properties located at 9109 and 9115 Northeast 94th Avenue in Vancouver, Washington
R&D	research and development
RAG	Remedial Action Grant
USEPA	U.S. Environmental Protection Agency
VCP	Voluntary Cleanup Program

1 PLANNING FRAMEWORK

In 2014, Clark County, Washington (the County) received an Integrated Planning Grant (IPG) from the Washington Department of Ecology (Ecology) to fund environmental characterization and redevelopment planning for three privately-owned parcels at 9109 and 9115 Northeast 94th Avenue in Vancouver, Washington (the Fleischer Property). This report presents the findings of the Fleischer Property IPG study.

The purpose of the IPG study was to identify recognized environmental conditions, characterize the nature and extent of hazardous substances, evaluate potential risk to human and ecological receptors, and identify scenarios pertaining to cleanup alternatives and redevelopment for the Fleischer Property. The County will use the resulting information to help make a decision regarding the acquisition of the Property.

1.1 BACKGROUND

The County is in the process of evaluating the redevelopment potential for the greater Leichner Campus and Fields Master Planning Area (the Planning Area; see Figure 1), which consists of 137 acres including the following:

- Properties totaling 128 acres that were purchased in 2012 by the County from Leichner Brothers Land Reclamation Corp. and which remain within an Ecology-enforced Consent Decree and Restrictive Covenant including:
  - The closed Leichner Brothers Municipal Landfill (landfill)
  - Future 99th Street Right of Way
  - Residential property north of the future 99th Street Right of Way
  - The Leichner Campus south of the landfill, also known as the Koski Property
- The Fleischer Property, consisting of three parcels located at 9109 and 9115 Northeast 94th Avenue, which are not owned by the County and which are not subject to the restrictions of the former Leichner properties Consent Decree and Restrictive Covenant.

Potential acquisition and redevelopment of the Fleischer Property by the County are complicated by evidence of polychlorinated biphenyl (PCB) contamination in surface soil. The Property has been vacant for almost 40 years and is likely to remain so without a significant improvement in the local real estate market. The Integrated Planning Grant (IPG)-funded investigation has provided the additional information necessary to develop cleanup alternatives and inform County decision-making regarding acquisition and redevelopment.

1.2 Planning Area Goals

The County's primary goals for the Planning Area, specifically related to the Fleischer Property, include:

- **Support job growth.** Jobs on this site are most likely to be light industrial in character to meet the underlying zoning classification and meet the needs of a growing regional economy.
- **Recapitalize the Financial Assurance Reserve Fund (FARF).** The County invested $1,150,000 from the FARF to acquire its current holdings in the Planning Area. The FARF is supported by solid waste rate payers and tipping fees and needs to be recapitalized to recover the investment in the Planning Area through proceeds from the Leichner Campus, either in property sale or lease revenue. No target for FARF recapitalization has been set, but the County typically sells property at appraised values, and would seek to at least recuperate its initial investment with interest.

The County's goals for the Fleischer IPG were to evaluate the cost of remediating the Fleischer Property and the feasibility of acquiring it as part of the overall Planning Area. IPG funds were used to conduct:

- Environmental site assessment of the Property
- Analysis of cleanup alternatives for the Property
- Physical site planning for redevelopment of the Property

1.3 Actions completed

IPG funds were used to complete the following actions:

- A draft reuse analysis of the Planning Area was completed on June 3, 2014. (see Appendix A). This report includes a market assessment, a site conditions summary and input from a real estate expert's panel convened on April 10, 2014.
- Community open house meetings were held on April 19, 2014 and April 23, 2015. (see Appendix B)
- A focused site assessment work plan was completed on July 8, 2014, and a work plan addendum for off-property sampling and analysis was completed on September 30, 2014. (see Appendix C)
- A focused remedial assessment, including preliminary cost estimates for remediation, of the Fleischer Property was completed on December 22, 2014. (see Appendix D)
- Conceptual redevelopment site layout options were completed on October 2, 2014. (see Appendix E)
- A property appraisal was completed on May 3, 2015. (see Appendix F)

- A market analysis of site reuse concepts was completed on June 16, 2015. (see Appendix G)
- A draft cleanup action plan was prepared in June of 2015. (see Appendix H)

2 PROPERTY ASSESSMENT

A broad overview of physical conditions and regulatory framework for redevelopment of the Planning Area has been conducted as part of this IPG study. A summary of key findings related primarily to the Fleischer Property is presented in this section, with more detailed analysis provided in the Appendices.

2.1 Location and Area Context

The Fleischer Property comprises three tax lots (County tax account numbers 199861000, 199854000, and 199851000) located in the northwest quarter of section 59, township 2 north, range 2 east, of the Willamette Meridian (see Figure 2). The Fleischer Property is approximately 9.12 acres. The landfill is located adjacent to the Property to the east; the Leichner Campus property to the south; and property owned and operated by Waste Connections is located to the north. The Property and the properties surrounding it are zoned Light Industrial. Land use in the vicinity of the Property is primarily industrial and residential. The Property is designated Industrial in the County's 20-Year Comprehensive Growth Management Plan.

2.2 Existing Conditions

The Fleischer Property contains one dilapidated single-story residence with an attached garage, a small barn, and a pump house with a domestic well. The rest of the Fleischer Property is vacant and is covered primarily in native grasses with pockets of noxious weeds.

SOILS

Soils on the Property consist largely of gravelly loam with some silt loam. Gravelly loam generally has favorable infiltration characteristics, which may be conducive to the use of low-impact development stormwater facilities. Loams vary widely with regard to engineering properties, but generally function well as a subgrade material. Compaction capability and drainage can be assumed to be moderate.

TOPOGRAPHY

With the exception of the landfill, the topography of the Planning Area is generally flat. However, the Fleischer Property generally slopes at 1 to 3 percent toward the southwest, and there are small bench or terrace features (see Figure 3). Elevations range between approximately 205 and 225 feet, National Geodetic Vertical Datum of 1929 (NGVD 29).

TRANSPORTATION

Transportation access and circulation to the Planning Area are generally considered favorable, based on the following facts (see Figure 4):

- The Planning Area is close to major transportation routes and anticipated public improvements.
- The area offers convenient access for auto and truck traffic to the interstate freeway system. An interchange with the I-205 freeway is located less than 2 miles west of the Fleischer Property.
- NE 94th Avenue is a Clark County arterial and is currently undergoing upgrades to the right of way to improve access and circulation. The improvements include a center turn lane, sidewalks, and stormwater management. The arterial is considered adequate to accommodate existing residential use, as well as anticipated light industrial use.

POTABLE WATER

The City of Vancouver is the potable water purveyor for the area. Water infrastructure is available adjacent to the site in all directions, including a 12-inch-diameter main line in NE 94th Avenue to the west and smaller supply lines in the residential subdivisions to the north, east, and south of the project site (see Figure 5). A 6-inch-diameter lateral supplies two fire hydrants on the Waste Connections property. The Planning Area lies within the city's Heights High-pressure zone, which is generally well-served with regard to flow and pressure.

POWER

Clark Public Utilities provides power service to the area. Overhead power is available adjacent to the Planning Area in all directions, including NE 94th Avenue to the west, NE 107th Avenue to the east, NE 86th Street to the south, and NE 99th Street to the northeast and northwest. High-voltage (115 kilovolt) overhead power lines cross the north end of the Planning Area, connecting NE 99th Street on the east and west sides. Medium-voltage overhead power lines (three-phase and one-phase) run along 94th Avenue NE and extend east into the interior of the site immediately to the north and south of the Waste Connections property.

NATURAL GAS

Northwest Natural Gas Co. provides natural gas service to the area. Natural gas infrastructure is available adjacent to the Planning Area in all directions. Waste Connections plans to convert their entire diesel-fueled vehicle fleet to run on compressed natural gas (CNG) by 2018. Waste Connections has installed a temporary CNG fueling station capable of fueling up to 16 vehicles. Waste Connections plans to construct a permanent CNG fueling station on their site with the capacity to fuel up to 120 vehicles. The existing gas line in NE 94th Avenue likely is inadequate to supply such a fueling station. If so, upgrades to the local system would be required.

SEWER

Clark County Regional Wastewater District (CRWWD) is the sanitary sewer purveyor for the area. Sewer infrastructure is available adjacent to the Planning Area in all directions, including a main "trunk" line in NE 94th Avenue to the west and smaller conveyance lines in the residential subdivisions to the north, east, and south of the project site. NE 94th Avenue has been identified by CRWWD as requiring upgrades to address forecasted demand growth in the area. Upgrades will bring an increased level of service to the project site and will benefit future development.

COMMUNICATIONS

CenturyLink, Inc. provides internet, cable, and telephone service to the area. Communications infrastructure is available to the site via underground cables in NE 94th Avenue.

Stormwater

The Property does not contain any engineered stormwater controls. Stormwater likely infiltrates into the ground on site or is conveyed to nearby street rights of way via overland flow.

2.3 Land Use Framework

Redevelopment of the property will be regulated by County land use plans and ordinances.

Zoning: Light Industrial (IL)

The IL zone is intended to provide for light manufacturing, warehousing, transportation, and other land-intensive uses. Services and uses that support industrial uses are allowed in these areas but limited in size and location to serve workers in the industrial area.

The existing zoning is consistent with the County's goals for the Planning Area.

2.4 Market Context

A preliminary market assessment was conducted to evaluate a wide range of potential development options in the Planning Area: industrial, flex, office, retail, single-family residential, recreation/open space, and mixed use (Appendix A). Although the study considered implications for the entire Planning Area, the initial findings focus primarily on the near-term redevelopment of the Leichner Campus and the Fleischer Property.

The Planning Area possesses the following key advantages:

- Proximity to the I-205/I-5 freeway system, providing good access north to the Puget Sound, east via I-84, and south to the Portland International Airport, Willamette Valley, and California
- Access to a good blue-collar and service labor force

- Availability of expansive areas of open space, suitable for either large-scale redevelopment or recreational space in proximity to an established neighborhood centrally located in the county
- Outstanding clear-weather views of Mount St. Helens

The Planning Area, however, must contend with the following challenges:

- Immediate proximity to residential areas, creating possible land-use conflicts with industrial development
- Relatively low market rents and high vacancies for commercial flex and office uses
- Environmental and topographic constraints pertaining to the landfill and the Fleischer Property

2.4.1 Implications for Redevelopment

Market Opportunity. Of the reuse potentials considered, the Planning Area appears to offer the strongest market opportunity for industrial development on the Leichner Campus and (potentially) the Fleischer Property. While a manufacturing use is possible, this submarket of Clark County appears to be particularly well-suited for distribution or transportation-related uses because of its ready access to I-205. It is possible that industrial reuse could be complemented by development of some portion of the site for flex, office, and/or limited ancillary retail space.

Site Advantages. As noted above, the Property's proximity to I-205 represents perhaps its greatest asset for industrial and related site reuse. Access to a good blue collar and service labor force, together with affordable housing, also could be important to the firms that might be recruited to the Leichner Campus and Fleischer Property portions of the Planning Area.

Site Disadvantages. For industrial and associated commercial reuses, primary disadvantages or challenges are associated with the deep and rather narrow configuration of the Leichner Campus (with limited street frontage) and with adjacency to residential uses (creating potential use conflicts). This may reduce building site coverage and associated land value. For supporting commercial flex and office uses, site competitiveness may also be hampered by relatively low rents and high vacancies as compared to elsewhere in Clark County and regionally. While not adjacent to residential properties, the Fleischer Property is encumbered by environmental contamination, as discussed in the next section.

3 ENVIRONMENTAL CONDITIONS

3.1 Site History

The Fleischer Property currently comprises a vacant home, barn, and pump house situated on approximately 10 acres of land with a historical agriculture use. Archival records indicate that the Property was developed sometime between 1940 and 1945, and fill composed of clarifier solids was placed on the Fleischer Property beginning in 1970. Aerial photography from the 1970s through the 1990s confirms the presence of fill material.

3.2 Environmental Impacts

Fill composed of clarifier solids was placed at the Fleischer Property in 1970. The Fleischer Property was purchased by the current owner in 1977, and between 1980 and 1990 some of the clarifier solids material was removed from the Property. A Phase I environmental site assessment and limited surface soil evaluation at the Fleischer Property conducted in 2010 identified clarifier solids on the property as a recognized environmental condition because this material reportedly had been acquired from the former Boise Cascade Mill, and it was concluded that it likely contained hazardous substances (e.g., PCBs). It was concluded that some clarifier solids material and/or impacts from the material remain on the Property.

Environmental investigations were completed at the Fleischer Property in 2010 and 2014 to assess the extent of soils impacted with PCBs associated with this fill material (See Figure 6). Groundwater was not encountered during either investigation, and groundwater was not assessed for PCBs at the Property. These investigations have identified the following impacts to soil at the Property:

PCB impacts are limited to shallow soil at the Fleischer Property. The investigations have delineated the approximate location of clarifier solids and the PCB contamination. The deepest soil sample that exceeds the Method A cleanup level (CUL) of 1 milligram per kilogram (mg/kg) was up to 5.5 feet below ground surface (test pit TP27; see Figure). The vertical and lateral extents of PCB-impacted soils have been generally delineated at the property, and generally PCBs are prevalent at the property above MTCA CULs.

3.3 Implications for Redevelopment

Likely cleanup scenarios were evaluated on their ability to address the contamination identified on the Fleischer Property. Cleanup actions are subject to the threshold requirements set forth in Washington Administrative Code 173-340-360 (2)(a). Under the threshold requirements, the cleanup action shall:

- Protect human health and the environment.
- Comply with cleanup standards.
- Comply with applicable state and federal laws.

- Provide for compliance monitoring.

Three potential alternatives for cleanup at the Fleischer Property were evaluated for each of the threshold requirements and costs (see Appendix D). These three alternatives are:

1. Excavation and off-site disposal of contaminated soil
2. Capping contaminated soils in place
3. Targeted excavation and capping of contaminated soils, based on some final, unknown redevelopment scenario

Removal of soils above MTCA CULs provides the opportunity to create an unencumbered property that can easily be redeveloped with few or no institutional or engineering controls. A targeted cap or full cap at the Property would result in the following likely institutional controls:

- **Soil Management Plan.** Surface and subsurface soils in some locations may potentially exceed unrestricted land use CULs, so it will be necessary to implement a soil management plan to establish proper handling and disposal procedures. These procedures will protect future workers from exposure that could occur during construction and utility projects.
- **Restrictive Covenant.** If specific CULs cannot realistically be achieved, uses on the site may be limited through a restrictive covenant. The covenant is written into a property deed and restricts the owner from developing particular uses.

Conceptual components of the three alternative remedial actions and associated cost estimates for the Fleischer Property are as follows:

1. Excavation and disposal of approximately 47,147 cubic yards of PCB-impacted soil. The site would be graded and backfilled with 6 inches of imported fill to the recommended ground surface elevation for stormwater management and redevelopment. The estimated cost for this remedy is $3,350,000 (including 20 percent contingency).
2. Capping of impacted soils. The site would be graded to allow for stormwater drainage. A clean cap (soil, asphalt, etc.) would be applied to the entire site, and a soil management plan would be developed and an environmental covenant placed on the site to protect the engineered cap. The soil management plan would describe the nature and locations of contaminated soil that is left in place, discuss potential worker safety considerations, and identify the type of demarcation fabric to be placed for future site activities that involve penetration of the soil cap. The estimated cost for this remedy is $1,040,000.
3. Targeted excavation of impacted soil and capping of the remaining site. A redevelopment plan would be required for the site. This alternative is based on a redevelopment scenario where approximately one-third (approximately 3 acres) of the site would be fully cleaned up to create an unencumbered property that fronts on 94th Avenue. A cap with institutional and engineering controls would then be applied to the rest of the Property. The estimated cost for this alternative is $1,842,300.

While these cleanup alternatives are not all-inclusive, they represent likely cleanup scenarios that work well with the anticipated redevelopment of the Property. A full discussion of these alternatives and engineers' cost estimates are included in Appendix D.

4 SITE PLANNING

The primary focus of the initial master planning effort that was completed as part of the IPG study was to scope potential redevelopment options for the Leichner Campus and the Fleischer Property, in order to realize economic development and community benefit goals and test the feasibility of County acquisition of the Fleischer Property. The redevelopment of these properties will help catalyze future improvements on adjacent properties and throughout the rest of the Planning Area.

4.1 Stakeholder Input

The County hosted two public open house events to inform the surrounding community and solicit feedback on the master plan. The first open house, held on April 19, 2014, presented the existing conditions analysis and requested input from the community on concerns for the property redevelopment before significant site planning. Primary concerns were related to traffic impacts from new development and direct impacts to surrounding properties in the form of noise, glare, and disruption of the landscape. These concerns were addressed in the subsequent conceptual plan development:

- One commercial access point to the Leichner Campus to control the amount of turning on and off of 94th Avenue. This access could be signalized if traffic counts show that trips to and from the site exceed the threshold for a controlled intersection.
- Provide visual separation from and limited impact on adjacent residential uses. As shown in Exhibit 2, this would include a landscape strip along NE 94th Avenue and a road and setback on southern end of the site.

A second open house was hosted on April 23, 2015, to present the preferred conceptual plan options and illustrative exhibits showing potential site development, including building location, parking, and landscape features. The graphic illustrations helped the community members to visualize the potential scale and impact of development in the Planning Area. In general, comments received were positive and constructive. Most lingering concerns were related to the part of the Planning Area adjacent to the neighboring residential properties. There was no concern or objection raised at the prospect of the County's potential acquisition of the Property to expand the developable area.

4.2 Market Opportunity

The 2011 Clark County Economic Development Strategy identified target industries, shown in Table 1. The industries most likely to need a large site close to Interstate 5/205 would be technology services, technology products, agricultural processing, and logistics and distribution.

Table 1. Target Industries and Site Considerations

Target Industry	Site and employment consideration
Technology services (e.g., broadcasting, software, research and development (R&D), and data processing services)	Highly skilled labor force; affordable, reliable electricity; buildings with large floor plates; buildings with under-floor utilities; regional R&D activities; competitive tax environment
Technology products (e.g., consumer electronics, personal computing)	Access to skilled labor; R&D/investment tax incentives; availability of land/modern facilities; regional R&D activities; water & wastewater capacity
Agricultural processing (e.g., food and beverage manufacturers process)	Access to skilled labor; access to markets/customers; regional R&D activities; quality of transport infrastructure; competitive utility prices; water & wastewater capacity
Logistics and distribution	Proximity to population centers; quality of transport infrastructure; large tracts of industrial-zoned land; intermodal highway and rail options; availability of semi-skilled labor; affordable labor rates; competitive tax environment
Healthcare management	Access to skilled labor; access to markets/customers; availability of land/modern facilities; regional R&D activities; regional teaching hospitals; R&D/investment tax incentives
Wealth management services (e.g., investment banking and corporate management)	Access to skilled labor; affordable labor rates; competitive tax environment

Source: [1]Clark County Economic Development Strategy, 2011. http://www.clark.wa.gov/planning/2016update/documents/FINAL_Clark-County-ED-Plan-9_2011.pdf

A study by the Columbia River Economic Development Council in 2011 found a limited number of properties in Clark County under common ownership, with water and sewer access, easily accessible from a highway, and industrially zoned[2]. These studies, together with the County's Economic Development Strategy, suggest that the site could have strategic importance for attracting target industries. The addition of the Fleischer Property to the Leichner Campus might increase the overall Planning Area's attractiveness to target users.

The following potential reuse options were considered most appropriate for the Fleischer Property and the Planning Area, given the goals of the County and the underlying zoning. The Leichner Submarket area is defined as the unincorporated portion of Clark County extending from Vancouver's City limits and St. Johns Road to about the Brush Prairie area on the north and to the vicinity of Ward Road /NE 182nd Avenue on the east (see Appendix A).

INDUSTRIAL

Industrial demand for space in the Leichner submarket area appears to be robust compared to the rest of Clark County and the metro region. The area's proximity to the freeway system presents

[1] Clark County Economic Development Strategy, 2011. http://www.clark.wa.gov/planning/2016update/documents/FINAL_Clark-County-ED-Plan-9_2011.pdf

[2] Clark County Rural Industrial Land Bank. Inventory of Possible Industrial Land Bank Areas, 2015. http://www.clark.wa.gov/planning/landbank/documents/2015-0317_InventoryPossibleIndustrialLandBankSites.pdf

opportunities for distribution and shipping. The Planning Area is also well-positioned to draw from a substantial blue-collar labor force nearby.

FLEX SPACE

Flex space appears feasible for the Leichner Campus and Fleischer Property; however, near-term vacancies and lower rents present some challenges. Earlier construction might take place as a build-to-suit or pre-lease for a specific user. Curb appeal and a master planned development image will be important in securing flex development over a traditional industrial use.

OFFICE SPACE

Because of limited existing submarket presence coupled with high vacancies and low rents, office space is not anticipated to be a major component of demand for the Leichner Campus or Fleischer Property. Suitability of the site is further limited by the relatively deep configuration of the site with limited street exposure. Except for the possibility of a large back-office operation that does not require strong street visibility, primary office use is likely to be ancillary to a major industrial user or as a limited component of a multi-tenant industrial park development.

RETAIL

The Planning Area is currently not well-situated, zoned, or configured for extensive retail development. Limited retail may be possible on a small-scale, infill basis, e.g., providing ancillary support to on-site industrial, flex, and possibly office employment. The most likely location for retail is on the west side of the Leichner Campus and the Fleischer Property because of the visibility from NE 94th Avenue. Attractiveness of this corridor for retail may be enhanced with street corridor improvements planned for 2015. Service retail uses (such as a small fitness center or copy/print/mail center) also might be possible at the interior of the site if included as tenants in a larger industrial or business park development. Relatively low rents suggest a fairly utilitarian retail/support use.

4.3 Conceptual Site Plan

The project team met with Clark County and City of Vancouver department directors for a focused design charrette to develop conceptual site designs for the Planning Area. The design conversation focused primarily on the layout of streets and parcels on the Leichner Campus and the Fleischer Property. Additional consideration was given to the potential for public open space on the landfill, including a pedestrian trail throughout the entire Planning Area. The design process considered the input received in previous steps, including vehicular circulation, infrastructure, market opportunity and demand, and impact on the surrounding residential neighborhoods.

The charrette resulted in three potential site layout options, each with an option to include the Fleischer Property, for a total of six potential redevelopment options (see Appendix E).

Clark County and City of Vancouver department directors subsequently reviewed the conceptual site plan options, with the intent of selecting a preferred option or options. Discussion focused on evaluating the relative economic benefit, cost, and impact to the surrounding community. Ultimately,

Options 2 and 5 were selected as the best alternatives for providing redevelopment flexibility while minimizing impact to surrounding neighborhoods through ample buffering on the southern and eastern site boundaries.

4.3.1 Preferred Option Plan

The preferred conceptual plan involves creation of an industrial subdivision of eight relatively uniformly sized parcels—ranging in size from about 3.6 to 5.6 acres (Figure 8). Access from NE 94th Avenue would be from construction of a new street at the southern edge of the Leichner Campus property (NE 88th Street) extending west-east into the Leichner Campus property—together with one internal street stubbed to the northern property line to allow access to the Fleischer Property. The preferred Option includes the following components:

- **Acreage.** Eight parcels with 35.3 acres developable on a 40.6-acre combined site; remaining site area reserved for rights of way, buffer area, storm sewer, monitoring wells, and methane-collection facilities.
- **Buildings.** Estimated at 576,870 square feet of building development for overall floor-area ratio/site coverage of 0.37 (with predominantly one-story development). Ample landscape area and parking are provided for each parcel.
- **Uses.** Primarily single- or multi-tenant industrial/service businesses on interior parcels with opportunity for a small amount of single or multi-tenant commercial retail/service situated in proximity to the 94th Avenue / 88th Street intersection.
- **Site Development.** Includes 2,290 lineal feet of interior roadway and water/sewer infrastructure at an estimated cost of $1.3 million, plus the County share of the Fleischer Property remediation and land acquisition.
- **Phasing.** Likely starting development at the western street frontage on NE 94th Avenue, extending eastward as warranted by market demand. Option to develop the eastern large site earlier with commitment from a qualified credit user. Assumes land sales over 11 years with build-out in 12 years.
- **Economic Benefits.** Including on-site plus economic multiplier benefits, reflects potential impact of 1,750 jobs at full development with wages averaging $52,260 per year. One-time development-related revenues are estimated at $4.9 million, with subsequent, ongoing tax revenues at $2.1 million annually to Clark County and other state/local jurisdictions.

The preferred option for the Leichner Campus and the Fleischer Property provides a conceptual design that identifies where buildings, roads, and other infrastructure might be located to support development (see Figures 9 &10). The master plan concept provides an example of how the site may be developed. The site could be developed at one time or over the course of many years, depending on market demand and the needs of the eventual end user. This flexibility allows the County to consider several options for redevelopment. It can preserve the option of attracting a large industrial user for as long as possible, or pursue an incremental, parcelized disposition approach involving a series of smaller-scale users.

5 IMPLEMENTATION STRATEGY

The IPG study process set out to provide the County with the best available data and a critical analysis of those data to make an informed decision regarding the potential acquisition of the privately owned Fleischer Property. Because the Fleischer Property has been shown to be constrained by environmental contamination, the County has to seriously weigh the potential for economic return and beneficial impact on its surrounding properties with the inherent risk and uncertainty associated with brownfield remediation. The following section summarizes the key points for the County to consider regarding acquisition, risk management, remediation, and funding as it makes its decision on if, when, and how to proceed with acquisition of the Fleischer Property.

While this report does not provide a recommendation for course of action, the conclusion is a pathway to proceed, should the County decide to acquire the Fleischer Property.

5.1 Property Acquisition

5.1.1 Summary of Key Decision Points for County Consideration

Any decision regarding acquisition has to weigh the cost of the Fleischer Property with the known cost to clean it up. The Fleischer Property was appraised, assuming a clean site, at $1.59 million in 2015. Based on the evaluation of preferred alternatives for the cleanup of environmental contamination on the site, it is assumed that cleanup would require approximately $3.3 million. Under that scenario, the Fleischer Property's value on the market appears to be lower than the cost of remediating existing environmental contamination. Without public financial support, the site is therefore likely to remain vacant and undeveloped for many years.

The County therefore has the following options to consider:

1. **Acquire the Fleischer Property and remediate the contamination.** The viability of this option depends greatly on the position of the current property owner and their desire to receive remuneration for the Fleischer Property versus relief from their obligation to clean up the environmental contamination. This option is also subject to funding available in the County budget and on support from Ecology in the form of Remedial Action Grant (RAG) funding for the cleanup actions.
2. **Do not pursue acquisition to allow the market to improve for a more favorable relation to the cost of cleanup.** The County could make improvements to the Leichner Campus and promote its redevelopment in the meantime to see property value increase. Under this scenario, the County does not take on the risk of ownership and liability for cleaning up the Fleischer Property, but does lose the opportunity to improve the overall Planning Area. This may have an impact on the value of the adjacent Leichner Campus and may affect its absorption.

5.2 Remediation Risk Management Strategy

The remediation of a contaminated property can be a complicated and potentially expensive and time-consuming effort. If the County pursues acquisition and remediation of the Fleischer Property, it will be important for the County to maintain focus on the end goals of the project and adhere to a well-thought-out strategy to minimize risks and costs. Based on the findings of the environmental site assessment, the Fleischer Property contains concentrations of PCBs that exceed Ecology cleanup levels. No impacts to groundwater have been detected. The remediation risk management strategy is based on three components: selected cleanup approach, administrative pathway, and funding.

5.2.1 Cleanup Approach

The IPG assessment of the nature and extent of contamination on the Fleischer Property identified and evaluated three potential remediation alternatives, each based on a different assumed redevelopment outcome. The options present a tradeoff between cost and the certainty that the remedy will effectively resolve the environmental concerns. Based on the preferred conceptual site plan option, the most reasonable cleanup scenario would be full removal of contamination.

5.2.2 Administrative Pathway

MTCA establishes administrative pathways that provide a framework for processing cleanup projects through Ecology's Toxics Cleanup Program and makes certain liability protections available. The pathways provide different degrees of Ecology involvement in cleanup and levels of liability protection. The pathway options are:

- **Voluntary Cleanup Program (VCP)**—Provides limited Ecology review at the work party's request and the potential for a No Further Action (NFA) determination from the state upon completion of a satisfactory cleanup. The VCP is the most commonly used pathway for addressing brownfield properties with less-complex site conditions (e.g. relatively few hazardous substances). The NFA determination is usually acceptable assurance for financing institutions to lend money for development. However, Ecology opinions issued under the VCP are not binding and there is no formal settlement of liability.
- **Agreed Order**—Negotiated agreement between the lead work party and Ecology on the scope and schedule of the cleanup. As long as the work is being conducted in compliance with the order, Ecology cannot pursue additional enforcement actions against the work party. Agreed Orders are *not* settlements of liability and do not provide the party with either a "covenant not to sue" (meaning that Ecology will not pursue further legal action) or contribution protection (meaning that other potentially liable parties are prevented from seeking compensation from the liable party). An Agreed Order does provide some formal assurance that the cleanup actions meet state standards, and it can be the basis for a Consent Decree.
- **Consent Decree**—Legal settlement of liability with the state. Judicial approval of the consent decree provides the work party with both a covenant not to sue from the state

and contribution protection, which precludes claims by other parties. Consent decrees do include reopener clauses that allow Ecology to require additional or different remedial action if the party does not complete the cleanup, if the remedial action did not achieve cleanup standards, or if new information reveals a previously unknown threat to human health or the environment at the site. To date, Ecology has not reopened any consent decrees.

The greatest liability protection is provided through the Consent Decree, but this also requires the greatest level of state oversight and the highest transaction costs. The VCP is the most commonly utilized administrative pathway because of its relative expediency. The choice of administrative pathway also has implications for funding, as explained in Section 5.2.3.

Protections the County may consider include using the services of legal counsel with specific expertise in MTCA cleanup in renegotiating the terms of an acquisition agreement with the current owner that includes protections against environmental liabilities to the extent allowable by law; requirements that the current owner actively assist in the pursuit of historical insurance recovery to assist in the characterization and remediation of contamination originating from the Fleischer Property; and a title transfer agreement that allows for full delineation of the contamination and agreement with Ecology pertaining to liability prior to the transfer of ownership becoming effective.

To provide the highest level of protection, the County may also pursue with the state a *prospective purchaser consent decree* (PPCD), which is consistent with the consent decree pathway summarized above, but executed with the state prior to finalization of the acquisition of the Fleischer Property. If the County wishes to pursue this protection, a comprehensive delineation of the nature and extent of contamination must be completed prior to executing the PPCD. The characterization, as well as ultimately the remediation effort, could be largely financed through an Ecology RAG and/or a U.S. Environmental Protection Agency (USEPA) brownfield cleanup grant. The County is encouraged to actively engage both agencies early in the acquisition process if it wishes to pursue such funding partnerships.

5.2.3 Funding Strategy

The County could seek grants, low-interest loans, and historical insurance claims to offset its share of environmental assessment and cleanup costs. The County can also negotiate with other potentially liable parties regarding their contributions to the cleanup effort.

State Grants— MTCA establishes a fee on imported hazardous materials, including petroleum, that funds a grant program to support local governments in cleanup of contaminated properties. This fund for local government grants is robust and has been budgeted around $65 million in recent biennia. These Remedial Action Grants typically cover 50 percent of cleanup costs and require local matching funds. There are two types of Remedial Action Grants: Oversight Grants and Independent Grants. Oversight Grants are provided to local governments conducting cleanup under an Agreed Order or Consent Decree. The match ratio for these grants can be adjusted to as high as 90 percent funding on a case-by-case basis. Independent Grants are available to local governments that conduct cleanups under the VCP. Independent Grants are limited to $600,000 in total eligible project costs. Like the Oversight grants, they typically require 50 percent match, but that can be adjusted to 90 percent.

Low-Interest Loans—The Washington State Brownfield Revolving Loan Fund provides below-prime interest rate loans to finance direct cleanup actions, public participation, and environmental insurance. Loan interest rates currently range from 1 to 3 percent; the payback term is typically five years. The Brownfield Revolving Loan Fund is capitalized by funds from the USEPA and is managed by the Washington State Department of Commerce

Historical Insurance Recovery—The County can consider pursuing funds to support environmental investigation and cleanup through claims on liability insurance carriers that provided coverage to either the current property owner or previous property owners and site operators. Before the mid-1980s, commercial general liability policies did not contain exclusions for liabilities caused by environmental damage. Therefore, cost recovery may be pursued from historical insurance policies that were in place when pollution occurred and that covered the property owner, operators, or other potentially liable parties. Historical insurance recovery requires a commitment of time and resources, but is becoming a standard industry practice. It should be noted that actions seeking liability insurance claims for environmental damage to a property are not actions against the site owner or operator, nor do they impact current or future insurance premiums. These are claims for damages in the past and are covered by liability policies for which coverage premiums were previously paid.

Contribution from Potentially Liable Parties—MTCA is based on the principle that liable parties should pay for environmental cleanup. One source of funds to assist in the cleanup is a contribution by historical liable parties that either owned or operated the site. This venue is available to any party acquiring a property with an outstanding environmental liability.

5.3 Redevelopment Work Program

The following work program describes the key steps that the County would take to move forward with the acquisition and redevelopment of the Fleischer Property, integrating both redevelopment and cleanup. These tasks are summarized in Exhibit 3 for easy review and reference.

1. Negotiate Acquisition of Property

As stated in the project goals, the County has an interest in redeveloping its properties around the former landfill. Acquisition of the Fleischer Property could potentially improve the position of these properties on the market, and provide additional land area for redevelopment and employment lands in the county. As previously mentioned, the acquisition of the Fleischer Property is contingent on a reasonable deal with the current property owner and the support of County leadership.

It is also important for the County to evaluate legal ramifications of acquisition of the Fleischer Property. The State of Washington's lending of credit prohibition limits the role of local governments in providing assistance to private interest where there is no public benefit. This issue could be resolved through consultation with County attorneys.

2. Negotiate Administrative Pathway with Ecology

While the County is negotiating an acquisition agreement with the Fleischer Property owners, it can initiate conversations with Ecology regarding the presumed remedial action and come to an agreement regarding the administrative pathway to guarantee oversight and obtain regulatory closure. The

pathway will be determined by the selected cleanup remedy and the level of liability protection deemed necessary for the acquisition of the property. As previously mentioned, the County could seek to negotiate a PPCD to provide the maximum amount of certainty for all parties.

3. Identify and Secure Funding

The County can begin discussions with state and federal funding sources before acquisition of the Fleischer Property, but in most cases will not be an eligible applicant until the County actually owns the Fleischer Property. During the negotiation and finalization of acquisition and regulatory approval, the County can work on researching funding sources and preparing application materials so that applications are ready to submit as soon as the acquisition is finalized and the regulatory pathway agreed on.

Both insurance recovery and claims against liable parties can be time-consuming processes. If the County chooses to pursue either, it can begin the investigation and development of a case concurrent with the property negotiation and regulatory review.

4. Conduct environmental remediation

Remediation actions on the Fleischer Property can be conducted once Ecology agrees to the cleanup plan and funding is secure. Remediation can occur prior to full site development, if a future user is not identified, or concurrently with preparation for site redevelopment. The latter option can provide some efficiency and cost savings; however, the County may elect to proceed with cleanup in order to market the site as "shovel ready." Cleanup is likely to involve removal and proper disposal of targeted areas of contaminated soil. Depending on future use and interested potential partners or purchaser, a reduced remedial action could be identified and approved by Ecology, but this could potentially limit funding availability.

5. Complete Master Plan and Public Improvements

The County should work on solidifying and codifying the elements of the Leichner Campus master plan and make key improvements to infrastructure to position the site for sale and redevelopment. Finalizing the master plan would include preliminary engineering design sufficient to identify impact on and demand for public services as well as provide a clear template for potential partners and developers.

In order to provide an incentive to a prospective developer and to maintain a sufficient level of control over the future outcomes of the property redevelopment, the County should finalize as much of the predevelopment land use process as possible. This includes:

- **Planned Action State Environmental Policy Act Checklist** that identifies and addresses any known or potential impact to natural and cultural resources, the surrounding community, and the regional economy.
- **Binding Site Plan** to formalize the physical attributes of the master plan and how they relate to the zoning of the site. This permit would provide the legal assurance that a developer would meet the intent and design of the master plan, while still providing flexibility within defined parameters.

The County should also consider what improvements could be made to public infrastructure on and near the Fleischer Property to best position it for sale. This would include constructing internal roadway(s); extending water, sewer, and gas lines; and providing improved commercial access on 94th Avenue. The County could apply for grant and loan funding from the state Community Economic Revitalization Board to fund the infrastructure.

6. Position Property for Redevelopment

Unless a user or purchaser is identified early, patience will be required of the County as it works to position the Fleischer Property, along with the Leichner Campus, for redevelopment through the private sector. Positioning the Fleischer Property will involve engaging with the full spectrum of the regional real estate and economic development field to market the assets of the Fleischer Property and dispel concerns related to past use and historical contamination. Once acquired and remediated and combined with the Leichner Campus master plan, the Fleischer Property would provide the County with over 40 acres of shovel-ready industrial land planned and designed to be flexible in meeting the needs of a growing regional economy.

Table 2. FLEISHER PROPERTY REDEVELOPMENT WORK PROGRAM

ACTION	CONCEPTUAL TIMEFRAME	FUNDING SOURCE
1. PROPERTY ACQUISITION		
NEGOTIATE TERMS OF ACQUISITION AGREEMENT FOR PROPERTY	MONTH 1 - 6	● COUNTY BUDGET
2. DETERMINE ADMINISTRATIVE PATHWAY		
NEGOTIATE REGULATORY PROGRAM REQUIREMENTS WITH ECOLOGY	MONTH 1 - 6	● COUNTY BUDGET
OBTAIN ECOLOGY OPINION LETTER ON ADEQUACY OF ENVIRONMENTAL ASSESSMENT AND APPROVAL OF CLEANUP ACTION PLAN	MONTH 1 - 6	
3. SECURE FUNDING		
IDENTIFY FUNDING SOURCES AND PREPARE APPLICAITONS	MONTH 1 - 12	● COUNTY BUDGET
2. ENVIRONMENTAL REMEDIATION		
CONDUCT ADDITIONAL SITE INVESTIGATION OR ANALYSIS *IF REQUIRED*	MONTH 7 - 9	● REMEDIAL ACTION GRANTS ● THIRD-PARTY CONTRIBUTION ● HISTORICAL INSURANCE RECOVERY ● CERB GRANT/LOAN ● FEDERAL BROWNFIELD CLEANUP GRANTS
ENGINEERING DESIGN FOR CLEANUP ACTION	MONTH 10 - 12	
COMPETITIVE BID FOR CLEANUP CONTRACT	MONTH 13 - 15	

ACTION	CONCEPTUAL TIMEFRAME	FUNDING SOURCE
IMPLEMENT CLEANUP ACTION (POTENTIALLY CONCURRENTLY WITH SITE PREPARATION WORK FOR REDEVELOPMENT)	MONTH 15 - 20	● COMMUNITY DEVELOPMENT BLOCK GRANT ● COUNTY BUDGET
3. DEVELOPMENT PLAN		
FINALIZE MASTER PLAN	MONTH 7 - 9	● COUNTY BUDGET ● CERB GRANT/LOAN
PLANNED ACTION SEPA	MONTH 9 - 12	
BINDING SITE PLAN	MONTH 9 - 12	
4. DEVELOPMENT DISPOSITION		
MARKET PROPERTY TO DEVELOPERS AND TENANTS/OPERATORS	MONTH 7 - 20	● COUNTY BUDGET
NEGOTIATE DEVELOPMENT AGREEMENT	MONTH 20 - 26	

LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

FIGURES

Source: Aerial photograph obtained from Esri ArcGIS Online; parcels and roads obtained from Clark County; area designations based on Clark County map "Leichner Properties Attachment D" at http://www.clark.wa.gov/general-services/purchasing/images/rfp654AttachD.jpg

Legend

- Current Extent of Master Plan Boundary
- Fleischer Property (Privately Owned)
- County-owned Property

Figure 1
Planning Area Overview
Leichner Master Plan

Clark County
Vancouver, Washington

0 150 300
Feet

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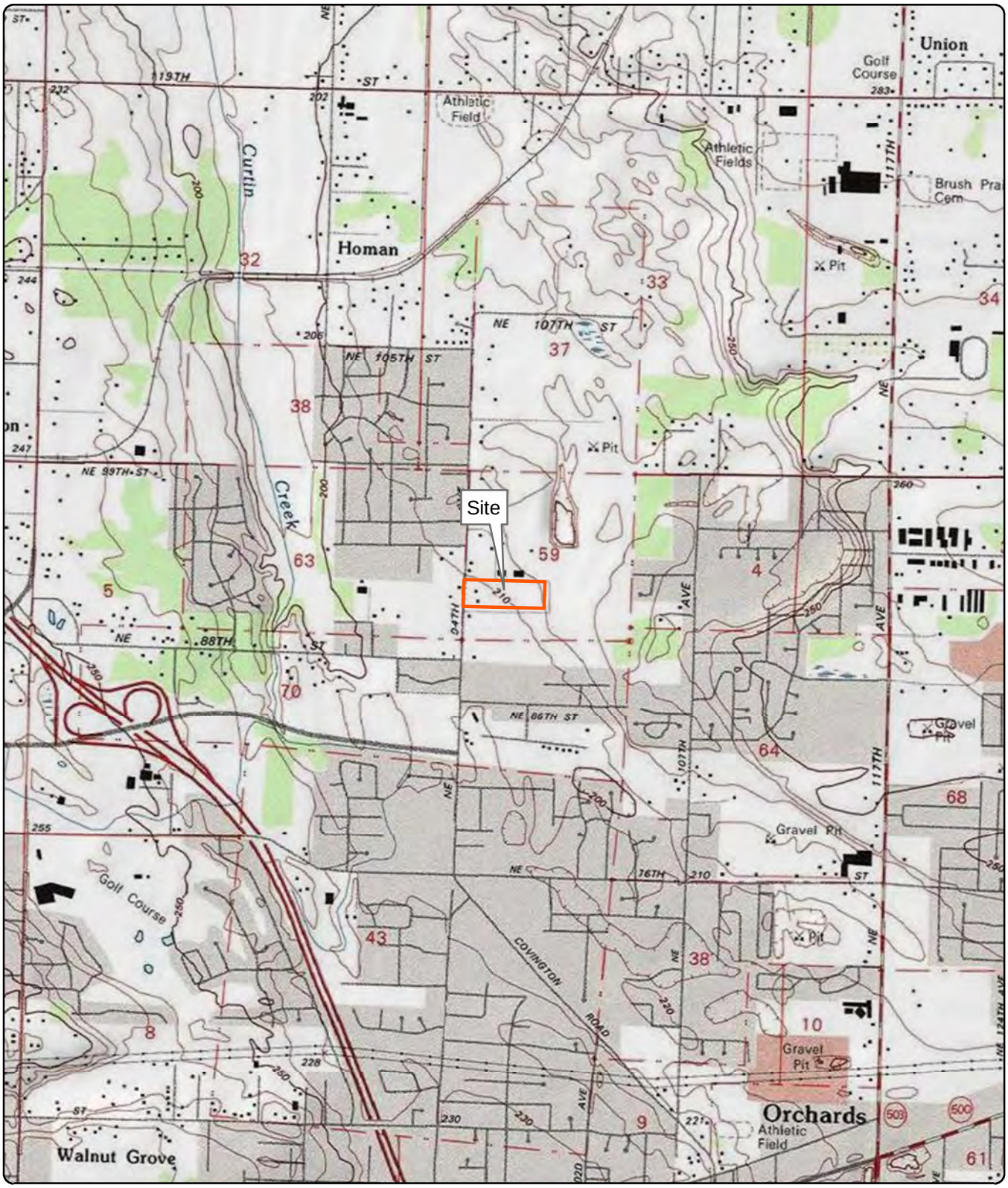

Site Address: 9109 and 9115 Northeast 94th Avenue, Vancouver, Washington
Source: U.S. Geological Survey (1990) 7.5-minute topographic quadrangle: Orchards
Section 59, Township 2 North, Range 2 East

Figure 2
Site Location

Fleischer Property
Focused Site Characterization
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington

0 1,000 2,000
Feet

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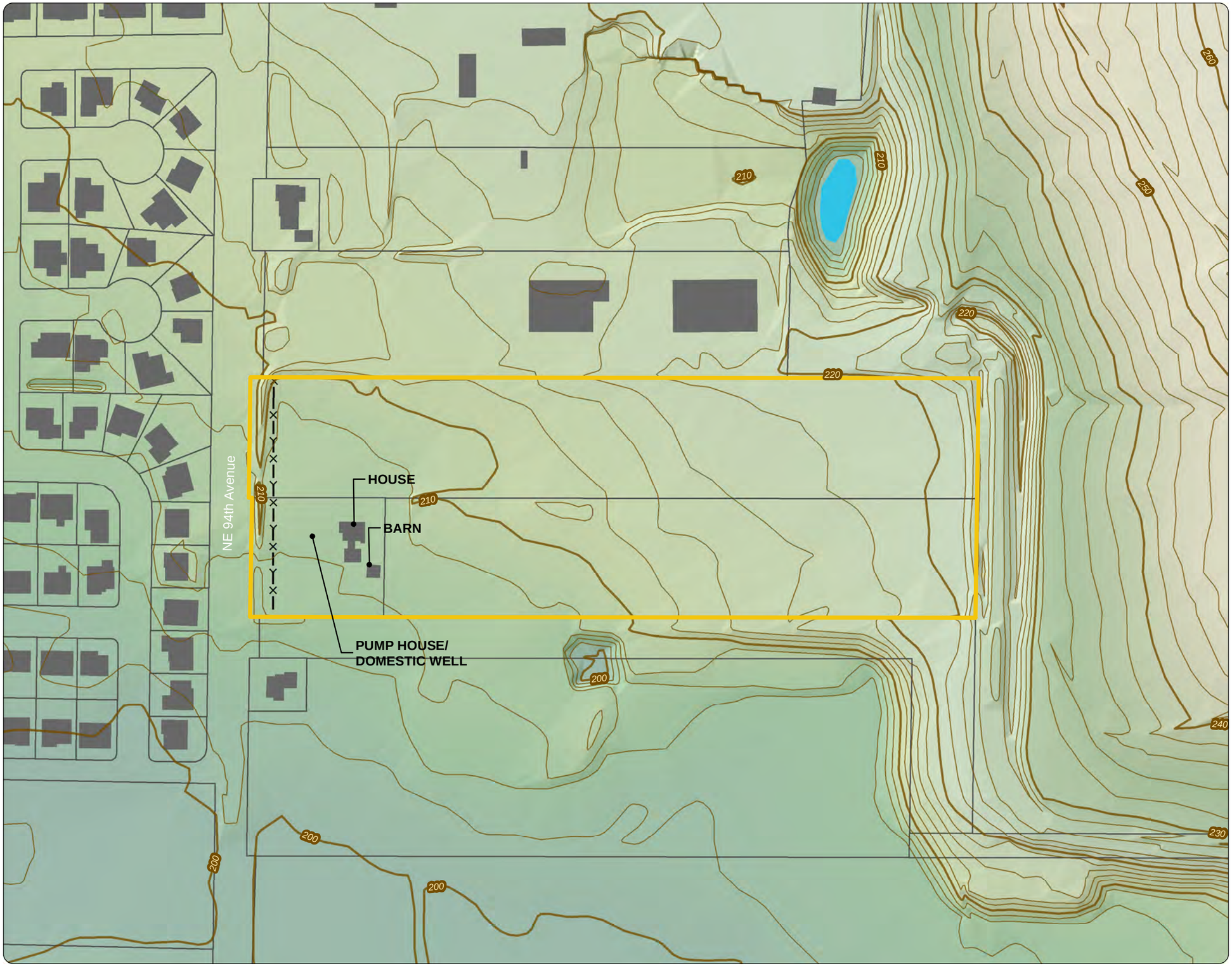
Path: X:\9059.07 Clark County\04 Fleischer IPG\Projects\PreliminaryRiandFS\Fig1_Site Location.mxd
Print Date: 12/10/2014
Approved By: E. Hess
Produced By: gherbert
Project: 9059.07

Figure 3
Site Topography

Fleischer Properties
Focused Site Characterization
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington



Legend

- Fence
- Elevation Contour (10 Feet)
- Elevation Contour (2 Feet)
- Building Footprint
- Surface Water
- Site Boundary
- Tax Lot Boundary

Elevation
263 Feet
198 Feet

Notes:
1. All site feature locations are approximate.
2. Elevation contours are LIDAR derived.
3. LIDAR = Light Detection and Ranging/ Laser Imaging Detection and Ranging (system)

0 75 150
Feet

Source: Elevation data, tax lots, hydrology, and building footprints obtained from Clark County.

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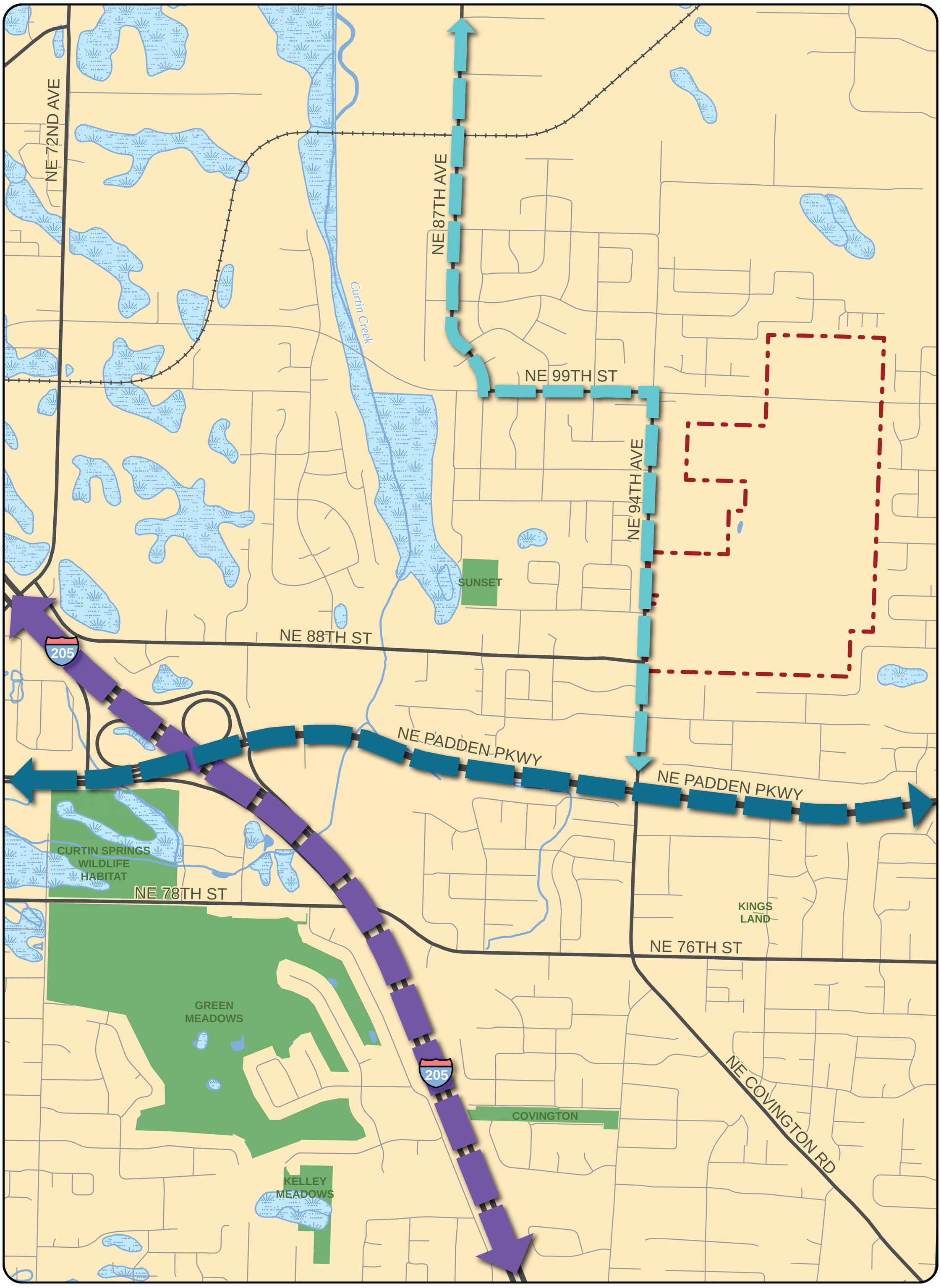
Print Date: 12/10/2014
Approved By: krosiund
Produced By: gherbert
Project: 9059.07.04



Source: Roads, parks, and wetlands obtained from Clark County GIS.

Legend

- Wetlands
- Parks
- Interstate
- Principal Arterial Parkway
- Minor Arterials
- Current Extent of Master Plan Boundary

Figure 4
Transportation
Leichner Master Plan
Clark County
Vancouver, Washington

0 500 1,000
Feet

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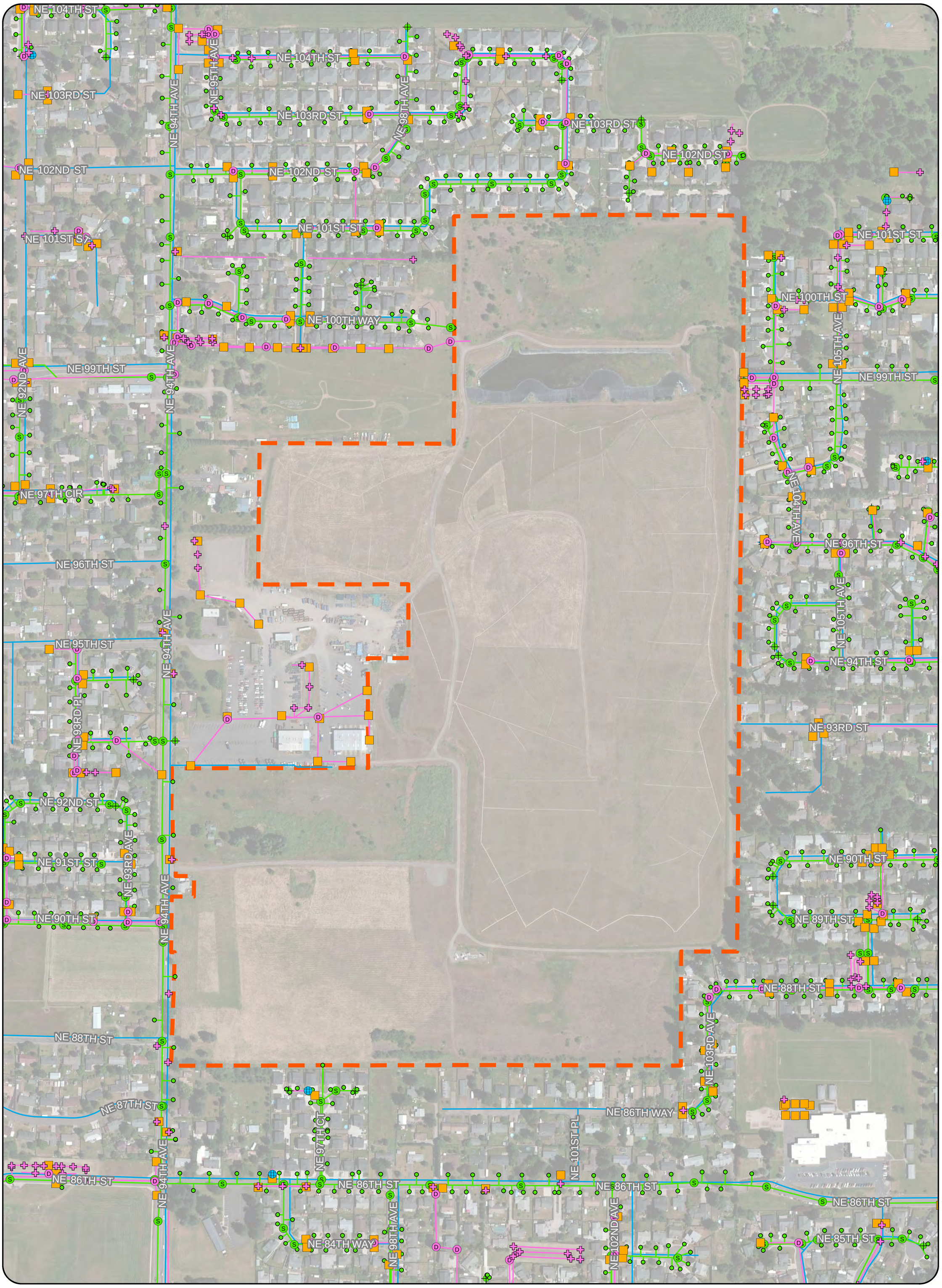

Source: Aerial photograph obtained from Esri ArcGIS Online; utilities and roads obtained from Clark County.

Legend

- Catch Basin
- Stormwater Filter System
- Stormwater Manhole
- Stormwater Storage Treatment
- Sewer Connection
- Sewer Clean Out
- Sewer Manhole
- Stormwater Line
- Sanitary Sewer Line
- Water Line
- Current Extent of Master Plan Boundary

Figure 5
Utilities and Infrastructure
Leichner Master Plan

Clark County
Vancouver, Washington

0 200 400
Feet

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Figure 6
Investigation Locations

Fleischer Properties
Focused Site Characterization
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington

Legend

- Test Pit
- Pole-mounted Transformer
- Residual Fill Material Sample Location from 2010 GeoDesign, Inc. Investigation
- Site Boundary
- Site Tax Lot
- Tax Lot Boundary

Note: All site feature locations are approximate.

0 50 100
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots obtained from Clark County

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Approved By: kroslund
Produced By: gherbert
Project: 9059.07.04

Figure 7
PCB Concentrations

Fleischer Properties
Focused Site Characterization
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington

Legend

- Test Pit
- Site Boundary

PCB Concentrations (mg/kg)

- < 1
- 1-10
- > 10

Notes:
1. All site feature locations are approximate.
2. Dpth = depth in feet below ground surface.
3. mg/kg = milligrams per kilogram.
4. PCB = polychlorinated biphenyl.
5. PCB Concentrations value is for total PCBs.
6. Model Toxics Control Act Method A cleanup level for unrestricted land use is 1mg/kg for PCB mixtures in soil.

0 50 100
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots obtained from Clark County

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Figure 8
Leichner Campus Master Plan

Fleischer Property
Vancouver, Washington

Project: 9059.07.04 Produced By: criley Approved By: solto Print Date: 06/29/15

Figure 9
Leichner Campus Perspective 1

Fleischer Property
Vancouver, Washington

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Project: 9059.07.04 Produced By: criley Approved By: sotto Print Date: 06/29/15

APPENDIX A

REUSE ANALYSIS

LEICHNER LANDFILL MASTER PLANNING

Reuse Analysis

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June 3, 2014

CONTENTS

1 INTRODUCTION 1

2 BACKGROUND 2

2.1 HISTORY OF PLANNING AREA 3

2.2 PREVIOUS PLANNING EFFORTS 4

2.3 REDEVELOPMENT POTENTIAL 4

3 MARKET CONDITIONS 5

3.1 MARKETPLACE ADVANTAGES 5

3.2 MARKETPLACE DISADVANTAGES 5

3.3 MARKET VIABILITY 6

3.4 POTENTIAL ECONOMIC RETURNS 7

3.5 IMPLICATIONS FOR REDEVELOPMENT 8

4 SITE CONDITIONS 9

4.1 ACCESS & TRANSPORTATION 9

4.2 INFRASTRUCTURE 9

4.3 STORMWATER DRAINAGE 10

4.4 SOILS & TOPOGRAPHY 11

4.5 MONITORING COMPLIANCE 12

4.6 LANDFILL GAS COLLECTION SYSTEM 12

4.7 FINAL COVER SYSTEM 13

5 REGULATORY ISSUES 14

5.1 COMPREHENSIVE PLAN DESIGNATION 14

5.2 ZONING 15

5.3 SITE DESIGN STANDARDS 16
5.4 CRITICAL AREAS AND ENVIRONMENTAL ANALYSIS 17
5.5 CONSENT DECREE 17
5.6 RESTRICTIVE COVENANT 18

6 SUMMARY OF REAL ESTATE PANEL 19

7 CONCLUSIONS AND RECOMMENDATIONS 21

7.1 CONCLUSIONS 21
7.2 RECOMMENDATIONS 22

TABLES

1 LEICHNER CAMPUS AND FIELDS MASTER PLAN PROPERTIES
2 ZONING FOR PLANNING AREA
3 DEVELOPMENT REQUIREMENTS

FIGURES

1—PLANNING AREA OVERVIEW
2—PROJECT PHASING
3—PLANNING AREA VICINITY
4—TRANSPORTATION
5—UTILITIES AND INFRASTRUCTURE
6—ZONING

APPENDICES

A—MARKET CONDITIONS TECHNICAL MEMORANDUM
B—SITE CONDITIONS SUMMARY FOR LANDFILL
C—ENVIRONMENTAL AND ENGINEERING SUMMARY TECHNICAL MEMORANDUM
D—LAND USE ANALYSIS TECHNICAL MEMORANDUM
E—REAL ESTATE EXPERT PANEL NOTES

1 INTRODUCTION

Overview

Clark County (the County) has begun a master planning process that will help guide decisions about the future use of five properties located 9411 NE 94th Avenue in unincorporated Clark County, Washington. The Leichner Campus and Fields Master Planning Area (the Planning Area; see Figure 1) includes four County-owned and one privately owned property comprising approximately 137 acres. The Planning Area will be developed in several phases (see Figure 2). The primary focus of this initial effort is to scope potential redevelopment options for two of those properties, the Leichner Campus and the Fleischer Property, in order to realize economic development and community benefit goals. The redevelopment of these properties will help catalyze future improvements on adjacent properties and throughout the rest of the Planning Area.

Purpose

The purpose of this reuse analysis is to characterize existing conditions in the Planning Area and identify reuse opportunities specific to the Fleischer Property and Leichner Campus. An areawide approach has been taken to better understand how these improvements could lead to future, phased development on the Leichner Fields Property and the Residential Property, as well as the extension of the 99th Street right-of-way (ROW). Areawide improvements will be particularly critical to development of the Leichner Fields Property, which formerly operated as the Leichner Municipal Waste Landfill. Although the landfill is closed, current structural and financial considerations make the near-term development of Leichner Fields unlikely. Adjacent development will contribute to improvements surrounding the closed landfill until it is suitable for redevelopment.

Table 1. Leichner Campus and Fields Master Plan Properties

Property	Parcels	Acreage	Ownership	Development Timeline
Leichner Campus	199845-000, 199863-000, 105740-000	35.03 acres	Clark County	Near term
Fleischer Property	199851-000, 199854-000, 199861-000	9.4 acres	Fleischer Family (private ownership)	Near term
Future 99th Street ROW	199856-000	11.03 acres	Clark County	Mid-term
Residential Property	199865-000, 199866-000	7.96 acres	Clark County	Mid-term
Leichner Fields Property	199869-000, 199843-000, 199858-000	74.14 acres	Clark County	Long term

2 BACKGROUND

The Planning Area is located at 9411 NE 94th Avenue, approximately 7 miles northeast of downtown Vancouver and 0.3 mile north of the Padden Parkway (see Figure 3). The northern boundary of the site extends just beyond what is planned as the future extension of NE 99th Street.

The Planning Area includes multiples parcels comprising approximately 137 cumulative acres of industrial and residential-zoned land (see Figure 1). The Planning Area includes:

Leichner Campus (Koski Property)—The Leichner Campus property is located south and west of Leichner Fields and consists of 35 acres of vacant land. The Leichner Campus and Leichner Fields properties were purchased by the County in December 2012. The two properties are currently fenced, with limited access through four gates. Gravel roads provide vehicle access to the properties.

Fleischer Property—The Fleischer Property is 9.45 acres of privately owned land and is the subject of a County-led Integrated Planning Grant project. It is bounded to the west by NE 94th Avenue, to the north by privately owned land leased to Waste Connections for industrial use, to the south by Leichner Campus, and to the west by Leichner Fields.

Future 99 Street ROW—This area constitutes the future extension of NE 99th Street. Construction is anticipated within the next eight to ten years; however, no funding has been allocated for the project to date. This area constitutes 11 acres and separates the Residential Property from the rest of the Planning Area.

Residential Property—The Residential Property, situated just north of the Future 99 Street ROW, consists of 8 acres of land zoned single-family residential. The current zoning coincides with the intended future use.

Leichner Fields (Closed Landfill)—Leichner Fields makes up 74 acres of the Planning Area. The property is owned by the County and has no vertical development. Because of physical constraints, the property is anticipated to be utilized as open space or surface parking, supporting future development on the adjacent properties, until redevelopment of the landfill is deemed financially viable.

Currently, the Planning Area is vacant and primarily covered in native grasses, except for the Fleischer Property, which contains one dilapidated, residential structure and several small outbuildings in similar deteriorated condition.

2.1 HISTORY OF PLANNING AREA

A large portion of the Planning Area consists of Leichner Fields, which formerly operated as the Leichner Landfill (Facility Site ID 1017). The landfill was previously owned and operated by the Leichner Brothers Land Reclamation Corporation. Historical records for this property indicate the following:

- The property was used for sand and gravel mining in the late 1930s.
- The property was later converted to a municipal landfill receiving solid waste from residential and commercial customers located within the city limits of Vancouver and parts of unincorporated Clark County, as well as other cities and towns in Clark County.
- Prior to the mid-1960s, waste received at the landfill was burned. The burning of waste was terminated in the mid-1960s.
- The landfill was owned and operated by Leichner Brothers Land Reclamation Corporation (LBLRC).
- Groundwater contamination was discovered at the Landfill in 1981.
- In 1987, the Washington State Department of Ecology (Ecology) issued a Consent Order which required extensive monitoring of the site.
- In 1988, the City of Vancouver (City) and Clark County (County) entered into the first of a series of agreements with LBLRC to ensure funding was available to close the landfill and complete post-closure maintenance.
- The Landfill closed on December 31, 1991.
- LBLRC entered into a Consent Decree with of Ecology in 1996.
- The County acquired the landfill property and the adjacent Leichner Campus (Koski Property) in 2012.
- The former landfill is now jointly managed by Ecology, LBLRC, the City, and the County through a series of agreements, including a Consent Decree dating back to 1988.

The Fleischer Property historically was used for agricultural purposes and fertilizer processing. Historical records indicate the following:

- The property was first developed sometime between 1940 and 1945.
- Fill material (reportedly pulp mill clarifier sludge) was placed on the property between 1964 and 1973.
- In 1977, the property was purchased by the current owners.
- Some of the fill material was removed between 1980 and 1990.

- The property appears to have remained relatively unchanged since 1996, in most part because of the presence of environmental contamination.

The Fleischer Property is currently underutilized. Acquisition of the Fleischer Property is complicated by evidence of polychlorinated biphenyl (PCB) contamination in surface soil. The nature and extent of the contamination has not been characterized, and investigation is needed in order for the County to consider acquisition and redevelopment of the property. Additional investigation will be performed through an Integrated Planning Grant program funded by Ecology.

2.2 PREVIOUS PLANNING EFFORTS

In 2012, the County embarked on a series of due diligence activities for the acquisition of the Leichner Campus and Fields (formerly Koski Property and Leichner Landfill). The County conducted a fatal flaws analysis that provided a mid-level overview of potential reuse options and identified alternatives warranting additional investigation. Fatal flaws identified in the study focused on engineering, permitting, and financial risks associated with development on the closed landfill, but noted the economic development potential of vertical development on the adjacent properties. The report recommended consideration for low-impact recreation and solar energy generation on Leichner Fields and light industrial development on the Leichner Campus.

2.3 REDEVELOPMENT POTENTIAL

This study and previous planning efforts indicate the following:

- The former landfill area is not expected to be available for a reuse that would involve significant structures. It is possible that some passive recreation-related uses, together with at-grade parking, might be considered on this portion of the site.
- However, recreation uses, such as sports fields that involve flat sites, are not likely to prove viable. This is because the capped site is mounded rather than level. Further leveling of the site without penetrating the existing landfill cap is not expected to prove viable from the joint perspectives of acceptable financial feasibility and risk management.
- Based on the Consent Decree and previous planning efforts, it appears that the only portion of the industrially designated acreage suitable for future development with significant structures is the Leichner Campus, Fleischer, and residentially zoned properties.

Placement of additional fill on the Leichner Campus site may be needed before industrial or related development can take place. Development will be possible to the extent that this property is released from restrictive provisions of the existing Consent Decree, or via other, similar, permissive amendments.

3 MARKET CONDITIONS

A preliminary market assessment was conducted to evaluate a wide range of potential development options in the Planning Area: industrial, flex, office, retail, single-family residential, recreation/open space, and mixed use (Appendix A). Although the study considered implications for the entire Planning Area, the initial findings focus primarily on the near-term redevelopment of the Leichner Campus and the Fleischer Property.

3.1 MARKETPLACE ADVANTAGES

The Planning Area possesses the following key advantages:

- Proximity to the I-205/I-5 freeway system, providing good access north to the Puget Sound, east via I-84, and south to the Portland International Airport, Willamette Valley, and California
- Access to a good blue-collar and service labor force
- Availability of expansive areas of open space, suitable for either large-scale redevelopment or recreational space in proximity to an established neighborhood centrally located in the county
- Outstanding clear-weather views of Mount St. Helens

3.2 MARKETPLACE DISADVANTAGES

The Planning Area must contend with the following challenges:

- Unique configuration of the Leichner Campus Property, characterized by a rather narrow configuration and limited street frontage
- Immediate proximity to residential areas, creating possible land use conflicts with industrial development
- Relatively low market rents and high vacancies for commercial flex and office uses
- Environmental and topographic constraints pertaining to the Leichner Fields Property
- Issues related to the proximity of potential new development and the closed landfill

3.3 MARKET VIABILITY

The preliminary market study considered trends in three geographic market areas: the Leichner submarket area, Clark County, and the Portland-Vancouver metro area. The study summarized potential reuse options with each of these markets in mind.

Land Valuation

- ➔ Current tax assessed land values for industrially designated properties were evaluated for properties adjoining the former landfill but which are not subject to the Consent Decree. Assessed land values ranged from $2.50 to$3.00 per square foot.
- ➔ Between 2011 and 2014, there were 12 industrial land sales transactions in Clark County for parcels ranging from 5 to 20 acres. Land values ranged from less than $1.50 to nearly $6.00 per square foot, averaging about $3.00. The tax assessed land value was somewhat less at $2.25.

Industrial

Industrial demand for space in the Leichner submarket area appears to be robust compared to the rest of Clark County and the metro region. The area's proximity to the freeway system presents opportunities for distribution and shipping. The Planning Area is also well positioned to draw from a substantial blue-collar labor force nearby.

Flex Space

Flex space appears feasible for the Leichner Campus Property; however, near-term vacancies and lower rents present some challenges. Earlier construction might take place as a build-to-suit or pre-lease for a specific user. Curb appeal and a master planned development image will be important in securing flex development over a traditional industrial use.

Office Space

Because of limited existing submarket presence coupled with high vacancies and low rents, office space is not anticipated to be a major component of demand for the Leichner Campus Property. Suitability of the site is further limited by the relatively deep configuration of the site with limited street exposure. Except for the possibility of a large back-office operation that does not require strong street visibility, primary office use is likely to be ancillary to a major industrial user or as a limited component of a multi-tenant industrial park development.

Retail

The Planning Area is currently not well situated, zoned, or configured for extensive retail development. Limited retail may be possible on a small-scale, infill basis, e.g., providing ancillary support to on-site industrial, flex, and possibly office employment. The most likely location for retail is on the west side of the Leichner Campus and Fleisher properties because of the visibility from NE 94th Avenue. Attractiveness of this corridor for retail may be enhanced with street corridor improvements planned for 2015. Service retail uses (such as a small fitness center or copy/print/mail center) also might be possible at the interior of the site if included as tenants in a larger industrial or business park development. Relatively low rents suggest a fairly utilitarian retail/support use.

Residential

As of 2013, new homes in the immediate area appear to support pricing in the range of $250,000. To the extent that housing at the northern edge of the Planning Area can be developed and marketed as providing added amenity value, it is possible that a higher-end product (with more square footage and/or higher value per square foot of structure) could be supported. The extent to which this is possible likely depends on purchaser perceptions of the amenity of being proximate to a potential recreation and open-space amenity versus concerns over direct or indirect landfill contamination or monitoring-related activities into the future.

Open Space

While preliminary data indicate a relative surplus of park-related land in the subarea (as compared with all of Clark County), there may still be opportunity for additional park area development and open space. Park-related preservation of the former landfill could serve recreation needs of adjacent development or serve larger regional needs for passive open space and associated event use.

Mixed Use

The form of horizontal mixed use that appears most viable likely would involve an industrial-led development on the Leichner Campus or the Fleischer Property. Horizontal mixed use could take place with some complementary office and retail, passive recreation/open space on Leichner Fields, and with single-family residential at the northern end of the Residential Property.

3.4 POTENTIAL ECONOMIC RETURNS

Number of Jobs

Estimating the quantity of jobs resulting from development is a function of building site coverage and number of workers per square foot of building area. Of the uses considered, office typically yields the highest levels of employment on a square foot or per acre basis—followed by flex, retail, industrial manufacturing, and then distribution. Job impacts for residential are typically limited to temporary benefits associated with home construction, together with any ongoing home occupation uses. There may be little to no direct job impact associated with recreation/open space use—except possibly as an outdoor event venue (as for weddings). Job potential with mixed use will depend on the proportion of the site developed for each of the uses separately, then added together.

Wage Rates

Typically, rates are relatively high for industrial and professional office uses and lower for retail uses. However, there is considerable wage rate variation within particular employment sectors, depending on the wage profile of each individual business. Manufacturing or distribution jobs may offer competitive wages.

Tax Revenues

Because of the combination of growing reliance on sales tax and the 1 percent property tax limitation, tax revenues per square foot of building in Washington tend to be highest for retail-related uses (except for grocery and pharmacy items, which are tax exempt). Construction activity also represents a strong source of sales tax generation, though of temporary duration when considered on a site-specific basis. Recreation and open space can be expected to generate minimal to no tax revenues, especially as the Leichner Fields site is expected to remain exempt from property taxes because of public ownership.

3.5 IMPLICATIONS FOR REDEVELOPMENT

Prospective market opportunities for reuse of the Planning Area are shaped by existing location, ownership, zoning, infrastructure, and environmental considerations. This initial review indicates the following:

- The Leichner Campus and Fleischer properties present the most viable opportunity for redevelopment, specifically industrial development.
- Industrial reuse could be complemented by some portion of the site being developed as flex, office, and/or limited ancillary retail space.
- While a manufacturing use is possible, this submarket appears to be particularly well suited for distribution uses because of its ready access to I-205 and I-5.
- Passive recreation/open space represents the best (and perhaps the only viable) economic reuse associated with the Leichner Fields.
- The Residential Property at the northern edge of the Planning Area is appropriately zoned and may be considered for residential use but with development likely tied to the extension of NE 99th Street.
- All site reuses are conditioned on both real and perceived environmental issues associated with landfill reclamation and monitoring being successfully addressed in perpetuity.

4 SITE CONDITIONS

4.1 ACCESS & TRANSPORTATION

Transportation access and circulation to the site are generally considered favorable (see Figure 4), based on the following facts:

- The Planning Area is close to major transportation routes and anticipated public improvements.
- The area offers auto and truck traffic convenient access to the interstate freeway system. An interchange with the I-205 freeway is located less than 1 mile west of the intersection of the Padden Parkway with NE 94th Avenue.
- The existing NE 94th Avenue is a Clark County arterial generally considered adequate to accommodate existing residential use, as well as light industrial use.

The County currently has plans to implement the various transportation improvements, including:

- Widening of NE 94th Avenue to improve vehicle, bicycle, and pedestrian access to the site. Other, related, improvements include curbs and gutters, turn lanes, and a new 38-foot-wide driveway to the Leichner Campus. The project is currently in design, and construction is targeted to start in 2015.
- Extension of NE 99th Street through the northern portion of the site. NE 99th Street currently terminates at the north end of the site from the east. The road is designated as an urban minor arterial, requiring two lanes of traffic with a center turn lane and a bike lane. The roadway will be constructed to meet County standards at the time of development. Construction is scheduled for 2018-2020 in the County Transportation and Improvement Plan. However, there is currently limited funding committed to this project.

4.2 INFRASTRUCTURE

Potable Water

The City is the potable water purveyor for the area. Water infrastructure is available adjacent to the site in all directions, including a 12-inch-diameter main line in NE 94th Avenue to the west and smaller supply lines in the residential subdivisions to the north, east, and south of the project site (see Figure 5). A 6-inch-diameter lateral supplies two fire hydrants on the Waste Connections property. The project site lies within the City's Heights High pressure zone, which is generally well-served with regard to flow and pressure.

Power

Clark Public Utilities provides power service to the area. Overhead power is available adjacent to the site in all directions, including NE 94th Avenue to the west, NE 107th Avenue to the east, NE 86th Street to the south, and NE 99th Street to the northeast and northwest. High-voltage (115 kilovolt) overhead power lines cross the north end of the property, connecting NE 99th Street on the east and west sides. Medium-voltage overhead power lines (three-phase and one-phase) run along 94th Avenue NE and extend east into the interior of the site immediately to the north and south of the Waste Connections property.

Natural Gas

Northwest Natural Gas Co. provides natural gas service to the area. Natural gas infrastructure is available adjacent to the site in all directions. Waste Connections plans to convert their entire diesel-fueled vehicle fleet to run on compressed natural gas (CNG) by 2018. Waste Connections has installed a temporary CNG fueling station capable fueling up to 16 vehicles. Waste Connections plans to construct a permanent CNG fueling station on their site with the capacity to fuel up to 120 vehicles. The existing line in NE 94th Avenue likely is inadequate to supply such a fueling station. If so, upgrades to the local system would be required.

Sewer

Clark County Regional Wastewater District (CRWWD) is the sanitary sewer purveyor for the area. Sewer infrastructure is available adjacent to the site in all directions, including a main "trunk" line in NE 94th Avenue to the west and smaller conveyance lines in the residential subdivisions to the north, east, and south of the project site (see Figure 5). NE 94th Avenue has been identified by CRWWD as requiring upgrades to address forecasted demand growth in the area. Upgrades will bring an increased level of service to the project site and will benefit future development.

Communications

CenturyLink, Inc. provides Internet, cable, and telephone service to the area. Communications infrastructure is available to the site via underground cables in NE 94th Avenue.

4.3 STORMWATER DRAINAGE

Stormwater management will be a key design concern for new development in the Planning Area. Overall, there is a lack of cohesive stormwater infrastructure on or adjacent to the Planning Area. Without a wetland or water body in the immediate vicinity, or existing conveyance lines to such a discharge location, stormwater runoff will have to be managed on site. On-site infiltration of stormwater has the potential to impact the existing groundwater monitoring network. Restrictive covenants require approval from Ecology and Clark County Public Health (CCPH) to site and construct on-site stormwater facilities.

Considerations for stormwater planning include:

- Engineered stormwater controls are currently in place for the closed landfill under Leichner Fields. These were developed as part of the landfill's closure design to minimize stormwater infiltration into the site and leachate creation.
- The Fleischer Property and the Leichner Campus do not contain any engineered stormwater controls. Stormwater on these properties likely infiltrates into the ground on site or is conveyed to nearby ROWs via overland flow.
- All other stormwater infrastructure adjacent to the Planning Area in the County ROW consists of catch basins and drywells, which discharge stormwater directly into the ground. Future development plans to widen NE 94th Avenue include roadside stormwater facilities to treat and dispose of stormwater runoff from the ROW.
- The current County NPDES Permit and proposed County Stormwater Manual require the use of Low Impact Development to the extent "feasible" for any new development.

4.4 SOILS & TOPOGRAPHY

Soils

Soils in the Planning Area, excluding the closed landfill on the Leichner Fields Property, consist largely of gravelly loam with some silt loam. Gravelly loam generally has favorable infiltration characteristics, which may be conducive to the use of low-impact development stormwater facilities. Loams vary widely with regard to engineering properties, but generally loams function well as a subgrade material. Compaction capability and drainage can be assumed to be moderate.

Topography

With the exception of the closed landfill, the topography of the Planning Area is generally flat. However, there is some variability between properties:

- The closed landfill under Leichner Fields is built up at a 5 to 8 percent slope to one high point in the middle of the site and a second high point in the northwest corner of the site.
- The Fleischer Property generally slopes at 1 to 3 percent toward the southwest.
- The Leichner Campus is generally flat, approximately 20 feet lower than the adjacent closed landfill, and has an approximate 5:1 upward slope toward the northeast corner of the lot. The eastern portion of the site is sunken below relative grade due to historic excavation for landfill capping materials.
- The NE 99th Street ROW and Residential Property are generally flat, approximately 15 feet lower than the adjacent residential properties, and have an approximate upward 5:1 slope around the east, north, and west boundaries of the project site.

4.5 MONITORING COMPLIANCE

Compliance monitoring of groundwater, stormwater, and landfill gas (LFG) on the Leichner Fields property is currently implemented to fulfill the requirements of the 1996 Consent Decree and the landfill's post-closure requirements. The purpose of the compliance monitoring is to evaluate the effectiveness of the remedial actions specified in the Consent Decree regarding groundwater cleanup levels.

Groundwater Monitoring

The compliance groundwater monitoring well network consists of 20 monitoring wells. The wells are monitored annually or semiannually. The 1996 Consent Decree established site-specific compliance cleanup levels in groundwater for selected volatile organic compounds and inorganic leachate indicator parameters, using Ecology's Model Toxics Control Act Method B cleanup levels based on the highest beneficial use (drinking water) of the affected groundwater. The recent results of groundwater monitoring performed in 2013 indicated that groundwater quality is not being adversely impacted by the landfill. Results show that institutional controls implemented in the mid-1900s, including the landfill surface cap and stormwater control and collection, have been effective at mitigating leachate generation and improving groundwater quality.

Stormwater Monitoring

Stormwater monitoring consists of monthly visual inspections and collection of quarterly stormwater grab samples. The 2013 stormwater monitoring results indicated that stormwater quality benchmarks applicable to the site were not exceeded during any event.

Landfill Gas

The compliance LFG monitoring network consists of 50 LFG monitoring probes installed along the perimeter of the Leichner Fields property boundary to monitor subsurface LFG migration, and in areas within the property to more closely monitor the performance of the gas collection and control system (GCCS). Compliance LFG monitoring is performed quarterly. The recent results of the LFG monitoring performed in 2012 and 2013 indicate that methane concentrations were below the regulatory limit in probes located along the site property boundary (i.e., point of compliance), with only a couple minor exceptions. In all cases, monitoring of the probes indicated that methane concentrations had been effectively reduced to concentrations below the MFS compliance level within a range of one day to approximately one week.

4.6 LANDFILL GAS COLLECTION SYSTEM

The GCCS contains LFG that is generated within the landfill and prevents it from migrating into the atmosphere and surrounding native soils. The GCCS consists of:

- Fifty LFG migration probes (described in Section 4.5).

- One hundred and seven LFG extraction wells—The LFG extraction well system is divided into four areas of collection: southeast, southwest, northeast, and northwest. LFG is conveyed from the extraction wells to the south flare station through an aboveground PVC piping system.
- LFG condensate collection system—Condensate sumps are located at all the low points along the header piping, or approximately every 400 feet. The condensate is periodically removed from the storage tank for regulated, off-site disposal.
- LFG flare station—The south flare station is located at the southern end of the former landfill and contains the mechanical and electrical equipment required to actively withdraw LFG and dispose of it in an environmentally acceptable manner.

4.7 FINAL COVER SYSTEM

The landfill cover system prevents or minimizes infiltration of precipitation and surface water runoff into the landfill, as well as leachate generation. The former refuse area (approximately 65 acres) was closed in three stages, and landfill cover systems were installed from 1989to 1992. All three phases of landfill cover systems were constructed to meet the applicable requirements specified in the MFS, WAC 173-304. The final covers consist of a multilayered composite system covering the entire 65 acres of refuse placed in the landfill. The final covers consist of (from bottom to top) general earthfill, select earthfill, a flexible membrane liner, a drainage layer, a geotextile liner, vegetative soil, topsoil, and native grasses. A detailed description of the components and design of the landfill cover system is provided in Appendix C.

5 REGULATORY ISSUES

5.1 COMPREHENSIVE PLAN DESIGNATION

Portions of the Master Plan area, including the Leichner Fields, Campus and Fleischer properties are designated Industrial in the County's 20-Year Comprehensive Growth Management Plan. The Industrial designation is implemented by the Light Industrial (IL), Business Park (BP), and Industrial Railroad (IR) zones. According to the Comprehensive Plan, these base zones are intended to provide employment opportunities, such as compatible office and attractive non-polluting industries. Areas designated Industrial also provide for more intensive job related land uses that pay family wages, such as professional offices, research and technology related industries.

- **Light Industrial (IL)** is intended to provide for light manufacturing, warehousing, transportation and other land intensive uses. Services and uses which support industrial uses are allowed in these areas but limited in size and location to serve workers within the industrial area.
- **Business Park (BP)** provides for uses permitted in the business park and is intended to provide for campus like development with higher job densities and family wage jobs than in traditional industrial areas. The BP zone is generally more restrictive than the IL zone in terms of allowed uses, with an emphasis on more office-oriented uses. This zone might provide some assurance to neighboring property owners that a less disruptive operator is less likely to locate on the property.
- **The Industrial Railroad (IR)** base zone provides land uses that require and take advantage of rail access. This designation is not appropriate for the master plan area.

5.2 ZONING

Approximately 124.6 acres of the planning area, including the Leichner Fields , Campus and Fleischer properties, are currently zoned Light Industrial (IL). An approximately 8-acre area zoned Single Family Residential (R1-7.5) is located north of the closed landfill (see Figure 6). The following table identifies the existing zoning and acreage by tax lot number.

Table 2. Zoning for Planning Area

Tax Lot	Acreage / Zoning
Leichner Fields	
199858	33.66 (IL)
199843	25.56 (IL)
199869	9.92 (IL)
Leichner Campus	
199845	2.12 (IL)
199863	7.42 (IL)
105740	25.49 (IL)
Fleischer Property	
199851	5 (IL)
199861	0.99 (IL)
199854	3.45 (IL)
Future NE 99th Street ROW	
199856	11.03 (IL)
Residential Property	
199866	R1-7.5
199865	R-1.7.5
Total Acreage	**132.6**

Of the approximately 19 acres north of the former landfill, approximately 11 acres are zoned IL and approximately 8 acres are zoned R1-7.5. It is anticipated that much of the 11-acre IL property will continue to be used for stormwater management and will be the site of the future NE 99th Street connection.

5.3 SITE DESIGN STANDARDS

The design of future uses on the property must consider and adhere to the development standards that apply to the base zones of the site. The following table lists the development requirements for those portions of the site (zoned IL) anticipated for redevelopment in the near term (see Appendix D).

Table 3. Development Requirements

Standards	IL
Setbacks:	
Front	20 ft
Side (street/interior)	0 ft
Rear	0
Screening:	
From R1-7.5	10 ft
From IL (separated by street/not separated by street)	10 ft/ None
Max Building Height	100 ft
Perimeter parcels or adjacent to R1-7.5 zone	60 ft
Max Lot Coverage	Maximum determined by compliance with screening and buffering standards contained in Chapter 40.320, Table 40.320.010-1, the Stormwater and Erosion Control Ordinance (Chapter 40.385), and all other applicable standards.
Min Landscaped Area	10%
Min Lot Area	N/A
Max Average Lot Area	None
Average Min Lot Width for Each Lot	None
Average Min Lot Depth for Each Lot	N/A
Parking & Loading	
Loading Berths	0-2, depending on square footage and use
Parking	1 space/500 sq ft (laboratories, research facilities, warehouses, and similar uses may require fewer)

5.4 CRITICAL AREAS AND ENVIRONMENTAL ANALYSIS

The County code regulates development impacts to environmentally sensitive "critical areas," which include flood hazard areas, wetlands, habitat conservation areas, critical aquifer recharge areas, and geologic hazard areas (Subtitle 40.4).

Wetlands

Clark County Geographic Information Systems data indicate the presence of a water feature mapped as a riparian habitat conservation area in the western section of the closed landfill (tax lot 199843) (see Attachment D) The water feature is one of three stormwater ponds constructed to collect and convey runoff from the surface of the landfill, and would not qualify as a riparian habitat conservation area. No U.S. Fish and Wildlife Service National Wetland Inventory wetlands are mapped on the site, and information provided by the Washington State Department of Fish and Wildlife does not indicate the presence of sensitive or regulated natural resources on any of the subject parcels.

Habitat Conservation Areas

Most of the vegetation on the site consists of perennial and annual grasses. As part of its routine maintenance of the site, the County removes any weeds, invasive vegetation, and volunteer trees and shrubs that could threaten the integrity of the landfill cap, which is generally 3 feet below the surface.

The site does not provide critical habitat protected under the Endangered Species Act, and no endangered or threatened species use the site. Vegetative conditions on site are not suitable for listed species habitat. In 2012, county staff identified coyotes, mice, voles, rabbits, hawks, owls, and songbirds—all species habituated to human presence—as species that use the subject parcels. The stormwater ponds support waterfowl use.

Aquifer Recharge Areas

A shallow aquifer and the deeper Troutdale aquifer underlie the closed landfill parcels. The integrity of the landfill cap must be maintained to prevent the infiltration of precipitation through the landfill material and the consequent pollution of the groundwater and/or aquifers.

5.5 CONSENT DECREE

In order to address known groundwater contamination, remedial investigation (RI) of the planning area began in 1987 pursuant to a Consent Order imposed by Ecology (No. DE 86-S131). The RI results were summarized in a 1988 Remedial Investigation Report and Feasibility Study Report (FS). In July 1996, Ecology and the LBLRC entered into Consent Decree No. 92-2-03081-7 (Decree). This was the final Decree for the Site, which implemented the final remedial actions described in a Cleanup Action Plan (CAP) associated with the Decree.

The RI and FS identified leachate from the closed landfill as the source of groundwater contamination. The CAP proposed a preferred remedial action to address the production and migration of leachate from the site. The Decree established requirements for: reporting to Ecology, a period review process, protection and performance monitoring, and the placement of a restrictive covenant on future use and development on the properties. The terms of the covenant are described below.

The consent decree has been amended twice: in 2002 to allow for the removal of approximately 7 acres of residentially zoned property for the development of the Neston Square subdivision; and in 2013 to recognize the sale of the now County-owned properties. The terms of the consent decree and restrictive covenant transfer with the property title.

5.6 RESTRICTIVE COVENANT

The Decree required that an environmental Restrictive Covenant (RC) be in place for the entire landfill site including the Leichner Campus. It was determined that contamination at the Site posed a limited threat to human health and the environment that could be mitigated, in part, by the use of institutional controls in the form of a RC. The RC encompasses both surface and subsurface components of the property. The RC was recorded for the Leichner Landfill property in April 1998. The RC includes the following restrictions:

- **Section 1.** No groundwater may be taken for domestic purposes from any well on the property.
- **Section 2.** Any activity on the property that may interfere with the cleanup action is prohibited. Any activity on the property that may result in the release of a hazardous substance that was contained as a part of the cleanup action is prohibited, unless allowed under the terms of a National Pollutant Discharge Elimination System or a state waste discharge permit.
- **Section 3.** The owner of the property must give written notice to Ecology of the owner's intent to convey any interest in the property. No conveyance of title, easement, lease, or other interest in the property may be consummated by the owner without adequate and complete provision for the continued operation, maintenance, and monitoring of the cleanup action.
- **Section 4.** The owner of the property must notify and obtain approval from Ecology prior to any use of the property that is inconsistent with the terms of the RC. Ecology may approve such a use only after public notice and opportunity for comment, and only if the proposed use will not threaten human health or the environment.
- **Section 5.** The owner of the property shall allow authorized representatives of Ecology the right to enter the property for the purposes of evaluating compliance with the terms of the Consent Decree and associated Cleanup Action Plan, to take samples, to inspect cleanup action taken at the property, and to inspect records that are related to the cleanup action.
- **Section 6.** The owner of the property reserves the right to record an instrument providing that the RC shall no longer limit use of the property. However, such an instrument may be recorded only with the consent of Ecology. Ecology or a successor agency may consent to the recording of such an instrument only after public notice and only if all obligations under the Decree have been satisfactorily completed.

6 SUMMARY OF REAL ESTATE PANEL

On April 8, 2014, the project team hosted a Real Estate Expert's Panel at the Waste Connections facility adjacent to the Leichner Campus. The nine-member panel was composed of local and regional experts in the fields of real estate development, commercial brokerage, appraisal, marketing, and land use law. The participating experts toured the full site, discussed the preliminary market findings, and offered insights about challenges and opportunities for adding value and redeveloping the site. A summary of their insights is provided below (notes are included as Appendix E).

Real Estate Panel
Todd Shaeffer, Specht Development
Monte Haynes, Kidder Mathews
Kirk Olsen, Trammell Crow
Jo Ellen Jarvis, Jarvis Appraisal
Jamie Howsley, Jordan Ramis
Eric Fuller, Eric Fuller & Associates
Scott Fraser, Kidder Mathews
Phillip Hanshew, Colliers
Mike Bomar, CREDC

Barriers to redevelopment:

Many factors combine to reduce the campus site's market value and create uncertainty about its redevelopment potential and entitlement timeline:

- Residential uses surrounding the site and likelihood of opposition, particularly at the southern end.
- Lack of certainty or identified end-user for the area's future.
- Adjacent landfill.
- Existing business (Waste Connection) and externalities associated with it.
- Limited number of larger-scale industrial users nearby makes the site riskier and development more difficult to finance.
- Uncertain utility capacity.
- Uncertainties around environmental issues, specifically potential wetlands.
- Transportation access needs.

Collectively, these barriers mean that the carrying costs while moving toward entitlements could be great, increasing the risk of the deal for any potential developer. A "do nothing to address barriers" strategy likely would result in any buyer requesting a lengthy contingency period to complete due diligence, and would ultimately result in a lower sale price for the County. The recommendation of the panel was to address and mitigate as many of these issues as possible.

Suggested strategy to mitigate barriers from workshop participants:

(1) Remove as many barriers and as much uncertainty as possible to improve opportunities for disposition:

a. Prepare preliminary site plans, including design and engineering for site access. Consider designing access for a public road on-site.

b. Complete improvements to NE 94th Street.

c. Prepare studies that characterize and address environmental and wetland issues.

d. Zoning should be as flexible as possible (look into Hillsboro, OR industrial model).

e. Plat and subdivide now, to reduce time and cost if multiple users are involved.

f. Prepare a framework for a development agreement spelling out the terms of a public-private partnership.

g. Distill all information into a usable and concise summary for potential developers.

(2) Consider using a Planned Action approach that provides more certainty for developers and neighbors.

(3) Preserve the option of attracting a large industrial user as long as possible, but recognize that a longer-play, parcel-by-parcel disposition approach may be necessary. Buildings of about 20,000 square feet seem to be the sweet spot for speculative development flex space.

(4) A decision is needed regarding whether the County should get together all the studies and reports described in (1) above and then sell the property, or (2) whether the County should put out an RFQ/RFP and have the selected developer fund the studies together with the County.

(5) The panel agreed that a ground lease was probably not appropriate for this particular site.

(6) Regarding engagement with the neighbors: the panel suggested entering conversations carefully, being forthright about the likely industrial future use, and putting in place restrictions regarding hours of operation for all new development.

Likely target market:

- Most likely a regional or local user with some entrepreneurial and risk-taking attitude.
- A single larger user may express interest in the site, or it may be a series of smaller-scale users interested in portions of the site. The County should be prepared to go in either direction.

7 CONCLUSIONS AND RECOMMENDATIONS

7.1 CONCLUSIONS

Based on the information generated through the reuse analysis research, the following conclusions are presented in a format outlining the relative strengths, weaknesses, opportunities, and threats associated with redevelopment of the Planning Area.

Strengths

- Adequacy of general utilities—power, communications, water, sewer for most uses, natural gas for most uses
- Adjacency to freeway system and transportation access
- Planned transportation improvements on NE 94th and NE 99th
- County ownership, which allows for longer-term land holding

Weaknesses

- Sewer capacity for high-intensity industrial uses that require large in/out flows of processing water.
- Natural gas for high-intensity and trucking-fleet-dependent uses.
- Lack of cohesive stormwater infrastructure adjacent to the project site. Stormwater runoff will have to be managed on site. Restrictive covenants require approval from Ecology and Clark County Public Health to site and construct on-site stormwater facilities.

Opportunities

- Property is zoned for light industrial use.
- IL zone allows for potential supplementary commercial, office, and mixed uses.
- Zone change to BP would expand office uses available to redevelopment, and would restrict some potential nuisance industrial uses in order to address neighborhood concerns.
- Industrial Comprehensive Plan designation is implemented with Light Industrial, Business Park and Railroad Industrial zones that offer flexibility in changing zoning to meet users' needs.
- Open space on former landfill.
- Parking on former landfill.

Threats

- Negative perception of landfill for prospective tenants.
- Environmental covenant and landfill conditions.
- Proximity of residential neighborhoods.
- Entire site is subject to the terms and conditions of Consent Decree and restrictive covenants.

7.2 RECOMMENDATIONS

Short Term

- Complete master planning program for the Leichner Campus and Fleisher properties. Identify conceptual redevelopment scenarios and prepare property disposition strategies for the most preferred options.
- Evaluate opportunities to relocate county services to the Leichner Campus property from other potentially more valuable industrial-zoned properties.
- Evaluate feasibility of removing Leichner Campus from Consent Decree.
- Address the issues that generate uncertainty for the property and get it as close to shovel ready as possible, including:
    - Identifying the presence (real or perceived) of wetlands,
    - Subdividing the Leichner Campus to allow for potential phased development
    - Complete a Planned Action SEPA to address any potential environmental or cultural resource questions ahead of development

Mid Term

- Plan for and prioritize increased utility and infrastructure capacity. Specifically completing the 99th Street connection and expanding sewer and natural gas capacity.

FIGURES

Source: Aerial photograph obtained from Esri ArcGIS Online; parcels and roads obtained from Clark County; area designations based on Clark County map "Leichner Properties Attachment D" at http://www.clark.wa.gov/general-services/purchasing/images/rfp654AttachD.jpg

Legend

- Current Extent of Master Plan Boundary
- Fleischer Property
- County-owned Property

Figure
Site Overview
Fleischer Property
Leichner Campus

Clark County
Vancouver, Washington

0 150 300
Feet

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Source: Aerial photograph obtained from Esri ArcGIS Online; parcels and roads obtained from Clark County; area designations based on Clark County map "Leichner Properties Attachment D" at http://www.clark.wa.gov/general-services/purchasing/images/rfp654AttachD.jpg

Legend

Current Extent of Master Plan Boundary

Development Phasing

- Near-term
- Mid-term
- Long-term

Figure
Phasing
Fleischer Property
Leichner Campus

Clark County
Vancouver, Washington

0 150 300
Feet

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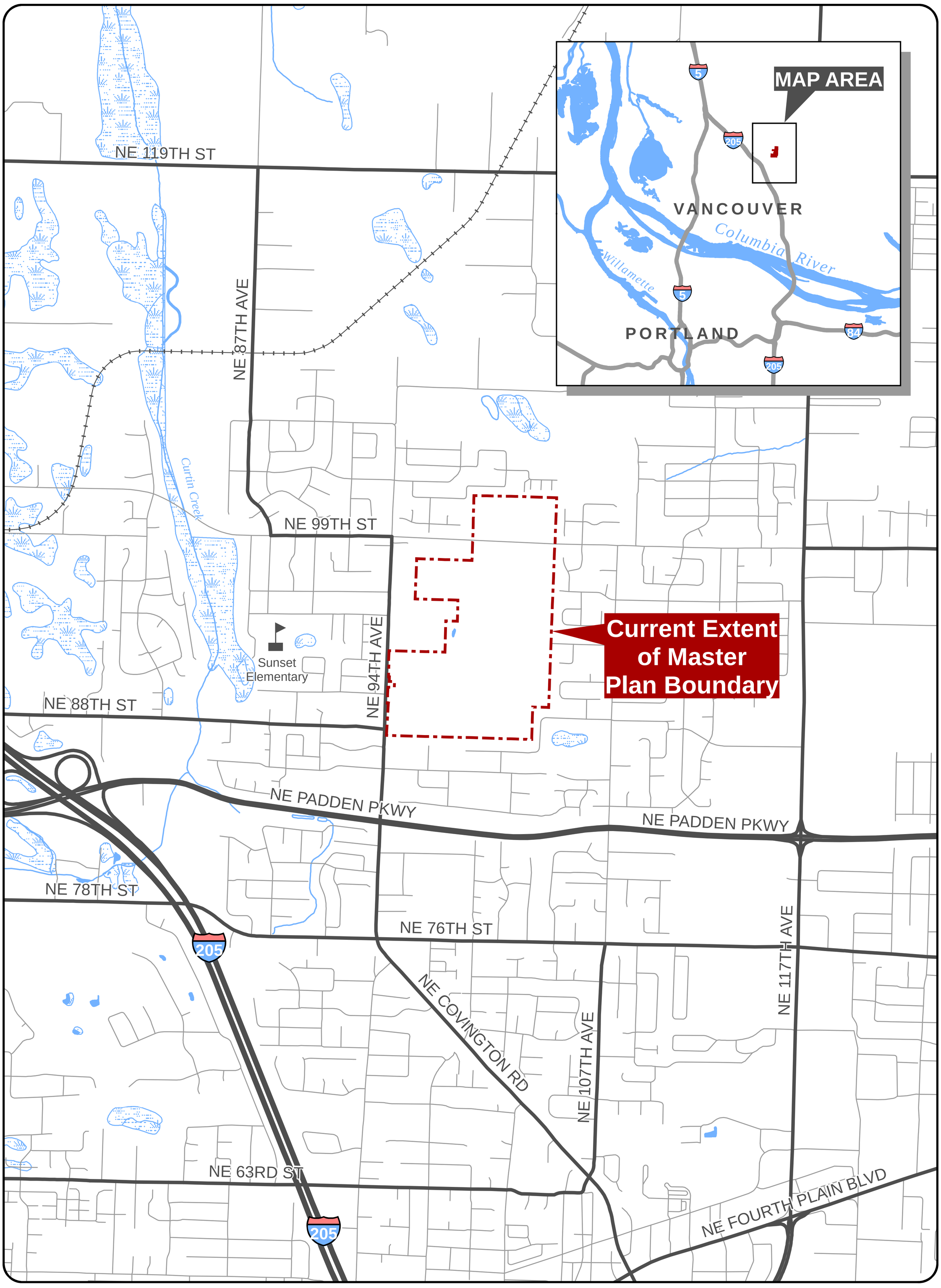

Source: Roads and wetlands obtained from Clark County.

Figure
Site Vicinity
Fleischer Property
Leichner Campus

Clark County
Vancouver, Washington

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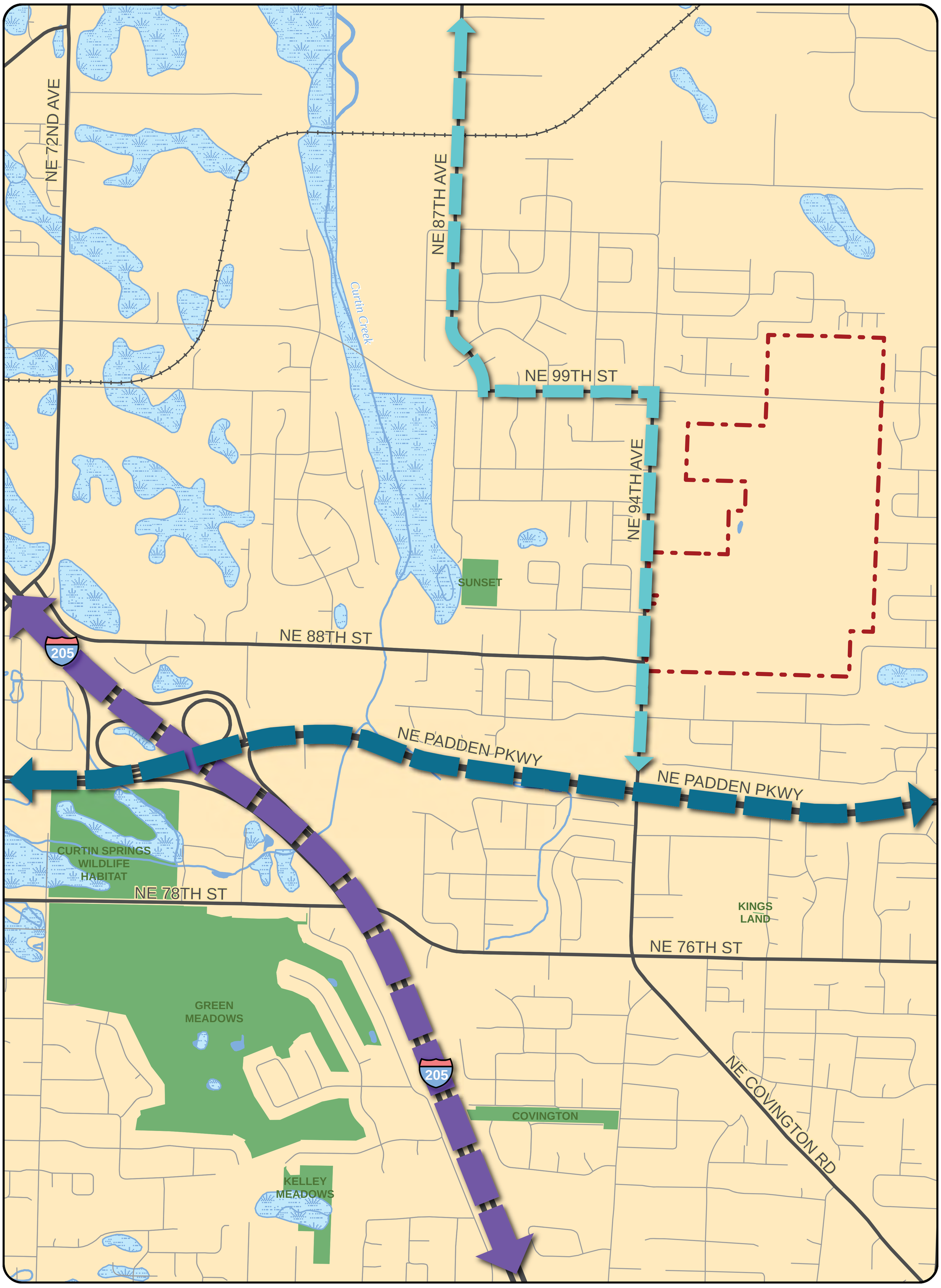

Source: Roads and wetlands obtained from Clark County.

Figure
Site Vicinity
Fleischer Property
Leichner Campus

Clark County
Vancouver, Washington

Legend

- Principal Arterial Road
- Minor Arterial Road
- Local Road
- Current Extent of Master Plan Boundary

0 500 1,000
Feet

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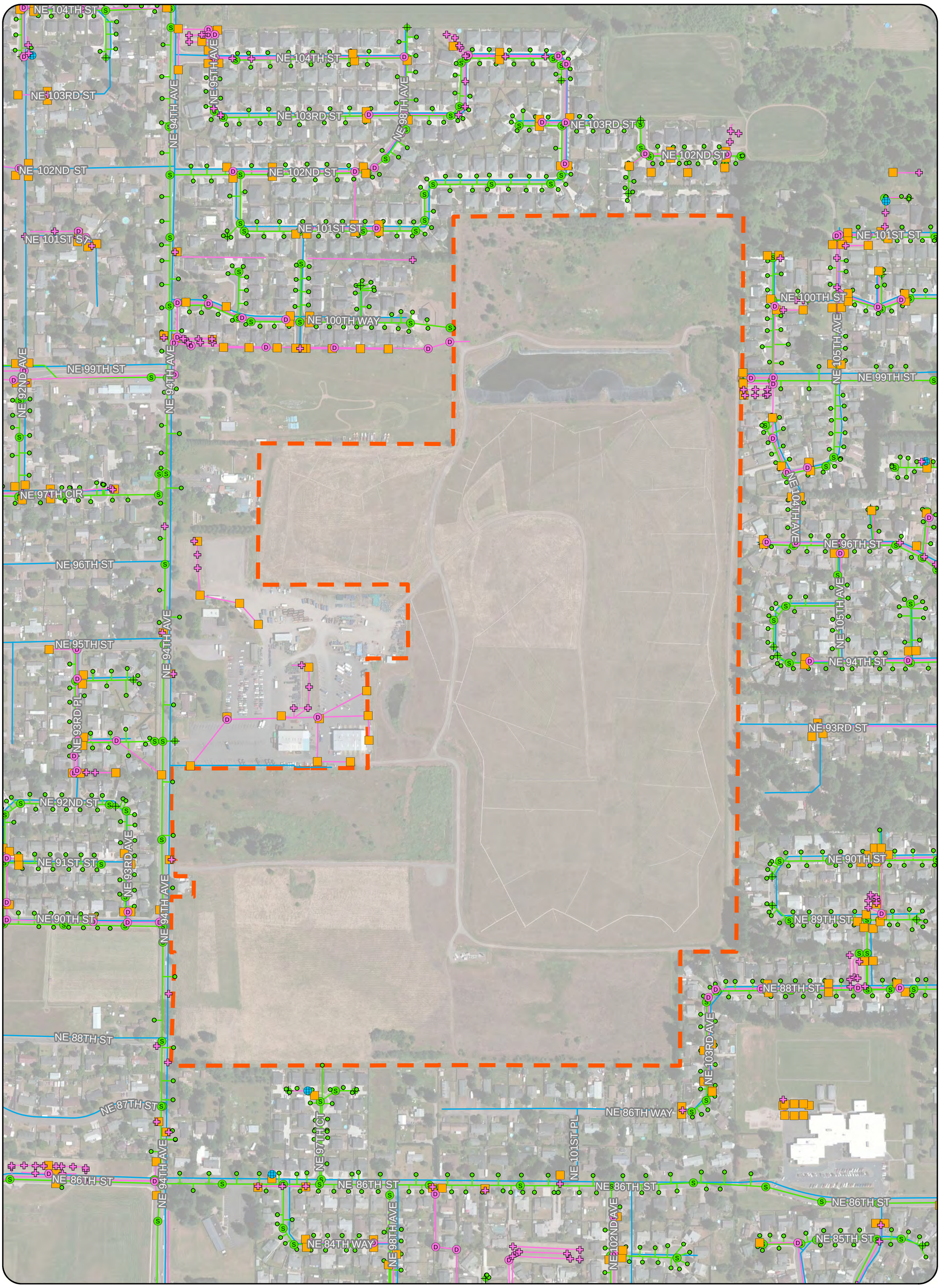

Source: Aerial photograph obtained from Esri ArcGIS Online; utilities and roads obtained from Clark County.

Legend

- Catch Basin
- Stormwater Filter System
- Stormwater Manhole
- Stormwater Storage Treatment
- Sewer Connection
- Sewer Clean Out
- Sewer Manhole
- Stormwater Line
- Sanitary Sewer Line
- Water Line
- Current Extent of Master Plan Boundary

Figure
Utilities and Infrastructure
Fleischer Property
Leichner Campus

Clark County
Vancouver, Washington

0 200 400
Feet

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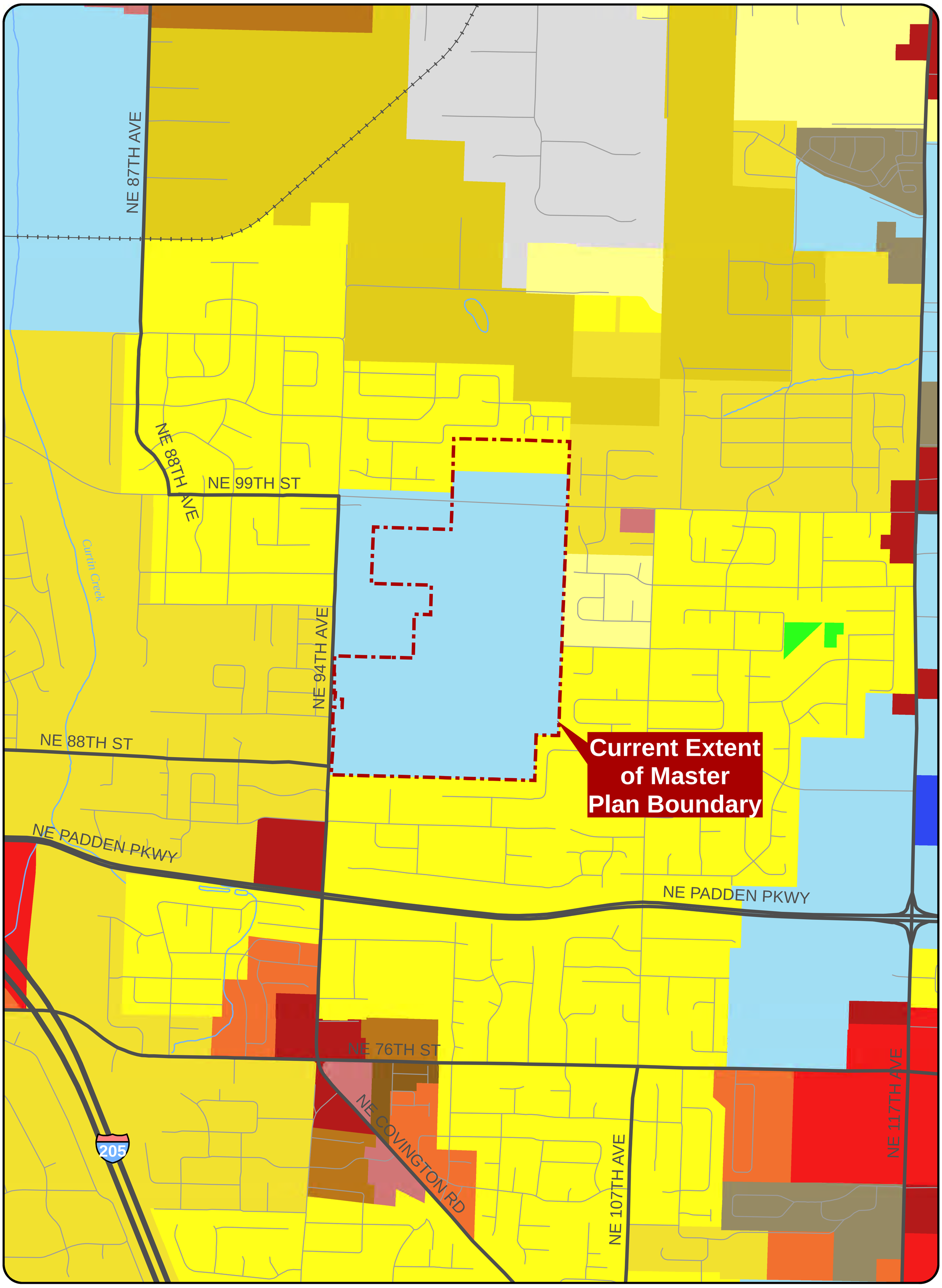

Source: Zoning and roads obtained from Clark County.

Legend

Zoning

- R1-5
- R1-6
- R1-7.5
- R1-10
- R-18
- R-22
- R-30

- Neighborhood Commercial (C-2)
- Community Commercial (C-3)
- General Commercial (GC)
- Mixed Use (MX)
- Light Industrial (IL)
- Heavy Industrial (IH)
- Parks/Wildlife refuge (P/WL)
- Urban Reserve-10 (UR-10)

Figure
Zoning
Fleischer Property
Leichner Campus

Clark County
Vancouver, Washington

0 500 1,000
Feet

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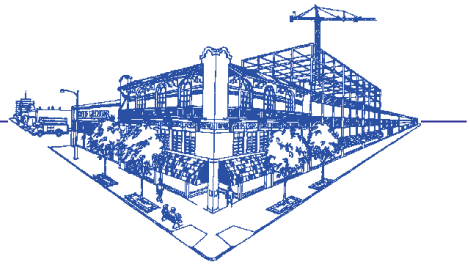
APPENDIX A

MARKET CONDITIONS TECHNICAL MEMORANDUM

E. D. Hovee
& Company, LLC
Economic and Development Services



MEMORANDUM

To:	Seth Otto - Maul Foster & Alongi, Inc. (MFA)
From:	Eric Hovee
Subject:	Overview Market Assessment for Leichner Landfill Master Plan
Date:	March 12, 2014

On behalf of MFA and Clark County, this memorandum provides an overview market assessment for reuse of properties associated with the Leichner Landfill Master Plan process. While this analysis addresses reuse opportunities for the entire 128-acre master plan area, primary focus is on development potentials for the 35-acre Koski property at the southern portion of the overall site assemblage.

Also addressed are opportunities for the adjoining 9.45 acre Fleischer property, made possible through a recently awarded Integrated Planning Grant (IPG) to Clark County. With this addition, the land area affected now encompasses a potential 137+ acre property assemblage.

Purposes of this Phase 1 overview assessment are to:

- Identify and briefly evaluate a wide range of potential development options – industrial, residential, recreation and open space uses, and possible mixed use development.
- Describe market trends, site advantages and disadvantages, potential economic returns, key issues to be addressed, and implementation requirements for each use considered.

This Phase 1 overview market assessment has been conducted as part of the Task 3 Reuse Analysis report in advance of convening a real estate expert panel and first public open house. Results of this assessment will serve as background information for these outreach discussions.

In response to input received from the real estate expert panel, public open house and design charrette, Phase 2 assessment refinement will involve the narrowing of reuse options in consultation with Clark County. For each reuse option, EDH will further evaluate market support (in terms of land needs and time required for land absorption), supportable land pricing (net of remediation/ monitoring costs), and resulting economic benefits (including jobs plus direct tax revenues to Clark County).

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LEICHNER MASTER PLAN AREA PROPERTY PROFILE

This market overview report begins with a brief profile of the Leichner landfill master plan area – including discussion of property location, ownership/parcelization, background, land use and zoning, infrastructure, and environmental considerations.[1]

Location. As depicted by the map on the following page, the approximately 128-acre Leichner landfill master plan area is located on the east side of NE 94th Avenue, with the southern boundary of the site situated approximately 0.3 miles north of the Padden Parkway. The northern boundary of the site extends just beyond what is planned as the future extension of NE 99th Street.

The property offers convenient access for auto and truck traffic to the interstate freeway system. An interchange with the I-205 freeway is located less than one mile west of the intersection of the Padden Parkway with 94th Avenue.

Ownership & Parcelization. The 128-acre site is owned by Clark County and comprised of:

- Koski Property (approximately 35 acres – as a primary focus of this market analysis)
- Closed landfill (74 acres)
- Future set aside for 99th Street right of way (11 acres)
- Vacant potential residential area (8 acres)

Immediately north of the Koski property and west of the closed landfill is a privately owned holding of approximately 9.45 acres (the Fleischer property). As a result of a recently awarded Integrated Planning Grant (IPG), this property is now being included with this master plan process – as part of a total 137+ acre assemblage.

Background. Clark County acquired 128-acres from the Leichner Brothers Land Reclamation Company (LBLRC) in 2012.The property previously was operated as the primary landfill and disposal site in Clark County from 1935 to 1992 (with site closure).

Currently, the entire property is jointly managed by the Washington State Department of Ecology (WADOE), City of Vancouver and Clark County through a series of agreements including a Consent Decree dating back to 1987. Under the terms of the Consent Decree, none of the County-owned properties may be developed until such time a certificate of completion of post-closure is issued pursuant to state statute.

[1] Information for this Leichner general market study has been obtained from sources generally deemed to be reliable. However, the accuracy of information obtained from third party sources is not guaranteed and is subject to change without notice. The observations and findings contained in this report are those of the author. They should not be construed as representing the opinion of any other party prior to their express approval, whether in whole or part.

Location of Leichner Master Play Properties

Source: Maul Foster Alongi.

Land Use. All of the properties under current county ownership have minimal building improvements but have been almost entirely constrained by landfill-related uses. There are other site improvements that have occurred in conjunction with landfill closure, including a site cap on the former landfill, retention pond to the north, and monitoring facilities.

Surrounding property uses are primarily residential to the south and east. Land to the north includes a mix of residential and vacant undeveloped property. Land immediately to the west is either vacant or in industrial use (including on-going operations of Waste Connections just west of the landfill). Properties west of 94th Avenue are primarily residential.

Zoning. Of the County's 128 acre ownership, 120 acres are zoned IL for light industrial (ML) use – also reflecting the Comprehensive Plan designation for the site. The 8 acre area at the northern edge of the site is zoned R1-7.5

All of the adjoining private property situated between the County-owned landfill site and 94th Avenue is designated for light industrial (IL) use. This designation includes the continuing operations of Waste Connections and also a small number of properties with existing residences.

The surrounding neighborhood area (on all sides) is zoned for single-family residential (R1) use, with allowed densities going as high as 12 units per acre. The Leichner master plan area is situated within the County's Sunnyside Neighborhood Association which has been identified by Clark County as inactive (as of 2012).

The *R1.5 residential* designation for the northern 8 acres of the site allows development of single family densities on lots ranging from 7,500 to 10,500 square feet in size.

The *IL light industrial* designation allows for a wide range (of all but the heaviest) agricultural, utility, construction, manufacturing, wholesale trade, transportation and warehousing uses on an outright permitted basis. Also allowed as permitted uses are a number of office and service related activities though it is noted that some educational and major health care uses are either excluded or allowed on a conditional use basis with limitations.

Retail including food service uses except for auto/motor vehicle dealers and general merchandise stores are generally allowed – though some retail uses are limited to a maximum of 10% of gross floor area of all buildings on the development site. Gasoline stations are a conditional use.

Within the IL designation, parks, trails and related uses are permitted only in association with a permitted use. Fitness/recreational uses are allowed permitted subject to the same size limitation as retail. Golf courses and country clubs are not allowed.

Accommodations (as with hotels/motels) are specifically prohibited. New residential uses are not allowed except as accessory uses (such as a caretaker, security or manager residence).

With this market analysis, only those uses as consistent with current applicable zoning are considered as viable for the industrial and residentially zoned portions of the master plan area.

Infrastructure. Access to the County-owned property, in particular, the Koski portion is via NE 94th Avenue, a Clark County arterial. This arterial is considered as generally adequate to accommodate existing residential as well as light industrial use, though improvements could be required with additional development.

NE 94th Avenue is anticipated to be widened, with new utilities and access to the Koski/Leichner site. The project is currently in design, with construction targeted to start in 2015. NE 99th Street is planned to be extended through the northern part of the site by Clark County, but with construction in 8-10 years and no funding committed to date.

Full public utilities currently appear to be available, generally from NE 94th Avenue. Sewer is provided by the Clark County Wastewater District and water by Clark Public Utilities (CPU). Electric service is also available via CPU; telephone and cable service is also understood as being available to the site. Natural gas is available though likely not in quantities adequate to serve major new industrial use(s) of the Koski and possibly the Fleischer properties.

Environmental. As noted, the entire 120 acres of the industrially designated property are encumbered by a Consent Decree under the jurisdiction of WADOE. Future encumbrances during and after development will include needed access to landfill monitoring facilities.

The property does not appear to be located in a flood plain according to FEMA maps. No significant wetlands are identified with the exception of an approximately 0.75 acre wetland associated with the former landfill area.

The *74 acre former landfill* is not expected to be available for reuse that would involve significant structures. It is possible that some passive recreation-related uses together with at-grade parking might be considered on this portion of the property.

However, recreation uses such as sports fields that involve flat sites are not likely to prove viable. This is because the capped site is mounded rather than level. Further leveling of the site without penetrating the existing landfill cap is not expected to prove viable from the joint perspectives of acceptable financial feasibility and risk management. These factors are considered in considerable detail with the prior *Fatal Flaw Analysis* and current more in-depth planning analyses by MFA and BergerABAM.

Based on the Consent Decree and a 2012 *Fatal Flaw Analysis* conducted for the site, it appears that the only portion of the industrially designated acreage suitable for future development with significant structures will be the *35 acre Koski property.* While not part of the landfill, overburden was removed from this area as part of the landfill cap.

Placement of additional fill on the Koski site may be needed before industrial or related development can occur. Development will be possible to the extent that this property is

released from the provisions of the existing Consent Decree, or via other similarly permissive amendments.

Based on prior real estate appraisal analysis conducted for Clark County, it is anticipated that environmental and regulatory issues will affect the cost of making the Koski property marketable for future development. These cost factors may be expected to include allowances for the following extraordinary factors:

- Cost of a geotech study
- Legal fees in conjunction with a proposed release and/or permissive amendment from the WADOE Consent Decree
- Extraordinary site preparation to replace overburden removed for the landfill cap
- Capital and on-going costs of site monitoring
- Time discount covering the period to achieving relief from the consent decree
- Added profit margin associated with higher risk of redeveloping a brownfield property

To be competitive for development, pricing of the Koski property will need to be adjusted for these factors and/or responsibility for mitigation undertaken by the County rather than the site developer.[2] In effect, the *net cost* to the site developer will need to be comparable to the fair market price of comparable *shovel ready* properties (free of such encumbrances) *minus* the cost to the site developer of addressing these extraordinary cost factors.

The *8 acres of residential property* at the north of the site were donated by LBLRC to Clark County after the County had purchased the initial 120 acres of industrially designated property. As with the Koski property, the residential acreage served as a borrow site during the closure of the landfill. While not designated as wetlands, this area is subject to annual flooding from rising ground water table and stormwater runoff.

Summary Notes. Prospective market opportunities for reuse of the Leichner landfill master plan area are shaped by existing location, ownership, zoning, infrastructure and environmental considerations. Based on this review, the 35-acre Koski site (plus the adjoining privately owned 9+ acre Fleischer property) presents the most viable opportunity for industrial development and also for related flex, office and supportive retail activity. The 8-acre property at the northern edge of the site is appropriately zoned and may be considered for residential use but with development likely tied to the extension of NE 99th Street.

These conditions serve as a starting point around which the rest of this market assessment is organized.

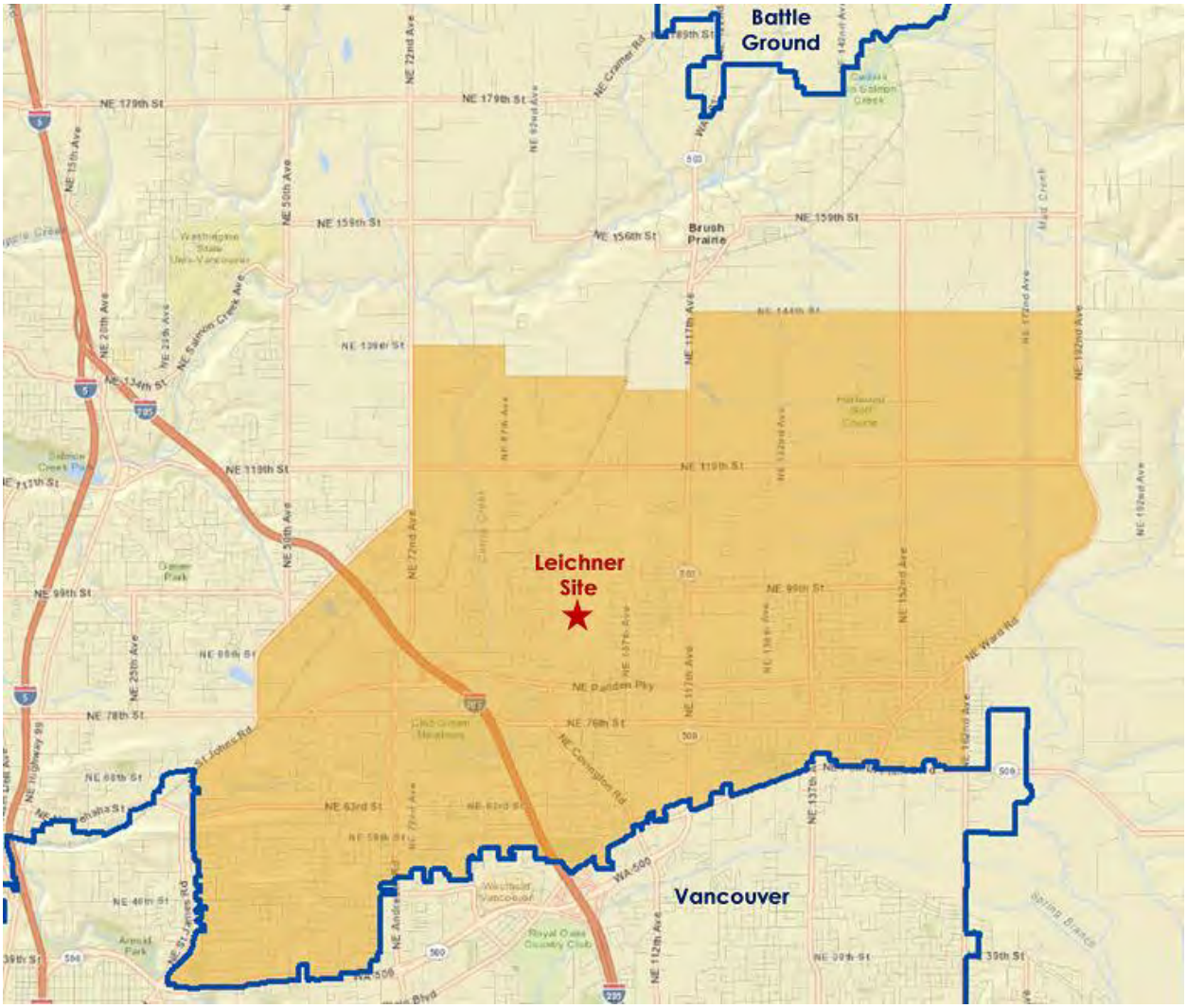
[2] In addition to extraordinary site costs, it is possible that valuation of the Koski property may also need to be adjusted for site configuration with minimal street frontage relative to site depth.

LEICHNER MARKET AREA

Three geographic market areas are identified as a basis for evaluating potential opportunities for industrial, flex, office, retail, recreation/open space and mixed use development:

- **Leichner Submarket Area** – as the unincorporated portion of Clark County extending from Vancouver's City limits and St. Johns Road to about the Brush Prairie area on the north and to the vicinity of Ward Road /NE 182nd Avenue on the east.
- **Clark County** – encompassing incorporated and unincorporated areas of Clark County.
- **Portland-Vancouver metro area** – a seven county economic region as defined by the U.S. Census Bureau including Clark and Skamania County (in Washington state) together with Multnomah, Washington, Clackamas, Columbia and Yamhill Counties (in Oregon).

Leichner Landfill Master Plan Submarket Area



Sources: Esri and E. D. Hovee & Company, LLC.

As illustrated by the map on the previous page, I-205 and the Padden Parkway serve as the primary north-south and east-west transportation corridors through the submarket area. The majority of comparable industrial / commercial property is located in proximity to I-205 and the Padden Parkway; residential uses are more dispersed throughout this submarket area.

The Portland-Vancouver metro area serves as the broader geographic context from which it is useful to profile economic trends affecting this integrated, bi-state regional economy. Due to a state boundary, limited river crossings between the two states, and property ownership by Clark County, it is also useful to describe distinct characteristics of the Clark County portion of the full metro economy.

Primary attention in this report is given to the more localized Leichner setting. Whether for industrial or other uses, this geography also comprises properties which may be both complementary to and competitive with portions of the Leichner Landfill Master Plan that are considered suitable for future development.

Based on this defined set of market areas, this assessment now turns to a brief review of market area demographics – followed by discussion of real estate products that might reasonably be considered for reuse with developable portions of the Leichner master plan area.

Demographic information utilized with this analysis is from the national data firm Claritas. Real estate information is primarily from CoStar, a nationally recognized commercial real estate data provider.

MARKET AREA DEMOGRAPHICS

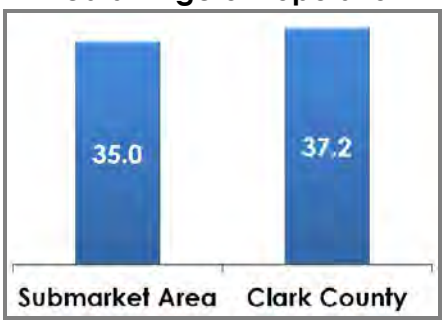
Population of the market subarea in which the Leichner property is located is estimated at 61,400 as of 2013. After increasing by nearly 33% in the decade of 2000-10, population is expected to be up by a more modest pace of an added 7% in the next five years. This is a somewhat faster rate of growth than forecast for all of Clark County.

Demographic data from Claritas is detailed by the Appendix to this report. A synopsis of key characteristics is outlined below (and shown by the graphs to the right):

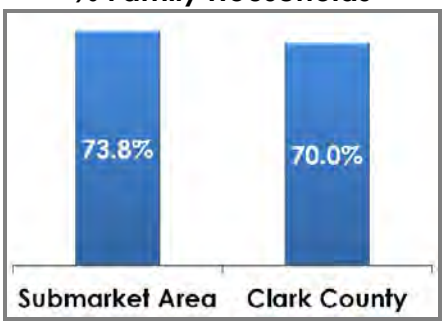
- Median age of population is below that of Clark County (at 35.0 versus 37.2 years). The submarket has above average proportions of residents at all age groups up to 44 and is under-represented for adults at ages of 45+.
- 74% of households are comprised of families (compared to 70% of households countywide).
- Less than 20% of submarket area adults have a bachelor's degree or better (as compared with close to 25% countywide).
- At nearly $54,300, median household income is about 1% above the median for Clark County.
- Close to 45% of employed residents work in blue collar or service occupations (as compared with less than 40% county-wide). Occupations with above average representation in this market subarea include persons employed in building grounds maintenance, healthcare support, maintenance repair, office and administrative support, production, personal care and services, and transportation and moving services.

A somewhat higher proportion of persons living in this submarket are in the labor force and employed than is the case county-wide. Other characteristics of submarket area residents – covering such factors as race/ethnicity, marital status, vehicle ownership, and means of transportation and average travel time to work – are generally similar to those of all Clark County residents.

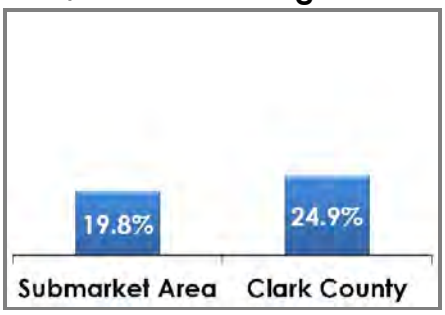
Median Age of Population



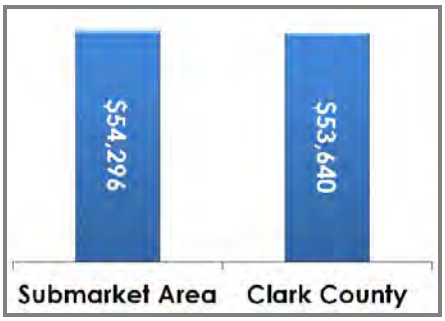
% Family Households



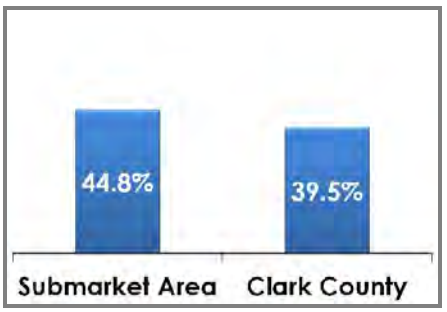
% Bachelor's Degree+



Median Household Income



% Blue Collar + Service Workers



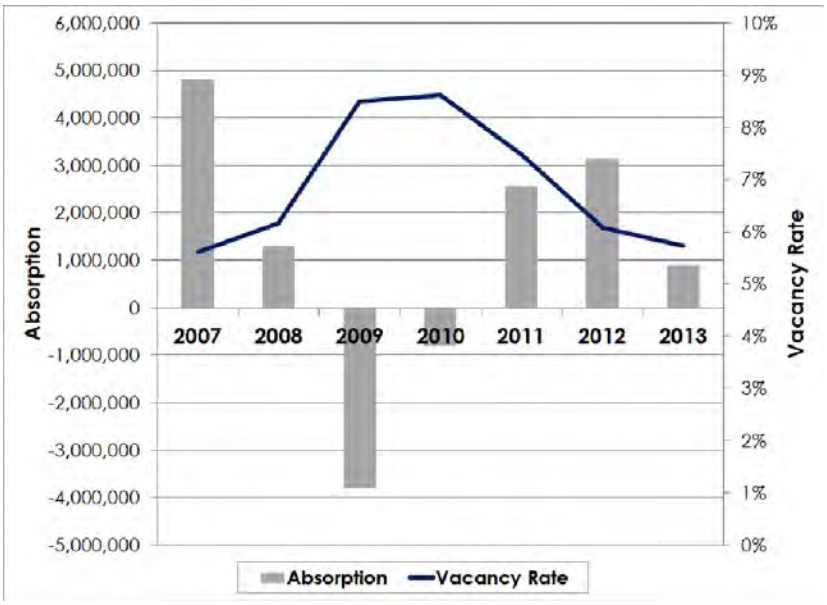
INDUSTRIAL MARKET

Discussion of uses that might be considered for reuse of some portion of the Leichner master plan area begins with industrial activity – including a review of trends regionally and locally.

Regional Market. The graph to the right compares patterns of vacancy and building space absorption for the Portland-Vancouver industrial market pre- and post recession. The recession was accompanied by negative net absorption (meaning that vacated space outpaced new leases) in 2009-10, with industrial vacancies peaking at 8.6% in 2010.

Economic recovery became apparent for the region's industrial space in 2011. By (2013), vacancies had dropped back to below 6% – at close to pre-recession levels.

PDX Metro Industrial Absorption/Vacancy (2007-13)



Sources: CoStar and E. D. Hovee & Company, LLC.

Leichner Submarket Area. As depicted by the following chart, the Leichner submarket area comprised a total of 2.2 million square feet of industrial space as of year-end 2013.

Comparative Industrial Market Indicators (Year-End 2013)

	Submarket Area	Clark County	Portland Metro
Total Inventory (SF)	2,219,972	19,344,114	191,085,618
% Warehouse/Distribution	79.32%	66.65%	69.67%
% Other	20.68%	33.35%	30.33%
Vacancy Rate	4.60%	4.80%	5.70%
Average Age (in years)	26.8	32.0	41.7
Net Absorption (2013)	134,451	75,340	964,986
Planned SF	182,713	784,213	5,235,418
Construction SF	0	70,000	897,675
Rental Rates (nnn)			
Average	$6.64	$6.18	$5.30
Range	$5.40-$11.88	$3.00-$16.25	$2.16-$42.60

Sources: CoStar and E. D. Hovee & Company, LLC.

This submarket represents about 11% of the total Clark County industrial inventory of over 19 million square feet and 1% of the more than 191 million square feet of competitive industrial space throughout the 7-county Portland metro region.

Key features of the Leichner industrial space inventory are noted as follows:

- Nearly 80% of the submarket's industrial inventory consists of warehouse/distribution space – a higher proportion than county or region-wide. The remainder of the industrial inventory is comprised of manufacturing or other unspecified space uses.
- The reported local vacancy rate is 4.6%, below both county and region-wide vacancies.
- Rental rates average between $6 and $7 per square foot per year both locally and county-wide – higher than the average rates reported region-wide. Also noted is that rates vary considerably between users – depending on factors such as size and quality of space available.
- For the 2013 calendar year just completed, net absorption locally (defined as new leases *less* new vacancies) was close to 135,000 square feet. Demand was actually stronger for this submarket than elsewhere in the county – with the remainder of Clark County experiencing negative absorption. This I-205 submarket accounted for 14% of net industrial space demand throughout the 7-county metro region.
- With 118 buildings inventoried, the "typical" industrial structure averages less than 20,000 square feet in size. As detailed by the Appendix to this report, there are nine industrial properties of 50,000 square feet or more in the Leichner market area. The largest is the 200,000+ square foot Barberton Industrial Park.
- CoStar indicates that 183,000 square feet of industrial space is planned for future development – mostly on NE Minnehaha Street. Planned buildings would range from about 6,000 to just over 40,000 square feet in size. However, no projects are indicated as being under construction at present.

Summary Notes. Industrial demand for space in the Leichner submarket area appears to be relatively robust compared to the rest of Clark County and the metro region. This area benefits from proximity to the I-205 corridor combined with good local arterial access.

The I-205/I-5 freeway system provides good access north to the Puget Sound and south to the Portland International Airport as well as east via I-84 or south on I-5 to Willamette Valley and California destinations. The Leichner site is also well positioned to draw from a substantial blue-collar labor force nearby.

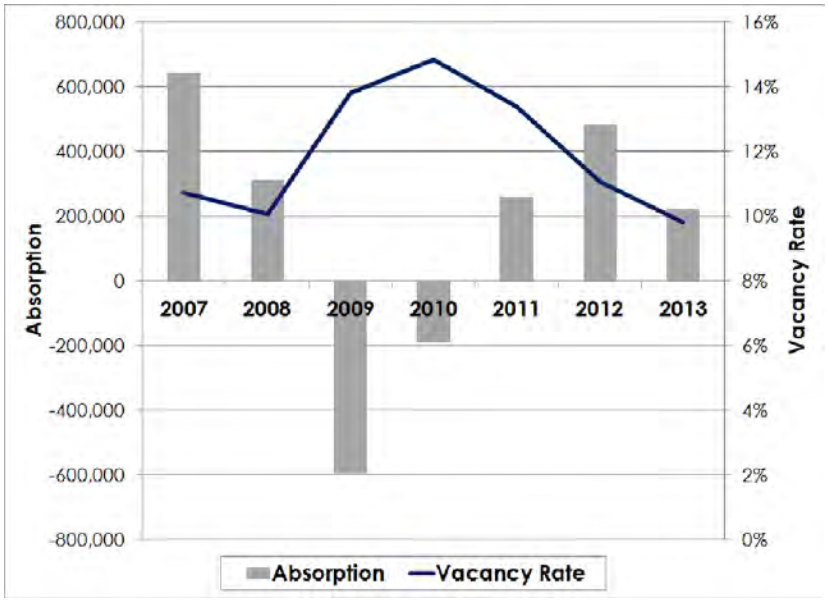
FLEX SPACE

Flex space represents a relatively new commercial real estate product type – a hybrid of traditional office and industrial space. CoStar defines *flex* as a type of building designed to be versatile; at least half of the rentable area of the building must be used as office space. Flex buildings typically are zoned light industrial and have ceiling heights under 18 feet.

Regional Flex Market. As of year-end 2013, there was an estimated 18.6 million square feet of flex building space region-wide. To date, the flex market comprises less than 10% as much building space as the traditional industrial market.

However, flex space has become a significant part of the commercial development product in some submarkets of the region. This is especially the case for Washington County's Sunset Corridor.

PDX Metro Flex Absorption & Vacancy (2007-13)



Sources: CoStar and E. D. Hovee & Company, LLC.

The pattern of absorption and vacancy from 2007-13 parallels that of office space regionally. Vacancies peaked at nearly 15% in 2010 but have since dropped to the range of 10%. Unlike industrial (and office) space, flex vacancies are now lower than they were pre-recession.

Leichner Flex Submarket. Just over 600,000 square feet is identified by CoStar as comprising the flex space inventory in the Leichner submarket area. As depicted by the following chart, the Leichner submarket area represents approximately 26% of the Clark County and 3% of the Portland metro inventory of flex space.

Comparative Flex Market Indicators (Year-End 2013)

	Market Area	Clark County	Portland Metro
Total Inventory (SF)	600,391	2,317,855	18,629,441
Vacancy Rate	14.90%	15.10%	10.00%
Net Absorption (2013)	19,777	(104,991)	219,356
Planned SF	66,753	200,652	474,652
Construction SF	0	0	1,910,911
Rental Rates (nnn)			
Average	$7.42	$8.66	$9.40
Range	$3.60-$13.20	$3.60-$19.00	$3.60-$23.00

Sources: CoStar and E. D. Hovee & Company, LLC.

Key findings for this emerging real estate product type for the Leichner submarket include the following:

- With 38 identified flex buildings, the average flex building is relatively small at just under 16,000 square feet in size. The largest local flex buildings are in the 40,000 square foot size range. As detailed by the Appendix to this report, the largest flex property owner is Eastridge Business Park with more than 335,000 square feet in multiple buildings.
- Vacancies for this submarket and all of Clark County remain relatively high at about 15%, compared with 10% for the greater metro region.
- Average rental rates are somewhat higher for flex space than industrial – but with less of a premium indicated for the Leichner subarea than for the rest of Clark County or metro area. This appears to be due, at least in part, to less product availability at the premium or high end of the rental rate spectrum.
- For the 2013 year just completed, positive absorption was reported for the Leichner submarket, while net space loss is indicated for the rest of Clark County.
- No new flex space construction is indicated as being underway anywhere in Clark, not surprising given continued high vacancy rates. On the Oregon side of the Columbia River, there is considerable new construction underway that will increase the region's flex space inventory by more than 10% when completed.
- Planned flex projects are indicated for the Leichner submarket – with three buildings planned for light manufacturing use at the Padden Parkway Business Park. One building is planned at under 10,000 square feet and two are in the range of 30,000 square feet each. Planned projects in Clark County account for more than 40% of what is planned regionally – with actual construction likely dependent on reduced vacancies or pre-leasing in advance of development.

Summary Notes. As with industrial, the Leichner submarket represents an important part of Clark County's as yet embryonic flex space market. Flex is likely to represent a lesser component of Koski property development at least near term until vacancies are reduced and supportable rent rates increase.

Earlier construction might occur as a build-to-suit or pre-lease for a specific user. Curb appeal and a master planned development image will also be more important to secure flex development than for a traditional industrial-distribution use.

OFFICE SPACE

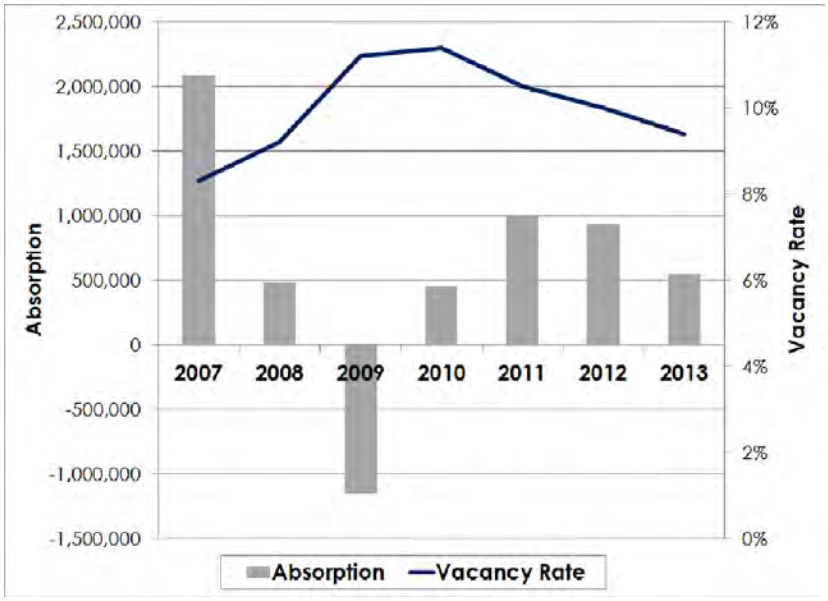
Due to industrial zoning of the Koski property, commercial office space is not expected to serve as the primary component of a site redevelopment program. However, it is possible that office and/or office/flex could prove complementary to industrial for portions of the property. This could occur, for example, at the eastern end of the site or with inclusion of the Fleischer property for added site area fronting NE 94th Avenue.

Regional Office Market. As with industrial and flex uses, 2007 was the last year of robust absorption and low vacancies before the recession. The metro area market experienced negative absorption of nearly 1.2 million square feet in 2009 (with lease terminations far outpacing new lease transactions), and with vacancies peaking in 2010 at 11.4%.

Since 2010, vacancies have been reduced each year – back to just over 9% as of 2013. Absorption is again positive, just not at the robust pace realized before the recession – and with some drop-off in activity in 2013.

Mediocre job growth has contributed to a weaker recovery of office space demand than has been the case with other forms of commercial investment property. The office market could change for the better as job growth continues and vacancy rates are further reduced.

PDX Metro Office Absorption & Vacancy (2007-13)



Sources: CoStar and E. D. Hovee & Company, LLC.

Relatively low vacancies (of 7% or less) are now reported for some submarkets such as Airport Way, in-city areas of Portland, and Central Vancouver. High vacancy rates (of 15%+) continue for Beaverton/217, Kruse Way, Sherwood and Tualatin (on the Oregon side of the Columbia River) – and for Orchards and Camas-Washougal (in Clark County).

Office development also can occur even amid higher localized vacancies for end-users as on a build-to suit basis. This type of user-driven office development often takes place in conjunction with adjoining industrial facilities owned by the same firm.

Leichner Office Submarket. As of year-end 2013, the Leichner submarket area comprises less than 275,000 square feet of office space – less than 3% of the county-wide office inventory. Key characteristics of the office market for this submarket in comparison with all of Clark County and the metro area are provided by the chart on the following page.

Comparative Office Market Indicators (Year-End 2013)

	Submarket Area	Clark County	Portland Metro
Total Inventory (SF)	273,826	10,929,488	98,305,980
% Class A	0%	20%	28%
% Class B	39%	55%	45%
% Class C	61%	26%	27%
Vacancy Rate	18.10%	10.10%	9.20%
Net Absorption (2013)	10,483	11,139	520,931
Planned SF	12,000	1,155,004	4,147,993
Construction SF	0	23,521	390,182
Rental Rates (fsg)*			
Average	$12.56	$20.34	$20.73
Range	$12.00-$15.00	$7.80-$45.00	$7.80-$45.00

*Note: There were no Submarket Area rental rates reported as full service gross, so the rents in the table are modified gross.

Sources: CoStar and E. D. Hovee & Company, LLC.

Other features of the Leichner office submarket CoStar inventory are noted as follows:

- With 50 buildings in the Leichner submarket, the typical office building averages less than 5,500 square feet in size. Only 8 buildings have more than 10,000 square feet of rentable area; there are three buildings in the range of 20-25,000 square feet. The largest owner of office properties is EastRidge Business Park totaling 89,000 square feet.
- In contrast with the rest of the county and region, this submarket currently has no properties identified as Class A office space; over 60% is classified as Class C space.
- The reported local submarket vacancy rate is over 18%, well above the 9-10% vacancy rate range noted for office space county-wide and regionally.
- Indicated local rental rates are noted as being substantially below those reported for office space county-wide and regionally. In part, this is due to a high proportion of Class C space; it also indicates the challenge for developing new product that undoubtedly will require higher rents than are currently the case to be financially feasible.
- A good sign is that this submarket experienced positive space absorption in 2013, accounting for a substantial share of the net space absorption in Clark County. However, county-wide absorption remains anemic as a share of regional office demand which itself has not yet recovered to anywhere near pre-recession levels.
- There is no construction currently underway within the local submarket and only limited office space being constructed county- and region-wide. However, there is now a considerable backlog of over 4.1 million square feet of office space planned within the metro area – including 1.2 million square feet in Clark County. One medical building is currently identified by CoStar as planned for the Leichner submarket area.

Summary Notes. Due to limited existing submarket presence coupled with high vacancies, and low rents, office space is not anticipated to be a major component of demand for the Koski property. Suitability of the site is further limited by the relatively deep configuration of the site with limited street exposure.

Except for the possibility of a large back-office operation not requiring street presence and image, the primary office use with site development is likely to be as an ancillary use to a major industrial user and/or as a limited component of a multi-tenant industrial park development.

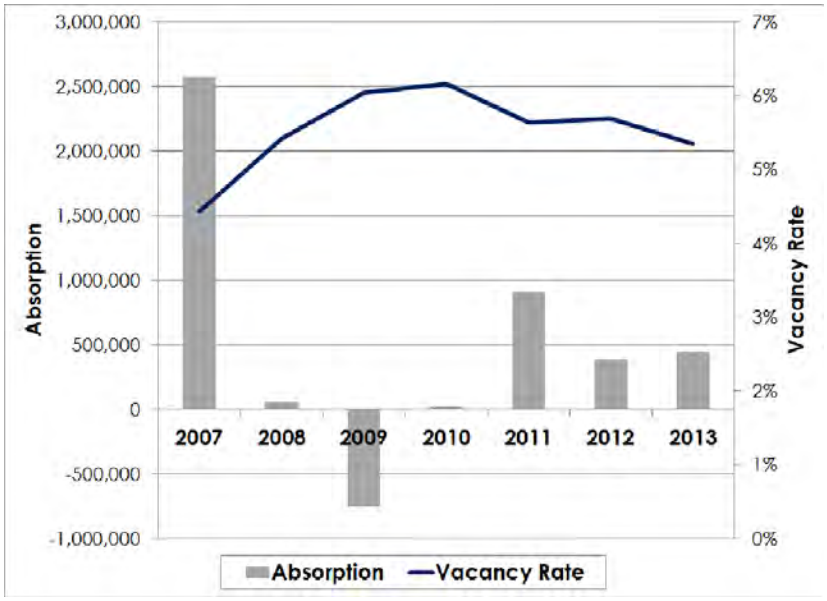
RETAIL SPACE

As with office space, retail is not expected to represent a major component of the 35-acre Koski site. Potentials are greater if the Fleischer property is included with the assemblage. Limited retail is possible on a small-scale infill basis as may be to support to support on-site industrial, flex and possibly office employment. This is consistent with existing site zoning that limits some retail uses to a maximum of 10% of gross floor area of all buildings on the development site and gasoline stations as a conditional use.

As with the other commercial uses considered, this discussion begins with a review of regional retail trends, followed by more detailed discussion of leasing and development activity in the submarket that encompasses Leichner master plan properties.

Regional Retail Market. CoStar data indicates that the seven-county metro area market has more than 115 million square feet of competitive retail space. After experiencing more than 2.5 million square feet of net absorption in 2007, the retail development market cratered -- with almost no space demand to negative net absorption each of the following three years.

PDX Metro Retail Absorption & Vacancy (2007-13)



Sources: CoStar and E. D. Hovee & Company, LLC.

Vacancy rates went from less than 4.5% to more than 6%. However, even at the peak of the recession retail vacancies were well below rates that continue to be experienced with office and flex space. The retail space market is now in an economic recovery phase. Positive absorption and declining vacancies have been experienced from 2011-13, though vacancies have not yet dropped back to pre-recession levels.

Leichner Area Retail Submarket. CoStar data indicates that the Leichner submarket area comprises approximately 1.8 million square feet of competitive retail space, both west and east of I-205. In effect, this submarket has about 9% of the competitive retail space in Clark County – as compared with 14% of population county-wide. While somewhat underserved relative to the immediate population, there is considerable retail nearby both to the south and north of this submarket – at or near the Westfield Vancouver mall and in Battle Ground, respectively.

Comparative Retail Market Indicators (Year-End 2013)

	Submarket Area	Clark County	Portland Metro
Total Inventory (SF)	1,767,205	18,752,194	115,548,120
% in a Center	71%	63%	48%
% Other	29%	37%	52%
Vacancy Rate	6.80%	7.60%	5.30%
Net Absorption (2013)	53,385	183,177	434,034
Planned SF	45,350	1,503,360	3,889,580
Construction SF	0	224,528	635,677
Rental Rates (nnn)			
Average	$14.27	$18.25	$16.94
Range	Up to $24.00	Up to $35.00	Up to $45.00

Sources: CoStar and E. D. Hovee & Company, LLC.

Other aspects of the localized market area most directly affecting Leichner site potentials for retail development are noted as follows:

- With 125 retail buildings in the CoStar database, average retail building size is over 14,000 square feet. The two largest retail stores in the area are a Fred Meyer in Orchards and a Costco on NE 84th Street – both of which range in size from 150-160,000 square feet.
- The largest multi-tenant retail center is Padden Crossing (totaling over 170,000 square feet with T-Mobile and Verison as well as Costco as tenants). Fred Meyer Orchards also includes Chase Bank and Starbucks. The 127,000 square foot Orchard Village development includes Lowe's, Woody's Chicago Style and Carl's Jr as tenants.
- A relatively high 70% of the retail space in the Leichner submarket area is situated in a planned retail center location.
- Current vacancy is reported by CoStar at 6.8%, somewhat below the Clark County rate (at 7.6%) but above the metro region (5.3%).
- Reported rents locally average just over $14 per square foot annually (reported on a triple net – tenant pays all expenses basis), which is below comparable rates county-wide and regionally. Top end of the submarket is up to $24 per square foot.
- Net absorption for 2013 is shown at a positive 53,385 square feet – equating to 29% of absorption county-wide.

- While considerable retail development is again underway or planned both county-wide and regionally regionally, there are no new retail projects currently under construction for the submarket pertinent to the Leichner master planned development. Just over 45,000 square feet of added retail is planned in smaller building increments. These planned projects range in size from 2,500 to 15,000 square feet at Bowyer Marketplace in Brush Prairie (restaurant and financial) and along NE 76th and 88th Streets.

Summary Notes. The Koski property is currently not well situated, zoned or configured for extensive retail development. Limited retail may be possible on a small-scale infill basis as it may provide ancillary support to predominant development of the property for on-site industrial, flex and possibly office employment.

If developed with the Koski property, the most likely location for retail (as with a restaurant, diner or pub) would be on the 94th Avenue street frontage. Attractiveness of this corridor for retail may be enhanced with street corridor improvements planned for 2015. Service retail uses (such as a small fitness center or copy/print/mail center) also might be possible at the interior of the site if included as tenants in a larger industrial or business park development.

Relatively low rents suggest a fairly utilitarian retail/support use. Retail site potentials are also improved if the Fleischer property is added to the Koski site, providing for more retail street frontage along NE 94th Avenue.

Most retail and related service/commercial tenants at this site would also be expected to be fairly small in size, generally ranging from about 1,500 to 3,500 square feet per tenant. Larger retail-related tenants might be accommodated subsequent to 94th Avenue corridor improvements if the Fleischer property were also included with the Koski property as a complete development package, and zoning amended on pertinent portions of the combined assemblage.

RESIDENTIAL DEVELOPMENT

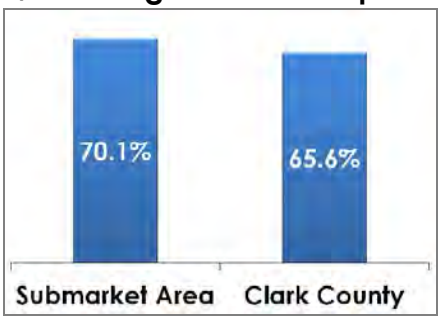
As of 2013, the submarket area encompassing the Leichner master plan area has a total of approximately 22,400 housing units. This submarket of Clark County is forecast to add nearly 1,500 households units in the five years from 2013-18 (averaging 300 new occupied units per year), and representing a 7% increase in occupied housing stock over this period.[3]

Other key features of Leichner submarket housing are summarized based on Claritas data as follows:[4]

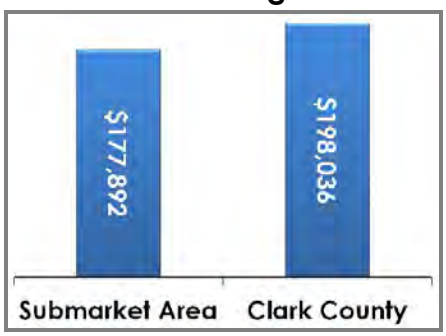
- The overwhelming majority of local occupied housing (70%) is owner-occupied – somewhat above the 66% ownership rate countywide.
- At close to $178,000, median housing values are 10% below the countywide median; over 60% of units are valued in the $100-$200,000 price range.
- This market area is strongly single-family oriented, with 75% of the housing inventory comprised of 1-unit, detached residences.
- Area residents also are accustomed to living in housing of relatively recent construction vintage; 55% of all units locally have been built in 1990 or more recently.

Residential Affordability. The recent pick-up in single-family residential construction in Clark County reflects, in part, the improved affordability of housing – due to reasonable price points and low interest rates. Using an index developed by the University of Washington, index values (as illustrated on the next page) indicate greater ability of a middle income family to carry the mortgage payments on a median priced home.

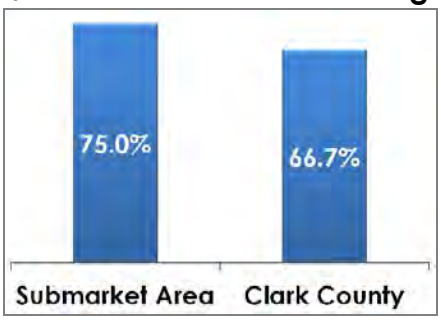
% Housing Owner-Occupied



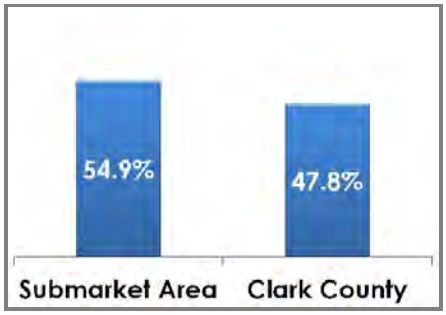
Median Housing Values



% of 1 Unit Detached Housing



% of Homes Built 1990 or Later

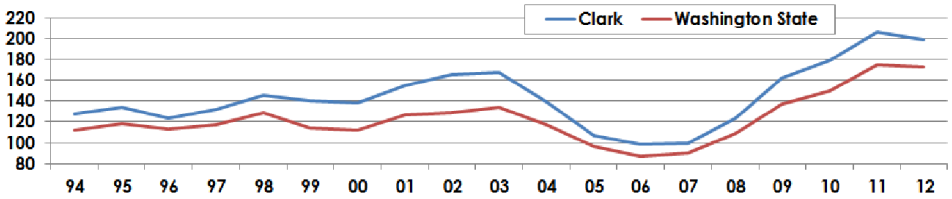


[3] If 81.5% of new residences remain as single-family, the Claritas forecast would indicate annual absorption of 195 added single-family homes annually (rounded to 200 at a 2.5% vacancy factor).

[4] Claritas is a national provider of demographic data customized to geographies as determined by the user. In addition to providing current estimates and trend data, the firm also provides 5-year forecasts for selected data items. Claritas is a division of The Nielsen Company.

Over the entire period from 1994-2013, Clark County also has maintained good affordability relative to the rest of Washington state.

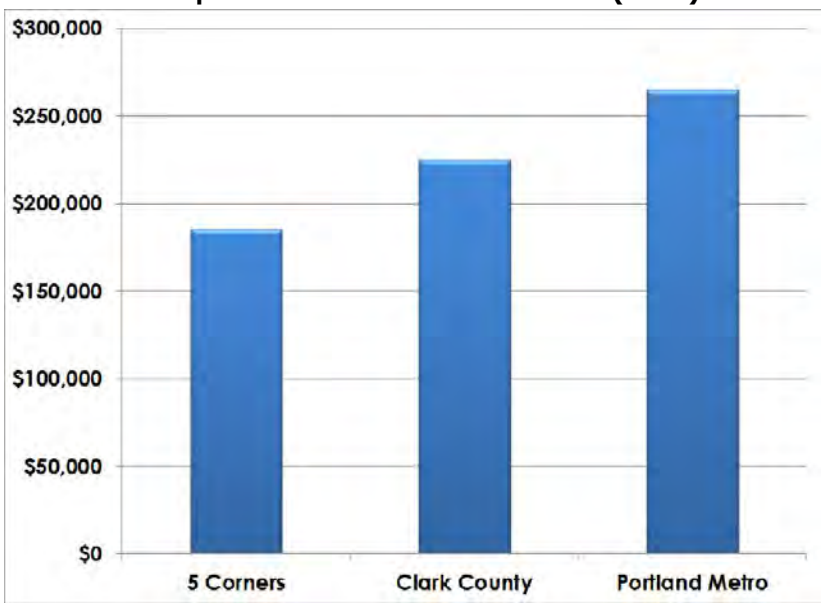
Washington State Affordability Index



Source: Washington State Center for Real Estate Research (WCRER) at Runstad Center, University of Washington.

Residential Pricing. Single family home pricing data for *existing and new home construction* has been compiled for the Five Corners portion of the larger submarket – as indicative of trends potentially applicable to the northern residential portion of the Leichner property:

Comparative Median Sales Prices (2013)



Sources: RMLS, E. D. Hovee & Company, LLC. Appendix B has added detail.

- Median sales price of a Five Corners home for 2013 was $185,500; average price was somewhat more at $195,500.
- Median prices for area sales were 18% below Clark County, and 30% below the Portland metro median price.
- However, average home prices for the Five Corners area homes increased by 25% in just the last year, almost double the 13% rate of price appreciation experienced county and region-wide.
- Total market time to sale dropped from 116 days in 2012 to 80 days in 2013. Market time is more favorable for this market subarea as compared with Clark County and the entire Portland metro area.

While housing has been relatively affordable for the Five Corners area, there is considerable variation throughout the larger market subarea. Housing costs are generally higher to the north and east of the Leichner site than to the south or west. This is particularly the case for new home construction.

Summary Notes. As of 2013, new homes in the immediate proximity of Five Corners appear to be supporting pricing in the range of $250,000. At about 2,000 square feet per unit, typical unit size is 10-15% smaller than the average new single family home being constructed in Clark County.

To the extent that housing at the northern edge of the Leichner master plan area can be developed and marketed as providing added amenity value, it is possible that a higher end product (with more square footage and/or higher value per square foot of structure) could be supported. The extent to which this is possible likely depends on purchaser perceptions of the amenity of being proximate to a potential recreation and open space amenity versus concerns over direct or indirect landfill contamination or monitoring related activities into the future.

RECREATION & OPEN SPACE USES

According to Clark County GIS data, there are 556 acres of in the land in the Leichner submarket area that have a zoning and comprehensive plan designation as parklands. This figure includes both public and privately owned properties.

Of this total, ten parks totaling 348 acres are currently developed and operated by Vancouver Parks and Recreation.

Subarea Parks Operated by Vancouver Parks & Recreation

Parks	Acres
Bosco Farm Park	12
Covington Neighborhood Park	5
Hockinson Meadows Park	240
Little Prairie Park	2
Oak Grove Neighborhood Park	4
Orchards Highlands Neighborhood Park	8
Orchards Park	58
Road's End Park	8
Sifton Neighborhood Park	5
Tiger Tree Neighborhood Park	6
Total	348

Sources: E. D. Hovee & Company, LLC from Vancouver Parks & Recreation website.

Other parklands in the subarea include public lands owned by Clark County but not yet developed and private ownerships as with the Green Meadows golf course and Glenwood Little League.

As documented previously by a 2012 analysis of potential Leichner master plan area reuses, there are two parks in closest proximity to the subject site. One park is playground-oriented and the other provides a trail system:

- The Orchards Highlands Neighborhood Park, located about five blocks to the east of the former Leichner landfill, features low impact uses such as trails.
- A small neighborhood park to the west of the property is shared with Sunset Elementary School (not part of the parks system operated by Vancouver Parks and Recreation).

All together, the 556 acres designated for parks use in the subarea equates to just over nine acres per 1,000 area residents. This is a greater acreage allocation than the approximately five acres per 1,000 residents county-wide.

While this preliminary data indicates a relative surplus of park-related land in the subarea (as compared with all of Clark County), there may yet be opportunity for additional park area development and open space. Park-related preservation of the former landfill could serve recreation needs of the most immediate adjoining residences east and north of the Leichner site and/or also serve larger regional needs for passive open space and associated event use.

MIXED USE DEVELOPMENT

Mixed use development can involve a combination of two or more of the commercial and/or residential land uses evaluated with this overview market assessment, coming in two forms:

- *Vertical mixed use* – where two uses such as residential and retail are combined in a single multi-story building. This typically occurs in a more urban setting associated with higher land values than are found in the Leichner master plan area. Vertical mixed use is not anticipated with any significant portion of redevelopment for this site area.
- *Horizontal mixed use* – occurring when two uses are located next to each other, often though not always in separate buildings. An example would be a business park that includes a mix of industrial, office and some support retail service tenants. The large acreage and distinct character of various portions of the Leichner property could be supportive of some form of horizontal mixed use.

The form of horizontal mixed use that appears most supportable from this market review likely would involve an industrial-led development on the Koski (and possibly the adjoining Fleischer) properties. Horizontal mixed use could occur with some complementary office and/or retail, passive recreation/open space on the capped landfill portion of the site, and with single family residential at the northern end of the property (north of 99th Street).

LAND VALUATION

Information regarding land values is of interest with respect to understanding the marketability of the subject Leichner master plan properties for future redevelopment – especially for the Koski and Fleischer sites. Data obtained with this initial Phase 1 overview report will become of greater relevance with Phase 2 refined analysis of financial feasibility for reuse including supportable land valuation.

With this initial assessment, existing land value information has been reviewed from two perspectives:[5]

- Current tax assessed values for industrially designated properties adjoining the Leichner land fill but which are not subject to the consent decree. Assessed values of these sites generally appear to range between about $2.50-$3.00 per square foot.
- Twelve industrial land sales transactions on parcels of 5-20 acres in Clark County between 2011-14. Market transaction values ranged from less than $1.50 to nearly $6.00 per square foot, averaging about $3.00. Market valuation appears somewhat above the tax assessed land value of these properties of about $2.25 per square foot.

This initial review indicates a reasonable correspondence between the assessed values of Leichner area industrial sites and recent market transactions county-wide. However, site by site review may indicate the need for adjustments to reflect extraordinary costs that might be needed to make specific properties *shovel-ready* without undue site or cost constraints.

More in-depth review of potential sales and lease values may be made with Phase 2 of this analysis. A more detailed determination of supportable land values will also take into account extraordinary costs associated with landfill-related issues as have been documented by prior property appraisal analysis. This more in-depth review can also be aimed to address questions raised by participants through discussion with the Real Estate Expert Panel.

DEVELOPMENT OPTIONS SUMMARIZED

This report has assessed market trends and prospects for an array of uses that could be considered for portions of the Leichner landfill master plan area. Uses considered have included industrial, flex, office, retail, single family residential, recreation/open space, and mixed use.

The chart on the following page provides a summary *matrix comparison* of the suitability of these uses in terms of such factors as market trends, site advantages and disadvantages, potential economic returns, key issues to be addressed, and implementation requirements.

[5] Clark County tax assessed valuations are as of 2013. Land transaction data is based on a compilation by CoStar.

Leichner Landfill Area Master Plan - Comparative Reuse Matrix

Potential Site Use	Market Opportunity	Site Advantages	Site Disadvantages	Economic Returns	Key Issues to Address	Implementation Requirements
Industrial	Strong, especially for distribution	• I-205 proximity + local access • Good blue collar labor force	• Deep / narrow configuration • Adjacency to residential uses	*# Jobs:* Mid *Wages:* High *Taxes:* Mid	• Truck access • Housing buffer • Extraordinary site costs w/landfill	Secure single developer, discount price to market
Flex Space	Modest with build-to-suit or pre-lease	• Potential mix w/ industrial space • NE Clark County labor force	• Low area rents & high vacancies • Distance from tech corridors	*# Jobs:* Mid-High *Wages:* High *Taxes :*Mid	• Siting to open space amenity • Creating value to support high rent	Reserve high-amenity site area; market to anchor flex user or tenant
Office	Limited to back-office or build-to-suit	• Potential mix w/ industrial space • For back office not requiring street presence	• Low area rents & high vacancies • Limited street presence	*# Jobs:* High *Wages:* Mid-High *Taxes:* Mid	• Siting to open space amenity • Creating value to support high rent	Site plan for high amenity office use plus parking requirements
Retail	Limited to small scale, ancillary retail/service use	• Potential support to industrial use • Enhanced w/ Fleischer site	• Zoning restriction to ancillary use • Limited street frontage	*# Jobs:* Mid *Wages:* Low-Mid *Taxes:* High	• Street frontage for pad site(s) • Integration with Fleischer site	Target preferred retail to support on-site jobs + neighborhood
Single Family Residential	Strong for housing on north side of former landfill	• Nearby housing (north side) • Potential amenity of open space	• Small site size (8 acres) • Perception of land fill proximity	*# Jobs:* High during construction only *Wages:* Mid-High *Taxes:* Mid	• Setting market niche for housing • Designing landfill pond as amenity	Develop separately from Koski property
Recreation / Open Space	Good for passive neighborhood or regional open space	• Large open space for passive use • Possible outdoor event space	• Not suitable for active sports use • Use conflicts with adjoining housing	*# Jobs:* Low *Wages:* Low-Mid *Taxes:* None-Low	• Parking to serve non-local events? • Commercial event potential?	Master plan with credibility to attract full site reuse
Mixed Use	Most likely if led by industrial anchor user	• Separate housing & industrial areas	• Site configuration limits mix options	*# Jobs:* Mid-High *Wages:* High *Taxes:* Mid	• Integration with Fleischer site • Which use leads?	Focus on recreation plan & industry first

Source: E. D. Hovee & Company, LLC. Analysis is preliminary, intended for illustrative purposes, and subject to revision.

What follows is a summary of preliminary findings and recommendations from this analysis.

Market Opportunity. Of the reuse potentials considered, the Leichner master plan area appears to offer the strongest market opportunity for industrial development on the Koski and (potentially) the adjoining Fleischer properties. While a manufacturing use is possible, this submarket of Clark County appears to be particularly well suited for distribution or related transportation related uses due to its ready access to I-205. It is possible that industrial reuse could be complemented by some portion of the site being developed by flex, office and/or limited ancillary retail space.

Passive recreation/open space represents the best (and perhaps only viable) economic reuse associated with the capped landfill portion of the site. Single family residential offers good potential for the 8 acres north of what could be an extended 99th Street corridor. All site reuses are conditioned on both real and perceived environmental issues associated with landfill reclamation and monitoring being successfully addressed in perpetuity.

Site Advantages. As noted above, the property's proximity to I-205 represents perhaps its greatest asset for industrial and related site reuse. Access to a good blue collar and service labor force together with affordable housing also could be important to the firms that might be recruited to the Koski (and potentially Fleischer) portions of the site.

For single family and recreation/open space uses, the site benefits from proximity to an established neighborhood centrally located in Clark County. Potential for reuse as an outdoor event venue would also benefit from the large open space available plus outstanding clear-weather views to Mount St. Helens.

Site Disadvantages. For industrial and associated commercial reuses, primary disadvantages or challenges are associated with the deep and rather narrow configuration of the Koski site (with limited street frontage) and with adjacency to residential (creating potential use conflicts). This may reduce building site coverage and associated land value. For supporting commercial flex and office uses, site competitiveness may also be hampered by relatively low rents and high vacancies as compared to elsewhere in Clark County and regionally.

For open space/recreation, the primary market-related disadvantage is that environmental and topographic considerations will likely preclude active sports field use. For residential, limiting factors are the small size of the site area available (at only 8 acres), need for completed 99th Street extension and perceived or real issues associated with proximity to a former landfill.

Economic Returns. With this analysis, economic returns have been considered on a preliminary basis from three perspectives:

- *# of jobs created* – which is related to building site coverage and number of workers per square foot of building area. Of the uses considered, office typically yields the highest levels of employment on a square foot or per acre basis – followed by flex, retail, industrial manufacturing and then distribution.

Job impacts for residential are typically limited to temporary one-time benefits associated with home construction together with any on-going home occupation uses. There may be little to no job direct impact associated with recreation/open space use – except possibly as an outdoor event venue (as for weddings). Job potential with mixed use will be dependent on the proportion of the site developed for each of the uses separately, then added together.

- *Wage rates* – typically are relatively high for industrial and professional office uses, then lower for retail. However, there is considerable wage rate variation within particular employment sectors depending on the wage profile of each individual business.

  Some manufacturing or distribution firms pay extremely well, others not so well. While retailing is generally lower paying (and with a higher proportion of part-time and entry level workers), there are some retailers that pay wages competitive with industrial uses.
- *Tax revenues* – focused on returns to Clark County and other local jurisdictions including schools. Due to the combination of growing reliance on sales tax and the 1% property tax limitation, tax revenues per square foot of building in Washington tend to be highest for retail related uses (except for grocery and pharmacy items which are tax exempt).

  Construction activity is also represents a strong source of sales tax generation, though of temporary duration when considered on a site-specific basis. Recreation and open space can be expected to generate minimal to no tax revenues, especially as the capped landfill site is expected to remain exempt from property taxes due to public ownership.

More detailed quantitative estimates of economic returns that might be anticipated will be conducted with Phase 2 assessment refinement. This will occur as reuse options are narrowed based on stakeholder and public input in consultation with Clark County.

Key Issues to Address. Issues are identified from the perspective of their importance to market feasibility and will vary somewhat by use considered. Key issues that could serve to make or break the market appeal for industrial use include ability to provide suitable truck access to the site, appropriate buffering with adjoining residential uses (related to business operating characteristics as for noise, lighting, and security), and the extraordinary costs of development associated with landfill proximity that may make this site non-competitive with other unimpaired greenfield sites elsewhere in Clark County or regionally.

For flex space and office use, orientation to an open space amenity may be important to increase business tenant appeal and support higher rents to defray costs of construction. For retail uses (though limited), street frontage for pad sites including integration with the Fleischer site could nonetheless prove instrumental.

For residential, designing the 99th Street corridor and nearby landfill pond as an amenity feature could be useful to address potential homebuyer concerns if not create added property value. For mixed (industrial/commercial) development, integration with the Fleischer property becomes of greater importance for added site area and street frontage. A related question will be to determine which use has the greatest potential to kick-off the development, creating momentum for eventual build-out of developable portions of the full master plan area.

Implementation Requirements. Priority actions to better assure site market feasibility are closely tied to key issues which vary by use considered, as follows:

- *Industrial* – feasibility is most sensitive to extraordinary factors that affect cost of development because the per acre value of land supported by industrial is generally less than for other uses. To be competitive for development with unimpaired greenfield sites, pricing of the Koski property will need to be discounted for these extraordinary factors and/or responsibility for mitigation undertaken by the County rather than the site developer. Also recommended is that the County select a single development entity with experience and capacity to redevelop and sustain a viable project complicated by on-going environmental compliance requirements.
- *Flex space* – market capture could be integrally linked to reservation of high amenity portions of the site for this use coupled with aggressive marketing to an anchor flex space user or tenant.
- *Office* – development involves similar considerations as for flex space, including a site plan that identifies suitable location within the property for a high amenity office use plus addressing greater parking requirements of office as compared with industrial/flex space.
- *Retail* – due to size limitations of current zoning, it is recommended that a targeted approach be taken to identified preferred types of retail that would be most useful to support on-site job uses and immediate surrounding neighborhood priorities (primarily for smaller scale convenience service retail).
- *Single family residential* – is recommended to be developed separately from the Koski property via sale to a qualified developer with experience in marketing residential in proximity to adjoining remediation sites.
- *Recreation/open space* – trail and recreational development is recommended to proceed based on a master plan process aimed not only to accommodate passive recreation but also to accommodate potential event uses, creating amenity value for adjoining employment and residential development.
- *Mixed use* – development is most likely to be driven by a recreation/open space master plan integrating the full site together with securing an industrial anchor user.

Next Steps. Questions and suggestions related to any aspect of the Phase 1 market overview report are welcome. As appropriate, revisions and further research to supplement this initial analysis will be made based on comments received as a basis for Phase 2 assessment refinement.

The current list of reuse options will be narrowed in consultation with Clark County. For each reuse priority, the Phase 2 analysis will describe potential market support (in terms of land needs and time required for absorption), suitable land pricing (net of extraordinary remediation/monitoring costs), and resulting economic benefits.

APPENDIX. SUPPLEMENTAL DATA TABLES

On the following pages are provided detailed supplemental data tables used for this overview market analysis:

- Population Demographics
- Household & Income Profile
- Employment & Transportation Indicators
- Housing Profile
- Submarket Area Industrial Properties
- Submarket Area Flex Properties
- Submarket Area Office Properties
- Submarket Area Retail Centers
- Single Family Housing Sales

Population Demographics (Claritas)

Description	Estimated Number Submarket Area	Clark County
Population		
2018 Projection	65,758	468,522
2013 Estimate	61,412	441,228
2010 Census	58,839	425,363
2000 Census	44,262	345,240
Growth 2013-2018	7.08%	6.19%
Growth 2010-2013	4.37%	3.73%
Growth 2000-2010	32.93%	23.21%
2013 Est. Population by Age (%)	61,412	441,228
Age 0 - 4	4,726	30,925
Age 5 - 9	4,635	30,770
Age 10 - 14	4,734	32,542
Age 15 - 17	2,926	20,123
Age 18 - 20	2,472	17,315
Age 21 - 24	3,141	22,119
Age 25 - 34	8,073	53,666
Age 35 - 44	8,853	59,846
Age 45 - 54	8,374	62,389
Age 55 - 64	6,890	55,639
Age 65 - 74	3,946	33,909
Age 75 - 84	1,739	15,108
Age 85 and over	901	6,877
2013 Est. Median Age	35.0	37.2
2013 Est. Average Age	35.7	37.4
2013 Est. Pop Age 15+ by Marital Status (%)	47,316	346,991
Total, Never Married	13,654	92,986
Males, Never Married	7,120	49,381
Females, Never Married	6,533	43,605
Married, Spouse present	24,125	183,243
Married, Spouse absent	1,884	12,911
Widowed	2,152	16,746
Males Widowed	382	3,383
Females Widowed	1,770	13,363
Divorced	5,500	41,105
Males Divorced	2,468	17,868
Females Divorced	3,032	23,237
2013 Est. Pop. Age 25+ by Edu. Attainment (%)	38,777	287,434
Less than 9th grade	971	8,701
Some High School, no diploma	2,589	17,139
High School Graduate (or GED)	11,980	78,332
Some College, no degree	11,850	83,788
Associate Degree	3,695	27,973
Bachelor's Degree	5,099	46,344
Master's Degree	2,033	19,113
Professional School Degree	399	3,962
Doctorate Degree	162	2,082

Household & Income Profile (Claritas)

Description	Submarket Area	Clark County
Households		
2018 Projection	22,768	174,503
2013 Estimate	21,286	164,028
2010 Census	20,451	158,099
2000 Census	15,441	127,210
Growth 2013-2018	7.0%	6.4%
Growth 2010-2013	4.1%	3.8%
Growth 2000-2010	32.5%	24.3%
2013 Est. Households by Household Type (% of Total)		
Family Households	73.8%	70.0%
Nonfamily Households	26.2%	30.0%
2013 Est. HHs by HH Income (%)		
CY HHs, Inc < $15,000	8.2%	10.3%
CY HHs, Inc $15,000 - $24,999	8.9%	9.6%
CY HHs, Inc $25,000 - $34,999	10.9%	11.0%
CY HHs, Inc $35,000 - $49,999	17.7%	15.9%
CY HHs, Inc $50,000 - $74,999	25.0%	21.9%
CY HHs, Inc $75,000 - $99,999	14.7%	13.8%
CY HHs, Inc $100,000 - $124,999	8.0%	7.8%
CY HHs, Inc $125,000 - $149,999	2.6%	3.6%
CY HHs, Inc $150,000 - $199,999	2.7%	3.9%
CY HHs, Inc $200,000 - $249,999	0.6%	0.9%
CY HHs, Inc $250,000 - $499,999	0.6%	1.1%
CY HHs, Inc $500,000+	0.1%	0.2%
2013 Est. Average Household Income	$63,027	$66,407
2013 Est. Median Household Income	$54,296	$53,640

Employment & Transportation Indicators (Claritas)

Description	Submarket Area	Clark County
2013 Est. Pop Age 16+ by Employment Status (% of Total)		
In Armed Forces	0.3%	0.3%
Civilian - Employed	59.7%	57.2%
Civilian - Unemployed	8.3%	8.0%
Not in Labor Force	31.6%	34.6%
2013 Est. Civ Employed Pop 16+ by Occupation (%)		
Architect/Engineer	2.4%	3.0%
Arts/Entertain/Sports	1.7%	1.8%
Building Grounds Maint	3.5%	3.3%
Business/Financial Ops	3.7%	5.2%
Community/Soc Svcs	1.3%	1.6%
Computer/Mathematical	2.3%	2.3%
Construction/Extraction	4.7%	4.7%
Edu/Training/Library	5.3%	5.3%
Farm/Fish/Forestry	0.1%	0.3%
Food Prep/Serving	4.4%	4.4%
Health Practitioner/Tec	3.5%	4.6%
Healthcare Support	2.8%	2.3%
Maintenance Repair	4.3%	3.6%
Legal	1.1%	0.9%
Life/Phys/Soc Science	0.4%	0.5%
Management	8.4%	10.1%
Office/Admin Support	16.1%	14.3%
Production	8.1%	6.0%
Protective Svcs	1.8%	2.3%
Sales/Related	9.2%	10.8%
Personal Care/Svc	4.8%	4.1%
Transportation/Moving	10.4%	8.6%
2013 Est. Pop 16+ by Occupation Classification (%)		
Blue Collar	27.5%	22.8%
White Collar	55.2%	60.5%
Service and Farm	17.3%	16.7%
2013 Est. Households by Number of Vehicles (% of Total)		
No Vehicles	3.1%	4.8%
1 Vehicle	28.0%	29.7%
2 Vehicles	43.4%	41.7%
3 Vehicles	17.1%	16.0%
4 Vehicles	5.4%	5.0%
5 or more Vehicles	2.9%	2.8%
2013 Est. Workers Age 16+, Transp. To Work (%)		
Drove Alone	78.6%	78.6%
Car Pooled	12.6%	10.0%
Public Transportation	1.7%	2.4%
Walked	0.9%	1.4%
Bicycle	0.3%	0.5%
Other Means	1.2%	1.3%
Worked at Home	4.7%	5.9%
2013 Est. Workers Age 16+ by Travel Time to Work (%)		
Less than 15 Minutes	23.1%	25.0%
15 - 29 Minutes	44.2%	40.8%
30 - 44 Minutes	20.0%	21.5%
45 - 59 Minutes	6.6%	7.1%
60 or more Minutes	6.1%	5.6%
2013 Est. Avg Travel Time to Work in Minutes	27.4	27.2

Housing Profile (Claritas)

Description	Submarket Area	Clark County
2013 Est. Tenure of Occupied Housing Units (%)		
Owner Occupied	70.1%	65.6%
Renter Occupied	29.9%	34.4%
2013 Owner Occ. HUs: Avg. Length of Residence (Years)	13.5	14.2
2013 Renter Occ. HUs: Avg. Length of Residence (Years)	5.8	6.1
2013 Est. All Owner-Occupied Housing Values (% of Total)		
Value Less than $20,000	2.7%	2.6%
Value $20,000 - $39,999	1.0%	1.2%
Value $40,000 - $59,999	1.0%	0.9%
Value $60,000 - $79,999	0.9%	1.0%
Value $80,000 - $99,999	2.0%	2.3%
Value $100,000 - $149,999	18.8%	15.5%
Value $150,000 - $199,999	42.2%	27.6%
Value $200,000 - $299,999	22.7%	28.8%
Value $300,000 - $399,999	6.1%	12.1%
Value $400,000 - $499,999	0.9%	2.8%
Value $500,000 - $749,999	1.3%	4.0%
Value $750,000 - $999,999	0.1%	0.3%
Value $1,000,000 or more	0.1%	0.8%
2013 Est. Median All Owner-Occupied Housing Value	$177,892	$198,036
2013 Est. Housing Units	22,412	173,730
2013 Est. Housing Units by Units in Structure (% of Total)		
1 Unit Attached	3.8%	6.2%
1 Unit Detached	75.0%	66.7%
2 Units	1.1%	2.9%
3 or 4 Units	3.7%	4.3%
5 to 19 Units	7.5%	9.1%
20 to 49 Units	1.2%	2.0%
50 or More Units	3.3%	4.4%
Mobile Home or Trailer	4.4%	4.3%
Boat, RV, Van, etc.	0.1%	0.2%
2013 Est. Housing Units by Year Structure Built (%)		
Housing Unit Built 2005 or later	10.6%	7.9%
Housing Unit Built 2000 to 2004	15.6%	13.7%
Housing Unit Built 1990 to 1999	28.8%	26.2%
Housing Unit Built 1980 to 1989	12.3%	13.4%
Housing Unit Built 1970 to 1979	19.2%	19.1%
Housing Unit Built 1960 to 1969	6.9%	7.1%
Housing Unit Built 1950 to 1959	3.1%	4.8%
Housing Unit Built 1940 to 1949	2.0%	3.5%
Housing Unit Built 1939 or Earlier	1.7%	4.4%
2013 Est. Median Year Structure Built	1992	1988

Sources: Claritas, E. D. Hovee & Company, LLC.

Submarket Area Industrial Properties (50,000+ Square Feet)

Name	Building Address	RBA (SF)
Barberton Industrial Park	10016-10020 NE 72nd Ave	203,808
Wubben Industrial Park	11218-11606 NE 66th St	163,369
EastRidge Business Park	11917-12609 NE 95th St	149,693
Opus/205 Commerce Center	5900 NE 88th St	130,900
Luokkala Industrial Park	7000 NE 40th Ave	114,800
Premier Pump & Power LLC	7600 NE 47th Ave	75,032
Central Industrial Park	6000 NE 88th St	68,840
Rubber & Plastics, Inc	7401 NE 47th Ave	63,715
Minnehaha Corporate Center	4208-4220 NE Minnehaha St	57,610

Sources: CoStar and E. D. Hovee & Company, LLC, as of year end 2013.
Ownership totals include multi-building assemblages.

Submarket Area Flex Properties (All Sizes)

Name	Building Address	RBA (SF)
EastRidge Business Park	11719-12906 NE 95th St	335,011
Cold Creek Industrial Park	4510 NE 68th Dr	44,316
McSteven's Inc	5600 NE 88th St	38,270
M2J Business Park	6300 NE St James Rd	34,494
Erickson Enterprises LLC	7811-7939 NE St Johns Rd	32,923
CHS Pharmacy Corporation	6600 NE 112th Ct	30,960
Major Foster Business Park	8901 NE 117th Ave	20,000
Klineline Center	11815 NE Highway 99	18,000
Hot Rod Engineering	4117 NE Minnehaha St	16,639
Laser Materials Corporation	12603 NE 95th St	10,000
Event Media Management	6716 NE 117th Ave	8,060
Interconnect Sales, Inc.	12011 NE 95th St	7,514
CH Kruse Plumbing, Inc	5800 NE 88th St	4,204

Sources: CoStar and E. D. Hovee & Company, LLC, as of year end 2013.
Ownership totals include multi-building assemblages.

Submarket Area Office Properties (10,000+ Square Feet)

Name	Building Address	Class	RBA (SF)
EastRidge Business Park	11805-12518 NE 99th St	B	88,752
Orchards Center	10621-10637 NE Coxley Dr	C	32,000
Northwest Public Power Association	9817 NE 54TH St	C	11,900
117th Avenue Building	6407 NE 117th Ave	C	10,000

Sources: CoStar and E. D. Hovee & Company, LLC, as of year end 2013.
Ownership totals include multi-building assemblages.

Submarket Area Retail Centers (Multi-Tenant)

Name	Building Address	RBA (SF)	Major Tenants
Padden Crossing	6717-6720 NE 84th St	170,712	Costco, T-Mobile, Verizon Wireless
Fred Meyer Orchards	7205-7411 NE 117th Ave	166,472	Fred Meyer, Chase Bank, Starbucks
Orchard Village	11413 NE 76th St	126,658	Lowe's, Woody's Chicago Style, Carl's Jr
Evergreen Plaza	11710-12010 NE Fourth Plain Rd	113,903	Bi-Mart, AutoZone, Cricket
Andresen Marketplace	6709-6715 NE 63rd St	112,637	Safeway, Starbucks, Subway, Brewed Awakenings
Bowyer Marketplace	11602-11608 NE 119th St	108,700	Winco, Fairway Coffee
Orchards Center	10401-10411 NE Fourth Plain Blvd	106,650	YMCA of Columbia-Willamette, Orchards E-Z Wash, Pho Saigon
Padden Market Center	13501-13620 NE 84th St	86,581	Albertsons, The UPS Store, Chase Bank, Subway
Orchard Plaza	11500-11606 NE 76th St	68,750	Safeway, Dollar Tree, Pizza Hut
Orchards Green	11717 NE 78th Way	26,587	Hertz, Quiznos, Radio Shack, Supercuts
M & O Properties	9310-9322 NE 76th St	24,590	Farmers Insurance, California Tan, Five Corners Appliance Co
Centerpointe Retail Center	8720 NE Centerpointe Dr	24,055	Cascade Dental, Starbucks, Supercuts
Concerto Square	3414 NE 52nd St	14,283	LF Staffing Services Inc, Laboratory of Dental Arts, UBuildIt
Heritage Plaza	15630 NE Fourth Plain Blvd	10,100	Beyond Beauty Hair-Nails Spa, Premier Mortgage
Orchard Pointe Plaza	10303 NE Fourth Plain Blvd	9,241	Bella Via Salon, Tropical Image Tanning, Begin Right
EastRidge Business Park	11701 NE 95th St	7,830	Driving 101, Orchards Chiropractic Clinic, Tan Me LLC
St Johns Plaza	4219 NE St. Johns Rd	2,534	Benny's Pizza Café

Sources: CoStar and E. D. Hovee & Company, LLC, as of year end 2013.

Single-Family Housing Sales (RMLS)

	December 2013 YTD			December 2012 YTD		
	Average Sale Price	Median Sale Price	Total Market Time	Average Sale Price	Median Sale Price	Total Market Time
5 Corners	195,500	185,500	80	156,400	150,000	116
Clark County	250,300	224,900	100	222,100	194,500	103
Portland Metro	310,600	265,000	83	275,000	235,000	112

Sources: RMLS *Market Action*, E. D. Hovee & Company, LLC.

APPENDIX B

SITE CONDITIONS SUMMARY FOR LANDFILL

MAUL FOSTER ALONGI

MEMORANDUM

To:	S. Otto, AICP	Date:	July 2, 2014
From:	M. Reiter, EIT	Project:	9059.07.03

RE: Leichner Landfill Site Conditions Summary

LEICHNER LANDFILL—SITE CONDITIONS SUMMARY

This memorandum has been prepared to summarize existing site conditions at the Leichner Master Plan Area. Information was compiled from a variety of sources to assess the availability and level of service of existing infrastructure that will serve future development on the project site.

Infrastructure

Sanitary Sewer

Clark County Regional Wastewater District (CRWWD) is the sanitary sewer purveyor for the area. Sewer infrastructure is available adjacent to the site in all directions, including a main "trunk" line in NE 94th Avenue to the west and smaller conveyance lines in the residential subdivisions to the north, east, and south of the project site. The project site is within CRWWD's Glenwood Creek Sub-basin 29. Sewer flows in the entire area generally drain via an 18-inch-diameter, polyvinyl chloride (PVC) sewer trunk in NE 94th Avenue. Flows combine from the north and south at the intersection of NE 94th Avenue and NE 90th Street and head west to CRWWD's Glenwood Pump Station at 9115 NE 90th Street. Flows are conveyed through an 18-inch-diameter forcemain to the west and eventually to the Salmon Creek Wastewater Treatment Plant.

Both the Glenwood Pump Station and the 18-inch-diameter PVC pipe in NE 94th Avenue have been identified by CRWWD as requiring upgrades to address forecasted demand growth in the area (MacKay & Sposito, 2006). Upgrades will bring an increased level of service to the project site and benefit future development. Although upgrades are planned, the existing system has capacity to accommodate a fully developed basin (MacKay & Sposito, 2006). Based on the existing system's capacity and the presence of a trunk line immediately adjacent to the project site, this analysis finds that sanitary sewer service is readily available for development on the project site. Industrial or commercial facilities that discharge excessive quantities of water to the sanitary sewer will need to coordinate closely with CRWWD with specific details on expected discharges. See Sheet C1.0 (attached) for additional details of existing sanitary sewer conditions.

Potable Water

The City of Vancouver (City) is the potable water purveyor for the area. Water infrastructure is available adjacent to the site in all directions, including a 12-inch-diameter ductile iron (DI) main line in NE 94th Avenue to the west and smaller supply lines in the residential subdivisions to the north, east, and south of the project site. A 6-inch-diameter lateral supplies two fire hydrants on the Waste Connections (WC) property. The project site lies within the city's Heights High pressure zone, which is generally well-served with regard to flow and pressure. Heights High contains two water stations that pump and treat local groundwater, but, to serve the relatively high demand, the pressure zone imports water from nearly all of the City's water stations. The project site can be served by the 12-inch-diameter DI water main in NE 94th Avenue. Hydraulic modeling efforts calculated peak-hour demand pressures in this main to be 60 to 100 pounds per square inch (psi) (HDR, 2007). A modeled fire flow analysis calculated sufficient fire flow demand at this main, and in surrounding areas, while forecasting growth in demand through the year 2026 (HDR, 2007).

Based on these favorable pressure and flow conditions, this analysis finds that potable water and fire suppression water are readily available for development on the project site. Industrial or commercial facilities that consume excessive amounts of potable water will need to coordinate closely with the City with specific details on expected consumption. See the attached Sheet C1.0 for additional details of existing potable water infrastructure.

Power

Clark Public Utilities (CPU) provides power service to the area. Overhead power is available adjacent to the site in all directions, including NE 94th Avenue to the west, NE 107th Avenue to the east, NE 86th Street to the south, and NE 99th Street to the northeast and northwest. High-voltage (115 kilovolt) overhead power lines cross the north end of the property, connecting NE 99th Street on the east and west sides. Medium-voltage overhead power lines (three-phase and one-phase) run along 94th Avenue NE and extend east into the interior of the site immediately to the north and south of the WC property.

Based on the availability of both high- and medium-voltage lines adjacent to and within the project site, this analysis finds that power is readily available for development on the project site. Industrial or commercial facilities that consume excessive amounts of power will need to coordinate closely with CPU to determine which overhead lines will offer the most reliable supply. See the attached Sheet C2.0 for additional details of existing power infrastructure.

Natural Gas

Northwest Natural Gas Co. (NWN) provides natural gas service to the area. Natural gas infrastructure is available adjacent to the site in all directions, including 4-inch- and 6-inch-diameter polyethylene lines in NE 94th Avenue to the west and smaller, 2-inch-diameter, polyethylene and wrapped steel lines in the residential subdivisions to the north, south, and east of the project site. A 2-inch-diameter, wrapped steel line currently terminates at the end of NE 99th Street to the northeast of the project site, and service does not continue in NE 99th Street to the northwest of

the project site. Two service laterals currently serve the WC site from the line in NE 94th Avenue. The project site likely is best served by the line in NE 94th Avenue, which is a low-pressure (60 psi maximum), 4-inch-diameter, Class B supply to the north of NE 95th Street and to the south of NE 90th Street. This line changes to 6-inch-diameter between NE 90th Street and NE 95th Street.

At the time of this report, WC plans to convert their entire diesel-fueled vehicle fleet to run on compressed natural gas (CNG) by 2018. WC has already installed a temporary CNG fueling station capable of fueling up to 16 vehicles on-site. In the next several years, WC plans to construct a permanent CNG fueling station with the capacity to fuel up to 120 vehicles. The existing line in NE 94th Avenue likely is inadequate to supply such a fueling station. If so, upgrades to the local system would be required. These upgrades would include a larger-diameter, higher-pressure line in the vicinity of the WC site, benefiting future development on the project site.

Based on the current availability of relatively large low-pressure lines adjacent to the project site and the possibility of increased supply being brought to the area in the future, this analysis finds that a reasonable level of natural gas service is available for development on the project site. Industrial or commercial facilities that consume relatively large amounts of natural gas or that require high supply pressures (large boilers, etc.) will need to coordinate closely with NWN to determine whether upgrades to the existing infrastructure are necessary for adequate service. If increased supply is brought to the area in the future to accommodate a CNG fueling station at the WC site, a robust level of service may be available for new development on the project site. See the attached Sheet C2.0 for additional details of existing gas infrastructure.

Communications

CenturyLink, Inc. provides internet, cable, and telephone service to the area. Communications infrastructure is available to the site, at a minimum, via underground cables in NE 94th Avenue.

Based on the availability of communications infrastructure adjacent to the project site, this analysis finds that a reasonable level of communications service (i.e., telephone, cable, and Internet up to 20 megabits per second) is available for development on the project site. Industrial or commercial facilities that require relatively large amounts of data via high-speed Internet connections (data centers, high-tech services, etc.) will need to coordinate closely with CenturyLink, Inc. to determine whether upgrades to the existing infrastructure are necessary for adequate service. See Sheet C2.0 for additional details of existing communications infrastructure.

Stormwater Drainage

Engineered stormwater controls are currently in place for the closed Leichner Landfill property. These were developed as part of the landfill's closure design to minimize stormwater infiltration into the site and leachate creation. The closed landfill has an individual NPDES Permit, and future development at the project site will not be allowed to utilize the landfill's stormwater system. The Fleischer and Koski (Leichner Campus) properties do not contain any engineered stormwater controls. Stormwater on these properties likely infiltrates into the ground on site or is conveyed to

nearby rights-of-way (ROWs) via overland flow. Stormwater infrastructure in the County ROW is owned and maintained by the County. See the attached Sheet C3.0 for additional details of existing stormwater infrastructure.

Existing Site Conditions

Existing stormwater infrastructure and drainage patterns on the project site are being modified by the County and WC. At the time of this report, stormwater runoff from portions of the Leichner Landfill Property (approximately 35 acres) is collected by perimeter ditches and underground perforated pipes and conveyed to a detention basin on the west side of the property. A pump station conveys flows from the west drainage basin to the sedimentation basin at the north end of the property via two 8-inch-diameter high-density polyethylene forcemains. The primary forcemain conveys flow to a ditch for conveyance to the sedimentation basin. The secondary forcemain, utilized only during large storm events, conveys flow to an 18-inch-diameter, plastic pipe that terminates at the sedimentation basin. Runoff from the north half of the landfill (approximately 30 acres) drains by gravity directly into the sedimentation basin via perimeter ditches. Once flows from both basins are combined in the sedimentation basin, a flow-control structure backs up flow and allows for settlement of suspended solids. Flows from the sedimentation basin then enter the north detention basin, immediately to the west, via a short pipe. A second pump station pumps flows from the detention basin through approximately 200 lineal feet (LF) of 20-inch-diameter DI force main to a 24-inch-diameter corrugated metal (CM) gravity line just south of NE 100th Way. This 24-inch-diameter CM pipe travels west down NE 99th Street for approximately 3,500 LF and outfalls to Curtain Creek via 650 LF of grass-lined ditch. The detention basin is designed to retain a 25-year, 24-hour storm and allow a maximum release rate of 8.5 cubic feet per second to Curtain Creek.

The Leichner Landfill stormwater system described above appears to be the only stormwater infrastructure available to convey flows from the project site to discharge at Curtain Creek. All other stormwater infrastructure adjacent to the site in the County ROW consists of catch basins and drywells, which discharge stormwater directly into the ground. NE 94th Avenue has at minimum ten such "stand-alone" systems disposing of stormwater runoff from NE 94th Avenue along the total length of the project site. Future development plans to widen NE 94th Avenue include roadside stormwater facilities to treat and dispose of stormwater runoff from the ROW.

Based on the lack of cohesive stormwater infrastructure adjacent to the project site, this analysis finds that stormwater management will be a key design concern for new development on the project site. Without a wetland or water body in the immediate vicinity or existing conveyance lines to such a discharge location, stormwater runoff will have to be managed on site or pumped off site to the nearest conveyance lines or water body.

Regulatory Requirements for New Development

New developments on the project site will be subject to the ten minimum requirements of the Western Washington Stormwater Management Manual, consistent with Clark County Code. Additional requirements specific to landfill closures will also govern development on the landfill

property specifically. Generally, any new development will be required to implement best management practices to treat runoff to statewide water quality goals and control flow quantities to maximum allowable flowrates. Maximum allowable discharge flowrates will be governed by predeveloped runoff conditions. Some level of storage, such as a detention pond, could potentially be necessary to achieve these requirements. New developments are required to implement low-impact development (LID) stormwater controls to the maximum extent feasible. Soil conditions on the site may be favorable for the implementation of LID stormwater facilities that infiltrate runoff, but infiltration of stormwater has the potential to impact the landfill's existing groundwater monitoring network. Therefore, the feasibility of on-site infiltration will vary from location-to-location. Ultimately, infiltration testing of in situ soils and feasibility analysis of any proposed infiltration facilities should be performed by a licensed geotechnical engineer. Restrictive covenants require approval from Ecology and Clark County Public Health to construct stormwater facilities at the project site.

Access and Transportation

Access to the site from Interstate 205 (I-205) is available via NE Padden Parkway and NE 94th Avenue. NE Padden Parkway is classified as a PA-4CB urban principal arterial and a T-1 truck route between I-205 and NE 94th Avenue. NE 94th Avenue is classified as an M-2CB urban minor arterial. The County currently has plans to widen NE 94th Avenue, significantly improving vehicle, bicycle, and pedestrian access to the site. Current planned improvements include curb and gutter; a two-way, left-hand turn lane along the entire frontage of the site; and a new 38-foot-wide driveway to the Leichner Campus. There is currently a four-way, signalized intersection at NE Padden Parkway and NE 94th Avenue.

NE 99th Street currently terminates at the north end of the site from both the east and west directions. The County plans to complete a new section of NE 99th Street in the future to allow passage from the east to the west through the site. NE 99th Street is classified as an M-2CB urban minor arterial on both sides of the property. At this time, the extension of NE 99th Street is scheduled for 2018-2020, although funding has not been committed to this project.

Based on the proposed widening of NE 94th Avenue, the relatively short distance to I-205, and the existing size and classification of NE Padden Parkway, this analysis finds that the site has favorable transportation access and circulation. See the attached Sheet C4.0 for additional details of existing transportation infrastructure.

Soils and Topography

Soils on the project site, excluding the closed landfill, consist largely of gravelly loam with some silt loam. Gravelly loam generally has favorable infiltration characteristics, which may be conducive to the use of LID stormwater facilities. Loams vary widely with regard to engineering properties, but generally loams function well as a subgrade material. Compaction capability and drainage can be assumed to be better than those of silts and clays (unfavorable) but not as good as those of sands and gravels (most favorable).

The topography of the site is flat, except for the closed landfill. The closed landfill is built up at a 5 to 8 percent slope to one high point in the middle of the site and a second high point in the northwest corner of the site. The Fleischer property generally slopes at 1 to 3 percent toward the southwest. The Leichner Campus is generally flat, approximately 20 feet lower than the adjacent closed landfill, and has an approximate 5:1 upward slope, toward the northeast corner of the lot. The NE 99th Street ROW and residential property are generally flat, approximately 15 feet lower than the adjacent residential areas, and have an approximate 5:1 upward slope around the east, north, and west boundaries of the project site. See the attached soils map for additional details of existing soil conditions.

ATTACHMENTS

Sanitary & Water Plan
Power, Communications & Gas Plan
Stormwater Plan
Transportation & Access Plan
Proposed NE 94th Ave Improvements
Soils Map

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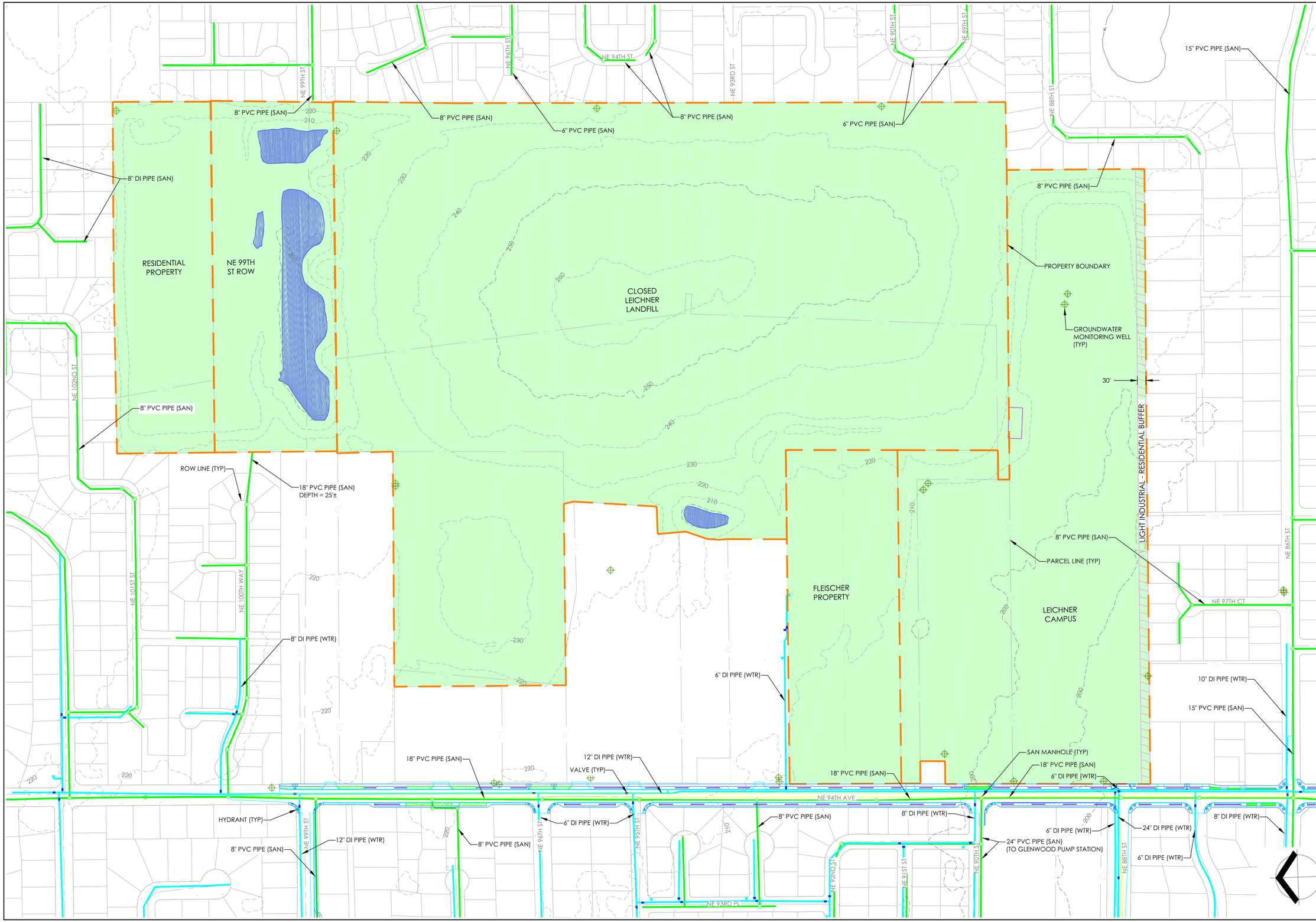

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CLARK COUNTY, WASHINGTON

LEICHNER LANDFILL SITE CONDITIONS

CLARK COUNTY
VANCOUVER, WA

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SHEET TITLE
EXISTING SANITARY SEWER & WATER INFRASTRUCTURE

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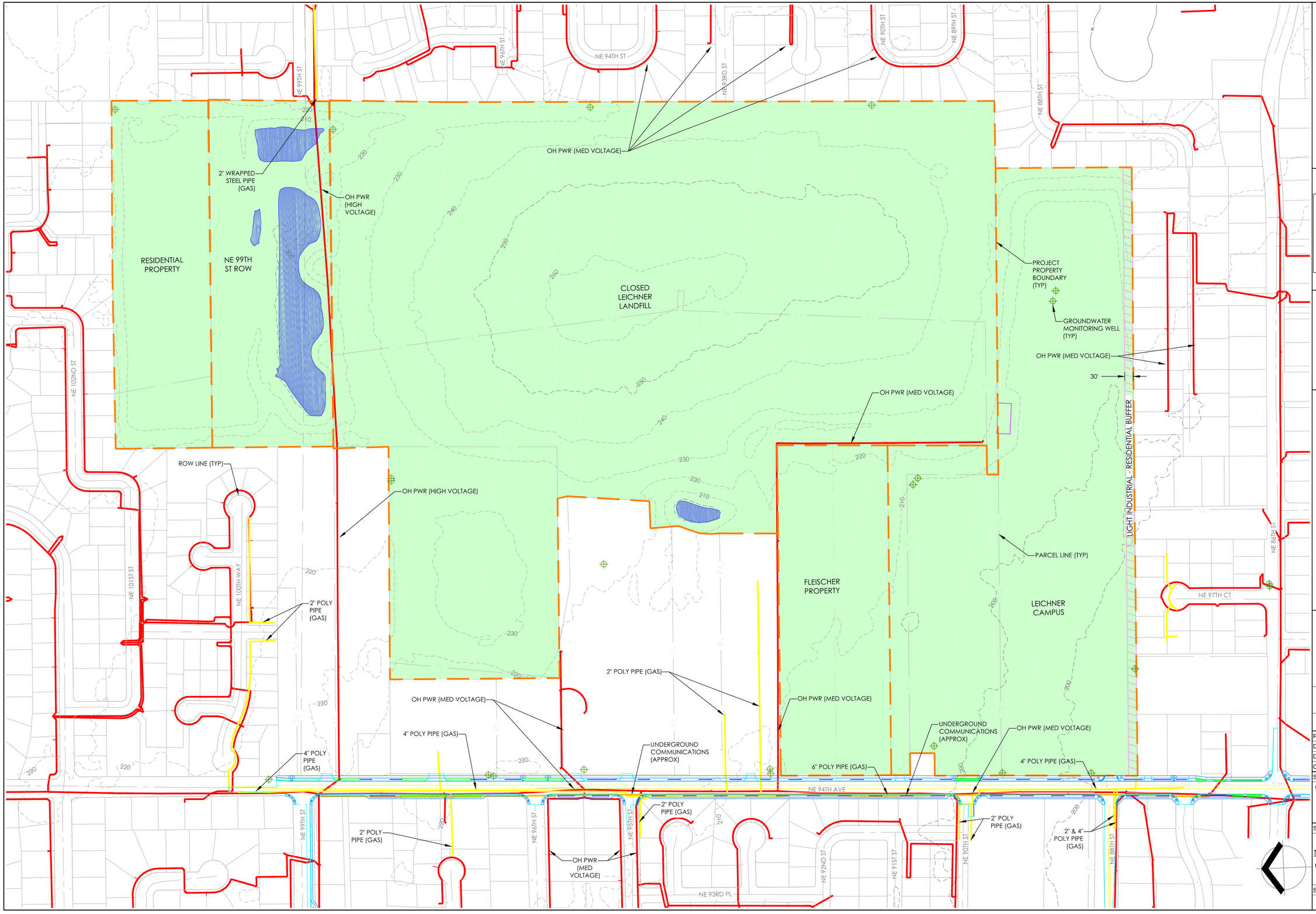

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CLARK COUNTY, WASHINGTON

LEICHNER LANDFILL SITE CONDITIONS

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SHEET TITLE
EXISTING POWER, NATURAL GAS, AND COMMUNICATIONS INFRASTRUCTURE

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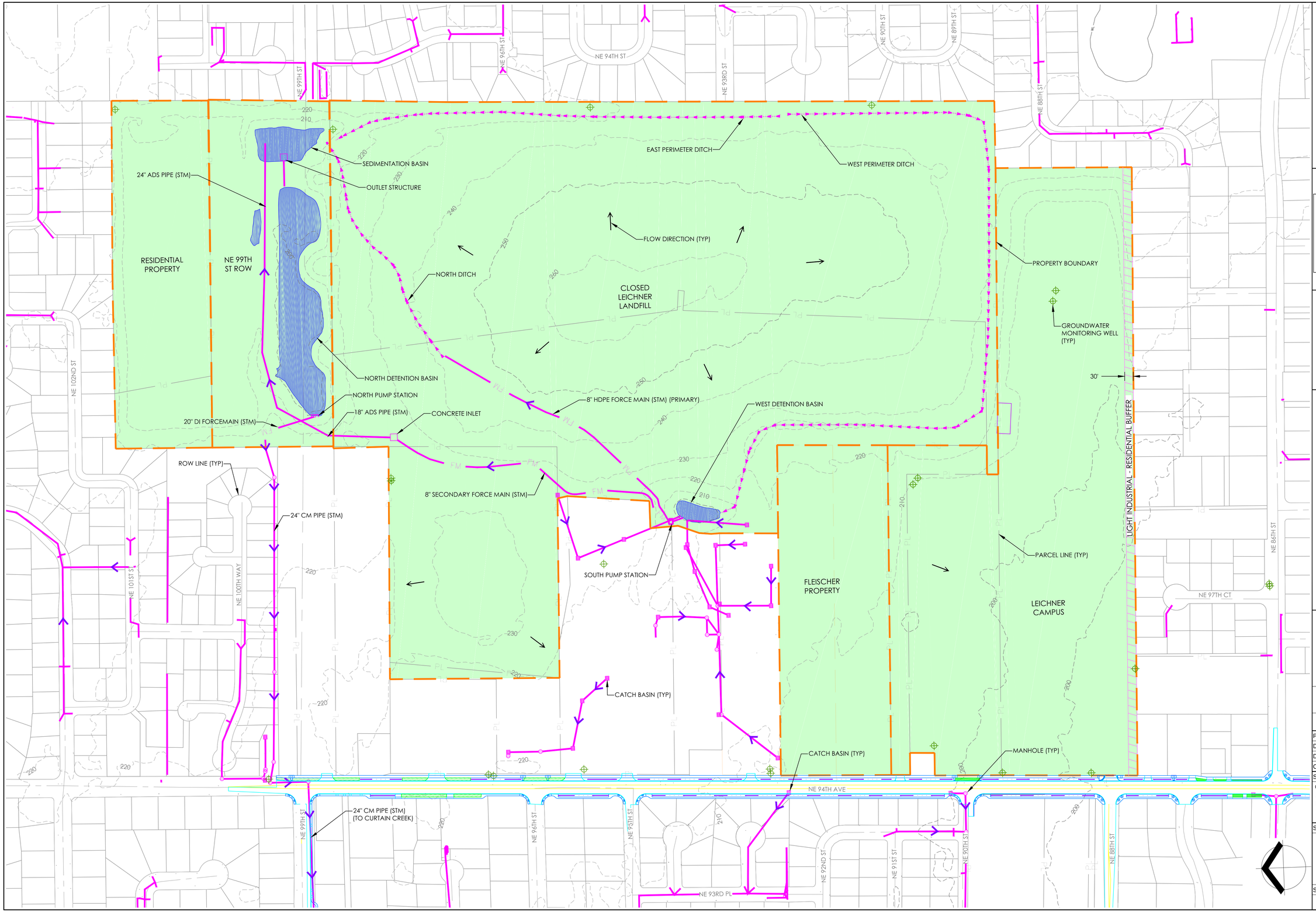

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CLARK COUNTY, WASHINGTON

LEICHNER LANDFILL SITE CONDITIONS

CLARK COUNTY
VANCOUVER, WA

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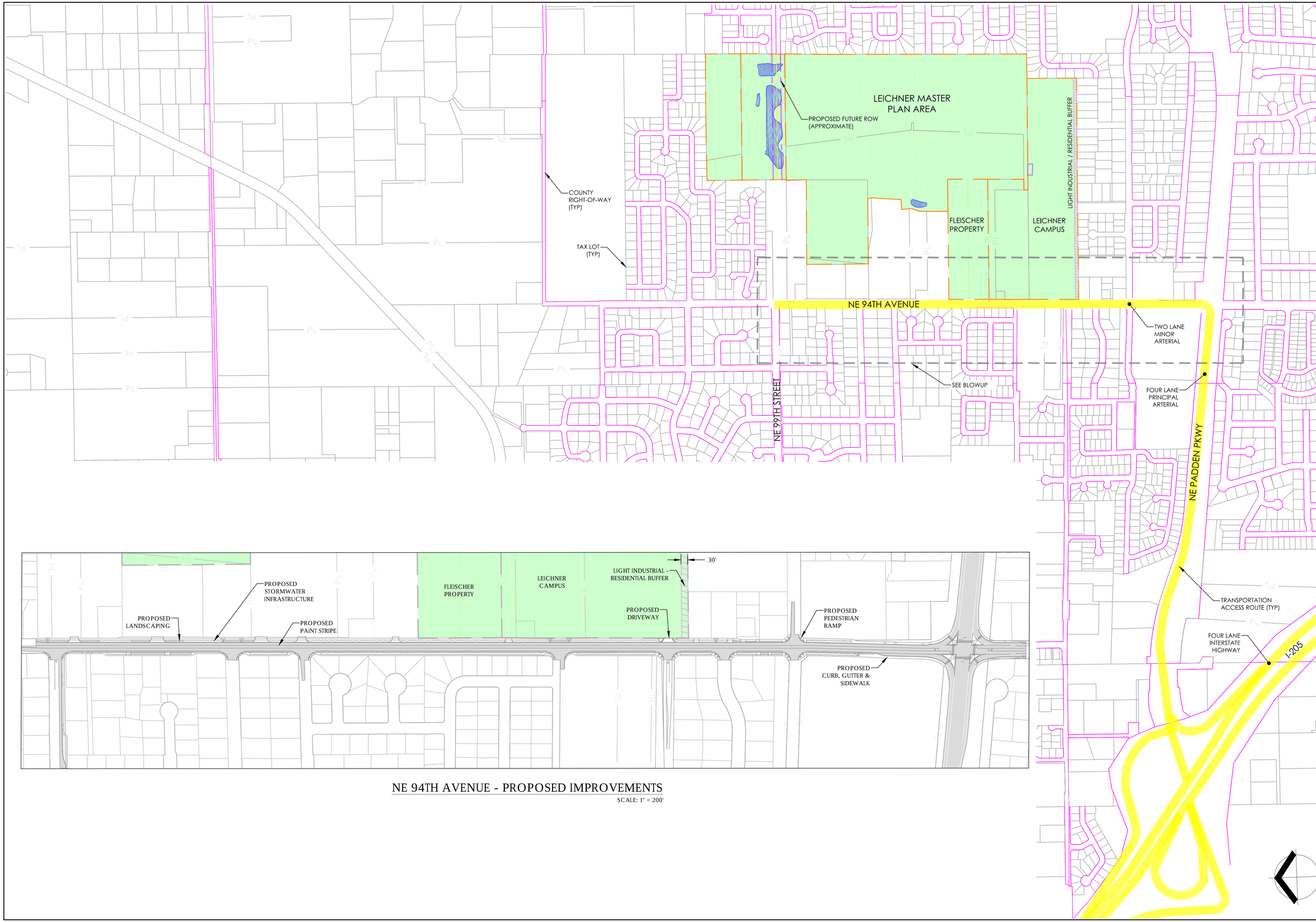

NE 94TH AVENUE - PROPOSED IMPROVEMENTS

SCALE: 1" = 200'

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LEICHNER LANDFILL SITE CONDITIONS

CLARK COUNTY
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EXISTING TRANSPORTATION INFRASTRUCTURE

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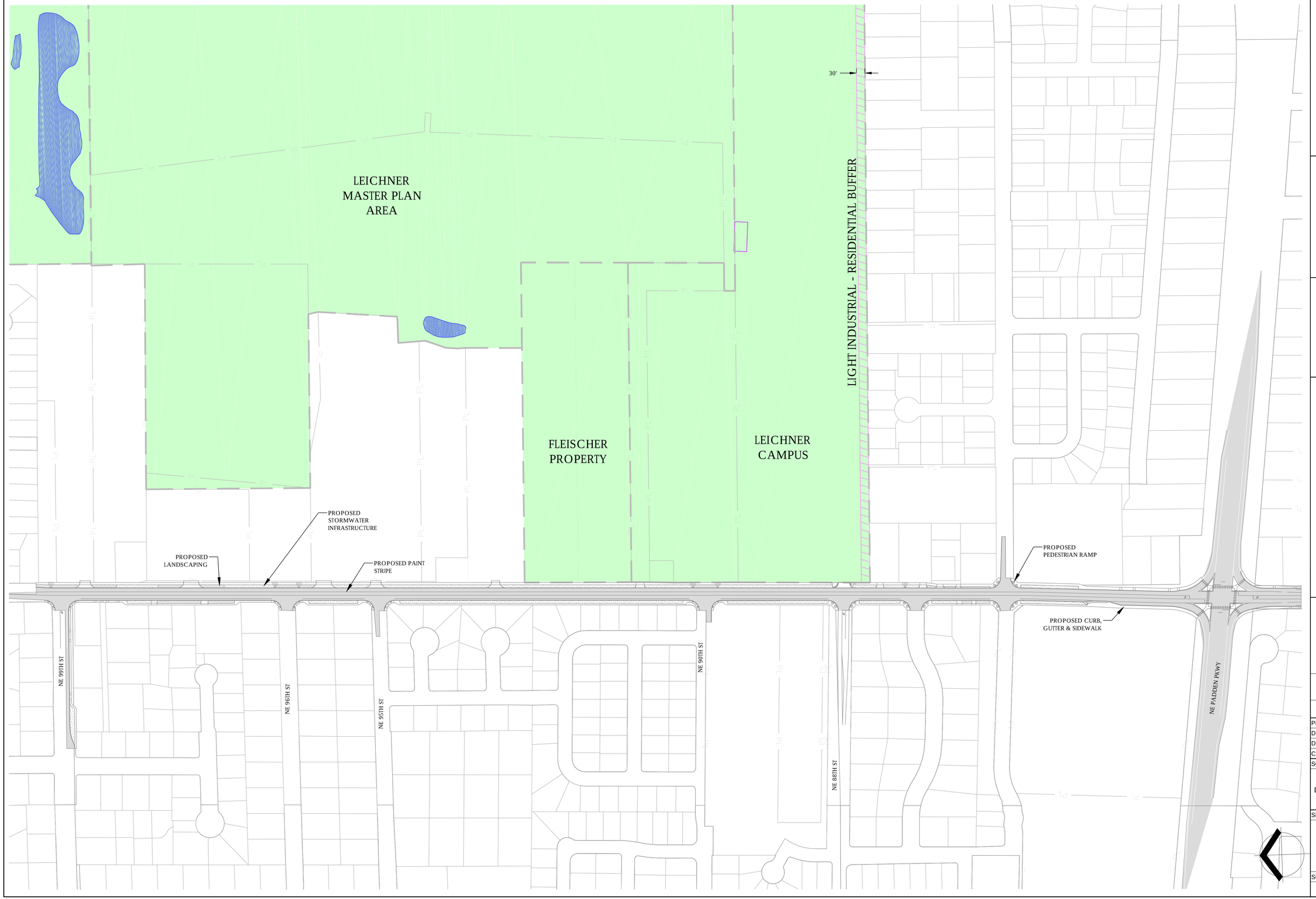

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LEICHNER LANDFILL SITE
CONDITIONS

CLARK COUNTY
VANCOUVER, WA

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NE 94TH AVE - PROPOSED IMPROVEMENTS

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APPENDIX C

ENVIRONMENTAL AND ENGINEERING SUMMARY TECHNICAL MEMORANDUM

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and Contractors

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SCS ENGINEERS

TECHNICAL MEMORANDUM

DATE: April 4, 2014

TO: Mike Davis, Clark County

CC: Jim Maul and Seth Otto, Maul, Maul Foster & Alongi, Inc.

FROM: Louis Caruso, L.G., SCS Engineers

SUBJECT: **Environmental and Engineering Summary for the Closed Leichner Landfill, Vancouver, Washington, Consent Decree 96-2-03081-7, Facility ID No. 1017**

SCS Engineers (SCS) prepared this memorandum at the request of Maul Foster & Alongi, Inc. (MFA) and with approval from Clark County (County), describing the regulatory framework and current site conditions at the closed Leichner Landfill (the Site) in Vancouver, Washington. SCS understands that MFA is conducting a reuse evaluation of the Site property on behalf of the County. This memorandum is intended to provide supplemental information for the reuse analysis report.

This memorandum provides a description of the regulatory framework specifically related to the historical and current Consent Decrees and remedial actions that govern the restrictive covenant for the Leichner Landfill property. The document also describes the following current site conditions: (1) landfill post-closure systems including the landfill cover system, stormwater management system, and landfill gas (LFG) collection and control system (GCCS) and (2) compliance monitoring programs for groundwater, stormwater, and LFG. Attachments to this memorandum include figures showing the groundwater monitoring network, stormwater control features, and LFG monitoring network (see Figures 1, 2, and 3, respectively), and a copy of restrictive covenant for the Site.

REGULATORY FRAMEWORK

Consent Decrees

Remedial investigation (RI) of the Site began in 1987 pursuant to Consent Order No. DE 86-S131. The RI results were summarized in a 1988 Remedial Investigation Report and Feasibility Study Report (FS), both prepared by Sweet-Edwards/EMCON, Inc. (1988a and 1988b). Subsequent additional investigations and remedial actions were performed pursuant to Consent Order No. DE 89-S119 (April 1989, with amendments in 1989 and 1990) and Agreed Order No. 93TC-S141 (May 1993). In July 1996, The Washington State Department of Ecology (Ecology) and the Leichner Brothers Land Reclamation Corporation (LBLRC) entered into Consent Decree No. 92-2-03081-7 (Decree). This was the final Decree for the Site, which implemented the final remedial actions described in a Cleanup Action Plan (CAP) associated with the Decree.

Remedial Actions

The CAP specified a series of remedial actions to address groundwater impacts at the Site that had already been implemented as part of the landfill's post-closure requirements under the Washington State Minimum Functional Standards (MFS) for Solid Waste Handling, Washington Administrative Code (WAC) Chapter 173-304. The post-closure activities included the following:

- Constructing an engineered landfill composite cap.
- Installing a GCCS.
- Constructing a surface water and erosion control system.
- Making improvements to the dumpster and truck wash areas.

As indicated in Section 8 of the CAP, these postclosure activities were also considered to be the site-specific remedial actions with respect to Model Toxics Control Act (MTCA) regulations under the Decree. The CAP indicated that "the cleanup action consists of final landfill closure and post-closure requirements outlined in Chapter 173-304 WAC (i.e., MFS), and required ongoing compliance groundwater monitoring as approved by Ecology." The above-listed remedial actions were completed before the Decree was formalized in 1996. The Decree also specifies that the point of compliance for groundwater cleanup is the Site property boundary.

Groundwater, stormwater, and LFG compliance monitoring are currently implemented to fulfill the requirements of the Decree and the MFS requirements for post-closure monitoring under WAC 173-304 and in accordance with current agency approved plans, including the 2013 Compliance Monitoring Plan (CMP; SCS, 2013c). Stormwater monitoring is also performed in accordance with the Site's National Pollutant Discharge Elimination System (NPDES) Industrial Stormwater General Permit (Permit), reissued on May 16, 2012 (expires January 1, 2015).

Restrictive ~~Convenant~~ Covenant

An environmental Restrictive Covenant (RC) was recorded for the Site property in April 1998. A copy of the RC is provided in Attachment 1. It was determined that contamination at the Site posed a limited threat to human health and the environment that could be mitigated, in part, by the use of institutional controls in the form of an RC. The RC encompasses both surface and subsurface components of the property and includes the following restrictions:

- Section 1. No groundwater may be taken for domestic purposes from any well on the property.
- Section 2. Any activity on the property that may interfere with the Cleanup Action is prohibited. Any activity on the property that may result in the release of a hazardous substance that was contained as a part of the Cleanup Action is prohibited, unless allowed under the terms of an NPDES or state waste discharge permit.

- Section 3. The owner of the property must given written notice to Ecology, or to a successor agency, of the owner's intent to convey any interest in the property. No conveyance of title, easement, lease, or other interest in the property may be consummated by the owner without adequate and complete provision for the continued operation, maintenance, and monitoring of the cleanup action.

- Section 4. The owner of the property must notify and obtain approval from Ecology, or from a successor agency, prior to any use of the property that is inconsistent with the terms of the RC. Ecology or its successor agency may approve such a use only after public notice and opportunity for comment, and only if the proposed use will not threaten human health or the environment.

- Section 5. The owner of the property shall allow authorized representatives of Ecology, or of a successor agency, the right to enter the property in accordance with the terms set forth in Section IX of the Decree for the purposes of evaluating compliance with the terms of the Decree and associated CAP, to take samples, to inspect Cleanup Action taken at the property, and to inspect records that are related to the Cleanup Action.

- Section 6. The owner of the property and the owner's assigns and successors in interst reserve the right under WAC 173-340-440 to record an instrument providing that the RC shall no longer limit use of the property or be of any further force or effect. However, such an instrument may be recorded only with the consent of Ecology, or of a successor agency. Ecology or a successor agency may consent to the recording of such an instrument only after public notice and comment, and only if all of Leichner Brothers Land Reclamation Corporation's obligations under the Decree have been satisfactorily completed.

LANDFILL POST-CLOSURE SYSTEMS

This section describes the engineered, landfill post-closure systems including the final cover system, stormwater management system, and the GCCS. As-built drawings of these systems are provided in the Site's Master Operations Plan (MOP; EMCON/OWT, 2005). SCS is currently updating the MOP to describe modifications to the post-closure landfill systems, include as-built drawings. These modifications are incorporated into the descriptions of the post-closure systems provided in the sections below.

Landfill Cover System

The landfill cover system prevents or minimizes precipitation and surface water runoff from infiltrating into the landfill and generating leachate. This section describes the design and construction of the final cover system.

Construction of Final Cover System

The Leichner Landfill refuse area (approximately 65 acres) was closed in three stages:

- Phase I Closure. In 1988 and 1989, a final cover system was constructed over the northern 22 acres of the landfill.
- Phase IIA Closure. In 1991, a final cover system was constructed over 22 of the remaining 43 acres of the landfill. Construction was performed in the southeast portion of the Phase II closure area.
- Phase IIB Closure. In 1992, the remaining 21 acres were closed and capped with a final cover system.

All three closures were constructed to meet the applicable requirements specified in the MFS, Chapter 173-304 WAC.

Final Cover System Description

The final cover system is a multi-layered composite system covering the entire 65 acres of refuse placed in the landfill. The final cover consists of (from bottom to top) general earthfill, select earthfill, a flexible membrane liner (FML), a drainage layer, geotextile, vegetative soil, topsoil, and native grasses. During Phase IIA and IIB final cover construction (i.e., the southern 43 acres of the landfill), an underdrain system was constructed within the drainage layer. The underdrain system outlets to the perimeter ditches around the landfill. The final cover components and their purposes are described below.

General Earthfill

General earthfill was placed over landfill areas as needed to provide a firm foundation for the other components of the final cover system and to construct positive drainage across the landfill by filling depressions and smoothing out the existing grade.

General earthfill was compacted in lifts no more than one-foot thick, then finish graded to match design subgrade elevations. During Phase IIB construction, soil and burned refuse were used together as general earthfill. The soil and burned refuse mixture (consisting mostly of soil, rock, ash, and glass, with minor amounts of metal) was obtained from an abandoned refuse-burning area located south of the closed landfill.

Select Earthfill

Select earthfill was placed over the general earthfill to provide a protective soil layer underneath the flexible membrane liner.

The select earthfill consists of screened soil with a maximum particle size of one-inch. Gravel-size materials in the select earthfill were rounded. In the Phase I closure area, select earthfill was placed in a 6-inch-thick layer over the general earthfill and finish-graded with a steel drum roller. In the Phase IIA and IIB closure areas, the select earthfill thickness was reduced to 4 inches.

Flexible Membrane Liner

The FML, frequently referred to as the geomembrane, is a low permeability barrier, which contains landfill gas and separates surface water from leachate.

A 60-mil thick, high-density polyethylene (HDPE) FML panel or sheet was placed directly over the select earthfill. Both textured and smooth FML panels were installed. The installation process consisted of unrolling the sheeting, cutting panels to the required dimensions, and welding the seams immediately thereafter. The FML seams were welded primarily by using the hot wedge welding process; however, the extrusion welding process was used when the hot wedge welder could not be used. Examples of extrusion welding include patching, connecting intersecting seams, making small repairs, and in areas with limited accessibility.

Following installation and seam welding, each weld was visually inspected and subjected to both nondestructive and destructive testing. Nondestructive testing consisted of air-pressure testing hot wedge welds and vacuum-box testing extrusion welds. Destructive testing consisted of performing shear and peel tests on samples of the welded seams.

Drainage Layer

A 12-inch-thick, drainage layer, consisting of free-draining sand, was placed directly over the 60-mil HDPE liner. Rainfall, which infiltrates through the cover soil, drains vertically through the drainage layer, then laterally along the surface of the FML. The water is collected by a system of underdrain pipes which outlet to surface ditches or catchment systems.

Geotextile

The geotextile provides a filtering medium between the drainage layer and the overlying vegetative soil. This medium protects the drainage layer from clogging by keeping fine vegetative soil particles out of it.

Nonwoven geotextile was placed over the top of the drainage layer. The geotextile was deployed in much the same orientation as the FML, as shown on the FML as-built panel layout drawings. The geotextile was overlapped at least 6 inches, and the seams were either continuously sewn, using polymeric thread, or heat-bonded.

Vegetative Soil

Vegetative soil was placed in an 8-inch-thick layer directly over the nonwoven geotextile. The vegetative soil provides a rooting medium underneath the topsoil and a protective soil layer over the top of the drainage layer and geotextile.

Topsoil

Topsoil provides a soil layer for grassy vegetation. During Phases I and IIA, imported topsoil was placed directly over the vegetative layer in two, 4-inch-thick lifts. The first lift was mixed into the upper 4 inches of the underlying vegetative soil before placement of the second 4-inch -thick lift of topsoil.

During Phase IIB construction, an on-site soil source was used. The soil source met the requirements of both vegetative soil and topsoil. Because the materials met the specified

requirements of both materials, it was unnecessary to place the soil materials in separate lifts or to mix the lifts together. The vegetative soil and topsoil mixture was placed in a single, 16-inch-thick lift on top of the geotextile.

Hydroseed

Hydroseeding provides a grassy ground cover over the entire closed landfill surface and any other soil surfaces disturbed by construction. The hydroseeding reduces erosion of the soil surfaces and provides an aesthetically pleasing finished appearance.

The performance of the hydroseed mix used in Phases I and IIA construction was adequate, but it was thought that some improvement could be made. Therefore, a new design mix was used in Phase IIB construction.

Stormwater Management System

The stormwater management system is designed to prevent surface water ponding on, and direct stormwater runoff away from, the former refuse area. Stormwater is collected using underdrains, cutoff ditches, perimeter ditches, and catch basins as described below and shown in Figure 2.

Landfill Stormwater Collection

Underdrain System. The underdrain system consists of perforated, 4-inch-diameter polyethylene pipe installed in the drainage layer (above the geomembrane) of the landfill cover. Surface water infiltrating the cover soil is collected in the underdrain pipes.

Sideslope Ditches. Sideslope ditches collect and convey surface runoff (i.e., sheet flow) to the perimeter ditches. Sideslope ditches minimize the formation of gullies created by sheet flow runoff eroding the landfill's sideslopes.

Perimeter Ditches. Perimeter ditches convey stormwater runoff from the sideslope ditches and the underdrain system either to the South Detention Pond or to the Sedimentation Basin. Perimeter ditches located around the toe of the former refuse area also collect sheet flow from the landfill's sideslopes, similar to the sideslope ditch collection system.

Culverts. Five culverts were installed to convey runoff underneath roadways. Two 18-inch-diameter, HDPE culverts convey stormwater runoff under the site access road. These culverts each discharge into a ditch located near the South Detention Pond. The remaining three culverts were constructed with 12-inch-diameter HDPE. Two convey runoff under the maintenance road located at the north end of the 1992 closure area. The third conveys runoff under the perimeter road near the former northern location of the former LFG flare. The runoff flows north through a ditch into the drop inlet located west of the North Detention Pond and flows to the Sedimentation Basin through the stormwater conveyance piping system.

South Detention Pond

The 1-acre South Detention Pond collects runoff from the south and west portions of the landfill (an area approximately 35 acres in size). The basin is lined with Gundseal, textured geomembrane, a geotextile cushion, and a 1-foot-thick layer of erosion protection rock. Stormwater is pumped from the South Detention Pond to the Sedimentation Basin using three

pumps and two buried, 8-inch-diameter force mains. The pump station consists of a precast concrete vault containing three submersible pumps. The pumps discharge stormwater to buried force mains that, in turn, directs the water into two surface drainage features. One is located located on the north-central part of the Phase I closure area and conveys stormwater to the Sedimentation Basin. The second is located south of the former north LFG flare station and connects to an 18-inch-diameter stormwater conveyance pipe which drains to the Sedimentation Basin.

Sedimentation Basin

The 1-acre Sedimentation Basin is located directly east of the North Detention Pond. This feature is designed to allow suspended particles to settle out from stormwater before it enters the North Detention Pond. All collected stormwater runoff from the landfill area is routed through the Sedimentation Basin. The Sedimentation Basin is lined with textured, 60-mil, HDPE geomembrane. The geomembrane liner is covered with a geotextile cushion and a 1-foot-thick layer of general earthfill. The Sedimentation Basin outlet is a 16-inch-diameter, fabricated tee structure set in concrete that allows the basin to fill with stormwater to a one-foot depth before it discharges into the North Detention Pond.

North Detention Pond and Pumping Station

The 3.4-acre North Detention Pond is a geomembrane-lined impoundment located at the north end of the site. The basin controls the release of stormwater runoff from the site by retaining rainfall from a 25-year, 24-hour storm event and allowing a maximum release rate of 8.5 cubic feet per second. The North Detention Pond allows additional sedimentation to occur as stormwater flows from east to west across the pond. The North Detention Pond release structure is a concrete enclosure and pumping station containing three turbine pumps located near the bottom of the concrete enclosure. Stormwater is pumped (at a maximum pumping rate of approximately 2,400 gallons per minute) from the North Detention Pond through a 20-inch diameter force main to a 24-inch diameter gravity storm drainpipe conveyed to a grass-lined ditch that drains to Curtin Creek.

Modifications to Stormwater Control and Collection System

Improvements to the stormwater collection and control system were completed along the western side of former Module 2 in September and October 2013. The construction activities consisted of the following two elements: (1) the installation of approximately 0.25 acres (approximately 10,000 square feet) of geomembrane for stormwater control and (2) construction of a runoff collection system that included installing approximately 270 feet of runoff collection trench and piping and making repairs to portions of the existing landfill cover system for the Module 2 area.

The stormwater improvement construction activities were accomplished in substantial conformance with the design intent, permit conditions, and construction drawings dated September 2, 2013, and with technical specifications dated July 29, 2013, that were prepared by SCS and submitted to and approved by the County. A report documenting the stormwater improvement construction activities, including record drawings of the construction and existing site conditions was submitted to the County under separate cover. Additionally, the Site's Stormwater Pollution and Prevention Plan (SCS, 2013b) will be updated to reflect the modifications to the Module 2 stormwater collection system.

During excavation of the trench for the subsurface vault for the stormwater improvement project on October 10, 2013, landfill waste was encountered outside the existing final cover system along the western perimeter of former Module 2. The waste appeared localized to the eastern portion of the vault excavation and did not extend west to the property line. SCS estimates that the western extent of waste in the trench was approximately 8 feet from the property line. Within the vault excavation, the vertical extent of the waste was greater than approximately 8 feet bgs (depth of base of excavation). Based on field observations in the vault excavation and in test pits excavated to delineate the extent of waste, it was estimated that waste material is present approximately 50 feet south of the vault and 100 feet north of it. The County notified Clark County Public Health (CCPH) and Ecology of these finding in a memorandum dated October 30, 2013 (SCS, 2013d), and intends to extend the existing liner in 2014 over the area where waste was encountered outside the landfill footprint.

Landfill Gas Collection and Control System

The GCCS contains and prevents LFG that is generated within the landfill from migrating into the atmosphere and surrounding native soils. The GCCS consists of 50 LFG migration probes, 107 LFG extraction wells, a condensate collection system, and a LFG flare station (south flare station) (see Figure 3). Emissions from the LFG flare stack are permitted by Southwest Clean Air Agency (SWCAA) Air Discharge Permit (ADP) 07-2714.

The LFG extraction well system is divided into four areas of collection: southeast, southwest, northeast, and northwest. LFG is conveyed from the extraction wells to the south flare station through an aboveground, polyvinyl chloride (PVC) piping system (see Figure 3). The extraction well heads are connected to 3-inch-diameter laterals that are, in turn, connected into a 6-, 8-, and 10-inch header piping system.

Condensate sumps are located at all the low points along the header piping, or approximately every 400 feet. The condensate system is constructed with below ground conduits for a pneumatic pumping system to pump liquid from the sumps and pipe it to the south flare station where the liquid is temporarily stored in an double-lined aboveground storage tank. The condensate is periodically removed from the storage tank for regulated, offsite disposal.

The south flare station is located at the southern end of the landfill (see Figure 3) and contains the mechanical and electrical equipment required to actively withdraw LFG and dispose of it in an environmentally acceptable manner. The primary components at the station include a small wooden shed that houses miscellaneous equipment and the air compressor for the condensate pneumatic pumps, condensate sump, aboveground condensate storage tank, a moisture knock-out drum, electrical display and control panel, two parallel centrifugal blowers, and an enclosed LFG flare stack.

COMPLIANCE MONITORING

Compliance monitoring of groundwater, stormwater, and LFG is performed to evaluate the effectiveness of the remedial actions at achieving groundwater cleanup levels or other applicable regulatory compliance levels. The compliance monitoring programs for groundwater, stormwater, and LFG, and methods and procedures for implementation of the programs, are described in the 2013 CMP (SCS, 2013c).

Groundwater Monitoring

The compliance groundwater monitoring well network consists of 20 monitoring wells[1] that are discretely screened in the alluvium water-bearing zone (WBZ) and the Troutdale Formation aquifer (see Figure 1). The wells are monitored annually or semiannually and include the following: LB-1S, LB-1D, LB-3S, LB-3D, LB-4SR, LB-4D, LB-5S, LB-5D, LB-6S, LB-10SR, LB-10DR, LB-13I, LB-13D, LB-17I, LB-17D, LB-20S, LB-26I, LB-26D, LB-27I, and LB-27D.

The Decree established site-specific compliance cleanup levels in groundwater for select volatile organic compounds (VOCs) and inorganic leachate indicator parameters using the MTCA Method B cleanup levels based on the highest beneficial use (drinking water) of the affected groundwater. The most recent results of groundwater monitoring performed in 2013 were summarized in an annual environmental monitoring report for the Leichner Landfill (SCS, 2014). The results of groundwater monitoring in 2013 indicated that groundwater quality is not being affected by the landfill as evidenced by the following:

- VOCs continue to be undetected or their concentrations are below compliance cleanup levels.
- The concentrations of most inorganic indicator parameters in groundwater samples collected from monitoring wells located downgradient of the former waste cells have either remained generally stable or show decreasing trends.

Pronounced decreases in the concentrations of chloride, total dissolved solids, iron and manganese in groundwater collected from wells located downgradient and in close proximity to the landfill starting in 1996 indicate that institutional controls, including capping the landfill surface and stormwater control and collection, implemented in the mid-1990s have been effective at mitigating leachate generation and improving groundwater quality.

In 2011, laboratory testing for vinyl chloride (VC) and 1,1-dichloroethene (1,1-DCE) using a low-level U.S. Environmental Protection Agency (EPA) Method 8260B was implemented. The purpose was to achieve reporting limits below the compliance level of 0.1 micrograms per liter (µg/L) for these two VOCs, consistent with Ecology's letter to the Clark County dated April 27,

[1] Wells used to monitor groundwater elevation and/or quality in the upper portion of the alluvium WBZ are denoted with an "S" in the well number (e.g., well LB-1S). Wells used to monitor groundwater elevation and/or quality in the middle (or intermediate) portion of the alluvium WBZ are denoted with an "I" in the well number (e.g., LB-27I). Wells used to monitor groundwater elevation and/or quality in the deeper Troutdale Formation aquifer are denoted with a "D" in the well number (e.g., well LB-1D).

2011 (Ecology, 2011). After two years of testing (i.e., three additional monitoring events), the results showed that VC and 1,1-DCE were not detected above the compliance level of 0.1 µg/L. In response to these results, Ecology approved discontinuing laboratory analysis of VC and 1,1-DCE (Ecology, 2013).

Stormwater Monitoring

The stormwater monitoring program is described in the CMP and also in an updated Stormwater Pollution and Prevention Plan (SWPPP) dated July 2013 (SCS, 2013b). The SWPPP is required to be prepared pursuant to the Site's NPDES Permit. For the purposes of the SWPPP, the Site is divided into three stormwater drainage areas (see Figure 2) as described below. Additional description of the stormwater management system was previously presented in this memorandum.

Area 1. Area 1 comprises approximately 10 acres located to the north of the stormwater detention pond. Area 1 was used as a borrow source for clean fill while the landfill was in operation, as reflected in the area's topography. Most of Area 1 is vegetated with grasses and shrubs. Area 1 contains no buildings or structures.

Area 2 (Existing Landfill Area). Area 2 comprises approximately 77 acres and is the location of the approximate 70-acre closed landfill. An approximate 3.4-acre stormwater detention pond and an approximate 1-acre sedimentation pond are located at the north end of the Area 2. An approximate 1-acre detention pond is located on the west side of Area 2. Area 2 contains two small structures (1) the old flare shed that now houses a backup compressor for the condensate collection system and (2) the North Detention Pond pump shed.

Area 3. Area 3 comprises approximately 26 acres located at the south end of the property that was used as a borrow source for clean fill while the landfill was in operation. Material excavated from Area 3 was used to cover refuse and to fill sections of the landfill in preparation for closure. The excavation is evident in the area's topography. Area 3 includes three small (less than 1-acre) sedimentation basins that are not in use, and is mostly vegetated with grasses and shrubs.

It is important to note that "industrial" activities performed at the Site that could potentially affect stormwater quality are limited to intermittent maintenance of the landfill post-closure systems.

Stormwater monitoring consists of monthly visual inspections and collecting quarterly stormwater grab samples at Outfall 1 (see Figure 2) during qualifying storm events that generate stormwater discharge at the Site. The results of stormwater monitoring in 2013 were reported to Ecology in quarterly discharge monitoring reports (DMRs). The 2013 stormwater monitoring results indicated that stormwater quality benchmarks applicable to the Site were not exceeded during any event.

Landfill Gas

The compliance LFG monitoring network consists of 50 LFG monitoring probes installed along the perimeter of the Site property boundary to monitor subsurface LFG migration, and in areas within the property for monitoring the performance of the GCCS (see Figure 3). Compliance

LFG monitoring probes constructed as dual-completion probes (i.e., a shallow and deep probe constructed within the same borehole) are designated with an "A" for the shallow probe and "B" for the deep probe. Compliance LFG monitoring probes with the same probe number but constructed in different boreholes are designated with an "S" for the shallow probe and "D" for the deep probe.

The recent results of LFG monitoring performed in 2012 and 2013 (SCS, 2013a and 2014) indicated methane concentrations were below the MFS (WAC 173-304) regulatory limit of 5 percent methane by volume in all probes located along the Site property boundary (i.e., point of compliance), except for occasional exceedances of the regulatory limit in select probes along the west side of Module 2 (notably GP-7 and GP-9). In response to the occasional regulatory exceedances, when identified in these probes, adjustments to the LFG extractions wells were immediately performed. In all cases, monitoring of the probes indicated that methane concentrations were effectively reduced to concentrations below the MFS compliance level within one day to approximately one week.

Attachments: Figure 1 – Groundwater Monitoring Locations
Figure 2 – Site Map and Stormwater System
Figure 3 – Landfill Gas Probe and Extraction Well Locations
Attachment 1 – Restrictive Covenant

REFERENCES

EMCON/OWT, 2005, Master Operations Plan, Leichner Landfill, Clark County, Washington, prepared for Leichner Brothers Land Reclamation Corporation, Vancouver, Washington, by EMCON/OWT, Portland, Oregon, April.

SCS Engineers, 2013a, 2012 Fourth Quarter and Annual Report, Closed Leichner Landfill, Vancouver, Washington, Consent Decree 96-2-03081-7, Facility ID No. 1017, prepared for Clark County Environmental Services, Vancouver, Washington, by SCS Engineers, Portland, Oregon, February 28.

SCS Engineers, 2013b, Stormwater Pollution Prevention Plan, Plan Date: July 2013, State of Washington, Industrial Stormwater General Permit, Permit Number: WAR005572, Leichner Landfill, Site Address: 9411 NE 94th Avenue, Vancouver, WA 98862, Clark County, prepared for Clark County Environmental Services, Vancouver, Washington, by SCS Engineers, Portland, Oregon, July 30.

SCS Engineers, 2013c, Compliance Monitoring Plan, Leichner Landfill, 9411 NE 94th Avenue, Vancouver, WA 98862, Facility ID No. 1017, prepared for Clark County Environmental Services, Vancouver, Washington, by SCS Engineers, Portland, Oregon, July 30.

SCS Engineers, 2013d, Third Quarter 2013 Progress Report for the Closed Leichner Brothers Landfill, Vancouver, Washington, Consent Decree 96-2-03081-7, Facility ID No. 1017, prepared for Clark County Environmental Services, Vancouver, Washington, by SCS Engineers, Portland, Oregon, December 10.

SCS Engineers, 2014, 2013 Fourth Quarter and Annual Report, Closed Leichner Landfill, Vancouver, Washington, Consent Decree 96-2-03081-7, Facility ID No. 1017, prepared for Clark County Environmental Services, Vancouver, Washington, by SCS Engineers, Portland, Oregon, February 27.

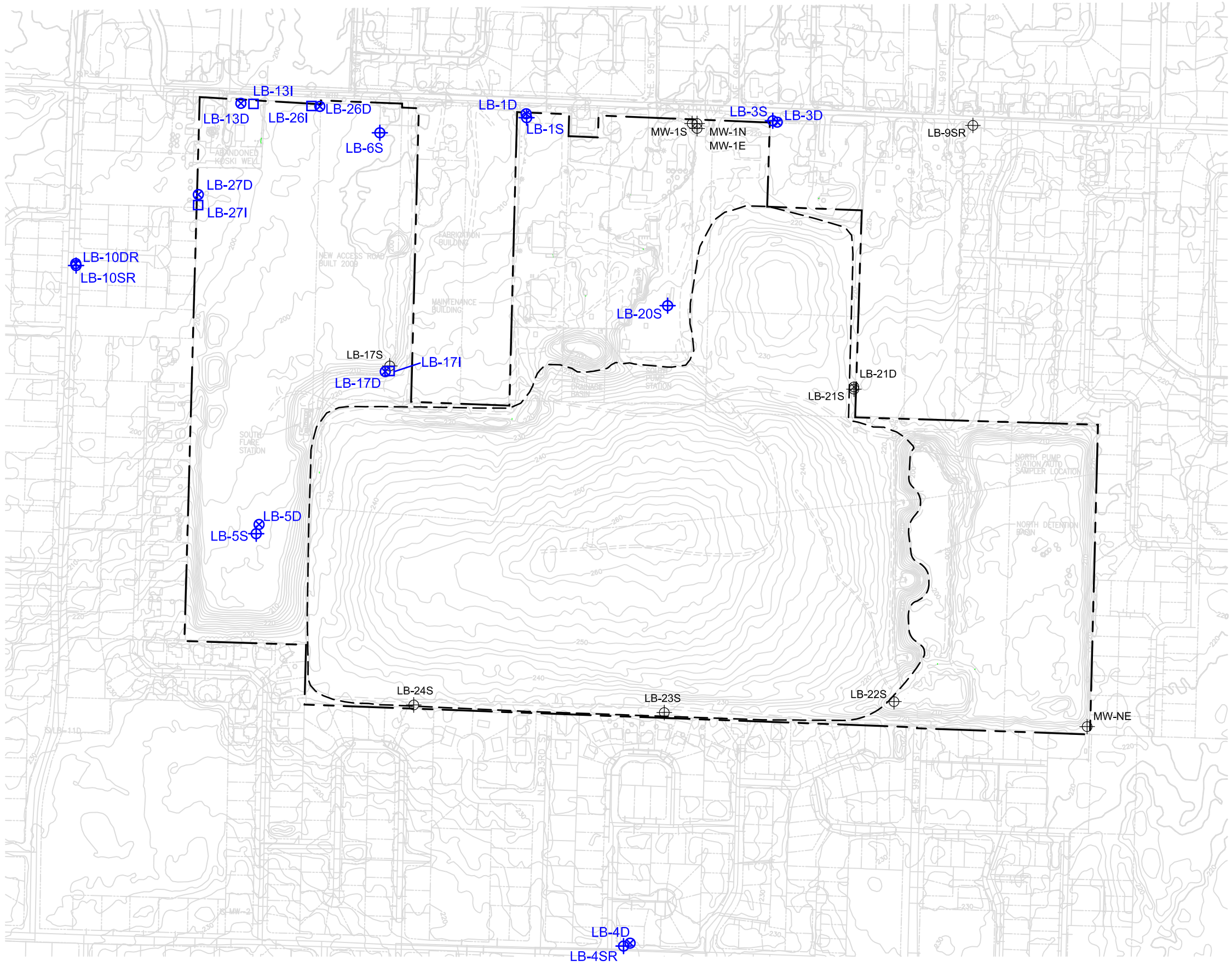
Sweet-Edwards/EMCON, Inc., 1988a, Leichner Landfill Remedial Investigation Report, prepared for Leichner Brothers Land Reclamation Corporation, Vancouver, Washington, by Sweet-Edwards/EMCON, Inc., Portland, Oregon, February.

Sweet-Edwards/EMCON, Inc., 1988b, Feasibility Study for the Leichner Landfill. prepared for Leichner Brothers Land Reclamation Corporation, Vancouver, Washington, by Sweet-Edwards/EMCON, Inc., Portland, Oregon, April.

Washington State Department of Ecology, 2011, Periodic Review under Model Toxics Control Act (MTCA), Leichner Brothers Landfill, prepared by Ecology, Southwest Region Office, Toxics Cleanup Program, April 27.

Washington State Department of Ecology, 2013, Email (re: Letter to WDOE requesting to Discontinue GW Sampling for VC and DCE) to M. Davis, Clark County Environmental Services, and L. Caruso, SCS Engineers, from M. Kourehdar, Ecology, Toxics Cleanup Program, February 12.

FIGURES



LEGEND:

LB-5S ⊕	Monitoring Well Location, Alluvial Water–Bearing Zone
LB-5D ⊗	Monitoring Well Location, Troutdale Aquifer
LB-17I □	Monitoring Well Location, Middle of Alluvial Water–Bearing Zone
—— — — ——	Property Boundary
— — — — — —	Limit of Landfill Cover and Approximate Edge of Waste

NOTES:

1. Monitoring wells designated by blue color are compliance monitoring wells.
2. Topography taken from Clark County GIS, December 2008.

SCS ENGINEERS
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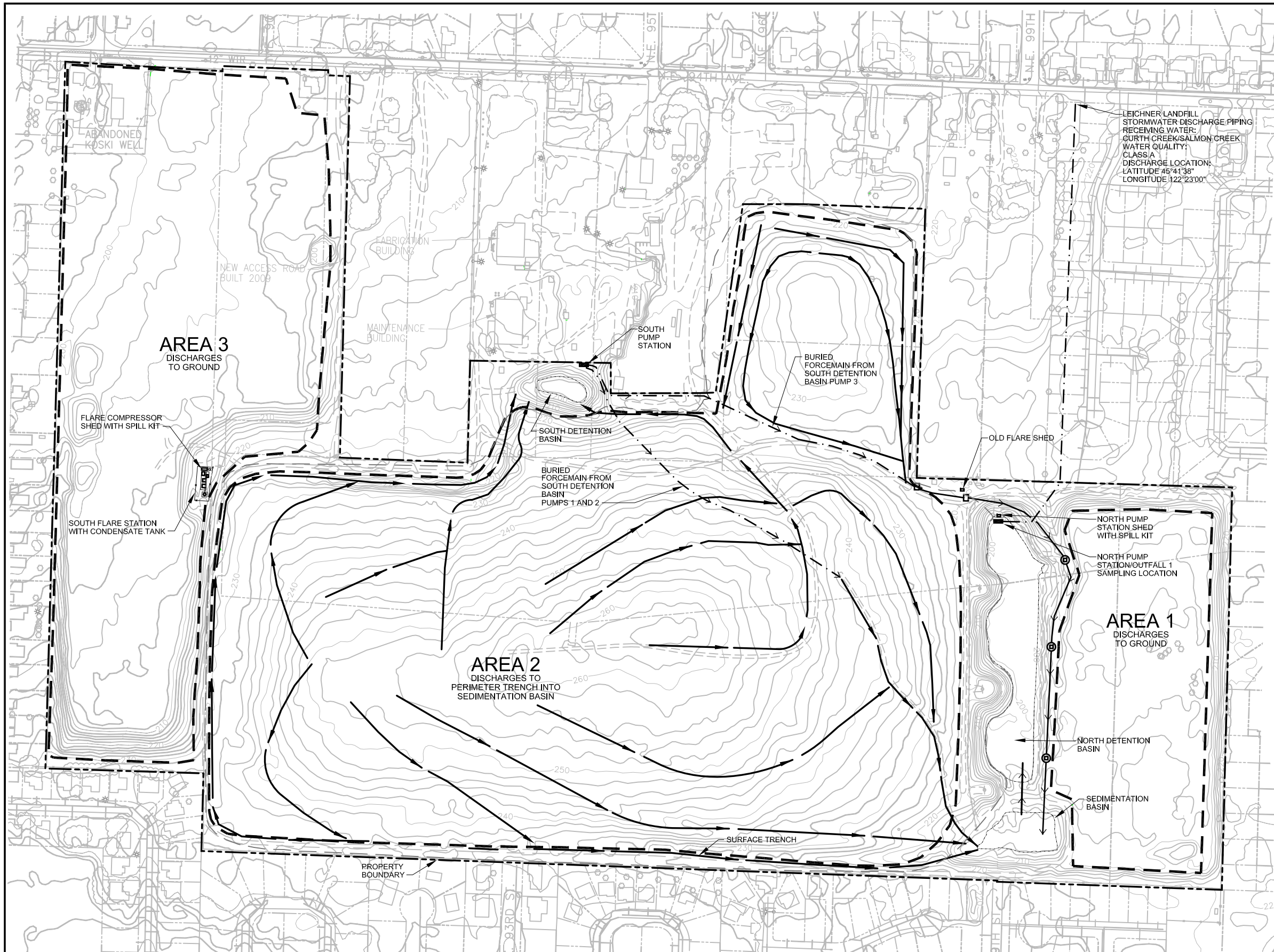
Portland, Oregon 97224
(503) 639-9201 FAX: (503) 684-6948

SCALE
0 400 800 FEET

PROJECT NO. 04214030.10	DES BY T.A.	GROUNDWATER MONITORING LOCATIONS	DATE APRIL 2014
SCALE AS SHOWN	CHK BY D.L.	LEICHNER LANDFILL VANCOUVER, WASHINGTON	FIGURE 1
CAD FILE FIGURE 1	APP BY L.C.		



LEGEND:

- Property Boundary
- Drainage Path
- Underground Stormwater Collection Piping
- Stormwater Forcemain
- Drainage Area Boundary
- Stormwater Forcemain Access Vault
- Stormwater Manhole
- Pump Station

NOTE:
Topography Taken From Clark County GIS, December 2008

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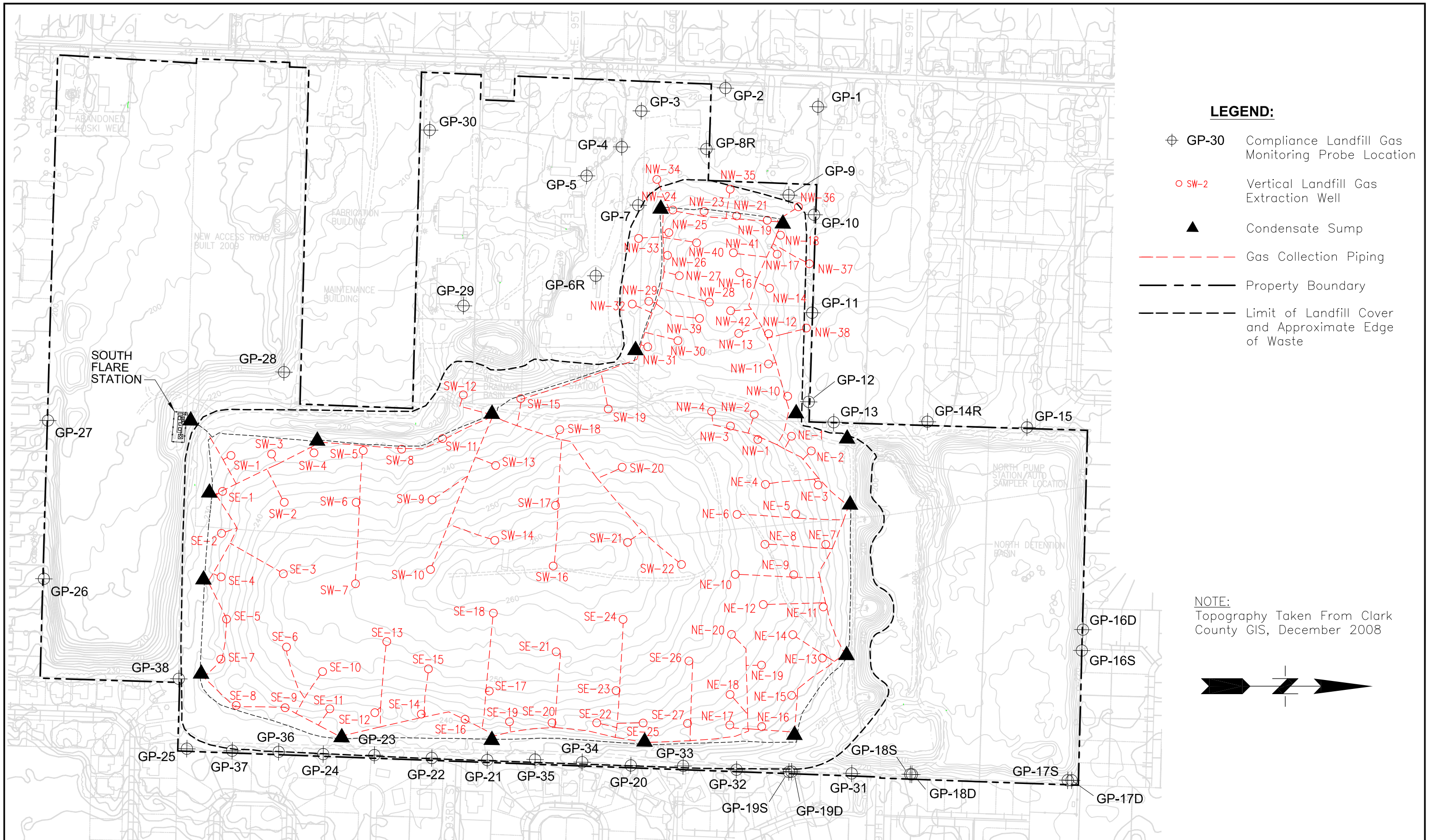
SCALE
0 300 600 FEET

PROJECT NO. 04214030.10	DES BY T.B.	STORMWATER SYSTEM FEATURE LOCATIONS	DATE APRIL 2014
SCALE AS SHOWN	CHK BY D.L.	LEICHNER BROTHERS LANDFILL VANCOUVER, WASHINGTON	FIGURE 2
CAD FILE FIGURE 2	APP BY L.C.		



SCS ENGINEERS
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SCALE
0 300 600 FEET

PROJECT NO. 04214030.10	DES BY T.A.	LANDFILL GAS PROBE AND EXTRACTION WELL LOCATIONS	DATE APRIL 2014
SCALE AS SHOWN	CHK BY D.L.	LEICHNER LANDFILL VANCOUVER, WASHINGTON	FIGURE 3
CAD FILE FIGURE 3	APP BY L.C.		

ATTACHMENT 1
RESTRICTIVE COVENANT

9804090180

RECORDING REQUESTED BY
AND WHEN RECORDED RETURN TO:

Stephen W. Horenstein, Attorney
Horenstein & Duggan, P.S.
P.O. Box 694
Vancouver, WA 98666

FILED FOR RECORD
CLARK CO. WASH
Horenstein & Duggan
98 APR -9 PM 3:11

AUDITOR
ELIZABETH A. LUCE

RESTRICTIVE COVENANT

Grantors:	Leichner Brothers Land Reclamation Corporation
Grantees:	The Public
Abbreviated Legal:	Section 4, T2N, R2E and Section 23, T3N, R2E W.M.
Assessor's Tax Parcel #	199843; 199845; 199846; 199847; 199848; 199856; 199857; 199858; 199859; 199860; 199863; 199865; 199866; 199869; 199871; 105740
Other Reference Nos:	N/A

The property that is the subject of this Restrictive Covenant is the subject of remedial action under Chapter 70.105D RCW. The work done to clean up the property (hereafter the "Cleanup Action") is described in the Consent Decree entered in State of Washington v. Leichner Brothers Land Reclamation Corporation, Clark County Superior Court No. 96-2-03081-7 and in exhibits to the Consent Decree. This Restrictive Covenant is required by the State of Washington Department of Ecology pursuant to WAC 173-340-440 because contaminants will be left in place on the property. This Restrictive Covenant is necessary to assure the continued protection of human health and the environment and the integrity of the Cleanup Action.

The undersigned, Leichner Brothers Land Reclamation Corporation, is the fee owner of real property in the County of Clark, State of Washington (legal description attached hereto as Exhibit "A"), hereafter referred to as the "Property." The Property encompasses both surface and subsurface estates. Leichner Brothers Land Reclamation Corporation makes the following declarations as to limitations, restrictions, and uses to which the Property may be put, and specifies that such declarations shall constitute covenants to run with the land, as provided by law, and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property.

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ATTORNEYS AT LAW
900 Washington Street, Suite 900
P.O. Box 694
Vancouver, Washington 98666
(360) 699-4771 • (503) 289-2643

Section 1. No groundwater may be taken for domestic purposes from any well on the Property.

Section 2. Any activity on the Property that may interfere with the Cleanup Action is prohibited. Any activity on the Property that may result in the release of a hazardous substance that was contained as a part of the Cleanup Action is prohibited, unless allowed under the terms of an NPDES or state waste discharge permit.

Section 3. The owner of the Property must give written notice to the Department of Ecology, or to a successor agency, of the owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property may be consummated by the owner without adequate and complete provision for the continued operation, maintenance, and monitoring of the Cleanup Action.

Section 4. The owner of the Property must notify and obtain approval from the Department of Ecology, or from a successor agency, prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant. The Department of Ecology or its successor agency may approve such a use only after public notice and opportunity for comment, and only if the proposed use will not threaten human health or the environment.

Section 5. The owner of the Property shall allow authorized representatives of the Department of Ecology, or of a successor agency, the right to enter the Property in accordance with the terms set forth in Section IX of the Consent Decree for the purposes of evaluating compliance with the terms of the Consent Decree and the Cleanup Action Plan, to take samples, to inspect Cleanup Action taken at the Property, and to inspect records that are related to the Cleanup Action.

Section 6. The owner of the Property and the owner's assigns and successors in interest reserve the right under WAC 173-340-440 to record an instrument providing that this Restrictive Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only with the consent of the Department of Ecology, or of a successor agency. The Department of Ecology or a successor agency may consent to the recording of such an instrument only after public notice and comment, and only if all of Leichner Brothers Land Reclamation Corporation's obligations under the Consent Decree have been satisfactorily completed.

LEICHNER BROTHERS LAND RECLAMATION CORPORATION

By: _____
Craig Leichner, President

Date: April 9, 1998

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(360) 699-4771 • (503) 289-2643

STATE OF WASHINGTON)
: ss.
County of Clark)

I certify that Craig Leichner appeared personally before me and that I know or have satisfactory evidence that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the President of Leichner Brothers Land Reclamation Corporation to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED this 9th day of April, 1998.

SUSAN M. SCHRANTZ
NOTARY PUBLIC
STATE OF WASHINGTON
COMMISSION EXPIRES
FEBRUARY 1, 1999

Susan Schrantz
NOTARY PUBLIC FOR WASHINGTON
My Commission Expires: Feb 1, 1999

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LEGAL DESCRIPTION FOR LEICHNER
Perimeter Description

July 27, 1993

A parcel of property in the James McAllister and in the William Goldbeck Donation Land Claim and in a portion of the Newton Addition as recorded in Book A of Plats at page 60 of Clark County records, in Section 4, Township 2 North, Range 2 East and in the South half of Section 33, Township 3 North, Range 2 East of the Willamette Meridian described as follows:

BEGINNING at the Southeast corner of the McAllister Donation Land Claim;

THENCE North 88° 29′ 04″ West along the South line of said McAllister Donation Land Claim 227.44 feet to the Northeast corner of the Northwest quarter of Lot 1 of the Newton Addition;

THENCE South 01° 43′ 50″ West along the East line of said Northwest quarter 473.72 feet to that line established by boundary agreement as recorded under Auditor's File # 9108090260 of Clark County records;

THENCE North 88° 16′ 04″ West along said boundary agreement line 981.21 feet;

THENCE South 01° 43′ 50″ West along said boundary agreement line 0.41 feet to the South line of the North half of Lot 3 of said Newton Addition;

THENCE North 88° 16′ 06″ West along said South line and the South lines of the North half of Lot 4 and the North half of Lot 5 of said Newton Addition 1119.46 feet to the centerline of NE 94th Ave;

THENCE North 02° 10′ 22″ East along said centerline 466.22 feet to the Southwest corner of said McAllister Donation Land Claim;

THENCE North 02° 09′ 58″ East along the West line of said McAllister Donation Land Claim 236.55 feet to the Southwest corner of that tract conveyed to Arvid E Koski by deed recorded under Auditor's File # G 18438 of Clark County records;

THENCE South 88° 29′ 04″ East along the South line of said Koski tract 90.00 feet to the Southeast corner thereof;

THENCE North 02° 09′ 58″ East along the East line of said Koski tract 80.01 feet to the Northeast corner thereof;

THENCE North 88° 29′ 04″ West along the North line of said Koski tract 90.00 feet to the West line of said McAllister Donation Land Claim;

EXHIBIT A

THENCE North 02° 09′ 58″ East along said West line 60.00 feet to the South line of that tract conveyed to Felix F. Fleischer by deed recorded under Auditor's File # 8403160018 of Clark County records;

THENCE South 88° 29′ 04″ East along said South line 1157.05 feet to a fence line and the Boundary Line Agreement as recorded under Auditor's File # 9302170319 of Clark County records;

THENCE North 01° 43′ 14″ East along said fence and Boundary Line Agreement 376.53 feet to the North line of said Fleisher tract;

THENCE North 88° 29′ 04″ West along said North line 1154.13 feet to said West line of the McAllister Donation Land Claim;

THENCE North 02° 09′ 58″ East along said West line 205.37 feet to the North line of that tract conveyed to Lorry Leichner by deed recorded under Auditor's File # G 336779 of Clark County records;

THENCE South 88° 29′ 04″ East along said North line 122.00 feet to the most Southerly Southwest corner of that tract conveyed to Lorry Leichner by deed recorded under Auditor's File # G 730682 of Clark County records;

THENCE North 02° 09′ 58″ East along the West line of said Leichner tract 102.00 feet;

THENCE North 88° 29′ 04″ West along the South line of said Leichner tract 122.00 feet to said West line of said McAllister Donation Land Claim;

THENCE North 02° 09′ 58″ East along said West line 1023.14 feet to the Westerly extension of the South line of the Kuhnhausen parcel as described in Exhibit D of the Boundary Line Agreement as recorded under Auditor's File # 9108090261 of Clark County records;

THENCE South 87° 10′ 13″ East along said South line 390.06 feet;

THENCE South 87° 51′ 35″ East along said South line 756.61 feet to the East line of said Kuhnhausen parcel;

THENCE North 02° 21′ 36″ East along said East line 380.79 feet to the Northeast corner of said Kuhnhausen parcel;

THENCE North 87° 48′ 39″ West along the North line of said Kuhnhausen parcel 1147.93 feet to the West line of said McAllister Donation Land Claim;

THENCE North 02° 09′ 58″ East along said West line 169.75 feet, more or less, to the South line of that tract conveyed to B. Charles Dorsey by deed recorded under Auditor's File # 8704210088 of Clark County records;

THENCE South 88° 28′ 27″ East along said South line 464.03 feet to the East line of said Dorsey tract;

THENCE North 02° 09′ 58″ East along said East line 25.11 feet;

THENCE North 02° 02′ 17″ East along said East line 162.90 feet to the South line of that tract conveyed to J.E. O'Flaherty by deed recorded in Book 72 at page 382 of Clark County records;

THENCE South 88° 28′ 27″ East along said South line 716.94 feet, more or less, to the East line of said O'Flaherty tract;

THENCE North 02° 04′ 21″ East along said East line 188.10 feet, more or less, to the North line of the South half of said McAllister Donation Land Claim;

THENCE South 88° 28′ 27″ East along said North line 1140.56 feet, more or less, to the East line of said McAllister Donation Land Claim;

THENCE South 02° 04′ 21″ West along said East line 673.42 feet;

THENCE South 02° 07′ 55″ West along said East line 1839.88 feet to the Northwest corner of the Napoleon McGilvery Donation land Claim;

THENCE South 01° 59′ 43″ West along said East line 492.82 feet to the POINT OF BEGINNING.

KURT F. STONEX
STATE OF WASHINGTON
26352
REGISTERED
PROFESSIONAL LAND SURVEYOR
EXPIRES MAY 5, 1994

7/27/93

APPENDIX D

LAND USE ANALYSIS TECHNICAL MEMORANDUM

BergerABAM

1111 Main Street, Suite 300, Vancouver, Washington 98660-2958
360/823-6100 • 360/823-6101 Fax • www.abam.com

Memorandum

Date: 27 May 2014

Subject: Leichner Landfill Existing Conditions

From: Read Stapleton, AICP

To: Seth Otto, AICP

In conjunction with the Leichner Landfill master planning process, BergerABAM has prepared the following summary of the existing zoning and development standards that apply to the site and their implications for the master plan alternatives under consideration.

EXISTING CONDITIONS

The following paragraphs explain the zoning and development standards that apply to the property.

Zoning Designations

The land area subject to this master plan process is approximately 132.6 acres and is composed of the former Leichner landfill site and adjoining properties. Approximately 124.6 acres of the site, including the former landfill property, are currently zoned Light Industrial (IL). An approximately 8-acre area zoned Single Family Residential (R1-7.5) is located north of the former landfill. The following table identifies the existing zoning and acreage by tax lot number.

Table 1. Leichner Master Plan Site Zoning

Tax Lot	Acreage / Zoning
Former Landfill:	
199858	33.66 (IL)
199843	25.56 (IL)
199869	9.92 (IL)
Koski Property:	
199845	2.12 (IL)
199863	7.42 (IL)
105740	25.49 (IL)
Fleischer Property:	
199851	5 (IL)
199861	0.99 (IL)

Tax Lot	Acreage / Zoning
199854	3.45 (IL)
Stormwater Facility and NE 99th Street ROW:	
199856	11.03 (IL)
Residential Property:	
199866	7.13 (R1-7.5)
199865	0.83 (R1-7.5)
Total Acreage	132.6

Of the approximately 19 acres located north of the former landfill, approximately 11 acres are zoned IL and approximately 8 acres are zoned R1-7.5. It is anticipated that much of the 11-acre IL property will continue to be used for stormwater management and will be the site of the future NE 99th Street connection. The remainder of the 11 acres of IL land may be used for residential. Master plan alternatives that involve residential use on this 11-acre IL property will require a comprehensive plan amendment and zone change to convert any remaining areas to a single-family residential zoning designation.

Site Design Standards

The design of future uses on the property must consider and adhere to the development standards that apply to the base zones of the site. The following table lists the setback requirements for the IL and R1-7.5 properties.

Table 2. Setback Requirements

Standards	Zone	
	IL	R1-7.5
Setbacks:		
Front	20 ft	10 ft
Side (street)	20 ft	10 ft
Side (interior)	0	5 ft
Rear	0	10 ft
Screening:		
From R1-7.5		
Separated by street	L2 (10 ft)	None
Not separated by street	L3 (10 ft)	None
From IL		

Standards	Zone	
	IL	R1-7.5
Separated by street	L2 (10 ft)	L3 (10 ft)
Not separated by street	None	L1 (10 ft)
Max Building Height	100 ft	35 ft
Perimeter parcels or adjacent to R1-7.5 zone	60 ft	N/A
Residential Density for Planned Unit Developments (per acre)	N/A	5.8 - 4.1
Max Lot Coverage	100%	50%
Min Landscaped Area	10%	N/A
Min Lot Area	N/A	7500 sf
Max Average Lot Area	N/A	10,500 sf
Average Min Lot Width for Each Lot	N/A	50 ft
Average Min Lot Depth for Each Lot	N/A	90 ft
Parking & Loading		
Loading Berths:		N/A
Industrial/Commercial/Public Utility Buildings		
Less than 5,000 sf	0	
5,000 to 25,000 sf	1	
25,000 to 50,000 sf	2	
Each additional 50,000 sf or fraction thereof	1	
Offices/Public Buildings/Recreation or Entertainment Facilities/Etc.		
Less than 30,000 sf	0	
30,000 to 100,000 sf	1	
100,000 sf and over	2	

Road Design Standards

It is anticipated that NE 99th Street will be extended through the property adjacent to the northern edge of the landfill property. Clark County designates the road as an urban minor arterial with the standard cross-section shown in Table 3.

Table 3. Road Cross-Section

Minor Arterial - 2 Lanes with Center Turn Lane (CTL) and Bike Lane	
ROW Width	72 ft
Roadway Width	48 ft
Number of Travel Lanes and Surface	2 - impervious pavement

Minor Arterial - 2 Lanes with Center Turn Lane (CTL) and Bike Lane	
Lane Width	12 ft
CTL Width and Surface	12 ft - impervious pavement
Bike Lane (2 Sides) Width	6 ft
Sidewalk Width and Surface	6 ft - permeable pavement allowed (5 ft if detached)
Planter/LID/Utility	12 ft
Access Spacing:	
Min Full Access Intersection Spacing	500 ft
Driveway Access Spacing Based on Posted Speed of Arterial:	20 MPH: 85 ft 25 MPH: 105 ft 30 MPH: 125 ft 35 MPH: 150 ft 40 MPH: 185 ft

Critical Areas and Environmental Analysis

Subtitle 40.4 of the Clark County code regulates development impacts to environmentally sensitive "critical areas" which include flood hazard areas, wetlands, habitat conservation areas, critical aquifer recharge areas, and geologic hazard areas. In conjunction with its 2012 analysis, BergerABAM reviewed available Clark County Geographic Information Systems (GIS) data for mapped indicators of critical areas on the site. Clark County GIS indicated the presence of a water feature mapped as a riparian habitat conservation area in the western section of the former landfill (tax lot 199843). A BergerABAM scientist visited the landfill property and determined that the water feature was one of three stormwater ponds constructed to collect and convey runoff from the surface of the landfill and would not qualify as a riparian habitat conservation area. No US Fish and Wildlife Service National Wetland Inventory wetlands are mapped on the site, and a review of the Washington Department of Fish and Wildlife Priority Habitat and Species online map does not indicate the presence of sensitive or regulated natural resources on any of the subject parcels.

Perennial and annual grasses comprise most of the vegetation on the site. As part of its routine maintenance of the site, the county removes any weeds, invasive vegetation, and volunteer trees and shrubs that could threaten the integrity of the landfill cap, which is generally 3 feet below the surface.

BergerABAM's 2012 fatal flaw analysis determined that endangered or threatened species do not use the site and it does not provide critical habitat protected under the Endangered Species Act. A stated above, grasses comprise most of the vegetation on the site and it is not suitable

habitat for listed species that may occur elsewhere in the county. In 2012, county staff identified coyotes, mice, voles, rabbits, hawks, owls, and songbirds – all species habituated to human presence – as species that use the subject parcels. In addition, the stormwater ponds support waterfowl use.

A shallow aquifer and the deeper Troutdale aquifer underlie the landfill parcels (Washington State Department of Ecology 2012). The integrity of the landfill cap must be maintained to prevent the infiltration of precipitation through the landfill material and the consequent pollution of the groundwater and/or aquifers. The entire site is located in the Category 2 Recharge Area, based on its proximity to public drinking water sources. There are no prohibited uses in Category 2 Recharge Areas; however, certain uses may be required to obtain a Critical Acquire Recharge Area (CARA) permit. These uses include injection and disposal wells for industrial process water.

The entire site is located outside the flood area, meaning that risk for flooding on site is very low.

Geologic hazards are defined as areas subject to influence from surface and subsurface actions related to earth processes. Washington State's Growth Management Act requires that these areas be defined so that safeguards in development can be assured. In Clark County, geologic hazards include steep slope, landslide, seismic, and volcanic hazard areas.

The Clark County online Property Info Center indicates that the site contains relatively steep slopes of 15-25% along the perimeter of the former landfill and also shows that the site has National Earthquake Hazard Reduction Program (NEHRP) ratings of C and D, on a scale in which "A" is the least susceptible to seismic damage and "D" is the most susceptible. Soil type, slope, soil water saturation and other physical factors are used to determine NEHRP classifications. The Clark County online Property Info Center does not represent that liquefaction is a concern on the site as it indicates that the site has a low to very low risk of liquefaction based on the qualities of underlying soils.

Given the geological conditions on site, a Geological Hazard Review may be required for any site grading or development on or immediately adjacent to the steep slopes along the perimeter of the landfill where slopes exceed 15%. Demonstration of compliance with the seismic hazard provisions found in CCC 40.430.020(F) is met at the time of building permit issuance through evidence of compliance with the International Building Code (IBC)

Clark County uses Archaeological Predictive Modeling to determine the likelihood of cultural resources being discovered on the property. The classifications are determined based on the elevation of a site, distance to water, and soil order. Based on these criteria, the site is designated as having high or moderately high archeological probability. A cultural resources

study should be conducted on those portions of the site note occupied by the landfill prior to any development activities.

APPENDIX E

REAL ESTATE EXPERT PANEL NOTES

MEETING NOTES

Meeting Topic and Number:	Leichner Landfill Property Real Estate Planning Workshop
Meeting Date & Time:	April 10, 2014 11 a.m.-2 p.m.
Project #:	9059.07.03
Project Name:	Leichner Campus Master Plan
Meeting Location:	Waste Connections Office 9411 NE 94th Avenue Vancouver, WA
Recorded By:	Katie Stromme
Attendees:	Steve Taylor, MFA Seth Otto, MFA Abe Farkas, ECONorthwest Lorelei Juntunen, ECONorthwest Mike Davis, Clark County Eric Hovee, E.D. Hovee & Co. Todd Shaeffer, Specht Development Monte Haynes, Kidder Mathews Kirk Olsen, Trammell Crow Jo Ellen Jarvis, Jarvis Appraisal Jamie Howsley, Jordan Ramis Eric Fuller, Eric Fuller & Associates Scott Fraser, Kidder Mathews Phillip Hanshew, Colliers Mike Bomar, CREDC
Distribution:	

1.1 **Market Opportunity Analysis (E. Hovee)**—Work to explore potential uses. Give quantitative sense and what fits in terms of site location and configuration. Map shown to illustrate opportunities zeroed in specifically on Leichner area.

a. **Is the analysis governed by the current use?** Mostly, yes—assumption is that zoning will not change radically

b. **Retail use**
   i. Limited; must be small-scale, combined with industrial use
   ii. Present zoning limits retail to 10% of site; retail centers more on the other side of I-205

c. **Industrial use**
   i. Decent absorption
   ii. Access to I-205 is favorable
   iii. Potential access to employable blue-collar labor force
   iv. Economic returns much greater than office space, retail etc.
   v. Job/wage/tax potential: industrial jobs lower density than office; however, wages could be relatively high
   vi. Need to address shallow eastern end of property and truck access

d. **Flex use** :

i. Data suggest that there is more flex than traditional industrial: indicative of a potential change in the market.
ii. Not a tier-A location for flex

e. **Office use**
i. More solid job growth could turn perspective around, but office space is not a major driver
ii. could be constructed in conjunction with a distribution setup
iii. Fleischer Property: If combined with Leichner site, may create more opportunities for combing retail or office development.

f. **Residential**
i. Single-family residential limited to northern area of property.
ii. Housing market is stronger as you go north east of the neighborhood

g. **Recreation/open space**
i. In general, larger area is well-served with parks in perspective of Clark County.
ii. Potential for event use/passive recreation (weddings).
iii. Field part is more challenging because of the hilly nature of the land (cannot be altered to preserve cap on the landfill).

h. **Mixed-use**
i. Question of whether to go sole industrial use versus mixing the site with industrial/office/retail.

1.2 Market Opportunity Analysis Questions/Comments

a. **Zoning code flexibility**
i. Possibly open up the zoning code a bit for a blending of office/industrial/commercial. Southern half of property may have a chance to craft more flexible zoning to let the market dictate potential uses.
ii. With political/policy support that might work well for this property. Industrial in the back/middle and flex with shorter buildings up on 94th: can support a higher land value than industrial can.

b. **Creating possibilities for a variety of potential users**
i. From the perspective of a developer: buy sites based on possibilities
1. Figure out road/utility plan in order to get the property more shovel-ready and attractive to buyers.
2. Create lots of parcels; lay out something—think of the developer's plans as speculative and give them maximum flexibility
3. Office development in this area is not ideal.
4. Industrial property ideal is 200-feet deep, 20,000 square foot buildings. Speculatively could be placed on the south side of the property.
5. Phasing approach: preserve big user option as long as you can until small user demand is great enough. Lots of 5,000 square-foot deals available.
ii. Hillsboro model zoning would be good to look at: multi-story office to distribution. Don't see a lot of big distribution on the Washington side of the river.
1. Big companies want to be next to others in case of a big failure; difficult to justify why choosing a spot (like this) versus something with more neighbors.
2. May be greater likelihood with local/regional companies. Large companies will want a discount to justify a purchase of a property like this.

c. **Capital demand**
i. Developer coming in would be more likely to be on the private side versus public.
ii. Private developer using their own bank account, recourse loans, will limit the vision for paying for studies to lay out infrastructure. The county will have to take that on while it hires a broker to look for a manufacturer.
iii. Don't build internal circulation roads: draw infrastructure off of them; plan large roads on the periphery to break up the property less.

1.3 **County's Obstacles, Resolution, Timing, and Disposition (A. Farkas)—** County's objective: The more money the county spends, the more they want in returns. Return may not be driven on ROI basis but on job number. What are some strategies for developing an effective plan for the county to unload the property given the three-year timeline and current amount of flexibility?

a. **BIGGEST OBSTACLES**
    i. **Land hold**
        1. will be painful and hard to get money back out; phasing acquisition would be more helpful
    ii. **Potential site users as "pioneers"**
    iii. **Uncertainty and the process to remove uncertainty for users**
        1. To position to sell: remove developers'/users' uncertainty: wetlands, geotech, environmental, prelim site planning, even a DA (development agreement) that gives a broad range of usability/flexibility so that when there is demand there isn't a two-year closing to perform studies
        2. Planned action reduces risk of getting hung up in court. The more potential legal barriers can be moved the more a potential user will be willing to take a risk.
        3. NFA on any fatal flaw; pull in the Fleischer property and remove the fatal flaw.
    iv. **Consent decree on the landfill**
    v. **Waste Connections truck traffic**
    vi. **Extended timeline**
        1. Time kills all deals: if the county gets tied up the deal will die and you will lose user interest.
        2. 90-180 day execution will be ideal
    vii. **Excess of environmental information**
        1. Could scare off users
        2. If you can distill environmental stuff down to one letter that is better than having *all* available information. Be able to give a basic overview clearly
    viii. **Topography**
        1. Issue with Fleisher property: a big user would be unlikely to combine sites.
    ix. Residential neighborhood
        1. What will neighbors say about industrial use?
        2. Think about adding trees to the edges of the property; buffer now to the residential neighbors who might not look favorably on a large plant/factory coming in
    x. Job creation requirements
        1. Strict requirements may scare off many potential users
b. **STEPS TO RESOLVE BARRIERS**
    i. Planning a street system
        1. Example: Port of Ridgefield 75 acres: SW WA Peace Health Center—looked at sensitive land issues, archaeological stuff, and did preliminary engineering on street improvements.
        2. Putting a road in now could save construction time but could also deter users who don't want the site subdivided.
        3. Have the road planned/engineered but also scatter plat lines for smaller users.
        4. Standard commercial access road is what's being discussed by the county and then letting the developer put in a private road
        5. Private road: shared maintenance agreements, shared access agreements: could get money back from other owners selling
        6. Would need to look a lot like a public road (sidewalks, lighting)—wide enough for trucks

7. Don't put the road in before finding a user. Multiple master plans outlining different road options/parcel size. Already restricted on where a road can start: needs to line up with 88th and 99th in a perfect world the road would be engineered and have permits in place with possibility to extend permits. That would allow a developer to immediately put rock down and get access by the end of the job.
8. Put multiple frameworks together
9. Subdividing plan for the property—money well spent. Might get a user that doesn't need a subdivision, but will potentially save many months. Establish property lines and CCNRs to address all the obvious things as well as lighting.

ii. **Electricity/sewage system**
   1. Ensure capacities for easy use

iii. **Traffic study**
   1. Do a study as though it was for all distribution and look at possible improvements. Plan for large-scale use. End of the day: better to play it safe in terms of planning

iv. **County should commit to as much testing & planning as is economically feasible**
   1. Without environmental testing: users will see a three-year contingency period to complete studies/testing.
   2. Consider a use development agreement on top of a planned action to give a developer certainty that entitlement will be in place for a number of years
   3. Late comer agreements: first buyer may want to recover road or Stormwater cost from incoming buyers.
   4. Vesting traffic: have a regional Stormwater solution that is vested over the property so that if regulations get more stringent there is a plan in place and you are vested.

v. **Public involvement**
   1. Spend time on strategy and do not approach public input lightly.
   2. Build a vision for them in terms of regulations for facility noise, odor, hours of operation—define it for them. As a public amenity: need funds to make it happen.
   3. Be transparent and firm
   4. Be cautious showing a blank picture to the public; have a vision in place to discuss planning and then work towards middle ground in terms of buffers and restrictions.
   5. Come into a meeting with a few different site plans—these houses nearby have been built after the landfill's existence (area got more attractive for development after its closing). Go in with some things that aren't predetermined but give them some ideas.
   6. Unique to this property: landfill, residences, industrial stuck in the middle. Neighbors care about what will happen with the landfill and care about neighbors in the backyard. Give them an idea of what it may transition into.
   7. Tell them tentative plan and how to pay for it.
   8. At the least: tell them it's an industrial park: it will have concrete, it will have trucks. Tell them that they'll meet again to get input on screening
   9. M. Davis, Clark County Solid Waste—
      a. East and north sides, not much will happen now.
      b. South end outreach: County has to begin from a transparent place and keep the public informed.
      c. At some point commissioners will get involved and make decisions about what they want from the site.
      d. County's direction currently is jobs.

e. County is set on keeping zoning industrial.
f. Not necessarily type of jobs or number of jobs per square foot: county has broad direction currently but looking for family-wage jobs.
g. Noise from loading and unloading at late hours will be an issue to discuss. Operating hours need to be restricted, period. Limit certain uses

c. TIMING

i. Testing/surveys

1. Don't put it on the market until testing/surveys are done otherwise price will drop the longer it sits on the market (traffic study needs to be done)

ii. **Keep cycles in mind**

1. Studies could be done in three to four months
2. Property could be placed on the market within a year

d. STRATEGY FOR DISPOSITION PROCESS

i. Hire a good industrial broker

ii. **Going through a developer**

1. They will want to tie it up with options and risk as few dollars possible for as long as possible
2. May or may not make sense
3. Developer will not build a road either

iii. Public/Private partnership

1. Enter into partnership with an arrangement between the county and developer; let the developer sit on it but let them add value along the way by having them pay for studies/engineering plan. "build this road and you can have it for a year"
2. If disposition is the ultimate intent then it's difficult to reconcile "disposing" of it with a developer without hard evidence of job creation.

iv. **Long-term lease**

1. Greatly drops return: much harder to do deals on lease land
2. Leases are better for more strategically-located properties (near water, near airport, technology parks).
3. Disposal after the lease would be significantly discounted.

v. Additional disposition strategies will need to be discussed in greater depth.

APPENDIX B

OPEN HOUSE MEETING NOTES

BergerABAM

1111 Main Street, Suite 300, Vancouver, Washington 98660-2958
360/823-6100 • 360/823-6101 Fax • www.abam.com

Leichner Landfill Master Plan
Open House Summary

Date: 4:00 – 7:00 PM, Tuesday, 29 April 2014
Location: Vancouver Church of Christ, 9019 NE 86th Avenue, Vancouver

Clark County has begun a master planning process to guide decisions about the future use of county-owned property at 9411 NE 94th Avenue. The county hosted an open house to inform the community and the owners of property surrounding the former Leichner Landfill of the master planning process, to review information regarding existing site conditions, and to discuss thoughts on the master plan design.

More than 2 weeks before the open house, a flier advertising the event was mailed to 1,386 residents and property owners. The distribution area for the mailing was Padden Parkway to the south, NE 92 Avenue to the west, NE 107 Avenue to the east, and NE 105 Street to the north.

Approximately 50 people, besides project team members, attended the open house but not everyone signed in (see Appendix A). Additionally, 14 attendees submitted comments (see Appendix B). Project team members present included Don Benton, Mike Davis, and Scott Fakler (County); Jim Maul, Seth Otto, and Stacy Frost (Maul Foster & Alongi); and Read Stapleton, Nelson Holmberg, and Traci Chumbley (BergerABAM).

Attendees were invited to review several displays, including a project schedule, an explanation of the project goals, a description of allowed uses on the site, and an existing conditions map (see Appendix C).

Project team members responded to attendees' questions concerning traffic circulation and site access, the project schedule, the county's development plans, and the potential impacts of the project on the traffic that currently cuts through the neighboring subdivision.

Appendix A
Participants

Appendix A: Participants

	Name and Address	Add to Email Update List
1	Dominic Thornberg 10217 NE 102nd St. Vancouver, WA 98662	Ed.dnac@msn.com
2	Sara Thornberg 10217 NE 102nd St. Vancouver, WA 98662	
3	Debbie Gipe 8914 Ne 104th Ave. Vancouver, WA 98662	Dgipe60@gmail.com
4	Steve Tommerup 9411 NE 87th St. Vancouver, WA 98662	
5	Mark VanHouse 10511 NE 89th Cir. Vancouver, WA 98662	
6	Mike Coenen 15575 SW Sequoia Pkwy., Ste 100 Portland, OR 97224	mcoenen@geodesigninc.com
7	George Parrish 10305 NE 99th Ave. Vancouver, WA 98662	
8	Geoffrey Landis 10305 NE 99th Ave. Vancouver, WA 98662	
9	Ramona Davis 10304 NE 86th St. Vancouver, WA 98662	
10	Paul Hardman 9701 NE 94th Ave. Vancouver, WA 98662	
11	Ellen Hardman 9701 NE 94th Ave. Vancouver, WA 98662	
12	Mike Harris 9807 NE 86th St. Vancouver, WA 98662	mwhjch@comcast.net
13	Joyce Harris 9807 NE 86th St. Vancouver, WA 98662	
14	D. Johnston 9117 NE 105th Ave. Vancouver, WA 98662	
15	Sue Johnston 9117 NE 105th Ave. Vancouver, WA 98662	

	Name and Address	Add to Email Update List
16	Glen Workman 9813 NE 92nd Ave. Vancouver, WA 98662	
17	Karen Workman 9813 NE 92nd Ave. Vancouver, WA 98662	
18	Cherry Wilson 9019 NE 86th Vancouver, WA 98662	Office.manager@vanchurch.org
19	Randy Wilson 9019 NE 86th Vancouver, WA 98662	
20	Terry Lenhart 9613 NE 91st Ave. Vancouver, WA 98662	
21	David Haytur 9703 NE 100th Way Vancouver, WA 98662	
22	Carolynn Zenk 9609 NE 84th Way Vancouver, WA 98662	
23	Gordon Zenk 9609 NE 84th Way Vancouver, WA 98662	g.zenk@comcast.net
24	Janet Schoessler 9306 NE 94th Cir Vancouver, WA 98662	starclarke@aol.com
25	Sharon Morrison 10207 NE 85th Cir. Vancouver, WA 98662	
26	Fred Poujade 9908 NE 104th St. Vancouver, WA 98662	Fredp@hevanet.com
27	Jo Melo 9500 NE 107th St. Vancouver, WA 98662	Joe@hintondevelopment.com
28	Stan Nelson 9716 NE 83rd Cir. Vancouver, WA 98662	Stanor@juno.com
29	Norma Nelson 9716 NE 83rd Cir. Vancouver, WA 98662	
30	George Mitchell 8708 NE 103rd Ave. Vancouver, WA 98662	
31	Linda Mitchell 8708 NE 103rd Ave. Vancouver, WA 98662	

	Name and Address	Add to Email Update List
32	Lois Pappadis 9709 NE 113th Ave. Vancouver, WA 98662	sprklplnte@comcast.net
33	Bradley Cooper 9204 NE 104th St. Vancouver, WA 98662	gizzy2005@hotmail.com
34	Steve Dail 10211 NE 102nd St. Vancouver, WA 98662	
35	Nancy Dail 10211 NE 102nd St. Vancouver, WA 98662	Nancy.dail@comcast.net
36	Jason Pacheco 10310 NE 96th St. Vancouver, WA 98662	Jason_Pacheco@comcast.net
37	Peggy Buytaert 10001 NE 95th Ct. Vancouver, WA 98662	Peg.buytaert@gmail.com
38	Steve Fleischmann 10115 NE 83rd St. Vancouver, WA 98662	Steve6f@q.com
39	Joyce Fleischmann 10115 NE 83rd St. Vancouver, WA 98662	
40	Dawn Hegarty 8619NE 94th Ave. Vancouver, WA 98662	dhegarty@comcast.net
41	Jeff Ragle 8707 NE 97th Ct. Vancouver, WA 98662	JR98662@comcast.net
42	Wendy Freeman 9307 NE 94th Cir. Vancouver, WA 98662	Wimpy1975@centurylink.net
43	Ken Oslund 8802 NE 94th Ave. Vancouver, WA 98662	oslundken@yahoo.com
44	Irene Oslund 8802 NE 94th Ave. Vancouver, WA 98662	
45	Mike Swanson 9208 NE 91st St. Vancouver, WA 98662	Msswanson3@yahoo.com

Appendix B
Comments Received

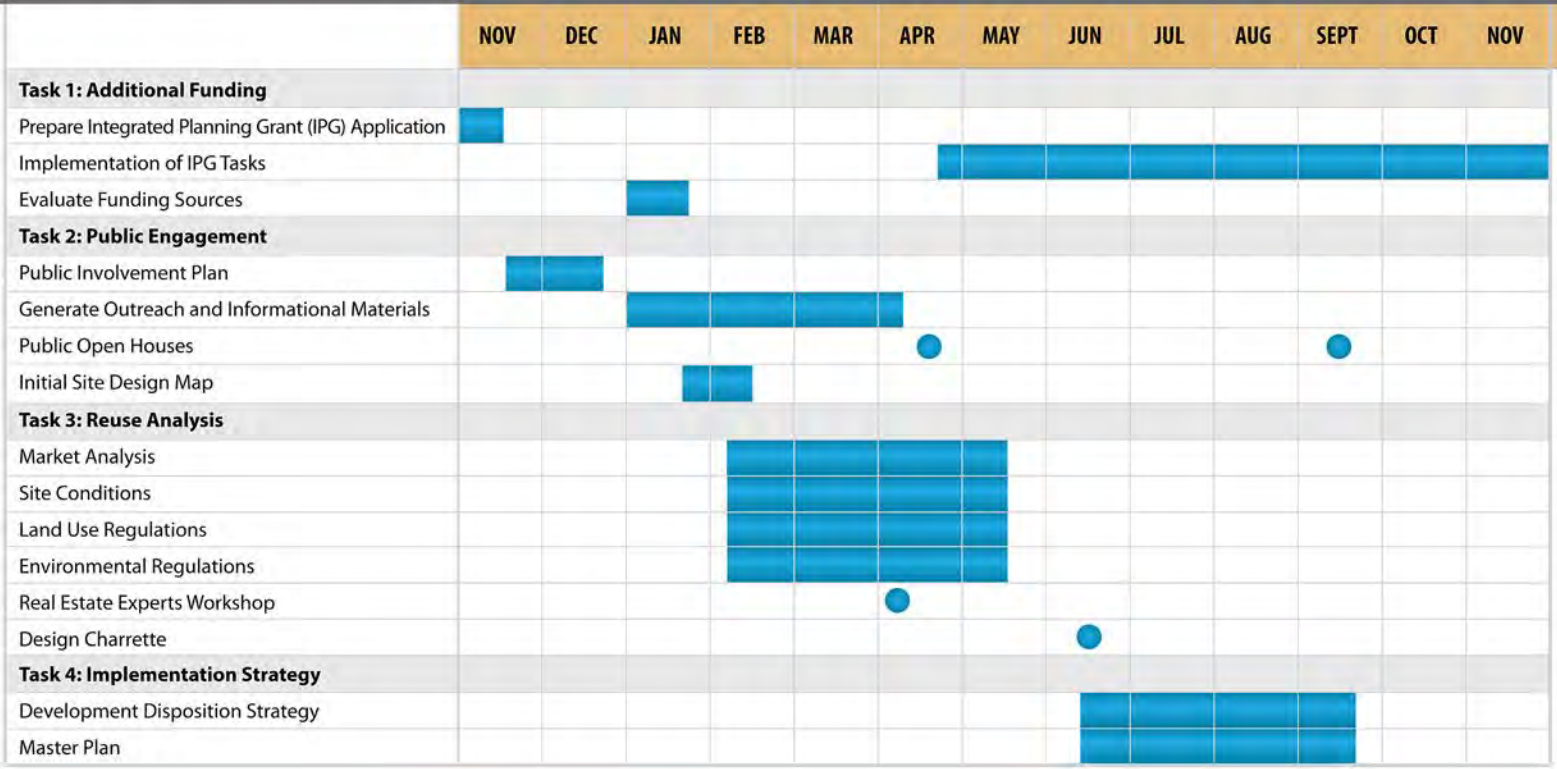
Appendix B: Comments Received

	Name	Comment
1	Steve and Nancy Dail 10211 NE 102nd St. Vancouver, WA 98662	We would cheer a decision to rezone the property north of the proposed 99th Street extension for a water retention area, or some other natural or recreational use. Thanks. This open house was very helpful.
2	Anonymous	With bike and walk paths, would like to see graffiti patrols. I think whoever takes care of Padden is doing a great job. Plans for 86th to continue from 94th to 107th?
3	Jeff Ragle 8707 NE 97th Ct. Vancouver, WA 98662	Clark County must do <u>everything</u> <u>possible</u> to avoid <u>any</u> commercial development on the identified property. It is not in the best interest of the public, those who reside in the affected neighborhood. The Master Plan <u>should</u> <u>not</u> <u>be</u> a plan for maximizing a return on investment, an increase in taxable property value, or job creation. <u>Any</u> plan that lessens the quality of life or existing property values is directly at odds with what the County should be doing with this property, for its residents. It would seem that <u>the</u> <u>only</u> viable options for this property are: an untouched natural area, a regional park with significantly designed buffers from existing residents and structures, or lastly a golf course within the property interior, leaving <u>all</u> property adjoining existing structures with a substantial buffer to avoid any interruption in existing residential quality. Simply put, though some property within this master plan may currently be zoned with commercial possibilities, it does not fit with, belong within, or add to the neighborhood that Clark County has planned for and allowed to develop around the property. This property identified in this "Master Plan" is not Clark County's "savings account." It is land that was purchased that's use must now be compatible with the neighborhood.
4	Sharon Morrison 10207 NE 85th Cir. Vancouver, WA 98662	I am concerned about the 94th and 86th intersection, Silver Star subdivision's <u>ONLY</u> option for exiting the subdivision. Traffic is already a problem at times. I would STRONGLY support a roundabout at that intersection to allow traffic flow.
5	Gordon Zenk 9609 NE 84th Way Vancouver, WA 98662	Our biggest concern is with traffic at the intersection of 94th Ave and 86th St. We strongly believe that a roundabout would be the best and most economical solution. Traffic volume at this intersection has greatly increased in recent years. As for the landfill, we would like to see some recreational facilities – walking trails, hiking paths, etc.
6	Anonymous	Please make the landfill into walking trails! (On the part that can't be built on.)
7	Sara Thornberg 10217 NE 102nd St. Vancouver, WA 98662	- No homes or any other building(s) on the adjacent property to Noah Pointe. Keep that area a green space/water retention area. - Turn closed landfill into walking trails. - Leichner campus: No industrial or auto shops. This is a residential area and should not be brought down in value or any other means. A fitness/recreational area would be nice or maybe something like a café/coffee shop or other community-type area.

	Name	Comment
8	Dominic Thornberg 10217 NE 102nd St. Vancouver, WA 98662	N. Adjacent Property: No more homes! This would be a great area for water runoff. It currently has standing water that the ducks use. Coyotes also use the land. 99th Street: Great! It needs to go through. Make it look nice. Closed Landfill: Let's use it for walking trails or solar farm. S. Adjacent Property and Leichner Campus: No eyesores! Professional looking or, better yet, fitness and recreation would be great!!! 94th Street: This should go further than the current plan. The property north of North Pointe Estates will likely be developed soon. Tri-Stone Dev. recently purchased. No homes on North Adjacent Property No homes on North Adjacent Property No homes on North Adjacent Property… [etc.] Thank you!
9	Fred Poujade 9908 NE 104th St. Vancouver, WA 98662	- We need traffic control at 86th, 88th, 94th, 95th, and 99th avenues. I would prefer roundabouts instead of signals. - Build a public golf course and park/kids play areas and bike/walking trails on the landfill. Establish a recreational use on the landfill.
10	Mark VanHouse 10511 NE 89th Cir. Vancouver, WA 98662	- Please use the property to benefit the community around it. A community park, greenspace adjacent to 99th Street would give residents a place to relax, walk, run; not look into a neighbor's backyard!! - No more homes - Definitely extending 99th Street through would be great.
11	Leon Winger 10114 NE 105th Ave. Vancouver, WA 98662	Keep the area north of 99th Street zoned as residential. Do not cause an adverse impact on groundwater and private wells.
12	Anonymous	I feel this development is ridiculous! It will take away homes from the wildlife. The delays or even being told you cannot drive to or from your home because of roadwork is outrageous. I am all for improvements but at what cost as a taxpayer and as a resident in the area plus the loss for wildlife. I vote NO!
13	Kelly Ragle 8707 NE 97th Ct. Vancouver, WA 98662	I live directly behind the projected development on 97th Ct. I already have to deal with the noise and lights at night from the Waste Connection facility. I am concerned that with any kind of commercial or light industrial I will have to deal with more noise pollution and lights shining into my home at night. I am also very concerned about the extra traffic that will be created on 94th. It is already very difficult and dangerous to exit our neighborhood. We only have one entrance/exit to our neighborhood because the other exit is closed off at the elementary school. I am concerned with more people traveling up and down 94th. It will be nearly impossible and/or safe to get out of our neighborhood.
14	Susan Johnston 9117 NE 105th Ave. Vancouver, WA 98662	Like the plan. Include walking trails around perimeter. Gate from 93rd (end of – off 107th Ave.) to property. Develop ball fields and play area on property that cannot be built on.

Appendix C
Open House Displays

LEICHNER LANDFILL | Master Plan Project Schedule



LEICHNER LANDFILL Master Plan

Project Goals

- **Engage the public in the planning process.**
- **Realize maximum economic benefit from the County's investment in the property.**
- **Provide opportunities for creation of family-wage jobs.**
- **Encourage environmental stewardship through redevelopment.**
- **Create an action-oriented redevelopment strategy.**
- **Remove barriers to redevelopment (e.g., environmental and regulatory constraints).**

What will it mean to create a master plan for the closed landfill and adjacent properties?

The County will work with the community to forge a viable vision for reusing the site and attracting private investment, creating public benefit, addressing environmental concerns and allowing future development.

The plan will take into account the site's physical conditions, environmental constraints, regulation requirements and economic and market conditions. It also will consider transportation and other infrastructure that will be needed to serve development.

The master plan will not necessarily identify specific users for the property, nor will it provide specific designs of buildings and other site features. Rather, it will provide a sense of development scale and potential building layout.

LEICHNER LANDFILL Master Plan

Possible uses on the site that are allowed in the light industrial (IL) zone include:

- Professional, scientific, and technical services (testing laboratories, surveying, other)
- Medical and diagnostic laboratories
- Warehousing and storage
- Communications-related businesses (broadcasting and publishing)
- Fitness and recreation centers
- Public administration
- Office, if serving a permitted industrial use
- Light manufacturing (food processing, metal fabrication, bakeries, furniture, clothing manufacturing, etc.)
- Auto repair and maintenance

LEICHNER LANDFILL
Master Plan

BergerABAM
210 East 13th Street, Suite 300, Vancouver, Washington 98660-3231
360/823-6100 • 360/823-6101 Fax • www.abam.com

Leichner Landfill Master Plan
Open House Summary

4:00–7:00 PM, Thursday, 23 April 2015
Vancouver Church of Christ, 9019 NE 86th Avenue, Vancouver

Clark County has completed a master planning process to guide decisions about the future use of county-owned property at 9411 NE 94th Avenue. The county hosted an open house to inform the community and the owners of property surrounding the former Leichner Landfill of the master planning process, to review and comment on preliminary site plans for the two conceptual master plan options, and to discuss thoughts on the master plan design. The site plans identify where buildings, roads, and other infrastructure might be located. The plans also indicate buffers to reduce impacts on adjacent properties. The site plans do not identify specific uses or businesses that might locate on the property.

More than two weeks before the open house, a flier advertising the event was mailed to nearby residents and property owners. The distribution area for the mailing was Padden Parkway to the south, NE 92 Avenue to the west, NE 107 Avenue to the east, and NE 105 Street to the north.

Approximately 38 people, besides project team members, attended the open house (see Appendix A). Additionally, 13 attendees submitted comments (see Appendix B). Project team members present included Mike Davis (county); Seth Otto, and Stacy Frost (Maul Foster & Alongi); and Jennifer Colbert (BergerABAM).

Attendees were invited to review several displays, including a project schedule, an explanation of the project goals, a description of the uses allowed on the site, an existing conditions map, a conceptual master plan, and a conceptual perspective (see Appendix C).

Project team members responded to attendees' questions concerning future land use, project schedule, and the potential impacts of the project on local traffic.

Appendix A
Participants

Appendix A: Open House 23 April 2015 – Participants

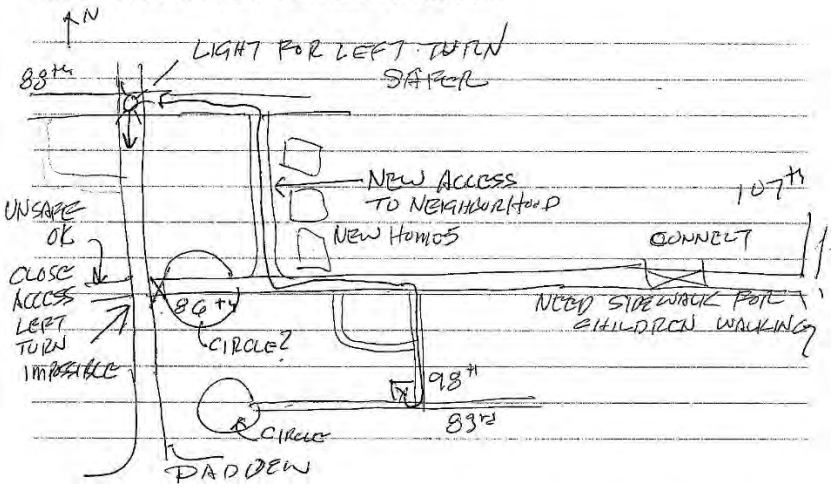
	Name and Address	Add to Email Update List
1	Marty Almandinger 10105 NE 98th St. Vancouver, WA 98662	almandinger@gmail.com
2	Pam Almandinger 10105 NE 98th St. Vancouver, WA 98662	
3	Mary Barton 10213 NE 86th Vancouver, WA 98662	
4	Ray Bateson 10608 NE 99th St. Vancouver, WA 98662	
5	Julie Briggs 10209 NE 86th St. Vancouver, WA 98662	
6	Walt Briggs 10209 NE 86th St. Vancouver, WA 98662	
7	Judy Bumbarger-Enright 10301 NE 85th Cir. Vancouver, WA 98662	jbumbarg@comcast.net
8	Sean Comfort 10200 NE 102nd Ave Vancouver, WA 98662	s.comfort@comcast.net
9	Mary Davis NE 92nd Ave Vancouver, WA 98662	
10	Peter DuBou P.O. Box 9810 Vancouver, WA 98666	
11	Reba Dye 8720 NE 99th St. Vancouver, WA 98662	
12	Jenny Ellefson 105th Ave Vancouver, WA 98662	
13	Jim Ellefson 105th Ave Vancouver, WA 98662	jimellefson@yahoo.com
14	Dan Enright 10301 NE 85th Circle Vancouver, WA 98662	danlesfc@comcast.net
15	Joanna Evans 10010 105th Ave. Vancouver, WA 98662	
16	Paul Hardman 9701 NE 94th Ave. Vancouver, WA 98662	
17	Ellen Hardman 9701 NE 94th Ave. Vancouver, WA 98662	

	Name and Address	Add to Email Update List
18	Mike Harris 9807 NE 86th St. Vancouver, WA 98662	mwhjch@comcast.net
19	Joyce Harris 9807 NE 86th St. Vancouver, WA 98662	
20	Dawn Hegarty 8619NE 94th Ave. Vancouver, WA 98662	dhegarty@comcast.net
21	Aleksey Kolomiytsev 9511 NE 100th Way Vancouver, WA 98662	alexey@slovo.org
22	Aaron Lemen 9708 NE 84th Way Vancouver, WA 98662	
23	Mark McLean 9102 NE 81st Ave. Vancouver, WA 98662	
24	Merri McLean 9102 NE 81st Ave. Vancouver, WA 98662	tradbill@mac.com
25	George Mitchell 8708 NE 103rd Ave. Vancouver, WA 98662	
26	Linda Mitchell 8708 NE 103rd Ave. Vancouver, WA 98662	
27	Stan Nelson 9716 NE 83rd Cir. Vancouver, WA 98662	Stanor@juno.com
28	Ken Oslund 8802 NE 94th Ave. Vancouver, WA 98662	oslundken@yahoo.com
29	Jeff Ragle 8707 NE 97th Ct. Vancouver, WA 98662	JR98662@comcast.net
30	Kelly Ragle 8707 NE 97th Ct. Vancouver, WA 98662	
31	SD Schrag 2005 NW 100th St Vancouver, WA 98662	the.schrag@comcast.net
32	Dominic Thornberg 10217 NE 102nd St. Vancouver, WA 98662	edidnac@msn.com
33	Mark VanHouse 10511 NE 89th Cir. Vancouver, WA 98662	
34	Lee Voreis 10414 NE 107St Vancouver, WA 98662	
35	Wayne Walker	
36	Cherry Wilson 9019 NE 86th Vancouver, WA 98662	office.manager@vanchurch.org

	Name and Address	Add to Email Update List
37	Randy Wilson 9019 NE 86th Vancouver, WA 98662	wilsonrch@juno.com
38	Leon Winger 10114 NE 105th Ave. Vancouver, WA 98662	

Appendix B
Comments Received

Appendix B: Open House 23 April 2015 – Comments Received

	Name	Comment
1	Jenny Ellefson 105th Ave. Vancouver, WA 98662	Park! Dog park! Walking trails!
2	Leland Voreis 10414 NE 107 St. Vancouver, WA 98662	Go for it. In my opinion, not a problem. Thanks.
3	Mark & Merri McLean 9102 NE 81st Ave. Vancouver, WA 98662	Traffic now on 88th St. and 94th Ave. is very congested at times. I am concerned that the plan to leave 94th a 2 to 3 lane road will lead to gridlock. Also, intersection of 88th/94th Ave. needs a traffic light if access road to industrial area is added. We have not received any information in the mail concerning this development.
4	Randi Wilson 10318 NE 92nd Ave. Vancouver, WA 98662	I hope they turn the landfill into a park with walking trails. I would like to be able to go walking up there when I retire and hopefully before!
5	Sean Comfort 10200 NE 102nd Ave. Vancouver, WA 98662	Plan seems okay. Traffic on 94th and 86th St. intersection will be a large problem. 86th St. from 94th Ave. to 107th Ave. should be connected and go through. Like the ideas for a park on the large landfill zone. Access from the new 99th St. seems logical. Very much prefer to leave "adjacent property" zoned as residential. Please leave the trees on the north limit fence line. I hope to provide comment on future definition of the plan for the property north of 99th St. Thank you for the information and opportunity to comment.
6	Stan Nelson 9716 NE 83rd Circle Vancouver, WA 98662	PLEASE SHARE YOUR COMMENTS BELOW: 
7	Mark Janhouse	Leichner campus needs a brewpub. Talk to Heathen Brewing! Please put in a walking trail at a minimum in the closed landfill area. Whole Foods/Starbucks in Leichner would not only increase jobs, but also have values.
8	Dan Enright 10301 NE 85th Circle Vancouver, WA 98662	Please consider your plans taking 86th St. through to 107th Ave. This is for safety at the crowded and busy 86th St. and 94th Ave. intersection.
9	Joanna Evans 10010 105th Ave. Vancouver, WA 98662	I do not want to see 99th go through. I feel many people already use 107th Ave. to cut time away from traveling on 117th Ave. If you open up 99th, my quiet neighborhood will become a speeding roadway.

	Name	Comment
10	Aaron Lemen 9708 NE 84th Way Vancouver, WA 98662	I'm open to light industrial use. My concerns are noise control for new tenants and proper traffic revision for 94th to fix current congestion and increased traffic (heavy equipment). Revision to not limit access 86th St.
11	Leon Winger 10114 NE 105th Ave. Vancouver, WA 98662	Do not change the residential zoning on adjacent property north of 99th St. Do not cause adverse groundwater impacts with earthwork activities.
12	Anonymous	Turn the north residential area into a real park for kids, dog park, or water runoff area. Put a brewery in the southern area of Leichner Campus. Heathen Brewery would love it there! Drive 88th all the way through. Provide nice wall for 99th to reduce noise for residents similar to Padden Parkway. Put in a Starbucks and Whole Foods.
13	Ray Bateson 10608 NE 99th St. Vancouver, WA 98662	If you're going to have an open house about the Leichner Master Plan, there should be someone that can answer questions about the 99th St. widening.

Appendix C
Open House Displays

LEICHNER LANDFILL | Master Plan Project Schedule

1. Existing Conditions Analysis
2. Real Estate Workshop
3. Open House #1
4. Design Charrette
5. Phase 2 Market Analysis and Site Assessment
6. Preferred Site Plan Option

we are here

Open House #2

LEICHNER LANDFILL Master Plan

Project Goals

- Engage the public in the planning process.
- Realize maximum economic benefit from the County's investment in the property.
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LEICHNER LANDFILL Master Plan

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- Communications-related businesses (broadcasting and publishing)
- Fitness and recreation centers
- Public administration
- Office, if serving a permitted industrial use
- Light manufacturing (food processing, metal fabrication, bakeries, furniture, clothing manufacturing, etc.)
- Auto repair and maintenance

LEICHNER LANDFILL
Master Plan

Clark County Master Plan for Future Land Use at Leichner Properties

www.clark.wa.gov/Leichner

LEICHNER LANDFILL | Conceptual Master Plan

LEICHNER LANDFILL | Perspective

APPENDIX C

SITE ASSESSMENT WORK PLANS

FOCUSED SITE ASSESSMENT WORK PLAN

FLEISCHER PROPERTIES

Prepared for

CLARK COUNTY, WASHINGTON

VANCOUVER, WASHINGTON

July 8, 2014

Project No. 9059.07.04

Prepared by

Maul Foster & Alongi, Inc.

400 E Mill Plain Blvd., Suite 400, Vancouver WA 98660

The material and data in this plan were prepared under the supervision and direction of the undersigned.

MAUL FOSTER & ALONGI, INC.

Kyle Roslund
Project Geologist

James Maul, LHG
President/Principal Hydrogeologist

CONTENTS

ILLUSTRATIONS IV

ACRONYMS AND ABBREVIATIONS V

1 INTRODUCTION 1
- 1.1 PURPOSE AND OBJECTIVES 1
- 1.2 REGULATORY FRAMEWORK 1
- 1.3 WORK PLAN ORGANIZATION 2

2 BACKGROUND AND PHYSICAL SETTING 2
- 2.1 SITE DESCRIPTION 2
- 2.2 SITE HISTORY 3
- 2.3 GEOLOGY AND HYDROGEOLOGY 3
- 2.4 SITE INVESTIGATIONS 4

3 PRELIMINARY CONCEPTUAL SITE MODEL 5
- 3.1 POTENTIAL SOURCES AND RELEASE MECHANISMS 5
- 3.2 FATE AND TRANSPORT PROCESSES 5
- 3.3 POTENTIAL EXPOSURE SCENARIOS 5
- 3.4 POTENTIAL RECEPTORS 6

4 SCOPE OF WORK 6

5 PROJECT SCHEDULE 9

LIMITATIONS

REFERENCES

FIGURES

APPENDIX A
SAMPLING AND ANALYSIS PLAN

APPENDIX B
GEODESIGN 2010 ANALYTICAL RESULTS

ILLUSTRATIONS

FOLLOWING REPORT:

FIGURES

1 SITE LOCATION

2 SITE TOPOGRAPHY

3 SITE FEATURES

4 PRELIMINARY CONCEPTUAL SITE MODEL OF POTENTIAL HUMAN AND ECOLOGICAL EXPOSURE PATHWAYS

5 PROPOSED SAMPLE LOCATIONS

ACRONYMS AND ABBREVIATIONS

bgs	below ground surface
County	Clark County, Washington
CSM	conceptual site model
CUL	cleanup level
DQO	data quality objective
Ecology	Washington State Department of Ecology
ESA	environmental site assessment
GeoDesign	GeoDesign, Inc.
IPG	Integrated Planning Grant
MFA	Maul Foster & Alongi, Inc.
MTCA	Model Toxics Control Act
PCB	polychlorinated biphenyl
Property	9109 and 9115 Northeast 94th Avenue in Vancouver, Washington
SAP	sampling and analysis plan
SCS	SCS Engineers
SVOC	semivolatile organic compound
ug/kg	micrograms per kilogram
USEPA	U.S. Environmental Protection Agency
WBZ	water-bearing zone

1 INTRODUCTION

Maul Foster & Alongi, Inc. (MFA) has prepared this focused site assessment work plan for Clark County, Washington (the County) to characterize the nature and extent of environmental impacts at the Fleischer properties located at 9109 and 9115 Northeast 94th Avenue in Vancouver, Washington (collectively referred to herein as the Property; see Figure 1). The work described in this work plan is being conducted by the County under an Integrated Planning Grant (IPG) provided by the Washington State Department of Ecology (Ecology). The IPG funds the County's assessment of the environmental condition of the Property.

The Property comprises three tax lots (Clark County Tax Account Numbers 199861000, 199854000, and 199851000). The Property is mostly unused at this time, but was formerly used for agriculture and some industrial activities. Structures at the Property include a boarded-up single-story residence with an attached garage, a small barn, and a pump house for a domestic well. The Property is currently owned by Bonnie Fleischer.

A fertilizer-processing business operated on the Property from approximately 1964 to 1977. During this period, fill material likely sourced from Boise Cascade Mill in Vancouver, Washington, was placed on the Property (GeoDesign, Inc. [GeoDesign], 2010). Most of the fill material was removed from the Property during the 1980s. An investigation by GeoDesign in 2010 detected elevated polychlorinated biphenyl (PCB) contamination in the surface soil above the Washington State Model Toxics Control Act (MTCA) cleanup levels (CULs).

1.1 Purpose and Objectives

The purpose of this focused site assessment is to generate data to further characterize the nature and extent of contaminants in selected areas of the Property to support an evaluation of potential cleanup actions (if needed). The activities outlined in this work plan are also intended to support the following project objectives:

- Characterize the nature and extent of contaminants in soil above MTCA CULs.
- Assess potential cleanup options for impacted media at the Property and potential costs.

1.2 Regulatory Framework

The County received an IPG from Ecology supporting environmental site assessment (ESA), analysis of cleanup alternatives, and site planning for redevelopment to transform the Property for economic development. This work plan has been developed to further assess the nature and extent of contamination at the Property. The focused site assessment will be conducted in general accordance with guidance put forth in MTCA (Washington Administrative Code 173-340).

1.3 Work Plan Organization

This document is organized as follows:

- ***Section 2*** discusses background information and the physical setting of the Property.
- ***Section 3*** describes the preliminary CSM.
- ***Section 4*** discusses the site assessment scope of work.
- ***Section 5*** describes the project schedule.

The following appendices are attached:

- Appendix A—a sampling and analysis plan (SAP). The SAP consists of a field sampling plan and quality assurance procedures.
- Appendix B—analytical results from the 2010 GeoDesign investigation.

The SAP identifies the proposed number of soil test locations and approximate depths of samples and test pits. It also addresses practices related to the handling and disposal of investigation-derived waste. The SAP defines the laboratory and field analytical quality procedures and the quality assurance and quality control requirements for analytical sampling and analysis.

Standard field operating procedures for collecting soil samples, analyzing samples, cleaning equipment, and managing waste are described in the SAP (Appendix A). If procedures deviate from the SAP, the deviations will be described in the summary report.

2 BACKGROUND AND PHYSICAL SETTING

The background and physical setting information summarized below for the Property has been obtained from site visits and the GeoDesign Phase I ESA and limited surface soil evaluation report (GeoDesign, 2010).

2.1 Site Description

The Property is located in the northwest quarter of section 59, township 2 north, range 2 east, of the Willamette Meridian (see Figure 1). The Property is approximately 9.5 acres. The Property is generally flat, although there are small bench or terrace features that will be assessed as part of this investigation (see Figure 2). Based on the National Geodetic Vertical Datum of 1929, the Property is situated at an elevation of approximately 215 feet above mean sea level.

According to the County planning department, the Property and the properties surrounding it are zoned Light Industrial. Land use in the vicinity of the Property is primarily industrial and residential.

2.2 Site History

Archival records summarized in the GeoDesign report indicate the developmental history of this Property as follows:

- 1940: The Property appears to be vacant land.
- 1945: Five structures (a residence and four associated outbuildings) were constructed on the northwest portion of the Property between 1940 and 1945. The rest of the Property appears to be for agricultural use.
- 1955-1970: The existing residence, garage, and small barn were constructed on the southwest portion and the four outbuildings were removed from the northwest portion between 1945 and 1955. The rest of the Property appears to be used for agriculture. Apparent fill material was placed on the Property beginning in 1970.
- 1973-1990: The fill material appears to be present over the entire Property, with the exception of the area immediately west of the current residence as shown in the 1973 aerial photograph. The fill material may have been placed as part of the former property owner's business (Drasler Organic Fertilizer Company). The site was purchased by the current property owners in 1977. Most of the fill material appears to have been removed from the Property between 1980 and 1990.
- 1996-2009: The residence located on the northwest portion of the Property was removed between 1990 and 1996. The Property has been primarily unused land since the current owners purchased it. Fill material is not evident in the 1996 and 2002 aerial photographs, though some small areas of fill were observed during site reconnaissance in 2009 (GeoDesign, 2010) and 2014.

2.3 Geology and Hydrogeology

According to the geologic map of the Vancouver quadrangle, Washington and Oregon, the Property and vicinity are underlain by Pleistocene outburst flood deposits (Phillips, 1987). The gravel-sized flood deposits typically consist of "well-rounded, foreset-bedded, well-sorted and stratified pebble and cobble gravel with angular to subangular boulders typically 2.5 meters or less in length; clast-supported with a sandy matrix; sandy matrix composed of mafic volcanic fragments, quartz, and muscovite…" (Phillips, 1987).

There is a drinking water well on the Property; however, no well log describing subsurface conditions could be located. Surface water at the Property is expected to flow to the east, toward a drainage ditch located along northeast 94th Avenue.

The geology of the surrounding area is well understood because of subsurface investigations and groundwater monitoring and sampling activities completed by SCS Engineers (SCS) at the Leichner Brothers Landfill, located adjacent to the Property to the north, east, and south (SCS, 2013)(see Figure 3). The investigations describe the geology beneath the landfill site as about 70 to 100 feet of alluvium, underlain by the upper member of the Troutdale Formation. The site hydrogeology

consists of an approximately 10- to 40-foot-thick unsaturated (vadose) zone, and an unconfined alluvial water-bearing zone (WBZ), which ranges in thickness from 35 to 45 feet. The alluvium generally consists of sand and gravelly to silty sand. Underlying the alluvial WBZ is the upper member of the Troutdale Formation aquifer. The Troutdale Formation aquifer generally consists of sandy to cobbly gravel with minor amounts of silt and clay. The alluvial WBZ and the Troutdale Formation aquifer are separated by a silt aquitard (sandy silt and clayey silt) east and south of the landfill. Southwest of the landfill, the silt aquitard is absent and the two aquifers are locally in hydraulic communication. The Troutdale Formation aquifer and the overlying aquitard have not been evaluated in the northern and western portions of the landfill site. Depths to groundwater at the landfill site in the vicinity of the Property range from approximately 25 to 40 feet below ground surface (bgs). The direction of groundwater flow, based on surveyed groundwater elevations in the alluvial WBZ, appears to be southwest (SCS, 2013).

2.4 Site Investigations

GeoDesign conducted a Phase I ESA and limited surface soil evaluation at the Property in March 2010. In the Phase I ESA, GeoDesign identified fill material on the Property as a recognized environmental condition because the fill material reportedly had been acquired from the Boise Cascade Mill and GeoDesign concluded that it likely contained hazardous substances (e.g., PCBs). The fill material was later removed; however, some fill material and/or impacts from the material may remain on the Property.

Residual fill material sampled in 2010 from the surface at two locations was analyzed for PCBs, total petroleum hydrocarbon—hydrocarbon identification, semivolatile organic compounds (SVOCs), and metals. One PCB Aroclor (Aroclor 1248) was detected in both samples at concentrations greater than the MTCA Method A CULs for both restricted and unrestricted land use. Other PCB Aroclors were not detected above the method reporting limits in either sample. Diesel- and heavy-oil-range hydrocarbons and metals (including arsenic, chromium, copper, lead, mercury, and nickel) were detected, although concentrations were below the MTCA Method A CULs for unrestricted land use. SVOCs were not detected above the method reporting limits.

Based on this precursory sampling, GeoDesign divided the 9.5-acre Property evenly into 21 sections for limited surface soil sampling for PCB analysis (see Figure 3). Between five and nine discrete surface soil sampling locations were located for 19 of the 20 sections. Soil samples were collected between the ground surface and 0.5 foot bgs. Discrete soil samples from each of the 19 sections were homogenized into one composite sample. PCB Aroclor 1248 was detected in each composite soil sample at concentrations ranging from 820 to 32,400 micrograms per kilogram (ug/kg). PCB Aroclor 1254 was detected in the composite soil sample from Section 1 at a concentration of 396 ug/kg. Except for the composite soil sample from Section 12, the detected concentrations of PCBs in the composite soil samples analyzed were all greater than the MTCA Method A CUL of 1,000 ug/kg for unrestricted land use. Sections 2 through 7, Section 14, and Section 17 were greater than the MTCA Method A CUL of 10,000 ug/kg for restricted land use.

The indicator hazardous substances for the Property are PCBs, specifically Aroclor 1248 and Aroclor 1254. Based on the GeoDesign (2010) investigation, chemicals of potential concern include

metals and diesel-range petroleum hydrocarbons. Because of the historical agricultural use at the Property, along with the reported use of fertilizer processing, other chemicals of potential concern may include chlorinated herbicides, organochlorine pesticides, and organophosphorus pesticides.

3 PRELIMINARY CONCEPTUAL SITE MODEL

A CSM describes potential chemical sources, release mechanisms, environmental transport processes, exposure routes, and receptors. The primary purpose of the CSM is to describe pathways by which human and ecological receptors could be exposed to site-related chemicals. A complete exposure pathway consists of four necessary elements: (1) a source and mechanism of chemical release to the environment, (2) an environmental transport medium for a released chemical, (3) a point of potential contact with the impacted medium (referred to as the exposure point), and (4) an exposure route (e.g., ingestion) at the exposure point. The potential release mechanisms and pathways are described below. Figure 4 presents a preliminary CSM of potential human and ecological exposure pathways.

3.1 Potential Sources and Release Mechanisms

Based on available information, it appears that the following Property-related activity may have contributed to contamination of environmental media at the Property:

- Impacted fill material placed on the site

This potential source and release mechanism is likely to have resulted in contaminant releases to surface and subsurface soil. Based upon current information for the site, it does not appear that historical site activities would have adversely impacted groundwater.

3.2 Fate and Transport Processes

The proposed initial scope of work will allow for characterization of contaminants in soil and assessment of potential fate and transport of contaminants to the extent present.

3.3 Potential Exposure Scenarios

The Property currently comprises three vacant tax parcels with abandoned building and unused domestic well. The redevelopment plan for the Property is still to be determined but could include light industrial uses. Exposure scenarios will have to be addressed once the redevelopment plan is established. Depending on the extent of impacts at the Property, the following are potentially current or future exposure pathways:

- Incidental ingestion of and dermal contact with chemicals in surface and/or subsurface soil

- Inhalation of fugitive dusts generated from surface and/or subsurface soil

These potential exposure pathways will be evaluated further upon completion of the site characterization.

3.4 Potential Receptors

The following current and future human and ecological receptors may potentially be exposed to chemicals originating from the Property:

- Construction workers
- Occupational workers
- Off-site residents
- Ecological receptors

4 SCOPE OF WORK

This section describes the objectives and scope of work for the site assessment. The field investigations will be conducted in general accordance with the protocol described in the SAP (see Appendix A).

4.1 Data Quality Objectives

The DQOs for this site assessment include the following:

- Identification and characterization of potential releases of hazardous substances on the Property from potential sources such as the fill material and historical light industrial activities. Source areas will be characterized through a review of historical information; GeoDesign 2010 Phase I ESA and Limited Surface Soil Evaluation results; and the collection of environmental samples for physical observation, field screening, and chemical analyses.
- Determination of the nature and extent of hazardous substances in environmental media at the Property and development of a final CSM. This evaluation will focus on the vertical and horizontal extent of contamination in the soil, and is not expected to extend to groundwater or evaluate vapors.
- Development of sufficient information to evaluate remedial action options and design source control measures to address contaminant releases from the Property, if deemed necessary.

The proposed site assessment scope of work is intended to meet these DQOs as they relate to the chemicals of interest identified at the Property.

4.2 Site Assessment Approach

To assess the impacts of the potential sources on the Property, soil samples will be collected and analyzed as described below. Additional information on sampling and analysis is provided in the SAP.

4.2.1 Utility Locates

Prior to investigation, public and private utility locates will be conducted. A private utility locate contractor will attempt to locate on-site utilities. Sampling locations may be adjusted based on information obtained from the utility locates.

4.2.2 Soil

MFA will conduct a focused site investigation of the lateral and vertical extent of hazardous substances in soil on the Property. The Property will be divided into a grid with test pits excavated at approximately 120-foot intervals (see Figure 5). During the excavation of test pits, the depth of fill and lithology will be recorded at each location.

The sampling will be in accordance with the methodology outlined in the SAP. Soil samples will be collected from three separate depths to the extent practicable, given conditions observed during excavation. If fill material is identified at the surface, the samples will be collected from: (1) surface fill material from ground surface to the fill/native soil interface, (2) native soil from 1 to 2 feet below the fill, and (3) native soil from 5 to 6 feet below the fill material/native soil boundary or to the limiting depth of the excavator from ground surface. If fill material is not identified, the samples will be collected from: (1) surface to 1 foot bgs, (2) from 3 to 5 feet bgs, and (3) from 8 to 10 feet bgs. The sample will be collected either directly from the sidewall of the test pit or as a grab sample from the excavator bucket filled with soil collected from a sidewall of the test pit. Figure 5 presents proposed sampling locations. Note that actual locations may be adjusted, based on field conditions.

An additional soil sample will be placed in a sealed plastic bag to be screened for volatile compounds, using a photoionization meter. Visual and olfactory observations will also be recorded. If there is field evidence of impacts, the sampling depths may be altered.

Initially, soil samples may be analyzed for the following:

- PCBs by U.S. Environmental Protection Agency (USEPA) Method 8082
- Metals (aluminum, arsenic, cadmium, chromium, copper, lead, nickel, and zinc) by USEPA Method 6010/6020; and mercury by USEPA Method 7471
- Diesel- and residual-range petroleum hydrocarbons by Northwest Total Petroleum Hydrocarbon Method NWTPH-Dx
- Chlorinated herbicides by USEPA 8151
- Organochlorine pesticides by USEPA 8081B

- Organophosphorus pesticides by USEPA 8270D

The uppermost sample from each test pit location will be analyzed for PCBs. Depending on the concentrations detected in the uppermost samples, the archived samples from the lower depths may be analyzed for PCBs.

In addition, the uppermost sample from test pits with fill at the surface will also be analyzed for metals and scanned for petroleum hydrocarbons. The uppermost native soil sample from each test pit will be analyzed for herbicides and pesticides. Depending on the metal concentrations detected in the uppermost sample, the archived samples from the test pits from the lower depths may be analyzed for metals and hydrocarbons.

Follow-up analyses for petroleum hydrocarbons in samples will depend on the type of petroleum hydrocarbons identified, but may include the following analyses:

- Diesel- and residual-range organics by Northwest Total Petroleum Hydrocarbon Method NWTPH-Dx
- Polycyclic aromatic hydrocarbons by USEPA Method 8270 selective ion monitoring
- Extractable petroleum hydrocarbons by Method NWTPH-EPH
- SVOCs by USEPA Method 8270C
- Benzene, toluene, ethylbenzene, and xylenes by USEPA Method 8021 or 8260B

Soil analytical results will be compared to MTCA Method A CULs for unrestricted land use. In the event that chemicals detected are not included in the MTCA Method A list, or the site is determined to be complex (e.g., multiple chemicals of potential concern), then MTCA Method B soil CULs for unrestricted land use may be used.

5 PROJECT SCHEDULE

The following is the anticipated site assessment project schedule:

Task	Start Date	Completion Time Frame (calendar weeks)
Prepare work plan and SAP	Week of June 16, 2014.	2
Ecology work plan/SAP review	Week of July 7, 2014.	2 to 4
Fieldwork	After receipt of Ecology's comments and approval of the work plan. Time frame includes fieldwork and laboratory analyses. Note that if follow up analyses are required, additional time will be required.	3
Focused site assessment report	After completion of fieldwork and receipt of final data packages.	7

The time frames for the work to be performed may change, based on items such as changes to the scope of work, site access, subcontractor availability, and Ecology approval.

LIMITATIONS

The services undertaken in completing this plan were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This plan is solely for the use and information of our client unless otherwise noted. Any reliance on this plan by a third party is at such party's sole risk.

Opinions and recommendations contained in this plan apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this plan.

The purpose of an environmental assessment is to reasonably evaluate the potential for or actual impact of past practices on a given site area. In performing an environmental assessment, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern. The following paragraphs discuss the assumptions and parameters under which such an opinion is rendered.

No investigation is thorough enough to exclude the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not, therefore, be construed as a guarantee of the absence of such materials on the site.

Environmental conditions that cannot be identified by visual observation may exist at the site. Where subsurface work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions at unsampled locations.

Except where there is express concern of our client, or where specific environmental contaminants have been previously reported by others, naturally occurring toxic substances, potential environmental contaminants inside buildings, or contaminant concentrations that are not of current environmental concern may not be reflected in this document.

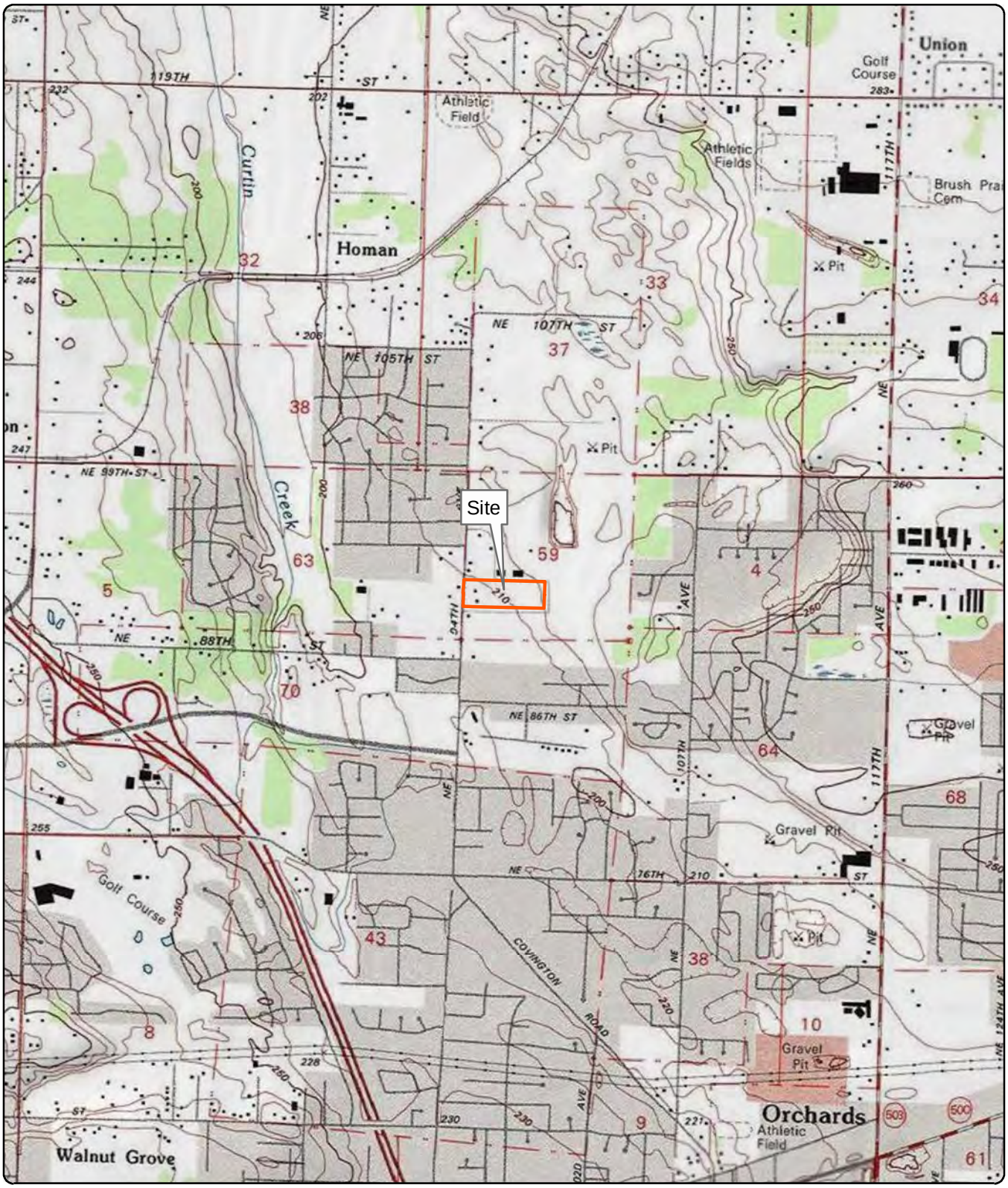
REFERENCES

GeoDesign. 2010. Phase I environmental site assessment and limited surface soil evaluation. Prepared for Jane Gilliland c/o Miller Nash LLP. GeoDesign, Inc. March 18.

Phillips, W. M. 1987. Geologic map of the Vancouver quadrangle, Washington and Oregon. . Open File Report 87-10. Scale 1:100,000.Washington Division of Geology and Earth Resources.

SCS. 2013. 2012 fourth quarter and annual report. Prepared for Clark County Bureau of Environmental Services. SCS Engineers. February 28.

FIGURES



Site Address: 9109 and 9115 NE 94th Avenue, Vancouver, WA
Source: US Geological Survey (1990) 7.5-minute
topographic quadrangle: Orchards
Section 59, Township 2 North, Range 2 East

Figure 1
Site Location

Fleischer Properties
Focused Site Assessment
9109 and 9115 NE 94th Avenue
Vancouver, Washington

0 1,000 2,000
Feet

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Print Date: 6/18/2014
Approved By: E. Hess
Produced By: jschane
Project: 9059.07

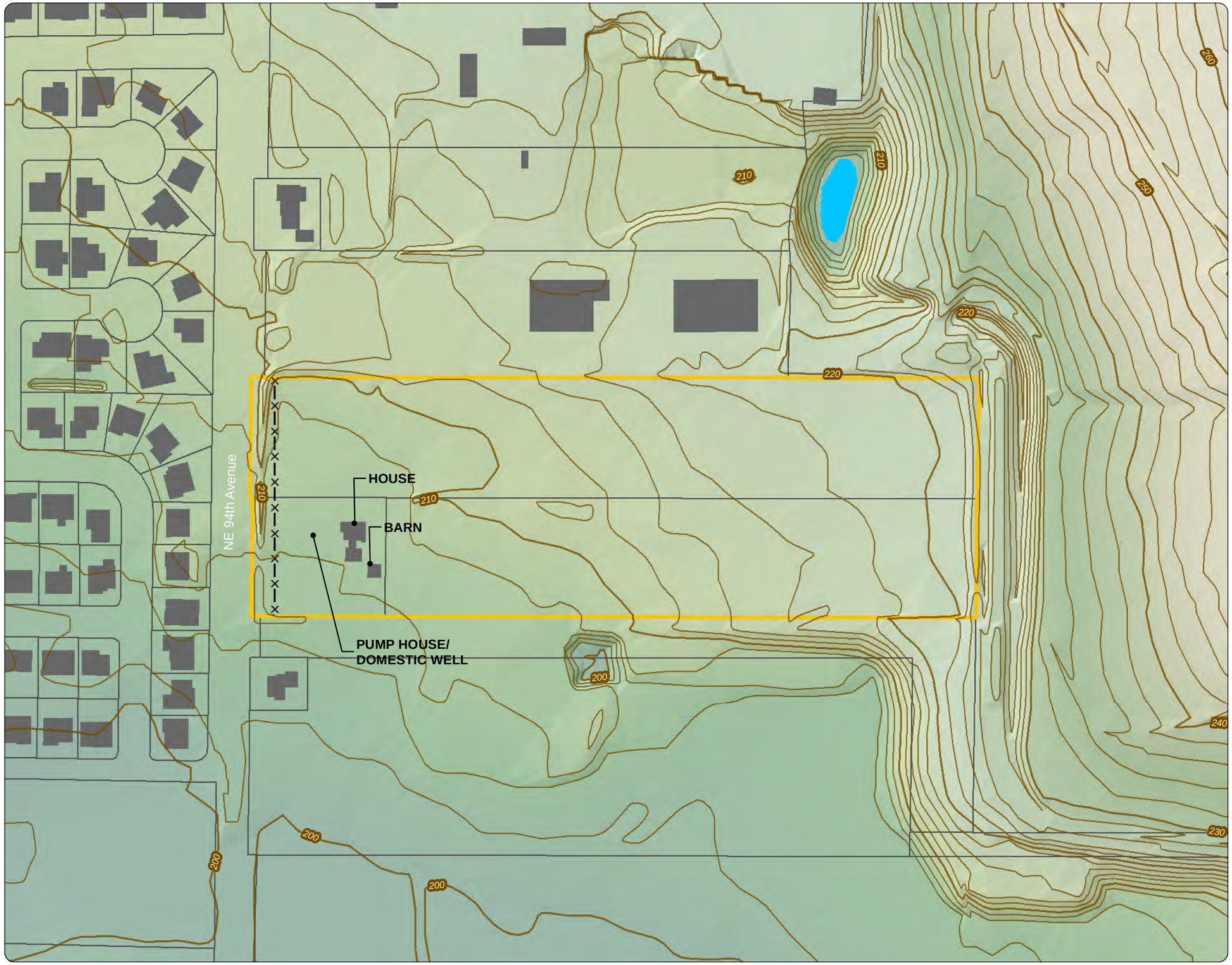

Figure 2
Site Topography

Fleischer Properties
Focused Site Assessment
9109 and 9115 NE 94th Avenue
Vancouver, Washington

Legend

- Fence
- Elevation Contour (10 ft)
- Elevation Contour (2 ft)
- Building Footprint
- Site Boundary
- Tax Lot Boundary

Elevation

- High : 262.831
- Low : 197.997

Note:
1. All site feature locations are approximate.
2. Elevation contours are LIDAR derived.
3. LIDAR = Light Detection and Ranging/ Laser Imaging Detection and Ranging (system)

0 75 150
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots, hydro, and elevation data obtained from Clark County.

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Print Date: 6/25/2014
Approved By: kroslund
Produced By: jschane
Project: 9059.07.04

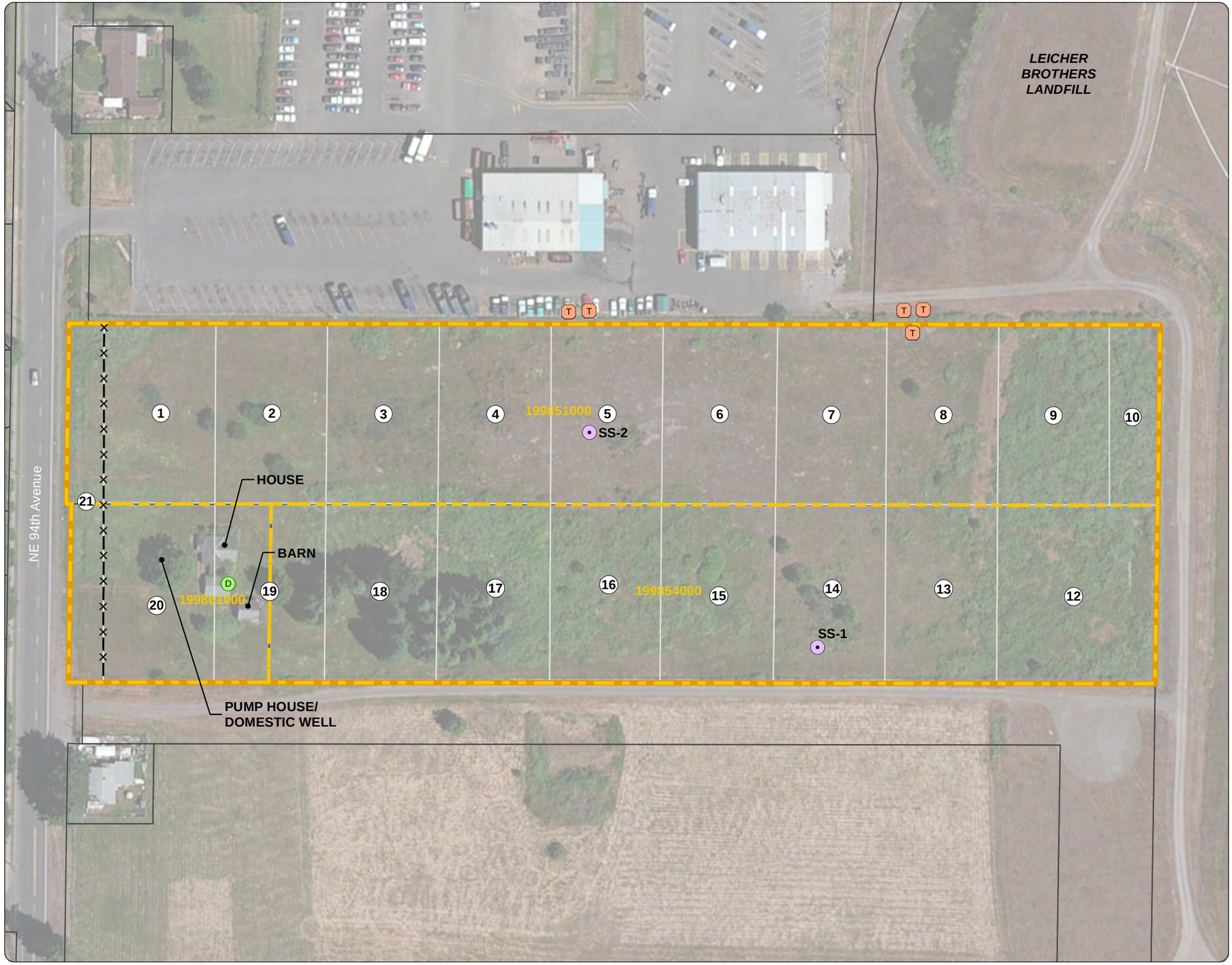

Figure 3
Site Features

Fleischer Properties
Focused Site Assessment
9109 and 9115 NE 94th Avenue
Vancouver, Washington

Legend

- Drum
- Pole-mounted Transformer
- Residual Fill Material Sample Location
- Fence
- Composite Soil Sample Section
- Site Boundary
- Site Tax Lot
- Tax Lot Boundary

Note: All site feature locations are approximate.

0 50 100
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots obtained from Clark County

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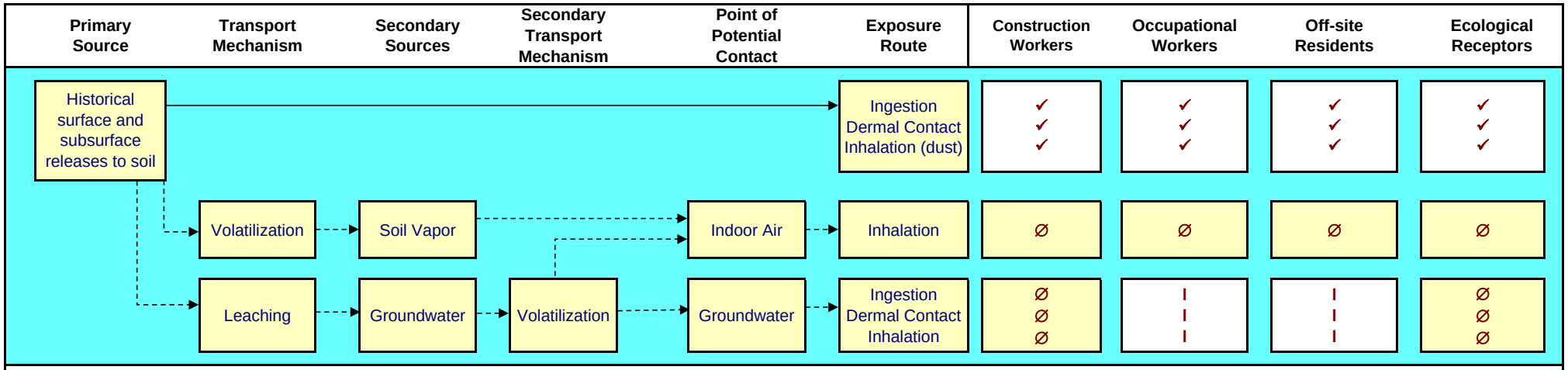
Print Date: 6/18/2014
Approved By: kroslund
Produced By: jschane
Project: 9059.07.04

Figure 4
Preliminary Conceptual Site Model of Potential Human and Ecological Exposure Pathways
Fleischer Properties
Focused Site Assessment
Vancouver, Washington



Notes:

Primary pathway →
Potential pathway - - →
Potentially complete exposure route ✓
Incomplete exposure route ∅
Insignificant exposure route I

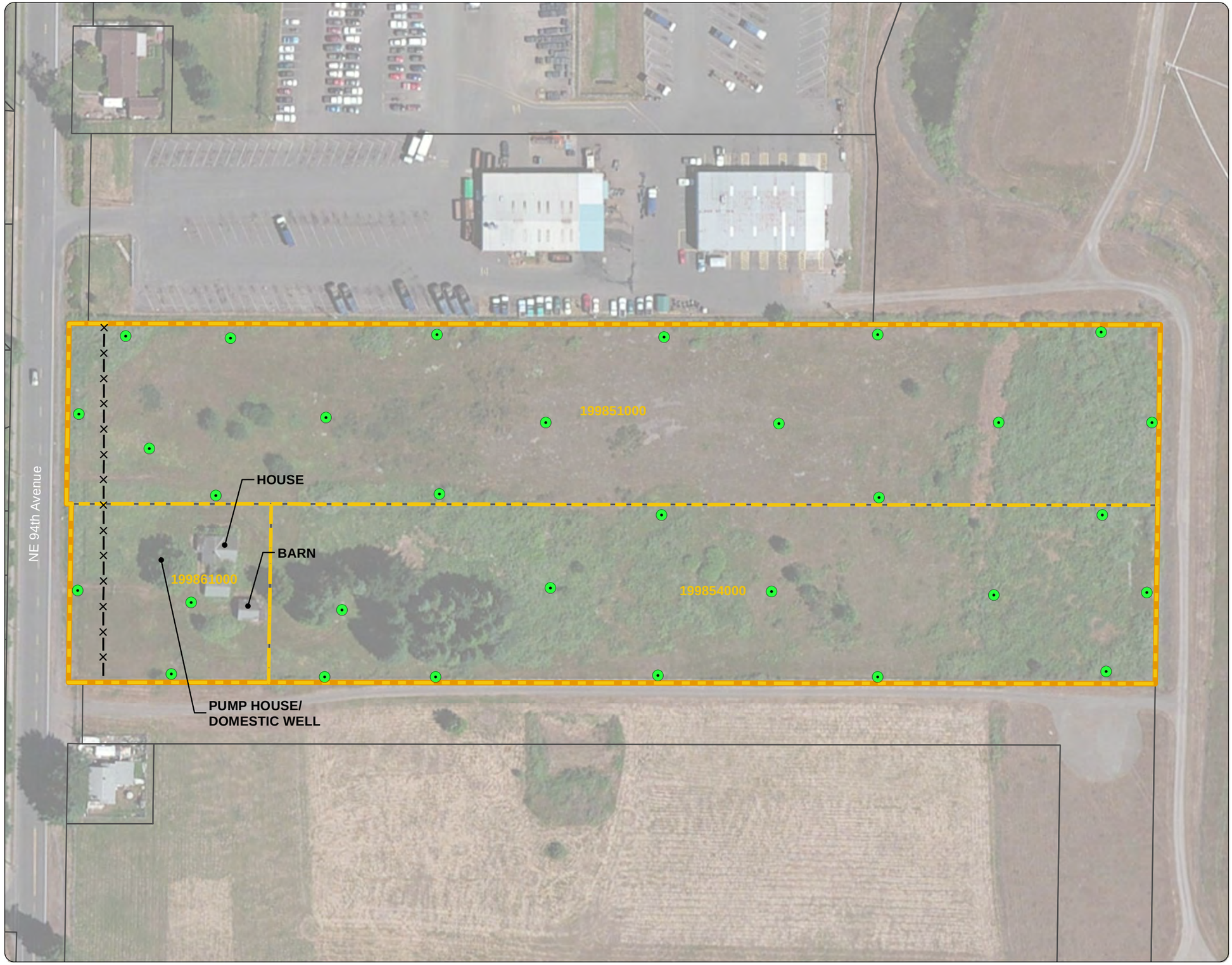


Figure 5
Proposed Sample Locations

Fleischer Properties
Focused Site Assessment
9109 and 9115 NE 94th Avenue
Vancouver, Washington

Legend

- Proposed Sample Locations
- Fence
- Site Boundary
- Site Tax Lot
- Tax Lot Boundary

Note: All site feature locations are approximate.

0 50 100
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots obtained from Clark County

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Print Date: 6/18/2014
Approved By: kraslund
Produced By: jschane
Project: 9059.07.04

APPENDIX A

SAMPLING AND ANALYSIS PLAN

SAMPLING AND ANALYSIS PLAN

FLEISCHER PROPERTIES

Prepared for

CLARK COUNTY, WASHINGTON

VANCOUVER, WASHINGTON

July 8, 2014

Project No. 9059.07.04

MAUL FOSTER ALONGI

Prepared by

Maul Foster & Alongi, Inc.

400 E Mill Plain Blvd., Suite 400, Vancouver WA 98660

SAMPLING AND ANALYSIS PLAN
FLEISCHER PROPERTIES

The material and data in this plan were prepared under the supervision and direction of the undersigned.

MAUL FOSTER & ALONGI, INC.

Kyle Roslund
Project Geologist

James Maul, LG
President/Principal Hydrogeologist

CONTENTS

ACRONYMS AND ABBREVIATIONS IV

1 INTRODUCTION 1
1.1 INVESTIGATION OBJECTIVES 1

2 ACCESS AND SITE PREPARATION 2
2.1 ACCESS 2
2.2 UTILITY LOCATES 2

3 SOIL EXPLORATION 3
3.1 TEST PIT ADVANCEMENT 3
3.2 TEST PIT DECOMMISSION 3
3.3 TEST PIT LOGGING AND DOCUMENTATION 3
3.4 SURVEYING 3
3.5 EQUIPMENT CLEANING AND DECONTAMINATION 3
3.6 MANAGEMENT OF INVESTIGATION-DERIVED WASTE 4

4 SOIL SAMPLING 4
4.1 PROCEDURE 4
4.2 NOMENCLATURE 5

5 ANALYTICAL METHODS 6
5.1 CHEMICALS OF INTEREST 6
5.2 LABORATORY ANALYSES FOR SOIL SAMPLES 6
5.3 LABORATORY TEST METHODS AND REPORTING LIMITS 6
5.4 QA/QC SAMPLES GENERATED IN FIELD 7
5.5 LABORATORY OPERATIONS 7
5.6 SAMPLE CONTAINERS, PRESERVATION, AND HANDLING 7
5.7 SAMPLE CUSTODY 7
5.8 FIELD INSTRUMENTATION 8
5.9 FIELD QC 9
5.10 LABORATORY INSTRUMENTATION 10
5.11 LABORATORY CALIBRATION AND PREVENTIVE MAINTENANCE 10
5.12 LABORATORY QA/QC CHECKS 10
5.13 DATA REDUCTION, VALIDATION, AND REPORTING 11

6 REPORTING 13

LIMITATIONS

REFERENCES

TABLE

APPENDIX A
SOIL LOG FORM

APPENDIX B
FIELD SAMPLING DATA SHEET FORM

ACRONYMS AND ABBREVIATIONS

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
COC	chain of custody
COI	chemical of interest
County	Clark County, Washington
Dx	diesel- and residual-range petroleum hydrocarbons
Ecology	Washington State Department of Ecology
FSDS	field sampling data sheet
IDW	investigation-derived waste
IPG	Integrated Planning Grant
LCS	laboratory control sample
MFA	Maul Foster & Alongi, Inc.
MS/MSD	matrix spike and matrix spike duplicate
MTCA	Model Toxics Control Act
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
Property	9109 and 9115 Northeast 94th Avenue in Vancouver, Washington
QA	quality assurance
QC	quality control
SAP	sampling and analysis plan
SDG	sample delivery group
SVOC	semivolatile organic compound
USEPA	U.S. Environmental Protection Agency
VOC	volatile organic compound
WAC	Washington Administrative Code

1 INTRODUCTION

Maul Foster & Alongi, Inc. (MFA) has prepared this sampling and analysis plan (SAP) consistent with the requirements of the Washington Administrative Code (WAC) 173-340-820 for Clark County, Washington (the County) to guide the collection of soil samples during the site assessment investigation at the Fleisher properties, located at 9109 and 9115 Northeast 94th Avenue in Vancouver, Washington (collectively referred to herein as the Property; see Figure 1 of the focused site assessment work plan [MFA, 2014]). The Property historically was used as a fertilizer-processing business and reportedly received fill from a paper mill.

The work described in this SAP is being conducted by the County under an Integrated Planning Grant (IPG) provided by the Washington State Department of Ecology (Ecology). The IPG funds will allow the County to assess the environmental condition of the Property. This SAP describes procedures for collection, preservation, and analysis of soil samples at the Property, and will be used for the various phases and tasks of the project. The purpose of the sampling is to obtain reliable data about physical, environmental, and chemical conditions at the Property that will support the goals and objectives of the site assessment.

This SAP has been prepared consistent with Ecology's Guidance on Sampling and Data Analysis Methods (Ecology, 1995) and Guidance for Preparing Quality Assurance Project Plans for Environmental Studies (Ecology, 2004), and the 1993 Model Toxics Control Act (MTCA) (WAC Chapter 173-340).

1.1 Investigation Objectives

The primary objective of this SAP is to establish procedures for the collection of data of sufficient quality to evaluate the nature and extent of impacted soil at the Property. The focused site assessment work plan references relevant procedures and protocols from this SAP, and identifies specific media to be sampled and the locations, frequency, and types of field or laboratory analyses that will be conducted (MFA, 2014).

Soil will be investigated on the Property to better define the nature and extent of impacts. Test pits will be advanced from ground surface to the test pit completion depth. If fill material is identified at the surface, the samples will be collected from: (1) surface fill material from the surface to the contact with native soil, (2) native soil from 1 to 2 feet below the fill, and (3) native soil from 5 to 6 feet below the fill material/native soil boundary, depending on the depth limitations of the excavating equipment from the ground surface. If fill material is not identified, the samples will be collected from: (1) surface to 1 foot below ground surface (bgs), (2) from 3 to 5 feet bgs, and (3) from 8 to 10 feet bgs. For each sampling depth, three discrete samples of equal volume will be collected and combined into a composite sample. Soil samples will be screened using a photoionization meter or an organic vapor monitor. Visual and olfactory observations will also be recorded. If there is visual or olfactory evidence of impacts, the sample depths may be altered in order to collect samples in and just beneath the impacted areas. Surface soil samples and at least one

soil sample at depth will be analyzed from each test pit. If soil impacts are identified, the samples below the impacted areas will also be analyzed for chemicals identified.

This SAP is meant to ensure that reliable data about physical, environmental, and chemical conditions at the Property are obtained in support of the development of remedial actions at the Property if necessary to protect human health and the environment. It provides a consistent set of procedures that will be used during the various work phases identified in the work plan (MFA, 2014). If a phase of work or otherwise unforeseen change in methodology requires modification to this SAP, the variation will be summarized in the summary report. This SAP provides procedures that will be used to direct the investigation process so that the following conditions are achieved:

- Data collected are of high quality, representative, and verifiable.
- Use of resources is cost effective.
- Data can be used by the County and Ecology to support selection and implementation of remedial actions, if necessary.

This SAP describes methods that will be used for sampling environmental media, decontaminating equipment, and managing investigation-derived waste (IDW). It also includes procedures for collecting, analyzing, evaluating, and reporting useful data. This SAP includes analytical methods that may be used for analyzing environmental samples. The document includes quality assurance (QA) procedures for field activities, sampling QA and quality control (QC) procedures, and data validation.

2 ACCESS AND SITE PREPARATION

2.1 Access

MFA personnel will notify the County and the Ecology project manager before beginning work at the Property. Access to the Property is allowed at reasonable times for the purpose of overseeing work performed under the IPG. Brush will be removed from the Property prior to initiation of investigation activities.

2.2 Utility Locates

Before field sampling programs begin at the Property, public and private utility-locating services and other information sources will be used to check for underground utilities near test pit locations. MFA will coordinate fieldwork with the County to estimate the locations of possible on-site utilities and piping and other subsurface obstructions.

3 SOIL EXPLORATION

Test pits will be used to evaluate the nature and extent of potential soil impacts at the Property. The proposed locations of test pits are shown on Figure 4 of the focused site assessment work plan (MFA, 2014). Additional details are provided below.

3.1 Test Pit Advancement

An excavator will be used to advance test pits. Soil samples will be collected as described in Section 4.

3.2 Test Pit Decommission

Material excavated from each test pit, except for the material collected for soil sampling, will be returned to the test pit from which it was taken.

3.3 Test Pit Logging and Documentation

A log of soil type from each test pit will be prepared in the field by a geologist or engineer licensed in the state of Washington or working under the supervision of a geologist or engineer licensed in the state of Washington. Test pit logs will include the project name and location, the name of the excavator contractor, the excavating method, the sampling method, soil sample depths, and a description of soil encountered. Soil samples will be described using American Society for Testing and Materials designation D2488-00, Standard Practice for Description and Identification of Soils (Visual-Manual Procedures). The information will be recorded on the MFA soil log form included in Appendix A.

3.4 Surveying

The horizontal location of test pits will be surveyed using a global positioning unit capable of submeter accuracy.

3.5 Equipment Cleaning and Decontamination

3.5.1 Excavation Equipment

The working area of the excavator and excavating equipment will be steam-cleaned or hot-water pressure-washed after its arrival on site and after use at each test pit. The excavating equipment will be cleaned before it leaves the Property. Decontamination fluids will be transferred to 55-gallon drums approved by the Washington State Department of Transportation, and will be managed according to the procedures outlined in Section 3.6.

3.5.2 Sampling Equipment

Sampling equipment and reusable materials that contact the soil will be decontaminated on site and between each sample and sampling location. Decontamination will generally consist of the following:

- Tap-water rinse (may consist of an equivalent high-pressure, hot-water rinse)
- Nonphosphate detergent wash, consisting of a dilute mixture of Liqui-Nox® and tap water (visible soil to be removed by scrubbing)
- Distilled-water rinse
- Methanol solution rinse (1:1 solution with distilled water)
- Distilled-water rinse

3.6 Management of Investigation-Derived Waste

IDW may include decontamination fluids and sampling debris. The IDW will be segregated into liquids and sampling debris (e.g., personal protective equipment and plastic sheeting). IDW will be stored in a 55-gallon drum in a designated area on the Property.

Drums (tops and sides) will be labeled with their contents, the estimated volume of material, the date of collection, and the origin of the material. The drums will be transferred to a designated area on the Property and will be stored there until the IDW has been characterized.

Analytical data from the soil-sampling activities will be used to characterize the IDW generated during excavation and sampling. After the work is conducted and analytical results are received, MFA can assist the County in arranging for IDW disposal.

4 SOIL SAMPLING

Soil samples will be collected for lithologic description, field screening, and chemical analyses, as described below. The sampling interval and depth are specified in Section 1.1.

4.1 Procedure

Before soil samples are collected, the sample-collection device will be decontaminated according to the procedures described in Section 3.5. After the sampling material is retrieved from the test pit by the excavator, it will be placed on clean plastic sheeting. New, disposable gloves will be used for the collection of samples. Samples will be prepared, handled, and documented as follows:

- Soil-sampling equipment will be decontaminated before it is used at each sampling location (see Section 3.5).
- Samples will be obtained from intervals specified in Section 1.1, using a gloved hand or a decontaminated stainless-steel device such as a spoon, trowel, or knife.
- Soil that will be analyzed for volatile organic compounds (VOCs) will be transferred directly from freshly exposed soil into laboratory-supplied containers, using the U.S. Environmental Protection Agency (USEPA) Method 5035A sampling procedures. The samples will be collected with a new, 5-milligram sampler and placed in 40-milliliter vials. A soil sample in an 8-ounce glass jar, to be analyzed for PCBs, petroleum hydrocarbons, heavy metals, pesticides, herbicides, or other analytes will accompany the vials.
- Coarse-grained particles (e.g., larger than 0.25 inch) may be removed before the sample is placed in a laboratory-supplied container. The amount of coarse-grained material will be estimated and documented on the soil field sampling data sheet (FSDS; see sample form in Appendix B). The percentage of coarse-grained material (e.g., material larger than 0.25 inch) to fine-grained material (e.g., smaller than 0.25 inch) will be estimated on the FSDS.
- Soil samples will be transferred from the sampling device or stainless-steel bowl into laboratory-supplied glass jars, using a gloved hand or a decontaminated stainless device such as a steel spoon, trowel, or knife.
- Containers will be labeled, packed in iced shipping containers with chain-of-custody (COC) documentation (see Section 5.7), and delivered to the contract laboratory.
- Sampling information will be recorded in a field notebook, on an FSDS, or on the COC form.
- QC samples will include one duplicate sample per 20 samples collected.

4.2 Nomenclature

Soil samples will be labeled with a "TP" prefix and a number to describe sampling from a test pit location, an "S" to indicate a soil sample matrix, and sample depth. The depth interval will be noted as the middle of the sampling interval. For example, a soil sample collected from the twelfth test pit and at a depth interval of 3 to 5 feet bgs will have the sample number TP12-S-4.0.

For duplicate soil samples, DUP will replace the test pit location number, and the sample will have the same sample time as the primary sample. A duplicate sample of the abovementioned sample would appear as TP-S-4.0-DUP.

Samples will be documented on an FSDS (see Appendix B) and on the test pit log (see Appendix A).

5 ANALYTICAL METHODS

5.1 Chemicals of Interest

PCBs, metals (including arsenic, chromium, copper, lead, mercury, and nickel), and diesel- and residual-range petroleum hydrocarbons were detected in surface soil during a previous investigation and have been identified as chemicals of interest (COIs). Based on analytical results for these COIs, follow up analyses may include VOCs, semivolatile organic compounds (SVOCs), and polycyclic aromatic hydrocarbons (PAHs). Based on historical uses at the Property, potential COIs may include herbicides or pesticides.

5.2 Laboratory Analyses for Soil Samples

Soil samples will be analyzed for the parameters specified in the work plan (MFA, 2014) and this SAP, using the following methods, if applicable:

- PCBs by USEPA Method 8082
- Metals (aluminum, arsenic, lead, cadmium, chromium, copper, nickel, and zinc), using USEPA Methods 6010/6020; and mercury by USEPA Method 7471
- Diesel- and residual-range petroleum hydrocarbons (Dx) by Northwest Total Petroleum Hydrocarbon Method NWTPH-Dx
- Chlorinated herbicides by USEPA 8151
- Organochlorine pesticides by USEPA 8081B
- Organophosphorus pesticides by USEPA 8270D
- PAHs by USEPA Method 8270 selective ion monitoring
- Extractable petroleum hydrocarbons by Method NWTPH-EPH
- SVOCs by USEPA Method 8270C
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) by USEPA Method 8021 or 8260B, depending on method reporting limits.

5.3 Laboratory Test Methods and Reporting Limits

Following the QA/QC requirements set forth in this SAP, Specialty Analytical of Clackamas, Oregon, will perform the following analyses, using the methods specified in Section 5.2.

Soil samples initially will be analyzed for polychlorinated biphenyls (PCBs), metals, and petroleum hydrocarbons (see the attached Table). If the hydrocarbon identification results indicate that diesel-

or residual-range organics are detected in a soil sample, then analyses for the following COIs will also be requested: diesel- and residual-range petroleum hydrocarbons quantification; extractable petroleum hydrocarbons; pesticides; herbicides; BTEX; SVOCs; and PAHs.

5.4 QA/QC Samples Generated in Field

To ensure that field samples and quantitative field measurements are representative of the media collected and conditions being measured, sample collection and measurement methods will follow procedures documented in Section 4. QC samples collected in the field include field equipment rinsate blanks, trip blanks, and field duplicates. Field QC samples will be clearly identified on the FSDSs. Field and trip blank results may indicate possible contamination introduced by field or laboratory procedures; field duplicates indicate overall precision in both field and laboratory procedures.

5.5 Laboratory Operations

In the laboratory, QC samples will include matrix spike/matrix spike duplicate (MS/MSD) samples, laboratory control samples (LCSs), surrogate spike samples, and method blanks, as well as other QC samples and procedures required by the individual methods.

5.6 Sample Containers, Preservation, and Handling

5.6.1 Preservation

Soil samples for VOC analyses will be collected in vials, using the USEPA 5035A method. Other soil samples will be collected in glass jars. The samples will be stored in iced coolers. Sample containers will be supplied by the laboratory.

5.6.2 Sample Packaging and Shipping

Samples will be stored in iced shipping containers or a refrigerator designated for samples, and then transported by courier to Specialty Analytical in iced shipping containers.

5.7 Sample Custody

Sample custody will be tracked from point of origin through analysis, using a COC form, which will be filled out with the appropriate sample and analytical information as soon as practicable after samples are collected. For purposes of this work, custody will be defined as follows:

- In view of MFA field representatives
- Inside a cooler that is in view of MFA field representatives
- Inside a locked space such as a cooler, locker, or vehicle to which the MFA representatives have the only available key(s)

The following items will be recorded on the COC form:

- Project name
- Project number
- MFA project manager
- Sampler name(s)
- Sample number, date and time collected, media, number of bottles submitted
- Requested analyses for each sample
- Type of data package required
- Turnaround requirements
- Signatures and printed names of persons having custody of samples; organization name, date, and time of transfer
- Additional instructions or considerations that may affect analysis (nonaqueous layers, archiving, etc.), as needed

Persons in possession of the samples will be required to sign and date the COC form when samples are transferred between individuals or organizations. The COC will be included in the shipping containers with the samples. The laboratory will implement its in-house custody procedures, which begin when sample custody is transferred to laboratory personnel.

If samples are shipped (by a third party), the following custody procedures will be followed. The COC will be signed and custody will be relinquished to the shipping carrier. The signed COC(s) will be packed in shipping containers with the samples. Signed documentation will be obtained from the shipper, acknowledging receipt of the package(s). The shipping document(s) will be used to track the samples while they are in transit to the laboratory.

At the analytical laboratory, a designated sample custodian will accept custody of the samples and will verify that information on the COC form matches the sample labels received as appropriate. The shipping container or set of containers will be given a laboratory identification number, and each sample will be assigned a unique sequential identification number.

5.8 Field Instrumentation

Field instruments may be used during the investigations. The following field equipment will require calibration or calibration checks before use and periodically during sampling activities:

- Photoionization detector or organic vapor monitor

5.8.1 Field Calibration

Calibration procedures, calibration frequency, and standards for measurement will be conducted according to manufacturers' guidelines. To ensure that field instruments are properly calibrated and remain operable, the following procedures will be used:

- Standards used to calibrate field instruments will meet the minimum requirements for source and purity recommended in the equipment operation manual. Standards will be used before the expiration dates.
- Acceptable criteria for calibration will be based on the limits set in the operations manual.
- Users of the equipment will be trained in the proper calibration and operation of the instrument.
- Field instruments will be inspected before they are taken to the Property.
- Field instruments will be calibrated at the start of each work period. Meters will be recalibrated during the work period if inconsistent or unusual readings occur, or if conditions warrant more frequent calibration.
- Calibration procedures (including time, standards used, and calibration results) will be recorded in a field notebook or in an instrument logbook. The information will be available to aid in the resolution of problems that may be encountered.

5.9 Field QC

The following samples will be prepared by the sampling personnel in the field and submitted to the laboratory:

- **Equipment Rinsate Blanks—**To ensure that decontamination procedures are sufficient, an equipment rinsate blank will be collected when nondedicated equipment is used. At least one equipment rinsate blank will be collected per sampling event or per 20 samples collected, whichever is more frequent. If more than 20 samples are collected with the same equipment, or if high concentrations of contaminants are encountered, additional equipment rinsate blanks may be collected, as warranted. Equipment rinsate blanks will be collected by passing deionized/distilled water through or over sampling equipment.
- **Trip Blanks—**A trip blank monitors the potential for cross-contamination during sample collection and transport. A trip blank consists of reagent-grade water in a new sample container, which is prepared at the same time as the sample containers. The trip blank will accompany the samples during collection, shipment, and storage. At least one trip blank will be included with each cooler in which samples for VOC analyses are stored.

- **Field Duplicates—**Field duplicates are collected to measure sampling and laboratory precision. At least one duplicate sample will be collected during each sampling event, or one per 20 samples, whichever is more frequent.

5.10 Laboratory Instrumentation

Specific laboratory instrument calibration procedures, frequency of calibration, and preparation of calibration standards will be performed according to the method requirements developed by the USEPA, following procedures presented in SW-846 (USEPA, 1986).

5.11 Laboratory Calibration and Preventive Maintenance

The laboratory calibration ranges specified in SW-846 (USEPA, 1986) will be followed.

Preventive maintenance of laboratory equipment will be the responsibility of the laboratory personnel and analysts. This maintenance typically includes routine care and cleaning of instruments and inspection and monitoring of carrier gases, solvents, and glassware used in analyses. The preventive-maintenance approach for specific equipment will follow the manufacturers' specifications and good laboratory practices.

Precision and accuracy data will be examined for trends and excursions beyond control limits to determine evidence of instrument malfunction or operator error. Maintenance will be performed when an instrument begins to change, as indicated by the degradation of peak resolution, shift in calibration curves, decrease in sensitivity, or failure to meet the QC criteria. The laboratory is responsible for implementing equipment maintenance procedures.

5.12 Laboratory QA/QC Checks

USEPA Method 8260B includes specific instructions for the analysis of QC samples and the completion of QC procedures during sample analysis. These QC samples and procedures verify that the instrument has been calibrated properly and has remained in calibration throughout the analytical sequence, and that the sample preparation procedures have been effective and have not introduced contaminants into the samples. Additional QC samples are used to identify and quantify positive or negative interference caused by the sample matrix. The following laboratory QC procedures are required for most analytical procedures:

- **Calibration Verification—**Instruments will be calibrated at the start of the project or sample run, as required, and when ongoing calibration does not meet control criteria. The number of points used in the initial calibration is defined in the analytical method. Continuing calibration will be performed as specified in the analytical method to track instrument performance. If a continuing calibration does not meet control limits, analysis of project samples will be suspended until the source of the control failure is either eliminated or reduced to within control specifications. Project samples analyzed while the instrument was outside of control limits will be reanalyzed.

- **Method Blanks—**Method blanks are used to assess possible laboratory contamination of samples associated with the stages of preparation and with analysis of samples and extracts. The laboratory will not apply blank corrections to the original data. A minimum of one method blank will be analyzed per sample extraction group, or one per 20 samples, whichever is more frequent.
- **MS/MSD Samples—**MS samples are analyzed to assess the matrix effects on the accuracy of analytical measurements. A minimum of one MS will be analyzed for each sample delivery group (SDG), or one per 20 samples, whichever is more frequent. For volatile analysis, MSD samples will be analyzed for each SDG, or one per 20 samples, whichever is more frequent. Because the spike is a duplicate sample, it measures the quality of laboratory preparatory techniques and the heterogeneity of the sample.
- **Surrogate Spike Compounds—**Surrogate spikes are used to evaluate the recovery of an analyte from individual samples. Project samples to be analyzed for organic compounds will be spiked with appropriate surrogate compounds as defined in the analysis method. Recoveries determined using these surrogate compounds will be reported by the laboratory; however, the laboratory will not correct sample results using these recoveries.
- **LCSs—**Although not required by the referenced methods, the laboratory will analyze LCSs for VOCs by USEPA Method 8260B. One LCS will be analyzed per SDG, or one per 20 samples, whichever is more frequent. The source of the LCS must be included in the data package.

5.13 Data Reduction, Validation, and Reporting

The laboratory will provide analytical data packages that include laboratory QA/QC results to permit independent and conclusive determination of data quality. MFA will determine data quality, using the data evaluation procedures described in this section. The results of the MFA evaluation will be used to determine if the project data quality objectives are met.

5.13.1 Field Data Reduction

Daily internal QC checks will be performed for field activities. Checks will consist of reviewing field notes and field activity memoranda to confirm that the specified measurements, calibrations, and procedures are being followed. The need for corrective action will be assessed on an ongoing basis, in consultation with the project manager.

5.13.2 Laboratory Evaluation

Initial data reduction, evaluation, and reporting at the analytical laboratory will be carried out as described in USEPA SW-846 manuals for organic analyses (USEPA, 1986), as appropriate. Additional laboratory data qualifiers may be defined and reported (in the laboratory's case narrative reports) to further explain the laboratory's QC concerns about a particular sample result.

5.13.3 Data Deliverables

Laboratory data deliverables are listed below. Electronic deliverables will contain the same data that are presented in the hard-copy report. Laboratory data deliverables should include:

- Transmittal cover letter
- Case narrative
- Analytical results
- COC
- Surrogate recoveries
- Method blank results
- MS/MSD results
- Laboratory duplicate results

5.13.4 MFA Evaluation

5.13.4.1 Data QA/QC Review

MFA will evaluate the laboratory data for precision, completeness, accuracy, and compliance with the analytical methods. MFA will review data and assign data qualifiers to sample results, following applicable sections of the USEPA procedures for organics data review (USEPA, 1986, 1994).

Data qualifiers, as defined by the USEPA, are used to classify sample data according to their conformance to QC requirements. Common qualifiers are listed below:

- J—Estimate, qualitatively correct but quantitatively suspect.
- R—Reject, data not suitable for use.
- U—Not detected at a specified reporting limit.

Poor surrogate recovery, blank contamination, and calibration problems, among other things, can cause the sample data to be qualified. When sample data are qualified, the reasons for the qualification will be stated in the data evaluation report.

QC criteria not defined in the guidelines for evaluating analytical data are adopted, where appropriate, from the analytical method.

The following information will be reviewed during data evaluation, as applicable:

- Sampling locations and sample numbers
- Sampling dates
- Requested analysis
- COC documentation
- Sample preservation
- Holding times

- Method blanks
- Surrogate recoveries
- MS/MSD results
- Laboratory duplicates (if analyzed)
- Field duplicates
- Trip blanks
- Field blanks
- LCSs
- Method reporting limits
- Additional comments or difficulties reported by the laboratory
- Overall assessment

The results of the data evaluation review will be summarized for each data package. Data qualifiers will be assigned to sample results on the basis of USEPA guidelines, as applicable.

5.13.4.2 Data Management and Reduction

MFA uses an EQuIS database to manage laboratory data. The laboratory will provide the analytical results in electronic EQuIS-deliverable format. Following data evaluation, data qualifiers will be entered into the EQuIS database.

Data may be reduced to summarize particular data sets and to aid interpretation of the results. Statistical analyses may also be applied to results. Data reduction QC checks will be performed on hand-entered data, calculations, and data graphically presented. Data may be further reduced and managed using one or more of the following computer software applications:

- Microsoft Excel (spreadsheet)
- EQuIS (database)
- AutoCad and/or Arc GIS (graphics)
- USEPA ProUCL (statistical software)

6 REPORTING

Approximately four weeks after the data are received, MFA will generate a data report, which will summarize and screen the data against the MTCA cleanup levels. Estimates of the nature and extent of soil contamination will be provided, as well as work-product documentation (e.g., data validation reports). Should laboratory analysis and communications with Ecology indicate that followup field sampling may be necessary, field report deliverables may be delayed to incorporate additional data collected.

LIMITATIONS

The services undertaken in completing this plan were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This plan is solely for the use and information of our client unless otherwise noted. Any reliance on this plan by a third party is at such party's sole risk.

Opinions and recommendations contained in this plan apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this plan.

REFERENCES

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TABLE

Table
Sampling and Analysis Plan
Focused Site Assessment
Fleischer Properties
Vancouver, Washington

Area of Concern	Test Pit Location Identification	Test Pit Location	Sample Location Depth (feet bgs)[a]	Sample Identification[b]	Initial Analysis	Archived for Later Analysis[c]
Soil Analysis—horizontal and vertical delineation of impacted soil						
Section 1	TP1	Section Center	0 - 1	TP1-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP1-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP1-SC-9.0	-	PCBs, TPH-HCID, metals
	TP1a	Section Boundary	0 - 1	TP1a-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP1a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP1a-SC-9.0	-	PCBs, TPH-HCID, metals
Section 2	TP2	Section Center	0 - 1	TP2-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP2-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP2-SC-9.0	-	PCBs, TPH-HCID, metals
	TP2a	Section Boundary	0 - 1	TP2a-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP2a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP2a-SC-9.0	-	PCBs, TPH-HCID, metals
Section 3	TP3	Section Center	0 - 1	TP3-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP3-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP3-SC-9.0	-	PCBs, TPH-HCID, metals
	TP3a	Section Boundary	0 - 1	TP3a-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP3a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP3a-SC-9.0	-	PCBs, TPH-HCID, metals
Section 4	TP4	Section Center	0 - 1	TP4-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP4-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP4-SC-9.0	-	PCBs, TPH-HCID, metals
	TP4a	Section Boundary	0 - 1	TP4a-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP4a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP4a-SC-9.0	-	PCBs, TPH-HCID, metals

Table
Sampling and Analysis Plan
Focused Site Assessment
Fleischer Properties
Vancouver, Washington

Area of Concern	Test Pit Location Identification	Test Pit Location	Sample Location Depth (feet bgs)[a]	Sample Identification[b]	Initial Analysis	Archived for Later Analysis[c]
Section 5	TP5	Section Center	0 - 1	TP5-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP5-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP5-SC-9.0	-	PCBs, TPH-HCID, metals
	TP5a	Section Boundary	0 - 1	TP5a-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP5a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP5a-SC-9.0	-	PCBs, TPH-HCID, metals
Section 6	TP6	Section Center	0 - 1	TP6-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP6-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP6-SC-9.0	-	PCBs, TPH-HCID, metals
	TP6a	Section Boundary	0 - 1	TP6a-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP6a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP6a-SC-9.0	-	PCBs, TPH-HCID, metals
Section 7	TP7	Section Center	0 - 1	TP7-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP7-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP7-SC-9.0	-	PCBs, TPH-HCID, metals
	TP7a	Section Boundary	0 - 1	TP7a-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP7a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP7a-SC-9.0	-	PCBs, TPH-HCID, metals
Section 8	TP8	Section Center	0 - 1	TP8-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP8-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP8-SC-9.0	-	PCBs, TPH-HCID, metals
	TP8a	Section Boundary	0 - 1	TP8a-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP8a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP8a-SC-9.0	-	PCBs, TPH-HCID, metals

Table
Sampling and Analysis Plan
Focused Site Assessment
Fleischer Properties
Vancouver, Washington

Area of Concern	Test Pit Location Identification	Test Pit Location	Sample Location Depth (feet bgs)[a]	Sample Identification[b]	Initial Analysis	Archived for Later Analysis[c]
Section 9	TP9	Section Center	0 - 1	TP9-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP9-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP9-SC-9.0	-	PCBs, TPH-HCID, metals
	TP9a	Section Boundary	0 - 1	TP9a-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP9a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP9a-SC-9.0	-	PCBs, TPH-HCID, metals
Section 10	TP10	Section Center	0 - 1	TP10-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP10-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP10-SC-9.0	-	PCBs, TPH-HCID, metals
	TP10a	Section Boundary	0 - 1	TP10a-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP10a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP10a-SC-9.0	-	PCBs, TPH-HCID, metals
Section 11	TP11	Section Center	0 - 1	TP11-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP11-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP11-SC-9.0	-	PCBs, TPH-HCID, metals
	TP11a	Section Boundary	0 - 1	TP11a-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP11a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP11a-SC-9.0	-	PCBs, TPH-HCID, metals
Section 12	TP12	Section Center	0 - 1	TP12-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP12-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP12-SC-9.0	-	PCBs, TPH-HCID, metals
	TP12a	Section Boundary	0 - 1	TP12a-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP12a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP12a-SC-9.0	-	PCBs, TPH-HCID, metals

Table
Sampling and Analysis Plan
Focused Site Assessment
Fleischer Properties
Vancouver, Washington

Area of Concern	Test Pit Location Identification	Test Pit Location	Sample Location Depth (feet bgs)[a]	Sample Identification[b]	Initial Analysis	Archived for Later Analysis[c]
Section 13	TP13	Section Center	0 - 1	TP13-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP13-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP13-SC-9.0	-	PCBs, TPH-HCID, metals
	TP13a	Section Boundary	0 - 1	TP13a-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP13a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP13a-SC-9.0	-	PCBs, TPH-HCID, metals
Section 14	TP14	Section Center	0 - 1	TP14-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP14-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP14-SC-9.0	-	PCBs, TPH-HCID, metals
	TP14a	Section Boundary	0 - 1	TP14a-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP14a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP14a-SC-9.0	-	PCBs, TPH-HCID, metals
Section 15	TP15	Section Center	0 - 1	TP15-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP15-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP15-SC-9.0	-	PCBs, TPH-HCID, metals
	TP15a	Section Boundary	0 - 1	TP15a-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP15a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP15a-SC-9.0	-	PCBs, TPH-HCID, metals
Section 16	TP16	Section Center	0 - 1	TP16-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP16-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP16-SC-9.0	-	PCBs, TPH-HCID, metals
	TP16a	Section Boundary	0 - 1	TP16a-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP16a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP16a-SC-9.0	-	PCBs, TPH-HCID, metals

Table
Sampling and Analysis Plan
Focused Site Assessment
Fleischer Properties
Vancouver, Washington

Area of Concern	Test Pit Location Identification	Test Pit Location	Sample Location Depth (feet bgs)[a]	Sample Identification[b]	Initial Analysis	Archived for Later Analysis[c]
Section 17	TP17	Section Center	0 - 1	TP17-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP17-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP17-SC-9.0	-	PCBs, TPH-HCID, metals
	TP17a	Section Boundary	0 - 1	TP17a-SC-0.5	PCBs, TPH-HCID, metals	-
			3 - 5	TP17a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP17a-SC-9.0	-	PCBs, TPH-HCID, metals
Section 18	TP18	Section Center	0 - 1	TP18-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP18-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP18-SC-9.0	-	PCBs, TPH-HCID, metals
	TP18a	Section Boundary	0 - 1	TP18a-SC-0.5	PCBs	TPH-HCID, metals
			3 - 5	TP18a-SC-4.0	-	PCBs, TPH-HCID, metals
			8 - 10	TP18a-SC-9.0	-	PCBs, TPH-HCID, metals

NOTES:

Sample numbers, analyses, sampling depths, and recommended number of analyses may change, based on field conditions.

Herbicides and pesticides will be sampled from the uppermost native soil encountered at each test pit location. Depth of collection is subject to field observations.

bgs = below ground surface.

metals = aluminum, arsenic, cadmium, total chromium, copper, lead, nickel, and zinc.

PCB = polychlorinated biphenyl.

SC = composite soil sample.

TP = test pit.

TPH-HCID = total petroleum hydrocarbons-hydrocarbon identification.

[a]If fill material is at the surface, sampling depths will be (1) surface fill material, (2) native soil below at fill boundary, and (3) native soil at 5 to 6 feet below fill boundary. Sample identification will be changed to reflect collection depth.

[b]All samples will be three-point composite.

[c]Archived samples may be analyzed, depending on the analyte concentrations detected in the uppermost sample.

APPENDIX A

SOIL LOG FORM

MAUL FOSTER ALONGI

EXCAVATION LOG

CLIENT		Sheet	of
PROJECT NAME		Excavation Number	
PROJECT NO.		Date Started	
Engineer/Geologist		Date Finished	
Excavation Contractor		Total Depth	
Method		Ground Elevation	
Depth-to-water in Exc.		Datum	

Sample Name	Sample Interval (ft bgs)	FID/ PID Reading (ppm)	Soil Group Symbol	Field Location of Excavation:
				LITHOLOGIC DESCRIPTION

Excavation Drawing

APPENDIX B

FIELD SAMPLING DATA SHEET FORM

Maul Foster & Alongi, Inc.

7223 NE Hazel Dell Avenue, Suite B, Vancouver, WA 98665 (360) 694-2691 Fax. (360) 906-1958

Soil Field Sampling Data Sheet

Client Name		**Sample Location**					
Project Number		**Sampler**					
Project Name		**Sampling Date**					
Sampling Event		**Sample Name**					
Sub Area		**Sample Depth**					
FSDS QA:		**Easting**		**Northing**		**TOC**	

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(1) Backhoe	Liquid	Composite			2 oz. soil	
					4 oz. soil	
					8 oz. soil	
					Other	
					Total Containers	0

Sample Description:

General Sampling Comments

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelbey Tube, (7) Grab, (8) Other (Specify)

Signature _____

APPENDIX B

GEODESIGN 2010 ANALYTICAL RESULTS

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Friday, September 4, 2009

Colby Hunt
GeoDesign, Inc.
15575 SW Sequoia Pkwy, Ste 100
Portland, OR 97224

RE: NE 94th Ave Property / GillilandJ-1-01

Enclosed are the results of analyses for work order A908221, which was received by the laboratory on 8/24/2009 at 1:06:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-1	A908221-01	Soil	08/18/09 08:45	08/24/09 13:06
SS-2	A908221-02	Soil	08/18/09 09:00	08/24/09 13:06

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Philip Nerenberg, Lab Director

Apex Labs

12232 S.W. Garden Place
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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

ANALYTICAL SAMPLE RESULTS

Hydrocarbon Identification (HCID) Screen by NWTPH

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
SS-1 (A908221-01)			**Matrix: Soil**					
Gasoline Range Organics	ND	---	16.5	mg/kg dry	1	08/25/09 02:17	NWTPH-HCID	
Diesel Range Organics	DET	---	41.3	"	"	"	"	F-05
Oil Range Organics	DET	---	82.6	"	"	"	"	F-03
Surrogate: o-Terphenyl (Surr)			*Recovery: 82 %*	*Limits: 50-150 %*	"	"	"	
SS-2 (A908221-02)			**Matrix: Soil**					
Gasoline Range Organics	ND	---	23.7	mg/kg dry	1	08/25/09 03:05	NWTPH-HCID	
Diesel Range Organics	ND	---	59.2	"	"	"	"	
Oil Range Organics	ND	---	118	"	"	"	"	
Surrogate: o-Terphenyl (Surr)			*Recovery: 94 %*	*Limits: 50-150 %*	"	"	"	

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

ANALYTICAL SAMPLE RESULTS

Diesel Range (C10-C22) and Oil Range (C22-C40) Hydrocarbons by NWTPH-Dx - Silica Gel Cleanup

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
SS-1 (A908221-01)			**Matrix: Soil**					
Diesel Range Organics	**127**	---	24.4	mg/kg dry	1	09/02/09 10:15	NWTPH-Dx(SG)	F-03, F-05
Oil Range Organics	**387**	---	48.7	"	"	"	"	F-03
Surrogate: o-Terphenyl (Surr)			*Recovery: 91 %*	*Limits: 50-150 %*	"	"	"	

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
SS-1 (A908221-01RE2)			**Matrix: Soil**					**C-07**
Aroclor 1016	ND	---	7250	ug/kg dry	1000	08/27/09 10:14	EPA 8082A	
Aroclor 1221	ND	---	7250	"	"	"	"	
Aroclor 1232	ND	---	7250	"	"	"	"	
Aroclor 1242	ND	---	7250	"	"	"	"	
Aroclor 1248	**128000**	---	7250	"	"	"	"	
Aroclor 1254	ND	---	7250	"	"	"	"	
Aroclor 1260	ND	---	7250	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 150 %*	*Limits: 50-125 %*	"	"	"	*S-05*
Decachlorobiphenyl (Surr)			*317 %*	*Limits: 55-130 %*	"	"	"	*S-05*
SS-2 (A908221-02RE1)			**Matrix: Soil**					**C-07**
Aroclor 1016	ND	---	1050	ug/kg dry	100	08/27/09 10:29	EPA 8082A	
Aroclor 1221	ND	---	1050	"	"	"	"	
Aroclor 1232	ND	---	1050	"	"	"	"	
Aroclor 1242	ND	---	1050	"	"	"	"	
Aroclor 1248	**30100**	---	1050	"	"	"	"	
Aroclor 1254	ND	---	1050	"	"	"	"	
Aroclor 1260	ND	---	1050	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 118 %*	*Limits: 50-125 %*	"	"	"	
Decachlorobiphenyl (Surr)			*133 %*	*Limits: 55-130 %*	"	"	"	*Q-23, S-09*

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
SS-1 (A908221-01)			**Matrix: Soil**					
Antimony	ND	---	1.10	mg/kg dry	10	08/27/09 15:44	EPA 6020	
Arsenic	**2.63**	---	1.10	"	"	"	"	
Beryllium	ND	---	2.20	"	"	"	"	
Cadmium	ND	---	1.10	"	"	"	"	
Chromium	**19.8**	---	2.20	"	"	"	"	
Copper	**38.7**	---	4.40	"	"	"	"	
Lead	**44.2**	---	1.10	"	"	"	"	
Mercury	**0.0989**	---	0.0879	"	"	"	"	
Nickel	**9.27**	---	2.20	"	"	"	"	
Selenium	ND	---	1.10	"	"	"	"	
Silver	ND	---	1.10	"	"	"	"	
Thallium	ND	---	1.10	"	"	"	"	
Zinc	**1130**	---	22.0	"	50	08/27/09 16:22	"	
SS-2 (A908221-02)			**Matrix: Soil**					
Antimony	ND	---	1.56	mg/kg dry	10	08/27/09 16:15	EPA 6020	
Arsenic	**2.06**	---	1.56	"	"	"	"	
Beryllium	ND	---	3.11	"	"	"	"	
Cadmium	ND	---	1.56	"	"	"	"	
Chromium	**11.8**	---	3.11	"	"	"	"	
Copper	**23.3**	---	6.23	"	"	"	"	
Lead	**16.1**	---	1.56	"	"	"	"	
Mercury	ND	---	0.125	"	"	"	"	
Nickel	**11.4**	---	3.11	"	"	"	"	
Selenium	ND	---	1.56	"	"	"	"	
Silver	ND	---	1.56	"	"	"	"	
Thallium	ND	---	1.56	"	"	"	"	
Zinc	**1200**	---	31.1	"	50	08/27/09 17:04	"	

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight by D2216

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
SS-1 (A908221-01)			**Matrix: Soil**					
% Solids	**94.4**	---	1.00	% by Weight	1	08/25/09 08:04	D2216	
SS-2 (A908221-02)			**Matrix: Soil**					
% Solids	**69.5**	---	1.00	% by Weight	1	08/25/09 08:04	D2216	

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Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

QUALITY CONTROL (QC) SAMPLE RESULTS

Hydrocarbon Identification (HCID) Screen by NWTPH

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080386 - EPA 3546 (Fuels)							**Soil**					
Blank (9080386-BLK1)					Prepared: 08/24/09 11:38 Analyzed: 08/24/09 18:05							
NWTPH-HCID												
Gasoline Range Organics	ND	---	20.0	mg/kg wet	1	---	---	---	---	---	---	B-02
Diesel Range Organics	ND	---	50.0	"	"	---	---	---	---	---	---	
Oil Range Organics	ND	---	100	"	"	---	---	---	---	---	---	

Surr: o-Terphenyl (Surr) *Recovery: 76 %* *Limits: 50-150 %* *Dilution: 1x*

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel Range (C10-C22) and Oil Range (C22-C40) Hydrocarbons by NWTPH-Dx - Silica Gel Cleanup

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9090018 - EPA 3546 (Fuels)							**Soil**					
Blank (9090018-BLK1)					Prepared: 09/01/09 14:11		Analyzed: 09/02/09 09:22					
NWTPH-Dx(SG)												
Diesel Range Organics	ND	---	20.0	mg/kg wet	1	---	---	---	---	---	---	
Oil Range Organics	ND	---	40.0	"	"	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 102 %*	*Limits: 50-150 %*			*Dilution: 1x*					
LCS (9090018-BS1)					Prepared: 09/01/09 14:11		Analyzed: 09/02/09 09:45					
NWTPH-Dx(SG)												
Diesel Range Organics	82.4	---	20.0	mg/kg wet	1	83.3	---	99	70-130%	---	---	
Oil Range Organics	101	---	40.0	"	"	"	---	121	"	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 106 %*	*Limits: 50-150 %*			*Dilution: 1x*					
Duplicate (9090018-DUP1)					Prepared: 09/01/09 14:11		Analyzed: 09/02/09 11:00					
QC Source Sample: SS-1 (A908221-01)												
NWTPH-Dx(SG)												
Diesel Range Organics	**99.7**	---	26.2	mg/kg dry	1	---	127	---	---	24	40%	F-03, F-05
Oil Range Organics	**292**	---	52.4	"	"	---	387	---	---	28	40%	F-03
Surr: o-Terphenyl (Surr)			*Recovery: 84 %*	*Limits: 50-150 %*			*Dilution: 1x*					

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080425 - EPA 3546							**Soil**					
Blank (9080425-BLK1)					Prepared: 08/26/09 11:05	Analyzed: 08/26/09 15:34						**C-07**
EPA 8082A												
Aroclor 1016	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1232	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1242	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1248	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1254	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1260	ND	---	10.0	"	"	---	---	---	---	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 121 %*	*Limits: 50-125 %*			*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*134 %*	*55-130 %*			*"*					*Q-23, S-09*
LCS (9080425-BS1)					Prepared: 08/26/09 11:05	Analyzed: 08/26/09 15:49						**C-07**
EPA 8082A												
Aroclor 1016	202	---	10.0	ug/kg wet	1	250	---	81	40-140%	---	---	
Aroclor 1260	231	---	10.0	"	"	"	---	93	60-130%	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 116 %*	*Limits: 50-125 %*			*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*131 %*	*55-130 %*			*"*					*Q-23, S-09*
Duplicate (9080425-DUP2)					Prepared: 08/26/09 11:05	Analyzed: 08/27/09 09:59						**C-07**
QC Source Sample: SS-1 (A908221-01RE2)												
EPA 8082A												
Aroclor 1016	ND	---	7290	ug/kg dry	1000	---	ND	---	---	---	30%	
Aroclor 1221	ND	---	7290	"	"	---	ND	---	---	---	30%	
Aroclor 1232	ND	---	7290	"	"	---	ND	---	---	---	30%	
Aroclor 1242	ND	---	7290	"	"	---	ND	---	---	---	30%	
Aroclor 1248	**148000**	---	7290	"	"	---	128000	---	---	15	30%	
Aroclor 1254	ND	---	7290	"	"	---	ND	---	---	---	30%	
Aroclor 1260	ND	---	7290	"	"	---	ND	---	---	---	30%	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 150 %*	*Limits: 50-125 %*			*Dilution: 1000x*					*S-05*
Decachlorobiphenyl (Surr)			*297 %*	*55-130 %*			*"*					*S-05*

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Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080400 - EPA 3051							**Soil**					
Blank (9080400-BLK1)					Prepared: 08/25/09 08:55 Analyzed: 08/27/09 14:40							
EPA 6020												
Antimony	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Arsenic	ND	---	1.00	"	"	---	---	---	---	---	---	
Beryllium	ND	---	2.00	"	"	---	---	---	---	---	---	
Cadmium	ND	---	1.00	"	"	---	---	---	---	---	---	
Chromium	ND	---	2.00	"	"	---	---	---	---	---	---	
Copper	ND	---	4.00	"	"	---	---	---	---	---	---	
Lead	ND	---	1.00	"	"	---	---	---	---	---	---	
Mercury	ND	---	0.0800	"	"	---	---	---	---	---	---	
Nickel	ND	---	2.00	"	"	---	---	---	---	---	---	
Selenium	ND	---	1.00	"	"	---	---	---	---	---	---	
Silver	ND	---	1.00	"	"	---	---	---	---	---	---	
Thallium	ND	---	1.00	"	"	---	---	---	---	---	---	
Zinc	ND	---	4.00	"	"	---	---	---	---	---	---	
LCS (9080400-BS1)					Prepared: 08/25/09 08:55 Analyzed: 08/27/09 14:43							
EPA 6020												
Antimony	29.9	---	1.00	mg/kg wet	10	25.0	---	120	80-120%	---	---	
Arsenic	50.2	---	1.00	"	"	50.0	---	100	"	---	---	
Beryllium	24.8	---	2.00	"	"	25.0	---	99	"	---	---	
Cadmium	50.4	---	1.00	"	"	50.0	---	101	"	---	---	
Chromium	49.2	---	2.00	"	"	"	---	98	"	---	---	
Copper	54.1	---	4.00	"	"	"	---	108	"	---	---	
Lead	50.9	---	1.00	"	"	"	---	102	"	---	---	
Mercury	2.02	---	0.0800	"	"	2.00	---	101	"	---	---	
Nickel	52.5	---	2.00	"	"	50.0	---	105	"	---	---	
Selenium	24.7	---	1.00	"	"	25.0	---	99	"	---	---	
Silver	25.3	---	1.00	"	"	"	---	101	"	---	---	
Thallium	25.2	---	1.00	"	"	"	---	101	"	---	---	
Zinc	50.6	---	4.00	"	"	50.0	---	101	"	---	---	
Duplicate (9080400-DUP1)					Prepared: 08/25/09 08:55 Analyzed: 08/27/09 15:47							
QC Source Sample: SS-1 (A908221-01)												
EPA 6020												
Antimony	ND	---	1.12	mg/kg dry	10	---	ND	---	---	---	40%	

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080400 - EPA 3051							**Soil**					
Duplicate (9080400-DUP1)					Prepared: 08/25/09 08:55		Analyzed: 08/27/09 15:47					
QC Source Sample: SS-1 (A908221-01)												
Arsenic	**2.56**	---	1.12	mg/kg dry	"	---	2.63	---	---	2	40%	
Beryllium	ND	---	2.24	"	"	---	ND	---	---	---	40%	
Cadmium	ND	---	1.12	"	"	---	ND	---	---	---	40%	
Chromium	**21.0**	---	2.24	"	"	---	19.8	---	---	6	40%	
Copper	**40.6**	---	4.48	"	"	---	38.7	---	---	5	40%	
Lead	**48.1**	---	1.12	"	"	---	44.2	---	---	8	40%	
Mercury	**0.101**	---	0.0896	"	"	---	0.0989	---	---	2	40%	
Nickel	**9.47**	---	2.24	"	"	---	9.27	---	---	2	40%	
Selenium	ND	---	1.12	"	"	---	ND	---	---	---	40%	
Silver	ND	---	1.12	"	"	---	ND	---	---	---	40%	
Thallium	ND	---	1.12	"	"	---	ND	---	---	---	40%	
Duplicate (9080400-DUP2)					Prepared: 08/25/09 08:55		Analyzed: 08/27/09 16:58					
QC Source Sample: SS-1 (A908221-01)												
EPA 6020												
Zinc	**1140**	---	22.4	mg/kg dry	50	---	1130	---	---	0.7	40%	Q-16
Matrix Spike (9080400-MS1)					Prepared: 08/25/09 08:55		Analyzed: 08/27/09 16:12					
QC Source Sample: SS-1 (A908221-01)												
EPA 6020												
Antimony	26.2	---	1.08	mg/kg dry	10	26.9	0.396	96	75-125%	---	---	
Arsenic	54.1	---	1.08	"	"	54.0	2.63	95	"	---	---	
Beryllium	28.7	---	2.16	"	"	26.9	ND	107	"	---	---	
Cadmium	54.0	---	1.08	"	"	54.0	ND	100	"	---	---	
Chromium	69.3	---	2.16	"	"	"	19.8	92	"	---	---	
Copper	95.5	---	4.31	"	"	"	38.7	105	"	---	---	
Lead	98.5	---	1.08	"	"	"	44.2	101	"	---	---	
Mercury	2.16	---	0.0863	"	"	2.16	0.0989	95	"	---	---	
Nickel	65.0	---	2.16	"	"	54.0	9.27	103	"	---	---	
Selenium	27.1	---	1.08	"	"	26.9	ND	101	"	---	---	
Silver	28.5	---	1.08	"	"	"	0.242	105	"	---	---	
Thallium	27.6	---	1.08	"	"	"	ND	102	"	---	---	
Matrix Spike (9080400-MS2)					Prepared: 08/25/09 08:55		Analyzed: 08/27/09 16:19					

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080400 - EPA 3051							**Soil**					
Matrix Spike (9080400-MS2)					Prepared: 08/25/09 08:55		Analyzed: 08/27/09 16:19					
QC Source Sample: SS-2 (A908221-02)												
EPA 6020												
Antimony	42.6	---	1.57	mg/kg dry	10	39.2	0.452	108	75-125%	---	---	
Arsenic	76.7	---	1.57	"	"	78.6	2.06	95	"	---	---	
Beryllium	42.1	---	3.14	"	"	39.2	ND	107	"	---	---	
Cadmium	79.8	---	1.57	"	"	78.6	ND	102	"	---	---	
Chromium	91.5	---	3.14	"	"	"	11.8	101	"	---	---	
Copper	116	---	6.28	"	"	"	23.3	118	"	---	---	
Lead	97.7	---	1.57	"	"	"	16.1	104	"	---	---	
Mercury	3.08	---	0.126	"	"	3.14	ND	98	"	---	---	
Nickel	92.1	---	3.14	"	"	78.6	11.4	103	"	---	---	
Selenium	38.5	---	1.57	"	"	39.2	ND	98	"	---	---	
Silver	41.7	---	1.57	"	"	"	0.327	105	"	---	---	
Thallium	40.3	---	1.57	"	"	"	ND	103	"	---	---	
Matrix Spike (9080400-MS3)					Prepared: 08/25/09 08:55		Analyzed: 08/27/09 17:01					
QC Source Sample: SS-1 (A908221-01)												
EPA 6020												
Zinc	1180	---	21.6	mg/kg dry	50	54.0	1130	95	75-125%	---	---	Q-16
Matrix Spike (9080400-MS4)					Prepared: 08/25/09 08:55		Analyzed: 08/27/09 17:12					
QC Source Sample: SS-2 (A908221-02)												
EPA 6020												
Zinc	1850	---	31.4	mg/kg dry	50	78.6	1200	820	75-125%	---	---	Q-04, Q-16

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight by D2216

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080380 - Dry Weight							**Soil**					

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

SAMPLE PREPARATION INFORMATION

Hydrocarbon Identification (HCID) Screen by NWTPH

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9080386							
A908221-01	Soil	NWTPH-HCID	08/18/09 08:45	08/24/09 11:38	12.83g/10mL	10g/10mL	0.78
A908221-02	Soil	NWTPH-HCID	08/18/09 09:00	08/24/09 11:38	12.15g/10mL	10g/10mL	0.82

Diesel Range (C10-C22) and Oil Range (C22-C40) Hydrocarbons by NWTPH-Dx - Silica Gel Cleanup

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9090018							
A908221-01	Soil	NWTPH-Dx(SG)	08/18/09 08:45	09/01/09 14:11	13.05g/5mL	15g/5mL	1.15

Polychlorinated Biphenyls by EPA 8082A

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9080425							
A908221-01RE2	Soil	EPA 8082A	08/18/09 08:45	08/26/09 11:05	14.62g/5mL	10g/5mL	0.68
A908221-02RE1	Soil	EPA 8082A	08/18/09 09:00	08/26/09 11:05	13.66g/5mL	10g/5mL	0.73

Total Metals by EPA 6020 (ICPMS)

Prep: EPA 3051

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9080400							
A908221-01	Soil	EPA 6020	08/18/09 08:45	08/25/09 08:55	0.482g/50mL	0.5g/50mL	1.04
A908221-02	Soil	EPA 6020	08/18/09 09:00	08/25/09 08:55	0.462g/50mL	0.5g/50mL	1.08

Apex Labs

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

Notes and Definitions

Qualifiers:

B-02	Analyte detected in the extraction blank at a level below the MRL, but greater than one-half the MRL.
C-07	Extract has undergone Sulfuric Acid Cleanup by EPA 3665A, Sulfur Cleanup by EPA 3660B, and Florisil Cleanup by EPA 3620B in order to minimize matrix interferance.
F-03	The result for this hydrocarbon range is elevated due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
F-05	The sample chromatographic pattern does not resemble the fuel standard used for quantitation.
Q-04	The RPD and/or Percent Recovery for this QC sample is outside control limits due to a non-homogeneous sample matrix.
Q-16	Reanalysis of an original Batch QC sample.
Q-23	Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Data is likely biased high.
S-05	Surrogate recovery cannot be accurately quantified due to sample dilution required from high analyte concentration and/or matrix interference.
S-09	Surrogate failed. Data accepted based on acceptable recovery of 2nd Surrogate.

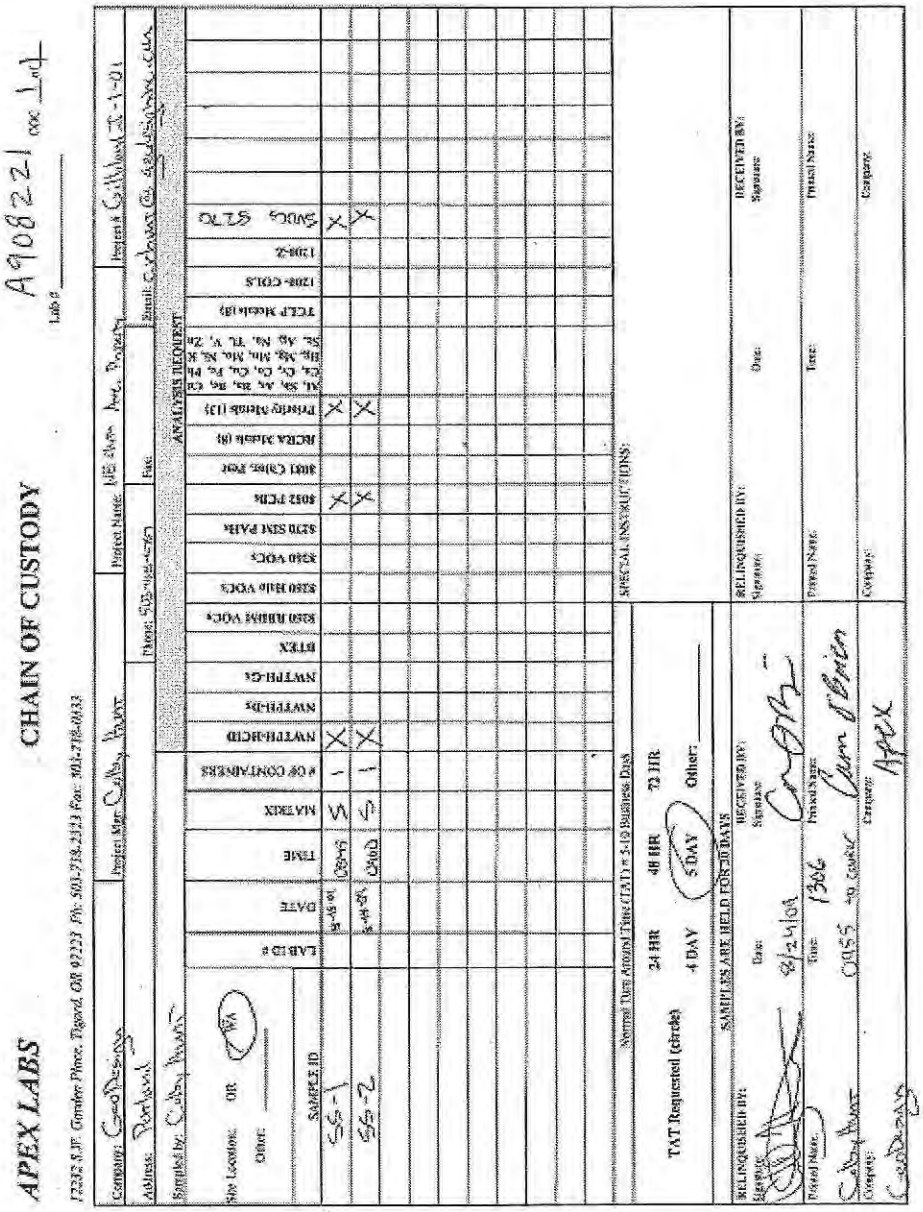
Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

GeoDesign, Inc. 15575 SW Sequoia Pkwy, Ste 100 Portland, OR 97224	Project: **NE 94th Ave Property** Project Number: GillilandJ-1-01 Project Manager: Colby Hunt	**Reported:** 09/04/09 13:58



APEX LABS

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

CHAIN OF CUSTODY

A908221 ok 1nd

Lab #: _____

Company: GeoDesign
Address: Portland
Project Mgr: Colby Hunt
Phone: 503-968-6767
Project Name: NE 94th Ave. Property
Fax:
Project #: GillilandJ-1-01
Email: Colby.Hunt@geodesigninc.com
Sampled by: Colby Hunt

Site Location: OR WA
Other: _____

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	BTEX	8260 HHPH VOCs	8260 HALO VOCs	8260 VOCs	8270 SIM PAHs	8082 PCBs	8081 Chlor. Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn	TCLP Metals (8)	1208-COLS	1208-Z	SUDS SETG
SS-1		9-4-09	0845	S	1	X								X			X					
SS-2		9-4-09	0900	S	1	X								X			X					

Normal Turn Around Time (TAT) = 3-10 Business Days

TAT Requested (circle): 24 HR 48 HR 72 HR 4 DAY 5 DAY Other: _____

SAMPLES ARE HELD FOR 30 DAYS

SPECIAL INSTRUCTIONS:

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 8/24/09	Date:	Date:	Date:
Time: 1306	Time:	Time:	Time:
Printed Name: Colby Hunt	Printed Name: Sam O'Brien	Printed Name:	Printed Name:
Company: GeoDesign	Company: Apex	Company:	Company:

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Philip Nerenberg

Philip Nerenberg, Lab Director

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

Certificate of Analysis Number:

09081304

Report To:		Project Name:	A908221
APEX Laboratories		Site:	Tigard, OR
Philip Nerenberg		Site Address:	
12232 SW Garden Place			
Portland		PO Number:	
OR		State:	Oregon
97223-		State Cert. No.:	TX200001
ph (503) 718-2323	fax:	Date Reported:	8/31/2009

This Report Contains A Total Of 19 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

8/31/2009

Date

Test results meet all requirements of NELAC, unless specified in the narrative.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Case Narrative for:
APEX Laboratories

Certificate of Analysis Number:
09081304

Report To:		Project Name:	A908221
APEX Laboratories		Site:	Tigard, OR
Philip Nerenberg		Site Address:	
12232 SW Garden Place			
Portland		PO Number:	
OR		State:	Oregon
97223-		State Cert. No.:	TX200001
ph (503) 718-2323	fax:	Date Reported:	8/31/2009

SAMPLE RECEIPT:

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg\kg-dry " or " ug\kg-dry ").

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or by his designee, as verified by the following signature.

Alisha C. Rodriguez

8/31/2009

Alisha C. Rodriguez
Project Manager

Date

Test results meet all requirements of NELAC, unless specified in the narrative.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

Certificate of Analysis Number:

09081304

Report To: APEX Laboratories
Philip Nerenberg
12232 SW Garden Place

Portland
OR
97223-
ph (503) 718-2323 fax: (503) 718-0333

Fax To:

Project Name: A908221
Site: Tigard, OR
Site Address:

PO Number:
State: Oregon
State Cert. No.: TX200001
Date Reported: 8/31/2009

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
SS-1	09081304-01	Soil	8/18/2009 8:45:00 AM	8/26/2009 9:00:00 AM		☐
SS-2	09081304-02	Soil	8/18/2009 9:00:00 AM	8/26/2009 9:00:00 AM		☐

Alisha C. Rodriguez

8/31/2009

Alisha C. Rodriguez
Project Manager

Date

Kesavalu M. Bagawandoss Ph.D., J.D.
Laboratory Director

Ted Yen
Quality Assurance Officer

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID SS-1 **Collected:** 08/18/2009 8:45 **SPL Sample ID:** 09081304-01

Site: **Tigard, OR**

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
PERCENT MOISTURE				**MCL**	**D2216**	**Units: wt%**	
Percent Moisture	5.87		0	1	08/27/09 12:40	EB1	5179401

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID SS-1 **Collected:** 08/18/2009 8:45 **SPL Sample ID:** 09081304-01

Site: Tigard, OR

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS BY METHOD 8270C			**MCL**	**SW8270C**	**Units: ug/kg-dry**		
1,2,4-Trichlorobenzene	ND		180	1	08/28/09 14:54	E_R	5182006
1,2-Dichlorobenzene	ND		180	1	08/28/09 14:54	E_R	5182006
1,2-Diphenylhydrazine	ND		180	1	08/28/09 14:54	E_R	5182006
1,3-Dichlorobenzene	ND		180	1	08/28/09 14:54	E_R	5182006
1,4-Dichlorobenzene	ND		180	1	08/28/09 14:54	E_R	5182006
2,4,5-Trichlorophenol	ND		180	1	08/28/09 14:54	E_R	5182006
2,4,6-Trichlorophenol	ND		180	1	08/28/09 14:54	E_R	5182006
2,4-Dichlorophenol	ND		180	1	08/28/09 14:54	E_R	5182006
2,4-Dimethylphenol	ND		180	1	08/28/09 14:54	E_R	5182006
2,4-Dinitrophenol	ND		180	1	08/28/09 14:54	E_R	5182006
2,4-Dinitrotoluene	ND		180	1	08/28/09 14:54	E_R	5182006
2,6-Dinitrotoluene	ND		180	1	08/28/09 14:54	E_R	5182006
2-Chloronaphthalene	ND		180	1	08/28/09 14:54	E_R	5182006
2-Chlorophenol	ND		180	1	08/28/09 14:54	E_R	5182006
2-Methylnaphthalene	ND		180	1	08/28/09 14:54	E_R	5182006
2-Nitroaniline	ND		180	1	08/28/09 14:54	E_R	5182006
2-Nitrophenol	ND		180	1	08/28/09 14:54	E_R	5182006
3,3'-Dichlorobenzidine	ND		180	1	08/28/09 14:54	E_R	5182006
3-Nitroaniline	ND		180	1	08/28/09 14:54	E_R	5182006
4,6-Dinitro-2-methylphenol	ND		180	1	08/28/09 14:54	E_R	5182006
4-Bromophenyl phenyl ether	ND		180	1	08/28/09 14:54	E_R	5182006
4-Chloro-3-methylphenol	ND		180	1	08/28/09 14:54	E_R	5182006
4-Chloroaniline	ND		180	1	08/28/09 14:54	E_R	5182006
4-Chlorophenyl phenyl ether	ND		180	1	08/28/09 14:54	E_R	5182006
4-Nitroaniline	ND		180	1	08/28/09 14:54	E_R	5182006
4-Nitrophenol	ND		180	1	08/28/09 14:54	E_R	5182006
Acenaphthene	ND		180	1	08/28/09 14:54	E_R	5182006
Acenaphthylene	ND		180	1	08/28/09 14:54	E_R	5182006
Aniline	ND		180	1	08/28/09 14:54	E_R	5182006
Anthracene	ND		180	1	08/28/09 14:54	E_R	5182006
Benz(a)anthracene	ND		180	1	08/28/09 14:54	E_R	5182006
Benzo(a)pyrene	ND		180	1	08/28/09 14:54	E_R	5182006
Benzo(b)fluoranthene	ND		180	1	08/28/09 14:54	E_R	5182006
Benzo(g,h,i)perylene	ND		180	1	08/28/09 14:54	E_R	5182006
Benzo(k)fluoranthene	ND		180	1	08/28/09 14:54	E_R	5182006
Benzoic acid	ND		710	1	08/28/09 14:54	E_R	5182006
Benzyl alcohol	ND		180	1	08/28/09 14:54	E_R	5182006
Bis(2-chloroethoxy)methane	ND		180	1	08/28/09 14:54	E_R	5182006
Bis(2-chloroethyl)ether	ND		180	1	08/28/09 14:54	E_R	5182006

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID SS-1 **Collected:** 08/18/2009 8:45 **SPL Sample ID:** 09081304-01

Site: Tigard, OR

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		180	1	08/28/09 14:54	E_R	5182006
Bis(2-ethylhexyl)phthalate	ND		180	1	08/28/09 14:54	E_R	5182006
Butyl benzyl phthalate	ND		180	1	08/28/09 14:54	E_R	5182006
Carbazole	ND		180	1	08/28/09 14:54	E_R	5182006
Chrysene	ND		180	1	08/28/09 14:54	E_R	5182006
Dibenz(a,h)anthracene	ND		180	1	08/28/09 14:54	E_R	5182006
Dibenzofuran	ND		180	1	08/28/09 14:54	E_R	5182006
Diethyl phthalate	ND		180	1	08/28/09 14:54	E_R	5182006
Dimethyl phthalate	ND		180	1	08/28/09 14:54	E_R	5182006
Di-n-butyl phthalate	ND		180	1	08/28/09 14:54	E_R	5182006
Di-n-octyl phthalate	ND		180	1	08/28/09 14:54	E_R	5182006
Fluoranthene	ND		180	1	08/28/09 14:54	E_R	5182006
Fluorene	ND		180	1	08/28/09 14:54	E_R	5182006
Hexachlorobenzene	ND		180	1	08/28/09 14:54	E_R	5182006
Hexachlorobutadiene	ND		180	1	08/28/09 14:54	E_R	5182006
Hexachlorocyclopentadiene	ND		180	1	08/28/09 14:54	E_R	5182006
Hexachloroethane	ND		180	1	08/28/09 14:54	E_R	5182006
Indeno(1,2,3-cd)pyrene	ND		180	1	08/28/09 14:54	E_R	5182006
Isophorone	ND		180	1	08/28/09 14:54	E_R	5182006
Naphthalene	ND		180	1	08/28/09 14:54	E_R	5182006
Nitrobenzene	ND		180	1	08/28/09 14:54	E_R	5182006
N-Nitrosodi-n-propylamine	ND		180	1	08/28/09 14:54	E_R	5182006
N-Nitrosodiphenylamine	ND		350	1	08/28/09 14:54	E_R	5182006
Pentachlorophenol	ND		180	1	08/28/09 14:54	E_R	5182006
Phenanthrene	ND		180	1	08/28/09 14:54	E_R	5182006
Phenol	ND		180	1	08/28/09 14:54	E_R	5182006
Pyrene	ND		180	1	08/28/09 14:54	E_R	5182006
Pyridine	ND		180	1	08/28/09 14:54	E_R	5182006
2-Methylphenol	ND		180	1	08/28/09 14:54	E_R	5182006
3 & 4-Methylphenol	ND		350	1	08/28/09 14:54	E_R	5182006
Surr: 2,4,6-Tribromophenol	26.4		% 19-135	1	08/28/09 14:54	E_R	5182006
Surr: 2-Fluorobiphenyl	28.4		% 15-140	1	08/28/09 14:54	E_R	5182006
Surr: 2-Fluorophenol	28.1		% 15-122	1	08/28/09 14:54	E_R	5182006
Surr: Nitrobenzene-d5	27.2		% 10-134	1	08/28/09 14:54	E_R	5182006
Surr: Phenol-d5	26.7		% 10-123	1	08/28/09 14:54	E_R	5182006
Surr: Terphenyl-d14	27.6		% 18-166	1	08/28/09 14:54	E_R	5182006

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550C	08/27/2009 13:43	QMT	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID SS-2 **Collected:** 08/18/2009 9:00 **SPL Sample ID:** 09081304-02

Site: Tigard, OR

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
PERCENT MOISTURE				**MCL**	**D2216**	**Units: wt%**	
Percent Moisture	26.6		0	1	08/27/09 12:40	EB1	5179399

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID SS-2 **Collected:** 08/18/2009 9:00 **SPL Sample ID:** 09081304-02

Site: Tigard, OR

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS BY METHOD 8270C			**MCL**	**SW8270C**	**Units: ug/kg-dry**		
1,2,4-Trichlorobenzene	ND		230	1	08/28/09 15:29	E_R	5182007
1,2-Dichlorobenzene	ND		230	1	08/28/09 15:29	E_R	5182007
1,2-Diphenylhydrazine	ND		230	1	08/28/09 15:29	E_R	5182007
1,3-Dichlorobenzene	ND		230	1	08/28/09 15:29	E_R	5182007
1,4-Dichlorobenzene	ND		230	1	08/28/09 15:29	E_R	5182007
2,4,5-Trichlorophenol	ND		230	1	08/28/09 15:29	E_R	5182007
2,4,6-Trichlorophenol	ND		230	1	08/28/09 15:29	E_R	5182007
2,4-Dichlorophenol	ND		230	1	08/28/09 15:29	E_R	5182007
2,4-Dimethylphenol	ND		230	1	08/28/09 15:29	E_R	5182007
2,4-Dinitrophenol	ND		230	1	08/28/09 15:29	E_R	5182007
2,4-Dinitrotoluene	ND		230	1	08/28/09 15:29	E_R	5182007
2,6-Dinitrotoluene	ND		230	1	08/28/09 15:29	E_R	5182007
2-Chloronaphthalene	ND		230	1	08/28/09 15:29	E_R	5182007
2-Chlorophenol	ND		230	1	08/28/09 15:29	E_R	5182007
2-Methylnaphthalene	ND		230	1	08/28/09 15:29	E_R	5182007
2-Nitroaniline	ND		230	1	08/28/09 15:29	E_R	5182007
2-Nitrophenol	ND		230	1	08/28/09 15:29	E_R	5182007
3,3'-Dichlorobenzidine	ND		230	1	08/28/09 15:29	E_R	5182007
3-Nitroaniline	ND		230	1	08/28/09 15:29	E_R	5182007
4,6-Dinitro-2-methylphenol	ND		230	1	08/28/09 15:29	E_R	5182007
4-Bromophenyl phenyl ether	ND		230	1	08/28/09 15:29	E_R	5182007
4-Chloro-3-methylphenol	ND		230	1	08/28/09 15:29	E_R	5182007
4-Chloroaniline	ND		230	1	08/28/09 15:29	E_R	5182007
4-Chlorophenyl phenyl ether	ND		230	1	08/28/09 15:29	E_R	5182007
4-Nitroaniline	ND		230	1	08/28/09 15:29	E_R	5182007
4-Nitrophenol	ND		230	1	08/28/09 15:29	E_R	5182007
Acenaphthene	ND		230	1	08/28/09 15:29	E_R	5182007
Acenaphthylene	ND		230	1	08/28/09 15:29	E_R	5182007
Aniline	ND		230	1	08/28/09 15:29	E_R	5182007
Anthracene	ND		230	1	08/28/09 15:29	E_R	5182007
Benz(a)anthracene	ND		230	1	08/28/09 15:29	E_R	5182007
Benzo(a)pyrene	ND		230	1	08/28/09 15:29	E_R	5182007
Benzo(b)fluoranthene	ND		230	1	08/28/09 15:29	E_R	5182007
Benzo(g,h,i)perylene	ND		230	1	08/28/09 15:29	E_R	5182007
Benzo(k)fluoranthene	ND		230	1	08/28/09 15:29	E_R	5182007
Benzoic acid	ND		910	1	08/28/09 15:29	E_R	5182007
Benzyl alcohol	ND		230	1	08/28/09 15:29	E_R	5182007
Bis(2-chloroethoxy)methane	ND		230	1	08/28/09 15:29	E_R	5182007
Bis(2-chloroethyl)ether	ND		230	1	08/28/09 15:29	E_R	5182007

Qualifiers:

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J - Estimated Value between MDL and PQL
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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID SS-2 **Collected:** 08/18/2009 9:00 **SPL Sample ID:** 09081304-02

Site: Tigard, OR

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		230	1	08/28/09 15:29	E_R	5182007
Bis(2-ethylhexyl)phthalate	ND		230	1	08/28/09 15:29	E_R	5182007
Butyl benzyl phthalate	ND		230	1	08/28/09 15:29	E_R	5182007
Carbazole	ND		230	1	08/28/09 15:29	E_R	5182007
Chrysene	ND		230	1	08/28/09 15:29	E_R	5182007
Dibenz(a,h)anthracene	ND		230	1	08/28/09 15:29	E_R	5182007
Dibenzofuran	ND		230	1	08/28/09 15:29	E_R	5182007
Diethyl phthalate	ND		230	1	08/28/09 15:29	E_R	5182007
Dimethyl phthalate	ND		230	1	08/28/09 15:29	E_R	5182007
Di-n-butyl phthalate	ND		230	1	08/28/09 15:29	E_R	5182007
Di-n-octyl phthalate	ND		230	1	08/28/09 15:29	E_R	5182007
Fluoranthene	ND		230	1	08/28/09 15:29	E_R	5182007
Fluorene	ND		230	1	08/28/09 15:29	E_R	5182007
Hexachlorobenzene	ND		230	1	08/28/09 15:29	E_R	5182007
Hexachlorobutadiene	ND		230	1	08/28/09 15:29	E_R	5182007
Hexachlorocyclopentadiene	ND		230	1	08/28/09 15:29	E_R	5182007
Hexachloroethane	ND		230	1	08/28/09 15:29	E_R	5182007
Indeno(1,2,3-cd)pyrene	ND		230	1	08/28/09 15:29	E_R	5182007
Isophorone	ND		230	1	08/28/09 15:29	E_R	5182007
Naphthalene	ND		230	1	08/28/09 15:29	E_R	5182007
Nitrobenzene	ND		230	1	08/28/09 15:29	E_R	5182007
N-Nitrosodi-n-propylamine	ND		230	1	08/28/09 15:29	E_R	5182007
N-Nitrosodiphenylamine	ND		450	1	08/28/09 15:29	E_R	5182007
Pentachlorophenol	ND		230	1	08/28/09 15:29	E_R	5182007
Phenanthrene	ND		230	1	08/28/09 15:29	E_R	5182007
Phenol	ND		230	1	08/28/09 15:29	E_R	5182007
Pyrene	ND		230	1	08/28/09 15:29	E_R	5182007
Pyridine	ND		230	1	08/28/09 15:29	E_R	5182007
2-Methylphenol	ND		230	1	08/28/09 15:29	E_R	5182007
3 & 4-Methylphenol	ND		450	1	08/28/09 15:29	E_R	5182007
Surr: 2,4,6-Tribromophenol	75.6	%	19-135	1	08/28/09 15:29	E_R	5182007
Surr: 2-Fluorobiphenyl	74.7	%	15-140	1	08/28/09 15:29	E_R	5182007
Surr: 2-Fluorophenol	71.6	%	15-122	1	08/28/09 15:29	E_R	5182007
Surr: Nitrobenzene-d5	68.2	%	10-134	1	08/28/09 15:29	E_R	5182007
Surr: Phenol-d5	72.8	%	10-123	1	08/28/09 15:29	E_R	5182007
Surr: Terphenyl-d14	76.5	%	18-166	1	08/28/09 15:29	E_R	5182007

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550C	08/27/2009 13:43	QMT	1.00

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Quality Control Documentation

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A908221

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 09081304
Lab Batch ID: 93321

Method Blank

RunID: R_090828B-5180902 Units: ug/kg
Analysis Date: 08/28/2009 11:22 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09081304-01A	SS-1
09081304-02A	SS-2

Analyte	Result	Rep Limit
1,2,4-Trichlorobenzene	ND	170
1,2-Dichlorobenzene	ND	170
1,2-Diphenylhydrazine	ND	170
1,3-Dichlorobenzene	ND	170
1,4-Dichlorobenzene	ND	170
2,4,5-Trichlorophenol	ND	170
2,4,6-Trichlorophenol	ND	170
2,4-Dichlorophenol	ND	170
2,4-Dimethylphenol	ND	170
2,4-Dinitrophenol	ND	170
2,4-Dinitrotoluene	ND	170
2,6-Dinitrotoluene	ND	170
2-Chloronaphthalene	ND	170
2-Chlorophenol	ND	170
2-Methylnaphthalene	ND	170
2-Nitroaniline	ND	170
2-Nitrophenol	ND	170
3,3'-Dichlorobenzidine	ND	170
3-Nitroaniline	ND	170
4,6-Dinitro-2-methylphenol	ND	170
4-Bromophenyl phenyl ether	ND	170
4-Chloro-3-methylphenol	ND	170
4-Chloroaniline	ND	170
4-Chlorophenyl phenyl ether	ND	170
4-Nitroaniline	ND	170
4-Nitrophenol	ND	170
Acenaphthene	ND	170
Acenaphthylene	ND	170
Aniline	ND	170
Anthracene	ND	170
Benz(a)anthracene	ND	170
Benzo(a)pyrene	ND	170
Benzo(b)fluoranthene	ND	170
Benzo(g,h,i)perylene	ND	170
Benzo(k)fluoranthene	ND	170
Benzoic acid	ND	670
Benzyl alcohol	ND	170
Bis(2-chloroethoxy)methane	ND	170
Bis(2-chloroethyl)ether	ND	170
Bis(2-chloroisopropyl)ether	ND	170
Bis(2-ethylhexyl)phthalate	ND	170
Butyl benzyl phthalate	ND	170
Carbazole	ND	170
Chrysene	ND	170
Dibenz(a,h)anthracene	ND	170
Dibenzofuran	ND	170

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A908221

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 09081304
Lab Batch ID: 93321

Method Blank

RunID: R_090828B-5180902 Units: ug/kg
Analysis Date: 08/28/2009 11:22 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Analyte	Result	Rep Limit
Diethyl phthalate	ND	170
Dimethyl phthalate	ND	170
Di-n-butyl phthalate	ND	170
Di-n-octyl phthalate	ND	170
Fluoranthene	ND	170
Fluorene	ND	170
Hexachlorobenzene	ND	170
Hexachlorobutadiene	ND	170
Hexachlorocyclopentadiene	ND	170
Hexachloroethane	ND	170
Indeno(1,2,3-cd)pyrene	ND	170
Isophorone	ND	170
Naphthalene	ND	170
Nitrobenzene	ND	170
N-Nitrosodi-n-propylamine	ND	170
N-Nitrosodiphenylamine	ND	330
Pentachlorophenol	ND	170
Phenanthrene	ND	170
Phenol	ND	170
Pyrene	ND	170
Pyridine	ND	170
2-Methylphenol	ND	170
3 & 4-Methylphenol	ND	330
Surr: 2,4,6-Tribromophenol	75.6	19-135
Surr: 2-Fluorobiphenyl	81.8	15-140
Surr: 2-Fluorophenol	84.4	15-122
Surr: Nitrobenzene-d5	75.3	10-134
Surr: Phenol-d5	84.4	10-123
Surr: Terphenyl-d14	84.7	18-166

Laboratory Control Sample (LCS)

RunID: R_090828B-5181574 Units: ug/kg
Analysis Date: 08/28/2009 11:57 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,2,4-Trichlorobenzene	850	510	60.0	34	116
1,2-Dichlorobenzene	850	545	64.1	32	129
1,2-Diphenylhydrazine	850	561	66.0	10	256

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A908221

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 09081304
Lab Batch ID: 93321

Laboratory Control Sample (LCS)

RunID: R_090828B-5181574 Units: ug/kg
Analysis Date: 08/28/2009 11:57 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,3-Dichlorobenzene	850	517	60.8	10	172
1,4-Dichlorobenzene	850	522	61.4	20	124
2,4,5-Trichlorophenol	850	533	62.7	40	150
2,4,6-Trichlorophenol	850	524	61.6	37	144
2,4-Dichlorophenol	850	519	61.1	39	135
2,4-Dimethylphenol	850	538	63.3	32	119
2,4-Dinitrophenol	850	502	59.1	10	191
2,4-Dinitrotoluene	850	601	70.7	30	150
2,6-Dinitrotoluene	850	554	65.2	30	150
2-Chloronaphthalene	850	519	61.1	20	175
2-Chlorophenol	850	590	69.4	23	134
2-Methylnaphthalene	850	541	63.6	30	135
2-Nitroaniline	850	541	63.6	20	175
2-Nitrophenol	850	504	59.3	29	182
3,3´-Dichlorobenzidine	850	565	66.5	10	261
3-Nitroaniline	850	556	65.4	20	175
4,6-Dinitro-2-methylphenol	850	504	59.3	10	181
4-Bromophenyl phenyl ether	850	535	62.9	20	175
4-Chloro-3-methylphenol	850	555	65.3	22	147
4-Chloroaniline	850	545	64.1	20	175
4-Chlorophenyl phenyl ether	850	536	63.1	25	158
4-Nitroaniline	850	620	72.9	20	175
4-Nitrophenol	850	532	62.6	10	132
Acenaphthene	850	514	60.5	30	160
Acenaphthylene	850	535	62.9	10	150
Aniline	1700	993	58.4	10	160
Anthracene	850	555	65.3	27	133
Benz(a)anthracene	850	597	70.2	33	143
Benzo(a)pyrene	850	553	65.1	17	163
Benzo(b)fluoranthene	850	585	68.8	24	159
Benzo(g,h,i)perylene	850	621	73.1	10	219
Benzo(k)fluoranthene	850	615	72.4	11	162
Benzoic acid	850	592	69.6	10	450
Benzyl alcohol	850	553	65.1	30	160

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A908221

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 09081304
Lab Batch ID: 93321

Laboratory Control Sample (LCS)

RunID: R_090828B-5181574 Units: ug/kg
Analysis Date: 08/28/2009 11:57 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Bis(2-chloroethoxy)methane	850	501	58.9	33	184
Bis(2-chloroethyl)ether	850	579	68.1	28	158
Bis(2-chloroisopropyl)ether	850	552	64.9	36	166
Bis(2-ethylhexyl)phthalate	850	657	77.3	10	158
Butyl benzyl phthalate	850	619	72.8	10	152
Carbazole	850	598	70.4	45	135
Chrysene	850	584	68.7	17	168
Dibenz(a,h)anthracene	850	592	69.6	10	227
Dibenzofuran	850	535	62.9	30	160
Diethyl phthalate	850	590	69.4	10	160
Dimethyl phthalate	850	562	66.1	10	112
Di-n-butyl phthalate	850	632	74.4	10	118
Di-n-octyl phthalate	850	620	72.9	10	146
Fluoranthene	850	607	71.4	26	137
Fluorene	850	540	63.5	35	135
Hexachlorobenzene	850	549	64.6	10	152
Hexachlorobutadiene	850	495	58.2	20	140
Hexachlorocyclopentadiene	850	164	19.3	10	152
Hexachloroethane	850	516	60.7	25	118
Indeno(1,2,3-cd)pyrene	850	627	73.8	10	171
Isophorone	850	598	70.4	21	196
Naphthalene	850	529	62.2	21	133
Nitrobenzene	850	505	59.4	35	180
N-Nitrosodi-n-propylamine	850	556	65.4	10	230
N-Nitrosodiphenylamine	1700	1350	79.4	30	160
Pentachlorophenol	850	424	49.9	14	176
Phenanthrene	850	572	67.3	35	135
Phenol	850	515	60.6	44	120
Pyrene	850	606	71.3	34	138
Pyridine	1700	918	54.0	10	150
2-Methylphenol	850	583	68.6	40	160
3 & 4-Methylphenol	850	617	72.6	40	160
Surr: 2,4,6-Tribromophenol	2500	1660	66.4	19	135
Surr: 2-Fluorobiphenyl	1700	1000	58.8	15	140

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8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A908221

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 09081304
Lab Batch ID: 93321

Laboratory Control Sample (LCS)

RunID: R_090828B-5181574 Units: ug/kg
Analysis Date: 08/28/2009 11:57 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Surr: 2-Fluorophenol	2500	1660	66.4	15	122
Surr: Nitrobenzene-d5	1700	1000	58.8	32	153
Surr: Phenol-d5	2500	1670	66.8	10	123
Surr: Terphenyl-d14	1700	1060	62.4	18	166

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 09081338-06
RunID: R_090828B-5181577 Units: ug/kg-dry
Analysis Date: 08/28/2009 13:43 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,2,4-Trichlorobenzene	ND	1290	841	65.3	1290	889	69.1	5.60	28	34	116
1,2-Dichlorobenzene	ND	1290	841	65.3	1290	895	69.5	6.28	60	32	129
1,2-Diphenylhydrazine	ND	1290	932	72.4	1290	983	76.4	5.38	60	10	256
1,3-Dichlorobenzene	ND	1290	797	61.9	1290	847	65.8	6.08	60	10	172
1,4-Dichlorobenzene	ND	1290	815	63.3	1290	841	65.3	3.11	28	20	124
2,4,5-Trichlorophenol	ND	1290	874	67.9	1290	879	68.2	0.519	60	40	150
2,4,6-Trichlorophenol	ND	1290	900	69.9	1290	929	72.1	3.15	60	37	144
2,4-Dichlorophenol	ND	1290	877	68.1	1290	886	68.8	1.03	60	39	135
2,4-Dimethylphenol	ND	1290	871	67.6	1290	923	71.6	5.74	60	32	119
2,4-Dinitrophenol	ND	1290	379	29.4	1290	298	23.2	23.7	60	10	191
2,4-Dinitrotoluene	ND	1290	903	70.1	1290	868	67.4	3.93	50	30	150
2,6-Dinitrotoluene	ND	1290	909	70.6	1290	926	71.9	1.82	60	30	150
2-Chloronaphthalene	ND	1290	929	72.1	1290	955	74.1	2.74	60	20	175
2-Chlorophenol	ND	1290	923	71.6	1290	982	76.2	6.21	40	23	134
2-Methylnaphthalene	ND	1290	885	68.7	1290	918	71.3	3.70	60	30	135
2-Nitroaniline	ND	1290	964	74.8	1290	929	72.1	3.68	60	20	175
2-Nitrophenol	ND	1290	847	65.8	1290	891	69.2	5.06	60	29	182
3,3'-Dichlorobenzidine	ND	1290	877	68.1	1290	877	68.1	0	60	10	261

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A908221

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 09081304
Lab Batch ID: 93321

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 09081338-06
RunID: R_090828B-5181577 Units: ug/kg-dry
Analysis Date: 08/28/2009 13:43 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
3-Nitroaniline	ND	1290	717	55.6	1290	783	60.8	8.89	60	20	175
4,6-Dinitro-2-methylphenol	ND	1290	382	29.6	1290	235	18.2	47.7	60	10	181
4-Bromophenyl phenyl ether	ND	1290	839	65.2	1290	903	70.1	7.30	60	20	175
4-Chloro-3-methylphenol	ND	1290	944	73.3	1290	955	74.1	1.12	42	22	147
4-Chloroaniline	ND	1290	832	64.6	1290	859	66.7	3.23	60	20	175
4-Chlorophenyl phenyl ether	ND	1290	882	68.5	1290	918	71.3	4.04	60	25	158
4-Nitroaniline	ND	1290	894	69.4	1290	992	77.1	10.4	60	20	175
4-Nitrophenol	ND	1290	814	63.2	1290	820	63.6	0.742	50	10	132
Acenaphthene	ND	1290	909	70.6	1290	892	69.3	1.85	31	30	160
Acenaphthylene	ND	1290	948	73.6	1290	958	74.4	0.954	50	10	150
Aniline	ND	2580	1520	58.8	2580	1550	60.0	1.98	60	10	160
Anthracene	ND	1290	876	68.0	1290	942	73.2	7.33	50	27	133
Benz(a)anthracene	ND	1290	898	69.8	1290	945	73.4	5.09	50	33	143
Benzo(a)pyrene	ND	1290	792	61.5	1290	791	61.4	0.191	60	17	163
Benzo(b)fluoranthene	ND	1290	823	63.9	1290	883	68.6	7.10	60	24	159
Benzo(g,h,i)perylene	ND	1290	824	64.0	1290	820	63.6	0.553	60	10	219
Benzo(k)fluoranthene	ND	1290	856	66.5	1290	852	66.1	0.532	60	11	162
Benzoic acid	ND	1290	836	64.9	1290	835	64.8	0.181	60	10	450
Benzyl alcohol	ND	1290	927	72.0	1290	994	77.2	6.94	60	30	160
Bis(2-chloroethoxy)methane	ND	1290	845	65.6	1290	838	65.1	0.900	60	33	184
Bis(2-chloroethyl)ether	ND	1290	876	68.0	1290	959	74.5	9.08	60	28	158
Bis(2-chloroisopropyl)ether	ND	1290	853	66.2	1290	882	68.5	3.32	60	36	166
Bis(2-ethylhexyl)phthalate	ND	1290	1070	82.7	1290	1140	88.7	7.00	60	10	158
Butyl benzyl phthalate	ND	1290	985	76.5	1290	1040	81.1	5.83	60	10	152
Carbazole	ND	1290	882	68.5	1290	933	72.5	5.68	60	45	135
Chrysene	ND	1290	897	69.6	1290	952	73.9	5.90	60	17	168
Dibenz(a,h)anthracene	ND	1290	839	65.2	1290	841	65.3	0.180	60	10	227
Dibenzofuran	ND	1290	924	71.8	1290	927	72.0	0.327	60	45	135
Diethyl phthalate	ND	1290	924	71.8	1290	930	72.2	0.654	60	10	160
Dimethyl phthalate	ND	1290	902	70.0	1290	920	71.4	2.00	60	10	112
Di-n-butyl phthalate	ND	1290	935	72.6	1290	979	76.0	4.59	60	40	132
Di-n-octyl phthalate	ND	1290	1010	78.4	1290	1090	84.6	7.65	60	10	146

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A908221

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 09081304
Lab Batch ID: 93321

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 09081338-06
RunID: R_090828B-5181577 Units: ug/kg-dry
Analysis Date: 08/28/2009 13:43 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Fluoranthene	ND	1290	868	67.4	1290	906	70.4	4.27	60	26	137
Fluorene	ND	1290	897	69.6	1290	917	71.2	2.17	60	45	135
Hexachlorobenzene	ND	1290	838	65.1	1290	876	68.0	4.42	60	10	152
Hexachlorobutadiene	ND	1290	812	63.1	1290	885	68.7	8.57	60	20	140
Hexachlorocyclopentadiene	ND	1290	339	26.4	1290	286	22.2	16.9	60	10	152
Hexachloroethane	ND	1290	761	59.1	1290	791	61.4	3.91	60	25	118
Indeno(1,2,3-cd)pyrene	ND	1290	880	68.4	1290	923	71.6	4.71	60	10	171
Isophorone	ND	1290	992	77.1	1290	1000	78.0	1.21	60	21	196
Naphthalene	ND	1290	870	67.5	1290	892	69.3	2.58	60	21	133
Nitrobenzene	ND	1290	848	65.9	1290	842	65.4	0.717	60	35	180
N-Nitrosodi-n-propylamine	ND	1290	880	68.4	1290	914	70.9	3.72	38	10	230
N-Nitrosodiphenylamine	ND	2580	2170	84.1	2580	2300	89.4	6.10	60	30	160
Pentachlorophenol	ND	1290	841	65.3	1290	897	69.6	6.45	50	14	176
Phenanthrene	ND	1290	879	68.2	1290	924	71.8	5.04	60	45	135
Phenol	332	1290	1310	76.0	1290	1480	88.8	11.9	42	44	120
Pyrene	ND	1290	994	77.2	1290	1040	80.9	4.76	31	26	127
Pyridine	ND	2580	1410	54.9	2580	1470	56.9	3.58	60	10	150
2-Methylphenol	ND	1290	938	72.8	1290	965	74.9	2.87	60	40	160
3 & 4-Methylphenol	ND	1290	1070	83.1	1290	1150	89.1	6.97	60	40	160
Surr: 2,4,6-Tribromophenol	ND	3790	2520	66.4	3790	2610	68.8	3.55	30	19	135
Surr: 2-Fluorobiphenyl	ND	2580	1860	72.4	2580	1860	72.4	0	30	15	140
Surr: 2-Fluorophenol	ND	3790	2670	70.4	3790	2830	74.8	6.06	30	15	122
Surr: Nitrobenzene-d5	ND	2580	1700	65.9	2580	1760	68.2	3.51	30	10	134
Surr: Phenol-d5	ND	3790	2640	69.6	3790	2860	75.6	8.26	30	10	123
Surr: Terphenyl-d14	ND	2580	1730	67.1	2580	1820	70.6	5.13	30	18	166

Qualifiers:
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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A908221

Analysis:	**PERCENT MOISTURE**	**WorkOrder:**	**09081304**
Method:	**D2216**	**Lab Batch ID:**	**R282195C**

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09081304-01A	SS-1
09081304-02A	SS-2

Sample Duplicate

Original Sample:	09081304-01		
RunID:	WET_090827C-5179401	Units:	wt%
Analysis Date:	08/27/2009 12:40	Analyst:	EB1

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Percent Moisture	5.87	5.866	0.140	20

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

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Sample Receipt Checklist

And

Chain of Custody

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	09081304	Received By:	T_B
Date and Time Received:	8/26/2009 9:00:00 AM	Carrier name:	Fedex-Standard Overnight
Temperature:	1.5°C	Chilled by:	Water Ice

1.	Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2.	Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3.	Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4.	Chain of custody present?	Yes ☑	No ☐	
5.	Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
6.	Chain of custody agrees with sample labels?	Yes ☑	No ☐	
7.	Samples in proper container/bottle?	Yes ☑	No ☐	
8.	Sample containers intact?	Yes ☑	No ☐	
9.	Sufficient sample volume for indicated test?	Yes ☑	No ☐	
10.	All samples received within holding time?	Yes ☑	No ☐	
11.	Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
12.	Water - VOA vials have zero headspace?	Yes ☐	No ☐	VOA Vials Not Present ☑
13.	Water - Preservation checked upon receipt (except VOA*)?	Yes ☐	No ☐	Not Applicable ☑

*VOA Preservation Checked After Sample Analysis

SPL Representative: _____ Contact Date & Time: _____

Client Name Contacted: _____

Non Conformance Issues: _____

Client Instructions: _____

09081304

SUBCONTRACT ORDER

Apex Laboratories

A908221

SENDING LABORATORY:

Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0333
Project Manager: Philip Nerenberg

RECEIVING LABORATORY:

SPL, Inc Houston
8880 Interchange Dr.
Houston, TX 77054
Phone :(800) 969-6775
Fax: (713) 660-8975

Sample Name: SS-1 Soil **Sampled: 08/18/09 08:45** (A908221-01)

Analysis	Due	Expires	Comments
8270C Semivolatiles (BNA)	08/31/09 17:00	09/01/09 08:45	
Containers Supplied:			
(B)4 oz Glass Jar			

Sample Name: SS-2 Soil **Sampled: 08/18/09 09:00** (A908221-02)

Analysis	Due	Expires	Comments
8270C Semivolatiles (BNA)	08/31/09 17:00	09/01/09 09:00	
Containers Supplied:			
(B)4 oz Glass Jar			

Released By	Date	Received By	Date
[signature]	8/25/09	[signature]	8/26/09 9:

AF

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Thursday, November 12, 2009

Colby Hunt
GeoDesign, Inc.
15575 SW Sequoia Pkwy, Ste 100
Portland, OR 97224

RE: NE 94th Ave Property / GillilandJ-1-02

Enclosed are the results of analyses for work order A910341, which was received by the laboratory on 10/30/2009 at 12:45:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 15:10

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CS-21(0-0.5)	A910341-01	Soil	10/29/09 16:30	10/30/09 12:45
Decan Water	A910341-02	Water	10/29/09 16:45	10/30/09 12:45

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 15:10

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-21(0-0.5) (A910341-01RE1)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	423	ug/kg dry	50	11/09/09 19:25	EPA 8082A	
Aroclor 1221	ND	---	423	"	"	"	"	
Aroclor 1232	ND	---	423	"	"	"	"	
Aroclor 1242	ND	---	423	"	"	"	"	
Aroclor 1248	**3000**	---	423	"	"	"	"	
Aroclor 1254	ND	---	423	"	"	"	"	
Aroclor 1260	ND	---	423	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 94 %*	*Limits: 50-125 %*	"	"	"	*S-05*
Decachlorobiphenyl (Surr)			*102 %*	*Limits: 55-130 %*	"	"	"	*S-05*
Decan Water (A910341-02)			**Matrix: Water**					**C-03, C-04**
Aroclor 1016	ND	---	0.118	ug/L	1	11/07/09 10:45	EPA 8082A	
Aroclor 1221	ND	---	0.118	"	"	"	"	
Aroclor 1232	ND	---	0.118	"	"	"	"	
Aroclor 1242	ND	---	0.118	"	"	"	"	
Aroclor 1248	**2.30**	---	0.118	"	"	"	"	
Aroclor 1254	ND	---	0.118	"	"	"	"	
Aroclor 1260	ND	---	0.118	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 45 %*	*Limits: 50-125 %*	"	"	"	*S-04*
Decachlorobiphenyl (Surr)			*11 %*	*Limits: 55-130 %*	"	"	"	*S-04*

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 15:10

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight by D2216

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-21(0-0.5) (A910341-01)			**Matrix: Soil**					
% Solids	**81.4**	—	1.00	% by Weight	1	11/04/09 08:34	D2216	

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Labs

12232 S.W. Garden Place
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503-718-2323 Phone
503-718-0333 Fax

GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 15:10

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9110015 - EPA 3510C (Neutral pH)							**Water**					
Blank (9110015-BLK1)					Prepared: 11/02/09 12:13		Analyzed: 11/07/09 10:01					**C-03, C-04**
EPA 8082A												
Aroclor 1016	ND	---	0.100	ug/L	1	---	---	---	---	---	---	
Aroclor 1221	ND	---	0.100	"	"	---	---	---	---	---	---	
Aroclor 1232	ND	---	0.100	"	"	---	---	---	---	---	---	
Aroclor 1242	ND	---	0.100	"	"	---	---	---	---	---	---	
Aroclor 1248	ND	---	0.100	"	"	---	---	---	---	---	---	
Aroclor 1254	ND	---	0.100	"	"	---	---	---	---	---	---	
Aroclor 1260	ND	---	0.100	"	"	---	---	---	---	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 104 %*	*Limits: 50-125 %*			*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*100 %*	*55-130 %*			*"*					
LCS (9110015-BS1)					Prepared: 11/02/09 12:13		Analyzed: 11/07/09 10:15					**C-03, C-04**
EPA 8082A												
Aroclor 1016	2.24	---	0.100	ug/L	1	2.50	---	90	40-140%	---	---	
Aroclor 1260	2.39	---	0.100	"	"	"	---	96	60-130%	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 98 %*	*Limits: 50-125 %*			*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*103 %*	*55-130 %*			*"*					
LCS Dup (9110015-BSD1)					Prepared: 11/02/09 12:13		Analyzed: 11/07/09 10:30					**C-03, C-04**
EPA 8082A												
Aroclor 1016	2.42	---	0.100	ug/L	1	2.50	---	97	40-140%	8	30%	
Aroclor 1260	2.46	---	0.100	"	"	"	---	99	60-130%	3	30%	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 109 %*	*Limits: 50-125 %*			*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*103 %*	*55-130 %*			*"*					
Batch 9110081 - EPA 3546							**Soil**					
Blank (9110081-BLK1)					Prepared: 11/06/09 11:13		Analyzed: 11/07/09 10:59					**C-03, C-04**
EPA 8082A												
Aroclor 1016	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1232	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1242	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1248	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1254	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1260	ND	---	10.0	"	"	---	---	---	---	---	---	

Apex Laboratories

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Philip Nerenberg, Lab Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 15:10

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9110081 - EPA 3546							**Soil**					
Blank (9110081-BLK1)					Prepared: 11/06/09 11:13		Analyzed: 11/07/09 10:59					**C-03, C-04**
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 80 %*		*Limits: 50-125 %*		*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*77 %*		*55-130 %*		*"*					
LCS (9110081-BS1)					Prepared: 11/06/09 11:13		Analyzed: 11/07/09 11:14					**C-03, C-04**
EPA 8082A												
Aroclor 1016	237	---	10.0	ug/kg wet	1	250	---	95	40-140%	---	---	
Aroclor 1260	236	---	10.0	"	"	"	---	94	60-130%	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 91 %*		*Limits: 50-125 %*		*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*81 %*		*55-130 %*		*"*					

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 15:10

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight by D2216

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9110032 - Dry Weight							**Soil**					

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 15:10

SAMPLE PREPARATION INFORMATION

Polychlorinated Biphenyls by EPA 8082A

Prep: EPA 3510C (Neutral pH)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9110015							
A910341-02	Water	EPA 8082A	10/29/09 16:45	11/02/09 12:13	850mL/5mL	1000mL/5mL	1.18

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9110081							
A910341-01RE1	Soil	EPA 8082A	10/29/09 16:30	11/06/09 11:13	14.52g/5mL	10g/5mL	0.69

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 15:10

Notes and Definitions

Qualifiers:

C-03	Extract has undergone Sulfuric Acid Cleanup in order to minimize matrix interferance.
C-04	Extract has undergone a Sulfur Cleanup using EPA 3660B.
S-04	Surrogate recovery is outside of established control limits due to a sample matrix effect.
S-05	Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy	Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses. For accurate comparison of volatile results to the level found in the blank, water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor. Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

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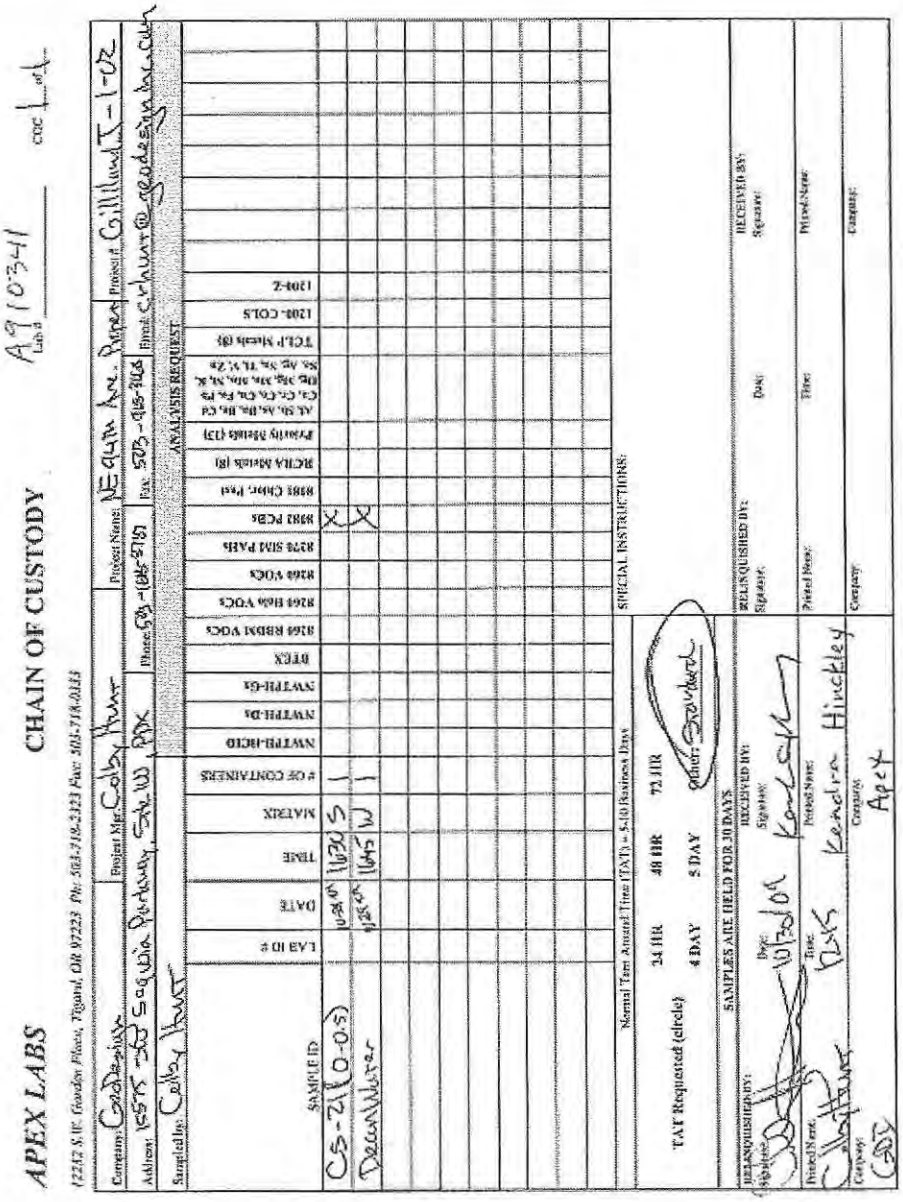
GeoDesign, Inc. 15575 SW Sequoia Pkwy, Ste 100 Portland, OR 97224	Project: **NE 94th Ave Property** Project Number: GillilandJ-1-02 Project Manager: Colby Hunt	**Reported:** 11/12/09 15:10



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Thursday, November 12, 2009

Colby Hunt
GeoDesign, Inc.
15575 SW Sequoia Pkwy, Ste 100
Portland, OR 97224

RE: NE 94th Ave Property / GillilandJ-1-02

Enclosed are the results of analyses for work order A910329, which was received by the laboratory on 10/29/2009 at 11:28:00AM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CS-1 (0-0.5)	A910329-01	Soil	10/28/09 10:45	10/29/09 11:28
CS-2 (0-0.5)	A910329-02	Soil	10/28/09 11:05	10/29/09 11:28
CS-3 (0-0.5)	A910329-03	Soil	10/28/09 11:40	10/29/09 11:28
CS-4 (0-0.5)	A910329-04	Soil	10/28/09 12:00	10/29/09 11:28
CS-5 (0-0.5)	A910329-05	Soil	10/28/09 12:30	10/29/09 11:28
CS-6 (0-0.5)	A910329-06	Soil	10/28/09 13:30	10/29/09 11:28
CS-7 (0-0.5)	A910329-07	Soil	10/28/09 14:00	10/29/09 11:28
CS-8 (0-0.5)	A910329-08	Soil	10/28/09 14:25	10/29/09 11:28
CS-9 (0-0.5)	A910329-09	Soil	10/28/09 15:00	10/29/09 11:28
CS-12 (0-0.5)	A910329-10	Soil	10/28/09 16:10	10/29/09 11:28
CS-13 (0-0.5)	A910329-11	Soil	10/28/09 15:40	10/29/09 11:28
CS-14 (0-0.5)	A910329-12	Soil	10/28/09 15:30	10/29/09 11:28
CS-15 (0-0.5)	A910329-13	Soil	10/28/09 14:50	10/29/09 11:28
CS-16 (0-0.5)	A910329-14	Soil	10/28/09 14:07	10/29/09 11:28
CS-17 (0-0.5)	A910329-15	Soil	10/28/09 13:33	10/29/09 11:28
CS-18 (0-0.5)	A910329-16	Soil	10/28/09 12:21	10/29/09 11:28
CS-19 (0-0.5)	A910329-17	Soil	10/28/09 11:45	10/29/09 11:28
CS-20 (0-0.5)	A910329-18	Soil	10/28/09 11:12	10/29/09 11:28

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-1 (0-0.5) (A910329-01RE1)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	94.8	ug/kg dry	10	11/06/09 21:53	EPA 8082A	
Aroclor 1221	ND	---	94.8	"	"	"	"	
Aroclor 1232	ND	---	94.8	"	"	"	"	
Aroclor 1242	ND	---	94.8	"	"	"	"	
Aroclor 1248	**1870**	---	94.8	"	"	"	"	
Aroclor 1254	**396**	---	94.8	"	"	"	"	
Aroclor 1260	ND	---	94.8	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 112 %*	*Limits: 50-125 %*	"	"	"	*Q-23*
Decachlorobiphenyl (Surr)			*132 %*	*Limits: 55-130 %*	"	"	"	*Q-23*
CS-2 (0-0.5) (A910329-02RE1)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	462	ug/kg dry	50	11/06/09 22:07	EPA 8082A	
Aroclor 1221	ND	---	462	"	"	"	"	
Aroclor 1232	ND	---	462	"	"	"	"	
Aroclor 1242	ND	---	462	"	"	"	"	
Aroclor 1248	**10200**	---	462	"	"	"	"	
Aroclor 1254	ND	---	462	"	"	"	"	
Aroclor 1260	ND	---	462	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 248 %*	*Limits: 50-125 %*	"	"	"	*S-05, Q-23*
Decachlorobiphenyl (Surr)			*368 %*	*Limits: 55-130 %*	"	"	"	*S-05, Q-23*
CS-3 (0-0.5) (A910329-03RE1)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1016	ND	---	933	ug/kg dry	100	11/06/09 22:22	EPA 8082A	
Aroclor 1221	ND	---	933	"	"	"	"	
Aroclor 1232	ND	---	933	"	"	"	"	
Aroclor 1242	ND	---	933	"	"	"	"	
Aroclor 1248	**17100**	---	933	"	"	"	"	
Aroclor 1254	ND	---	933	"	"	"	"	
Aroclor 1260	ND	---	933	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 102 %*	*Limits: 50-125 %*	"	"	"	*S-05, Q-23*
Decachlorobiphenyl (Surr)			*111 %*	*Limits: 55-130 %*	"	"	"	*S-05, Q-23*
CS-4 (0-0.5) (A910329-04RE1)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1016	ND	---	1940	ug/kg dry	200	11/06/09 22:36	EPA 8082A	
Aroclor 1221	ND	---	1940	"	"	"	"	
Aroclor 1232	ND	---	1940	"	"	"	"	
Aroclor 1242	ND	---	1940	"	"	"	"	

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-4 (0-0.5) (A910329-04RE1)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1248	**27600**	---	1940	ug/kg dry	200	"	EPA 8082A	
Aroclor 1254	ND	---	1940	"	"	"	"	
Aroclor 1260	ND	---	1940	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 835 %*	*Limits: 50-125 %*	"	"	"	*Q-23, S-05*
Decachlorobiphenyl (Surr)			*1260 %*	*Limits: 55-130 %*	"	"	"	*Q-23, S-05*
CS-5 (0-0.5) (A910329-05)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1016	ND	---	899	ug/kg dry	100	11/06/09 18:14	EPA 8082A	
Aroclor 1221	ND	---	899	"	"	"	"	
Aroclor 1232	ND	---	899	"	"	"	"	
Aroclor 1242	ND	---	899	"	"	"	"	
Aroclor 1248	**32400**	---	899	"	"	"	"	
Aroclor 1254	ND	---	899	"	"	"	"	
Aroclor 1260	ND	---	899	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 92 %*	*Limits: 50-125 %*	"	"	"	*Q-23, S-05*
Decachlorobiphenyl (Surr)			*95 %*	*Limits: 55-130 %*	"	"	"	*Q-23, S-05*
CS-6 (0-0.5) (A910329-06)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	934	ug/kg dry	100	11/06/09 18:29	EPA 8082A	
Aroclor 1221	ND	---	934	"	"	"	"	
Aroclor 1232	ND	---	934	"	"	"	"	
Aroclor 1242	ND	---	934	"	"	"	"	
Aroclor 1248	**20900**	---	934	"	"	"	"	
Aroclor 1254	ND	---	934	"	"	"	"	
Aroclor 1260	ND	---	934	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 88 %*	*Limits: 50-125 %*	"	"	"	*Q-23, S-05*
Decachlorobiphenyl (Surr)			*90 %*	*Limits: 55-130 %*	"	"	"	*Q-23, S-05*
CS-7 (0-0.5) (A910329-07)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1016	ND	---	942	ug/kg dry	100	11/06/09 18:43	EPA 8082A	
Aroclor 1221	ND	---	942	"	"	"	"	
Aroclor 1232	ND	---	942	"	"	"	"	
Aroclor 1242	ND	---	942	"	"	"	"	
Aroclor 1248	**13700**	---	942	"	"	"	"	
Aroclor 1254	ND	---	942	"	"	"	"	
Aroclor 1260	ND	---	942	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 49 %*	*Limits: 50-125 %*	"	"	"	*S-05, Q-23*

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-7 (0-0.5) (A910329-07)			**Matrix: Soil**					**C-04, C-03**
Surrogate: Decachlorobiphenyl (Surr)			*Recovery: 55 %*	*Limits: 55-130 %*	100	"	EPA 8082A	*Q-23, S-05*
CS-8 (0-0.5) (A910329-08)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	943	ug/kg dry	100	11/06/09 18:58	EPA 8082A	
Aroclor 1221	ND	---	943	"	"	"	"	
Aroclor 1232	ND	---	943	"	"	"	"	
Aroclor 1242	ND	---	943	"	"	"	"	
Aroclor 1248	**3940**	---	943	"	"	"	"	
Aroclor 1254	ND	---	943	"	"	"	"	
Aroclor 1260	ND	---	943	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 68 %*	*Limits: 50-125 %*	"	"	"	*Q-23, S-05*
Decachlorobiphenyl (Surr)			*80 %*	*Limits: 55-130 %*	"	"	"	*Q-23, S-05*
CS-9 (0-0.5) (A910329-09)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1016	ND	---	909	ug/kg dry	100	11/06/09 19:12	EPA 8082A	
Aroclor 1221	ND	---	909	"	"	"	"	
Aroclor 1232	ND	---	909	"	"	"	"	
Aroclor 1242	ND	---	909	"	"	"	"	
Aroclor 1248	**4010**	---	909	"	"	"	"	
Aroclor 1254	ND	---	909	"	"	"	"	
Aroclor 1260	ND	---	909	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 54 %*	*Limits: 50-125 %*	"	"	"	*Q-23, S-05*
Decachlorobiphenyl (Surr)			*61 %*	*Limits: 55-130 %*	"	"	"	*Q-23, S-05*
CS-12 (0-0.5) (A910329-10RE1)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1016	ND	---	92.3	ug/kg dry	10	11/07/09 09:11	EPA 8082A	
Aroclor 1221	ND	---	92.3	"	"	"	"	
Aroclor 1232	ND	---	92.3	"	"	"	"	
Aroclor 1242	ND	---	92.3	"	"	"	"	
Aroclor 1248	**820**	---	92.3	"	"	"	"	
Aroclor 1254	ND	---	92.3	"	"	"	"	
Aroclor 1260	ND	---	92.3	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 64 %*	*Limits: 50-125 %*	"	"	"	
Decachlorobiphenyl (Surr)			*52 %*	*Limits: 55-130 %*	"	"	"	*S-06*
CS-13 (0-0.5) (A910329-11)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1016	ND	---	859	ug/kg dry	100	11/06/09 19:42	EPA 8082A	
Aroclor 1221	ND	---	859	"	"	"	"	

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-13 (0-0.5) (A910329-11)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1232	ND	---	859	ug/kg dry	100	"	EPA 8082A	
Aroclor 1242	ND	---	859	"	"	"	"	
Aroclor 1248	**3140**	---	859	"	"	"	"	
Aroclor 1254	ND	---	859	"	"	"	"	
Aroclor 1260	ND	---	859	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 87 %*	*Limits: 50-125 %*	"	"	"	*Q-23, S-05*
Decachlorobiphenyl (Surr)			*88 %*	*Limits: 55-130 %*	"	"	"	*Q-23, S-05*
CS-14 (0-0.5) (A910329-12)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	909	ug/kg dry	100	11/06/09 19:56	EPA 8082A	
Aroclor 1221	ND	---	909	"	"	"	"	
Aroclor 1232	ND	---	909	"	"	"	"	
Aroclor 1242	ND	---	909	"	"	"	"	
Aroclor 1248	**20600**	---	909	"	"	"	"	
Aroclor 1254	ND	---	909	"	"	"	"	
Aroclor 1260	ND	---	909	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 75 %*	*Limits: 50-125 %*	"	"	"	*Q-23, S-05*
Decachlorobiphenyl (Surr)			*77 %*	*Limits: 55-130 %*	"	"	"	*Q-23, S-05*
CS-15 (0-0.5) (A910329-13)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1016	ND	---	847	ug/kg dry	100	11/06/09 20:11	EPA 8082A	
Aroclor 1221	ND	---	847	"	"	"	"	
Aroclor 1232	ND	---	847	"	"	"	"	
Aroclor 1242	ND	---	847	"	"	"	"	
Aroclor 1248	**8680**	---	847	"	"	"	"	
Aroclor 1254	ND	---	847	"	"	"	"	
Aroclor 1260	ND	---	847	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 63 %*	*Limits: 50-125 %*	"	"	"	*S-05, Q-23*
Decachlorobiphenyl (Surr)			*107 %*	*Limits: 55-130 %*	"	"	"	*S-05, Q-23*
CS-16 (0-0.5) (A910329-14RE2)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	453	ug/kg dry	50	11/07/09 09:46	EPA 8082A	
Aroclor 1221	ND	---	453	"	"	"	"	
Aroclor 1232	ND	---	453	"	"	"	"	
Aroclor 1242	ND	---	453	"	"	"	"	
Aroclor 1248	**4710**	---	453	"	"	"	"	
Aroclor 1254	ND	---	453	"	"	"	"	

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-16 (0-0.5) (A910329-14RE2)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1260	ND	---	453	ug/kg dry	50	"	EPA 8082A	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 50 %*	*Limits: 50-125 %*	"	"	"	*S-05*
Decachlorobiphenyl (Surr)			*52 %*	*Limits: 55-130 %*	"	"	"	*S-05*
CS-17 (0-0.5) (A910329-15)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	862	ug/kg dry	100	11/06/09 20:40	EPA 8082A	
Aroclor 1221	ND	---	862	"	"	"	"	
Aroclor 1232	ND	---	862	"	"	"	"	
Aroclor 1242	ND	---	862	"	"	"	"	
Aroclor 1248	**15900**	---	862	"	"	"	"	
Aroclor 1254	ND	---	862	"	"	"	"	
Aroclor 1260	ND	---	862	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 67 %*	*Limits: 50-125 %*	"	"	"	*Q-23, S-05*
Decachlorobiphenyl (Surr)			*77 %*	*Limits: 55-130 %*	"	"	"	*S-05, Q-23*
CS-18 (0-0.5) (A910329-16)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	890	ug/kg dry	100	11/06/09 20:54	EPA 8082A	
Aroclor 1221	ND	---	890	"	"	"	"	
Aroclor 1232	ND	---	890	"	"	"	"	
Aroclor 1242	ND	---	890	"	"	"	"	
Aroclor 1248	**2390**	---	890	"	"	"	"	
Aroclor 1254	ND	---	890	"	"	"	"	
Aroclor 1260	ND	---	890	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 44 %*	*Limits: 50-125 %*	"	"	"	*S-05, Q-23*
Decachlorobiphenyl (Surr)			*52 %*	*Limits: 55-130 %*	"	"	"	*S-05, Q-23*
CS-19 (0-0.5) (A910329-17)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	892	ug/kg dry	100	11/07/09 11:28	EPA 8082A	
Aroclor 1221	ND	---	892	"	"	"	"	
Aroclor 1232	ND	---	892	"	"	"	"	
Aroclor 1242	ND	---	892	"	"	"	"	
Aroclor 1248	**3840**	---	892	"	"	"	"	
Aroclor 1254	ND	---	892	"	"	"	"	
Aroclor 1260	ND	---	892	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 38 %*	*Limits: 50-125 %*	"	"	"	*S-05*
Decachlorobiphenyl (Surr)			*40 %*	*Limits: 55-130 %*	"	"	"	*S-05*

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-20 (0-0.5) (A910329-18)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	923	ug/kg dry	100	11/07/09 11:43	EPA 8082A	
Aroclor 1221	ND	---	923	"	"	"	"	
Aroclor 1232	ND	---	923	"	"	"	"	
Aroclor 1242	ND	---	923	"	"	"	"	
Aroclor 1248	**4140**	---	923	"	"	"	"	
Aroclor 1254	ND	---	923	"	"	"	"	
Aroclor 1260	ND	---	923	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 87 %*	*Limits: 50-125 %*	"	"	"	*S-05*
Decachlorobiphenyl (Surr)			*85 %*	*Limits: 55-130 %*	"	"	"	*S-05*

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight by D2216

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-1 (0-0.5) (A910329-01)			**Matrix: Soil**					
% Solids	**79.4**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-2 (0-0.5) (A910329-02)			**Matrix: Soil**					
% Solids	**79.1**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-3 (0-0.5) (A910329-03)			**Matrix: Soil**					
% Solids	**80.1**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-4 (0-0.5) (A910329-04)			**Matrix: Soil**					
% Solids	**74.7**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-5 (0-0.5) (A910329-05)			**Matrix: Soil**					
% Solids	**78.5**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-6 (0-0.5) (A910329-06)			**Matrix: Soil**					
% Solids	**77.3**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-7 (0-0.5) (A910329-07)			**Matrix: Soil**					
% Solids	**80.7**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-8 (0-0.5) (A910329-08)			**Matrix: Soil**					
% Solids	**80.3**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-9 (0-0.5) (A910329-09)			**Matrix: Soil**					
% Solids	**80.1**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-12 (0-0.5) (A910329-10)			**Matrix: Soil**					
% Solids	**80.4**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-13 (0-0.5) (A910329-11)			**Matrix: Soil**					
% Solids	**82.2**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-14 (0-0.5) (A910329-12)			**Matrix: Soil**					
% Solids	**77.1**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-15 (0-0.5) (A910329-13)			**Matrix: Soil**					
% Solids	**79.2**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-16 (0-0.5) (A910329-14)			**Matrix: Soil**					
% Solids	**81.4**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-17 (0-0.5) (A910329-15)			**Matrix: Soil**					
% Solids	**84.0**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-18 (0-0.5) (A910329-16)			**Matrix: Soil**					
% Solids	**82.8**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	

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Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight by D2216

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-19 (0-0.5) (A910329-17)			**Matrix: Soil**					
% Solids	**82.9**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-20 (0-0.5) (A910329-18)			**Matrix: Soil**					
% Solids	**81.6**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9110065 - EPA 3546							**Soil**					
Blank (9110065-BLK1)					Prepared: 11/05/09 11:12		Analyzed: 11/06/09 13:29					**C-03, C-04**
EPA 8082A												
Aroclor 1016	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1232	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1242	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1248	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1254	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1260	ND	---	10.0	"	"	---	---	---	---	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 85 %*	*Limits: 50-125 %*			*Dilution: 1x*					*Q-23*
Decachlorobiphenyl (Surr)			*101 %*	*55-130 %*			*"*					*Q-23*
LCS (9110065-BS1)					Prepared: 11/05/09 11:12		Analyzed: 11/06/09 13:44					**C-03, C-04**
EPA 8082A												
Aroclor 1016	249	---	10.0	ug/kg wet	1	250	---	100	40-140%	---	---	
Aroclor 1260	269	---	10.0	"	"	"	---	108	60-130%	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 88 %*	*Limits: 50-125 %*			*Dilution: 1x*					*Q-23*
Decachlorobiphenyl (Surr)			*98 %*	*55-130 %*			*"*					*Q-23*
Duplicate (9110065-DUP2)					Prepared: 11/05/09 11:12		Analyzed: 11/06/09 22:51					**C-03, C-04**
QC Source Sample: CS-4 (0-0.5) (A910329-04RE1)												
EPA 8082A												
Aroclor 1016	ND	---	1930	ug/kg dry	200	---	ND	---	---	---	30%	
Aroclor 1221	ND	---	1930	"	"	---	ND	---	---	---	30%	
Aroclor 1232	ND	---	1930	"	"	---	ND	---	---	---	30%	
Aroclor 1242	ND	---	1930	"	"	---	ND	---	---	---	30%	
Aroclor 1248	**23700**	---	1930	"	"	---	27600	---	---	15	30%	
Aroclor 1254	ND	---	1930	"	"	---	ND	---	---	---	30%	
Aroclor 1260	ND	---	1930	"	"	---	ND	---	---	---	30%	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 824 %*	*Limits: 50-125 %*			*Dilution: 200x*					*Q-23, S-05*
Decachlorobiphenyl (Surr)			*1290 %*	*55-130 %*			*"*					*Q-23, S-05*
Matrix Spike (9110065-MS1)					Prepared: 11/05/09 11:12		Analyzed: 11/06/09 21:09					**C-03, C-04, Q-11**
QC Source Sample: CS-18 (0-0.5) (A910329-16)												
EPA 8082A												
Aroclor 1016	ND	---	871	ug/kg dry	100	218	ND	218	40-140%	---	---	

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9110065 - EPA 3546							**Soil**					
Matrix Spike (9110065-MS1)					Prepared: 11/05/09 11:12		Analyzed: 11/06/09 21:09					**C-03, C-04, Q-11**
QC Source Sample: CS-18 (0-0.5) (A910329-16)												
Aroclor 1260	ND	---	871	ug/kg dry	"	"	ND		60-130%	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 70 %*		*Limits: 50-125 %*		*Dilution: 100x*					*Q-23*
Decachlorobiphenyl (Surr)			*78 %*		*55-130 %*		*"*					*Q-23*

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9110081 - EPA 3546							**Soil**					
Blank (9110081-BLK1)					Prepared: 11/06/09 11:13	Analyzed: 11/07/09 10:59						**C-03, C-04**
EPA 8082A												
Aroclor 1016	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1232	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1242	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1248	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1254	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1260	ND	---	10.0	"	"	---	---	---	---	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 80 %*	*Limits: 50-125 %*			*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*77 %*	*55-130 %*			*"*					
LCS (9110081-BS1)					Prepared: 11/06/09 11:13	Analyzed: 11/07/09 11:14						**C-03, C-04**
EPA 8082A												
Aroclor 1016	237	---	10.0	ug/kg wet	1	250	---	95	40-140%	---	---	
Aroclor 1260	236	---	10.0	"	"	"	---	94	60-130%	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 91 %*	*Limits: 50-125 %*			*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*81 %*	*55-130 %*			*"*					

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight by D2216

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9100448 - Dry Weight							**Soil**					
Duplicate (9100448-DUP4)					Prepared: 10/30/09 12:50		Analyzed: 11/01/09 12:03					
QC Source Sample: CS-5 (0-0.5) (A910329-05)												
D2216												
% Solids	**80.0**	---	1.00	% by Weight	1	---	78.5	---	---	2	20%	
Duplicate (9100448-DUP5)					Prepared: 10/30/09 12:50		Analyzed: 11/01/09 12:03					
QC Source Sample: CS-20 (0-0.5) (A910329-18)												
D2216												
% Solids	**83.1**	---	1.00	% by Weight	1	---	81.6	---	---	2	20%	

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

SAMPLE PREPARATION INFORMATION

Polychlorinated Biphenyls by EPA 8082A

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9110065							
A910329-01RE1	Soil	EPA 8082A	10/28/09 10:45	11/05/09 11:12	13.29g/5mL	10g/5mL	0.75
A910329-02RE1	Soil	EPA 8082A	10/28/09 11:05	11/05/09 11:12	13.67g/5mL	10g/5mL	0.73
A910329-03RE1	Soil	EPA 8082A	10/28/09 11:40	11/05/09 11:12	13.38g/5mL	10g/5mL	0.75
A910329-04RE1	Soil	EPA 8082A	10/28/09 12:00	11/05/09 11:12	13.82g/5mL	10g/5mL	0.72
A910329-05	Soil	EPA 8082A	10/28/09 12:30	11/05/09 11:12	14.17g/5mL	10g/5mL	0.71
A910329-06	Soil	EPA 8082A	10/28/09 13:30	11/05/09 11:12	13.85g/5mL	10g/5mL	0.72
A910329-07	Soil	EPA 8082A	10/28/09 14:00	11/05/09 11:12	13.16g/5mL	10g/5mL	0.76
A910329-08	Soil	EPA 8082A	10/28/09 14:25	11/05/09 11:12	13.2g/5mL	10g/5mL	0.76
A910329-09	Soil	EPA 8082A	10/28/09 15:00	11/05/09 11:12	13.73g/5mL	10g/5mL	0.73
A910329-10RE1	Soil	EPA 8082A	10/28/09 16:10	11/05/09 11:12	13.48g/5mL	10g/5mL	0.74
A910329-11	Soil	EPA 8082A	10/28/09 15:40	11/05/09 11:12	14.17g/5mL	10g/5mL	0.71
A910329-12	Soil	EPA 8082A	10/28/09 15:30	11/05/09 11:12	14.27g/5mL	10g/5mL	0.70
A910329-13	Soil	EPA 8082A	10/28/09 14:50	11/05/09 11:12	14.9g/5mL	10g/5mL	0.67
A910329-14RE2	Soil	EPA 8082A	10/28/09 14:07	11/05/09 11:12	13.57g/5mL	10g/5mL	0.74
A910329-15	Soil	EPA 8082A	10/28/09 13:33	11/05/09 11:12	13.81g/5mL	10g/5mL	0.72
A910329-16	Soil	EPA 8082A	10/28/09 12:21	11/05/09 11:12	13.57g/5mL	10g/5mL	0.74
Batch: 9110081							
A910329-17	Soil	EPA 8082A	10/28/09 11:45	11/06/09 11:13	13.53g/5mL	10g/5mL	0.74
A910329-18	Soil	EPA 8082A	10/28/09 11:12	11/06/09 11:13	13.28g/5mL	10g/5mL	0.75

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

Notes and Definitions

Qualifiers:

C-03	Extract has undergone Sulfuric Acid Cleanup in order to minimize matrix interferance.
C-04	Extract has undergone a Sulfur Cleanup using EPA 3660B.
Q-11	The spike recovery for this matrix spike cannot be accurately quantified due to sample dilution required from high analyte concentration and/or matrix interference.
Q-23	Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Data is likely biased high.
S-05	Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.
S-06	Surrogate recovery is outside of established control limits.

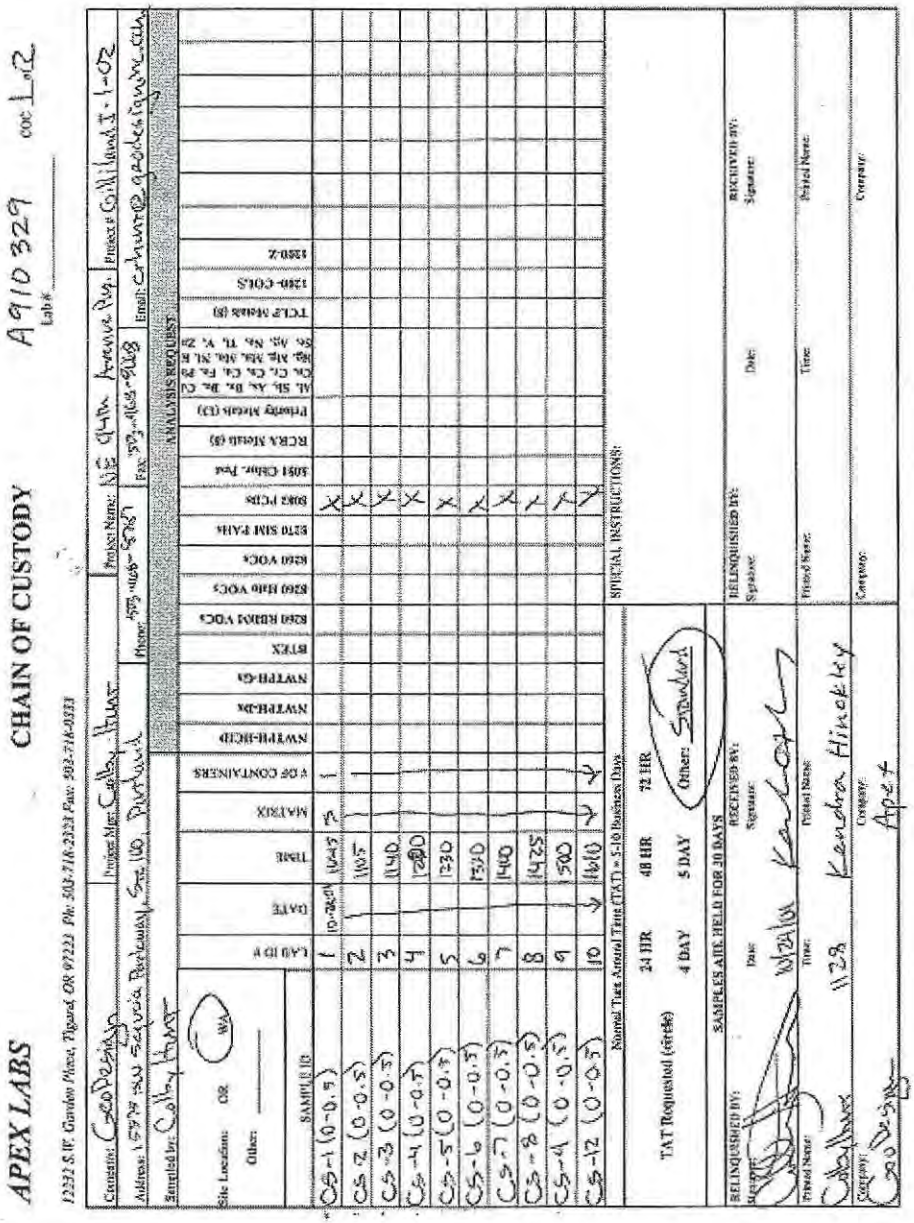
Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy	Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses. For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor. Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

GeoDesign, Inc. 15575 SW Sequoia Pkwy, Ste 100 Portland, OR 97224	Project: **NE 94th Ave Property** Project Number: GillilandJ-1-02 Project Manager: Colby Hunt	**Reported:** 11/12/09 14:21



APEX LABS

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

CHAIN OF CUSTODY

A910329

Lab #

COC: 1 of 2

Company: GeoDesign — Project Mgr: Colby Hunt — Project Name: NE 94th Avenue Prop. — Project #: GillilandJ-1-02

Address: 15575 SW Sequoia Parkway, Ste 100, Portland — Phone: 503-968-6500 — Fax: 503-968-6507 — Email: chunt@geodesign.com

Sampled by: Colby Hunt

Site Location: OR WA

Other: ____

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	BTEX	8260 BRMS VOCs	8260 HHS VOCs	8260 VOCs	8270 SIM PAHs	8082 PCBs	8081 Chlor. Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn	TCLP Metals (8)	1280-COLS	1280-Z
CS-1 (0-0.5)	1	10-30-09	1045	S	1									X							
CS-2 (0-0.5)	2		1105											X							
CS-3 (0-0.5)	3		1140											X							
CS-4 (0-0.5)	4		1200											X							
CS-5 (0-0.5)	5		1230											X							
CS-6 (0-0.5)	6		1310											X							
CS-7 (0-0.5)	7		1400											X							
CS-8 (0-0.5)	8		1425											X							
CS-9 (0-0.5)	9		1500											X							
CS-10 (0-0.5)	10		1610											X							

Normal Turn Around Time (TAT) = 5-10 Business Days

TAT Requested (circle): 24 HR, 48 HR, 72 HR, 4 DAY, 5 DAY, Other: Standard

SPECIAL INSTRUCTIONS:

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature:	RECEIVED BY: Signature:	RELINQUISHED BY: Signature:
Date: 10/30/09	Date:	Date:
Time: 1130	Time:	Time:
Printed Name: Colby Hunt	Printed Name: Kendra Hinckley	Printed Name:
Company: GeoDesign	Company: Apex	Company:

RECEIVED BY: Signature: Date: Time: Printed Name: Company:

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Labs

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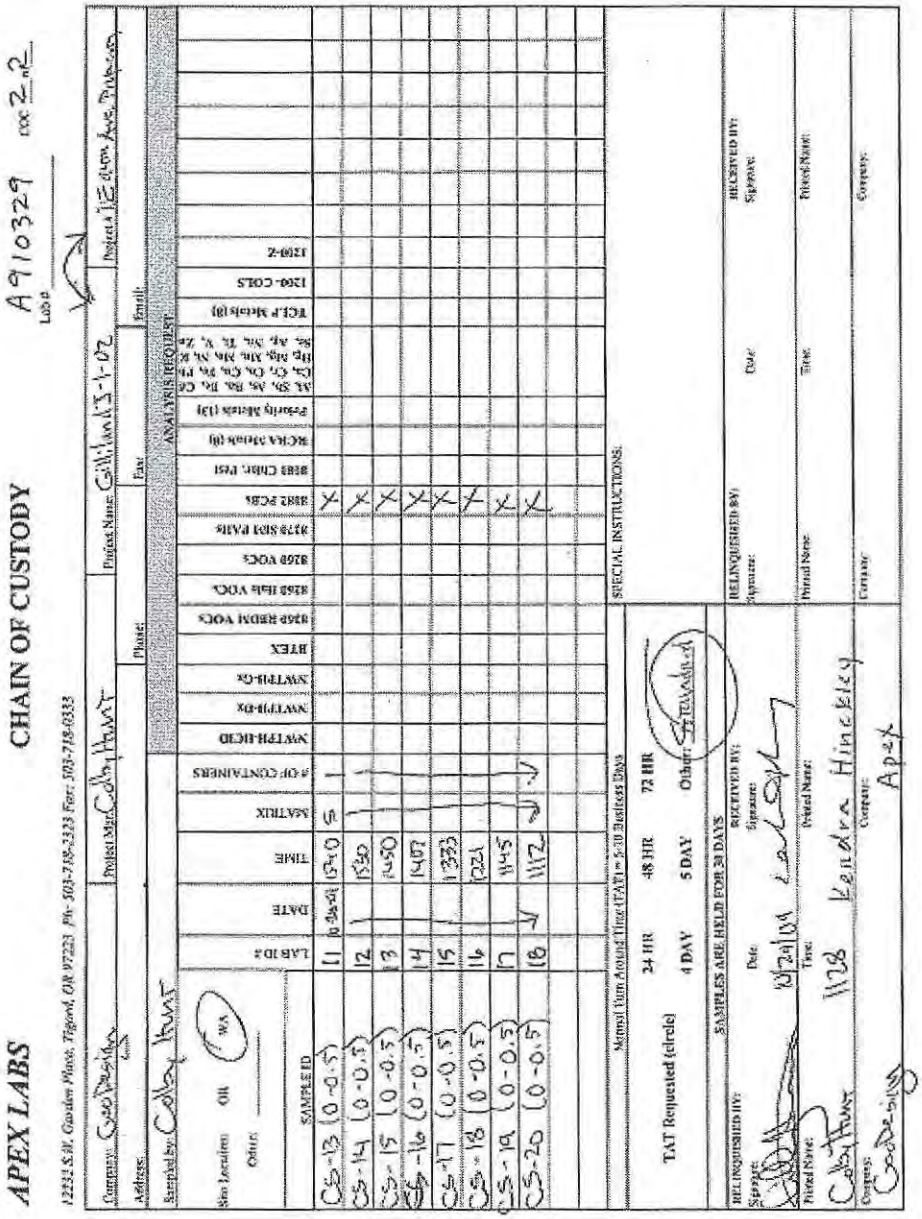
GeoDesign, Inc. 15575 SW Sequoia Pkwy, Ste 100 Portland, OR 97224	Project: **NE 94th Ave Property** Project Number: GillilandJ-1-02 Project Manager: Colby Hunt	**Reported:** 11/12/09 14:21



APEX LABS

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

CHAIN OF CUSTODY

A9110329 Lab #

Company: GeoDesign Project Mgr: Colby Hunt Project Name: Gilliland 3-1-02 Project # 12 94th Ave. Property

Address: Phone: Fax: Email:

Sampled by: Colby Hunt

Site Location: OR WA Other: ____

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	BTEX	8260 REDUX VOCs	8260 Halo VOCs	8260 VOCs	8270 SIM PAHs	8082 PCBs	8082 Chlor. Pest	8270C Acids (8)	Priority Metals (13)	As, Sb, Ag, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mn, Mo, Ni, Se, Ag, Na, Tl, V, Zn	TCLP Metals (8)	1260-COLS	1260-Z
CS-13 (0-0.5)	11	10/29/09	1340	S	1									X							
CS-14 (0-0.5)	12		1350											X							
CS-15 (0-0.5)	13		1400											X							
CS-16 (0-0.5)	14		1407											X							
CS-17 (0-0.5)	15		1333											X							
CS-18 (0-0.5)	16		1321											X							
CS-19 (0-0.5)	17		1445											X							
CS-20 (0-0.5)	18		1412											X							

Normal Turn Around Time (TAT) is 5-10 Business Days

TAT Requested (circle): 24 HR 48 HR 72 HR 4 DAY 5 DAY Other: Standard

SPECIAL INSTRUCTIONS:

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date:	Date: 10/29/09	Date:	Date:
Time:	Time: 1138	Time:	Time:
Printed Name: Colby Hunt	Printed Name: Leslie Hinckley	Printed Name:	Printed Name:
Company: GeoDesign	Company: Apex	Company:	Company:

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Philip Nerenberg

Philip Nerenberg, Lab Director

APPENDIX D

REMEDIAL ASSESSMENT

FOCUSED SITE CHARACTERIZATION

FLEISCHER PROPERTIES

Prepared for

CLARK COUNTY, WASHINGTON

VANCOUVER, WASHINGTON

December 22, 2014

Project No. 9059.07.04

MAUL FOSTER ALONGI

Prepared by

Maul Foster & Alongi, Inc.

400 E Mill Plain Blvd., Suite 400, Vancouver WA 98660

FOCUSED SITE CHARACTERIZATION

FLEISCHER PROPERTIES

The material and data in this report were prepared under the supervision and direction of the undersigned.

MAUL FOSTER & ALONGI, INC.

Emily Hess, GIT
Staff Geologist

Seth Otto, AICP
Project Manager

James Maul, LHG
President/Principal Hydrogeologist

CONTENTS

TABLES AND ILLUSTRATIONS V

ACRONYMS AND ABBREVIATIONS VI

1 INTRODUCTION 1
- 1.1 REGULATORY FRAMEWORK 1
- 1.2 SITE ASSESSMENT OBJECTIVES 1

2 BACKGROUND 2
- 2.1 PROPERTY DESCRIPTION 2
- 2.2 PROPERTY HISTORY 2
- 2.3 HISTORICAL AND CURRENT USES OF ADJACENT PROPERTIES 3
- 2.4 PREVIOUS INVESTIGATIONS 4
- 2.5 POTENTIAL ENVIRONMENTAL CONDITIONS 5
- 2.6 GEOLOGY AND HYDROGEOLOGY 5

3 FIELDWORK 6
- 3.1 SOIL SAMPLING 6
- 3.2 ANALYSES 7
- 3.3 INVESTIGATION-DERIVED WASTE 7

4 NATURE AND EXTENT 7
- 4.1 PESTICIDES AND HERBICIDES 8
- 4.2 PCBS 9
- 4.3 HYDROCARBONS 9
- 4.4 METALS 9
- 4.5 AMMONIA 10

5 CONCEPTUAL SITE MODEL 10
- 5.1 SOURCE CHARACTERIZATION 10
- 5.2 FATE AND TRANSPORT OF CONTAMINANTS 11
- 5.3 POTENTIAL SOIL EXPOSURE SCENARIOS 11
- 5.4 CLEANUP STANDARDS 12

6 RISK EVALUATION 13
- 6.1 SOIL 13
- 6.2 TERRESTRIAL ECOLOGICAL EVALUATION 13
- 6.3 SUMMARY 13

7 FOCUSED CLEANUP ACTION EVALUATION 14
- 7.1 ALTERNATIVE 1: EXCAVATION AND OFF-SITE DISPOSAL OF CONTAMINATED SOIL 14
- 7.2 ALTERNATIVE 2: CAPPING OF CONTAMINATED SOILS 14
- 7.3 ALTERNATIVE 3: TARGETED EXCAVATION AND CAPPING OF CONTAMINATED SOILS 15
- 7.4 CLEANUP ALTERNATIVE EVALUATION REQUIREMENTS 16
- 7.5 EVALUATION OF SITE CLEANUP ALTERNATIVES 17

LIMITATIONS

REFERENCES

TABLES

CONTENTS (CONTINUED)

FIGURES

APPENDIX A
2010 LABORATORY ANALYTICAL RESULTS

APPENDIX B
2014 LABORATORY ANALYTICAL RESULTS

APPENDIX C
DATA VALIDATION MEMORANDUM

TABLES AND ILLUSTRATIONS

FOLLOWING REPORT:

TABLES

1 SOIL ANALYTICAL RESULTS

2 COMPARISON OF CLARIFIER SOLIDS PRESENT AND PCB CONCENTRATIONS

3 COST ESTIMATE ALTERNATIVE 1—EXCAVATION OF CONTAMINATED SOILS

4 COST ESTIMATE ALTERNATIVE 2—CAPPING OF CONTAMINATED SOILS

5 COST ESTIMATE ALTERNATIVE 3—TARGETED EXCAVATION AND CAPPING OF CONTAMINATED SOILS

6 DISPROPORTIONATE COST ANALYSIS

FIGURES

1 SITE LOCATION

2 SITE TOPOGRAPHY

3 SITE FEATURES

4 INVESTIGATION LOCATIONS

5 CLARIFIER SOLIDS DEPTH

6 PCB CONCENTRATIONS

7 CONCEPTUAL SITE MODEL OF POTENTIAL HUMAN AND ECOLOGICAL EXPOSURE PATHWAYS

ACRONYMS AND ABBREVIATIONS

ATSDR	Agency for Toxic Substances and Disease Registry
bgs	below ground surface
CAP	Cleanup Action Plan
County	Clark County, Washington
CSM	conceptual site model
CUL	cleanup level
Ecology	Washington State Department of Ecology
ESA	environmental site assessment
GeoDesign	GeoDesign, Inc.
IDW	investigation-derived waste
IHS	indicator hazardous substance
Leichner Brothers Landfill	the landfill
LFG	landfill gas
MFA	Maul Foster & Alongi, Inc.
mg/kg	milligrams per kilogram
MRL	method reporting limit
MTCA	Model Toxics Control Act
PCB	polychlorinated biphenyl
PID	photoionization detector
POC	point of compliance
Property	9109 and 9115 Northeast 94th Avenue in Vancouver, Washington
RCRA	Resource Conservation and Recovery Act
SCS	SCS Engineers
SVOC	semivolatile organic compound
TEE	terrestrial ecological evaluation
ug/kg	micrograms per kilogram
USEPA	U.S. Environmental Protection Agency
WAC	Washington Administrative Code
WCI	Waste Connections, Inc.
WBZ	water-bearing zone

1 INTRODUCTION

On behalf of Clark County, Washington (the County), Maul Foster & Alongi, Inc. (MFA) has prepared this focused site characterization report for the Fleischer properties located at 9109 and 9115 Northeast 94th Avenue in Vancouver, Washington (referred to in this report as the Property) (see Figure 1). The Property is currently vacant but was formerly used for residential, agricultural, and some industrial activities. The Property was obtained in 1977 and is currently owned by Bonnie Fleischer.

1.1 Regulatory Framework

In 2014, the County received an Integrated Planning Grant from the Washington State Department of Ecology (Ecology). The grant is for environmental characterization and redevelopment planning. The purpose of the focused site characterization is to characterize the nature and extent of hazardous substances, evaluate potential risk to human and ecological receptors, and identify scenarios pertaining to cleanup alternatives and redevelopment for the Property. The County will use this document to make a decision regarding the purchase of the Property to become part of the larger adjacent County-owned property. This assessment meets the substantive requirements of Washington Administrative Code (WAC) 173-340 of the Model Toxics Control Act (MTCA), while identifying efficiencies that may be gained through integrating planned redevelopment design components with the remedial action.

1.2 Site Assessment Objectives

Previous investigations conducted on the Property detected contaminants with concentrations above MTCA cleanup levels (CULs) in surface soil and identified potential environmental conditions that may have resulted in impacts to soil on the Property. This assessment was conducted to evaluate previously identified environmental impacts and assess impacts to redevelopment of the Property. Site assessment objectives included the following:

- Development of a conceptual site model (CSM) and data quality objectives for site characterization
- Assessment of potential sources of contamination and of hazardous substances above relevant CULs in environmental media
- Evaluation of potential risk to current and reasonably likely future human and ecological receptors, as appropriate
- Evaluation of potential remedial options based on multiple redevelopment scenarios for impacted media

2 BACKGROUND

2.1 Property Description

The Property comprises three tax lots (County Tax Account Numbers 199861000, 199854000, and 199851000) located in the northwest quarter of section 59, township 2 north, range 2 east, of the Willamette Meridian (see Figure 1). The Property is approximately 9.5 acres. The closed Leichner Brothers Landfill (the landfill) is located adjacent to the Property to the north, east, and south. According to the County planning department, the Property and the properties surrounding it are zoned Light Industrial. Land use in the vicinity of the Property is primarily industrial and residential.

The Property is generally flat, although there are small bench or terrace features (see Figure 2). Based on the National Geodetic Vertical Datum of 1929, elevations range between approximately 205 and 225 feet above mean sea level. Structures at the Property include a single-story residence with an attached garage, a small barn, and a pump house with a domestic well.

2.2 Property History

Archival records summarized in a GeoDesign, Inc. (GeoDesign) Phase I environmental site assessment (ESA) and Limited Surface Soil Evaluation (GeoDesign, 2010) describe the developmental history of the Property as follows:

- 1940: The Property appears to be vacant land.
- 1945: Five structures (a residence and four associated outbuildings) were constructed on the northwest portion of the Property between 1940 and 1945. The rest of the Property appears to be for agricultural use.
- 1955–1970: The existing residence, garage, and small barn were constructed on the southwest portion and the four outbuildings were removed from the northwest portion between 1945 and 1955. The rest of the Property appears to be used for agriculture. Fill comprised of clarifier solids was placed on the Property beginning in 1970.
- 1973–1990: The clarifier solids appear to be present over the entire Property, with the exception of the area immediately west of the current residence as shown in a 1973 aerial photograph. The clarifier solids may have been placed as part of the former property owner's fertilizer-processing business (Drasler Organic Fertilizer Company). The Property was purchased by the current property owner in 1977. Some of the clarifier solids appear to have been removed from the Property between 1980 and 1990. In the 1990 aerial photographs, structures are discernible at the location of the existing abandoned structures.
- 1996–2009: The residence located on the northwest portion of the Property was removed between 1990 and 1996. The Property has been primarily unused land since the

current owner purchased it. Clarifier solids are not evident in the 1996 and 2002 aerial photographs, although some areas of clarifier solids were observed during site reconnaissance in 2009 (GeoDesign, 2010).

2.3 Historical and Current Uses of Adjacent Properties

The following information obtained from a Phase I ESA provides descriptions of the current and historical uses of the adjoining properties (SCS Engineers, Inc. [SCS], forthcoming):

North of the Property - Waste Connections, Inc. (WCI – refer to Figure 3): Two-thirds of the Property's northern boundary is bordered by WCI. WCI operates a garbage haul truck fleet facility (e.g., truck storage, fueling, maintenance, and repair) and a solid waste container storage yard. The WCI property had historical operations as a supporting facility for the adjacent Leichner Brothers Landfill when it was operational. The 1981, 1986, and 1990 aerial photographs show the WCI property as cleared and containing two or three structures that were presumably used to support the landfill operations. The 2000 aerial photograph has the same buildings and configuration as currently exists and several trucks and/or containers were present, indicating the property may have been used as a truck fleet facility.

North and east of the Property - Leichner Brothers Landfill: The eastern third of the Property's northern boundary and the Property's eastern boundary is bordered by the closed Leichner Brothers Landfill. The Leichner Brothers Landfill property was used as a gravel pit before landfilling operations began in the 1930s. Before the mid-1960s, solid waste was reportedly burned at the landfill. After this period, the waste was presumably used to fill in former gravel pits. The 1981 aerial photograph displays the Leichner Brothers Landfill property expanded to its current configuration with most of the land cleared and apparently used for landfill operations. The landfill was closed in 1991. Regulatory closure of the Leichner Brothers Landfill has not been issued to date. Investigations performed in the late 1980s identified that groundwater impacts were present at levels exceeding applicable regulatory screening levels in the shallow alluvium water-bearing zone beneath the Leichner Brothers Landfill property. The landfill property was purchased by the County in December 2012. There is a landfill gas (LFG) flare station on the Leichner Brothers Landfill property that is used to combust LFG generated by the landfill.

South of the Property - Koski property: The Property's southern boundary is bordered by the Koski property. The Koski property is predominately void of structural development except for a residential dwelling in the northwest corner of the Koski property. Aerial photographs from 1950, 1960, and 1970 show the Koski property appeared to have been used for agricultural purposes. From at least 1981 to 1990, a retention pond for the Leichner Brothers Landfill was located in the north-central portion of the Koski property. In the 1986 and 1990 aerial photographs, a dirt road was present that extended into the Koski property at the approximate location of former burn areas. The burn areas were reportedly associated with historical operations of the Leichner Brothers Landfill and the remnants of the burn waste materials reportedly consisted primarily of glass with lesser amounts of metal and ash. Remediation of the former burn areas was conducted in 1992. The Koski property was purchased by the County in December 2012.

West of the Property - Northeast 94th Avenue: The Property's western boundary is bordered by Northeast 94th Avenue. Across Northeast 94th Avenue is a residential development.

2.4 Previous Investigations

GeoDesign conducted a Phase I ESA and limited surface soil evaluation at the Property in March 2010. In the Phase I ESA, GeoDesign identified clarifier solids on the Property as a recognized environmental condition because this material reportedly had been acquired from the former Boise Cascade Mill, and GeoDesign concluded that it likely contained hazardous substances (e.g., polychlorinated biphenyls [PCBs]). Clarifier solids were later removed; however, some material and/or impacts from the material may remain on the Property.

Clarifier solids and soil were sampled in 2010 from the surface at two locations and analyzed for PCBs, total petroleum hydrocarbon—hydrocarbon identification, semivolatile organic compounds (SVOCs), and metals. One PCB Aroclor (Aroclor 1248) was detected in both soil samples at concentrations greater than the MTCA Method A CULs for both restricted and unrestricted land use. Other PCB Aroclors were not detected above the method reporting limits (MRLs) in either sample. Diesel- and heavy-oil-range hydrocarbons and metals (including arsenic, chromium, copper, lead, mercury, and nickel) were detected, although concentrations were below the MTCA Method A CULs for unrestricted land use. SVOCs were not detected above the MRLs.

Based on this precursory sampling, GeoDesign divided the Property into 20 sections for limited surface soil sampling for PCB analysis. Up to nine surface soil grab sampling sites were collected within each section for 19 of the 20 sections. Soil samples were collected between the ground surface and 0.5 foot below ground surface (bgs). Soil grab samples from each of the 19 sections were homogenized into one composite sample. PCB Aroclor 1248 was detected in each composite soil sample at concentrations ranging from 820 to 32,400 micrograms per kilogram (ug/kg). PCB Aroclor 1254 was detected in the composite soil sample from Section 1 at a concentration of 396 ug/kg. Except for the composite soil sample from Section 12, the detected concentrations of PCBs in the composite soil samples analyzed were all greater than the MTCA Method A CUL of 1,000 ug/kg for unrestricted land use. Sample results collected from Sections 2 through 7, Section 14, and Section 17 were greater than the MTCA Method A CUL of 10,000 ug/kg for restricted land use (GeoDesign, 2010).

The indicator hazardous substances (IHSs) for the Property are PCBs, specifically Aroclor 1248 and Aroclor 1254. Based on the GeoDesign investigation, chemicals of potential concern include metals and diesel-range hydrocarbons. Because of the historical agricultural use at the Property, along with the reported use of fertilizer processing, other chemicals of potential concern may include chlorinated herbicides, organochlorine pesticides, and organophosphorus pesticides.

2.5 Potential Environmental Conditions

Based on the findings of site characterization activities and known Property uses, the Phase I ESA identifies the following potential recognized environmental condition at the Property:

- Surface soil contamination resulting from clarifier solids and historical agricultural operations

2.6 Geology and Hydrogeology

According to the Geologic Map of the Vancouver Quadrangle, Washington and Oregon, the Property and vicinity are underlain by Pleistocene outburst flood deposits. The gravel-sized flood deposits typically consist of "well-rounded, foreset-bedded, well-sorted and stratified pebble and cobble gravel with angular to subangular boulders typically 2.5 meters or less in length; clast-supported with a sandy matrix; sandy matrix composed of mafic volcanic fragments, quartz, and muscovite…" (Phillips, 1987).

Soil conditions encountered during the July 2014 field sampling event confirmed the presence of clarifier solids at the Property. Observed thicknesses ranged from trace amounts to approximately 1.5 feet. Below the clarifier solids was generally 1 to 2 feet of dry sandy silt underlain by coarse sand and gravel to approximately 8.5 feet bgs, the maximum depth of investigation activities. Groundwater was not encountered during the investigation.

There is a domestic water well on the Property. No well log describing subsurface conditions could be located. Stormwater that falls on the Property is expected to infiltrate or flow to the east, toward a drainage ditch located along Northeast 94th Avenue.

The geology and hydrogeology at the adjoining former landfill has been extensively characterized (SCS, 2013) (see Figure 3). The investigations describe the geology beneath the landfill site as approximately 70 to 100 feet of alluvium, underlain by the upper member of the Troutdale Formation. The site hydrogeology consists of an approximately 10- to 40-foot-thick unsaturated (vadose) zone, and an unconfined alluvial water-bearing zone (WBZ), which ranges in thickness from 35 to 45 feet. The alluvium generally consists of sand and gravelly to silty sand. Underlying the alluvial WBZ is the upper member of the Troutdale Formation aquifer. The Troutdale Formation aquifer generally consists of sandy to cobbly gravel with minor amounts of silt and clay. The alluvial WBZ and the Troutdale Formation aquifer are separated by a silt aquitard (sandy silt and clayey silt) east and south of the landfill. Southwest of the landfill, the silt aquitard is absent and the two aquifers are locally in hydraulic communication. The Troutdale Formation aquifer and the overlying aquitard have not been evaluated in the northern and western portions of the landfill site. Depths to groundwater at the landfill site in the vicinity of the Property range from approximately 25 to 40 feet bgs. The direction of groundwater flow, based on surveyed groundwater elevations in the alluvial WBZ, appears to be southwest (SCS, 2013).

Monitoring wells in the vicinity of the Property (e.g., landfill monitoring wells LB-1S, LB-6S, LB-17I) have had detections of chloride, nitrate, total dissolved solids, dissolved iron, dissolved

manganese, and select volatile organic compounds. Dissolved iron and dissolved manganese have been detected in groundwater samples collected from these monitoring wells above compliance criteria (SCS, 2013).

3 FIELDWORK

To evaluate the potential for environmental contamination on the Property, soil samples were collected from test pits and analyzed for PCBs, metals, diesel- and lube-oil-range hydrocarbons, herbicides, organochlorine pesticides, and organophosphorus pesticides.

A work plan for this field sampling event was provided to Ecology on July 8, 2014. Fieldwork was performed on July 15, July 16, and October 1, 2014. The investigation was conducted consistent with the work plan (MFA, 2014a), with the following exceptions:

- The number of soil samples collected from eight of the test pits was increased from three to four because clarifier solids were identified either at the surface or at depth.
- At the request of the County, ammonia, iron, and manganese were added to the analyte list for soil samples adjacent to the landfill on the eastern boundary of the Property.
- One less test pit was advanced near the western boundary of the Property as was scoped because test pits TP08 and TP09 were advanced in this area.

Additional fieldwork was performed on October 1, 2014 consistent with the work plan addendum (MFA, 2014b). The soil sampling program was expanded to include sampling off-Property along the southern, eastern, and a portion of the northern Property boundaries to assess the presence of PCBs and to define the lateral extent of the site.

3.1 Soil Sampling

Before excavation began, public and private underground utility locating services checked for underground utilities. Thirty test pits were advanced by Munitor Construction, LLC, of Portland, Oregon, under the supervision of an MFA geologist on July 15 and July 16, 2014. The geologist collected soil samples, described soil types, and measured volatilization in soil headspace using a photoionization detector (PID). The soil headspace readings had a PID reading of 0.0 parts per million.

Investigation locations are shown on Figure 4. These locations were selected to characterize the spatial extent of the clarifier solids at the Property. Consistent with the work plan, most test pits were advanced to 7 to 9 feet bgs. Groundwater was not encountered during the assessment.

The samples collected on October 1, 2014 were obtained from test pits advanced by hand using decontaminated stainless steel tools (e.g., shovels, picks, hand augers). Soil samples were collected from the surface (to approximately 0.5 feet bgs) and from depths below the visual indications of

clarifier solids (estimated at 1.5 feet to 2.0 feet bgs). If clarifier solids were not observed, soil samples were collected from the subsurface at approximately 2.0 feet bgs.

3.2 Analyses

The uppermost soil sample for each test pit from the July 15 and July 16, 2014 fieldwork was submitted to the laboratory for analysis. Depending on the results from analyzing the uppermost samples, select archived samples from the lower depths were analyzed. The locations, sample depths, and analyses for each sample are summarized in Table 1. Samples were analyzed for PCBs by U.S. Environmental Protection Agency (USEPA) Method 8082; for diesel- and residual-range petroleum hydrocarbons by Northwest Total Petroleum Hydrocarbon Method NWTPH-Dx; for arsenic, chromium, copper, iron, lead, manganese, nickel, and zinc by USEPA Methods 6010/6020; for mercury by USEPA Method 7471; for ammonia by USEPA Method 350.1; for chlorinated herbicides by USEPA Method 8151; for organochlorine pesticides by USEPA Method 8081B; and for organophosphorus pesticides by USEPA Method 8270D.

For soil samples collected on October 1, 2014, the surface sample from each sampling location near the Property boundary was submitted for PCB analysis. Deeper soil samples and samples collected laterally south of the Property line were archived for possible follow-up analysis.

3.3 Investigation-Derived Waste

Investigation-derived waste (IDW) included decontamination fluids, and this liquid IDW was placed in a 5-gallon bucket and labeled with the contents, the volume of material, the date of collection, and the origin of the material. The bucket is stored on the Property to the west of the building, pending profiling for disposal.

4 NATURE AND EXTENT

This section summarizes the nature and extent of soil contamination on the Property associated with the potential environmental condition identified in Section 2.4 and based on previous site investigations summarized in Section 2.3. Groundwater was not assessed as part of this investigation because site characterization data showed that the property is not a source of groundwater contamination. Please refer to Section 5 for further discussion on groundwater. It is Ecology's position that groundwater contamination (iron and manganese) extends onto the Property based on results from adjacent groundwater monitoring wells at the Leichner Landfill.

Prior to the July 2014 investigation, assessment of the soil on the Property had been limited to sampling material at two surface soil sample locations and surface soil sampling at 19 locations collected during the Phase I ESA and limited surface soil evaluation (GeoDesign, 2010). The analytical results are summarized in Section 2.3. Diesel- and heavy-oil-range hydrocarbons and metals (including arsenic, chromium, copper, lead, mercury, and nickel) were detected in the clarifier

solids in surface soil samples, although concentrations were below the MTCA Method A CULs for unrestricted land use. PCB Aroclors 1248 and 1254 were detected in the surface soil samples at concentrations above and below MTCA Method A CULs.

To assess the extent of contamination on the Property, soil samples were collected from multiple depths from 30 test pits in July, 2014. PCB concentrations exceeded the CUL at various locations and in some instances elevated PCB concentrations were near the Property boundary. In order to define lateral extent of impacts in soil, MFA collected soil samples from off-property on October 1, 2014 near the southern, eastern, and a portion of the northern Property boundaries.

The investigations have delineated the approximate location of clarifier solids (see Figure 5) and the PCB contamination (see Figure 6). The deepest soil sample that exceeds the Method A CUL of 1 milligram per kilogram (mg/kg) was up to 5.5 feet bgs (TP27). None of the soil samples selected for metals analysis exceeded their respective CULs. Generally, PCBs are prevalent at the Property above MTCA CULs (refer to Figure 6).

The vertical and lateral extent of PCB impacted soil at the Property has been delineated, with exception of lateral extent of PCB impacts to the north (see Figure 6) adjacent to test pits TP10 and TP11. The vertical extent of PCBs was delineated in the test pit locations with exception of test pits TP42 and TP51. Manual test pit advancement encountered refusal at test pit TP51 at 2.0 feet bgs. Laterally west of the Property is Northeast 94th Avenue while approximately two thirds of the northern Property boundary is shared with the WCI facility. Both Northeast 94th Avenue and the WCI facility (former landfill operations) were developed prior to clarifier solids being placed at the Property. These operational constraints along with aerial photographs indicate that it is unlikely activities associated with the Property would extend across these operational boundaries.

The eastern one third of the northern Property boundary along with the eastern boundary and a small portion of the southern boundary is adjacent to the closed Leichner Brothers Landfill cap. These areas were likely modified during landfill closure and cap installation. Visible indications of the geotextile commonly used for landfill cap are present off-Property along the eastern boundary. Surface soil samples collected from these areas were not impacted with PCBs above the Method A CUL for unrestricted land use.

To the south, the Property is boarded by the Koski property. PCB contamination in soil appears to extend off-Property. The lateral extent of PCBs in soil is defined to the south. According to aerial photographs, a gravel road has been present along the southern Property boundary since before 1964 (refer to Figure 3). In some cases, PCB impacted surface soil extends to approximately the northern side of this gravel road.

4.1 Pesticides and Herbicides

Organophorphorus pesticides were not detected at concentrations above the MRL (refer to Table 1). There was one detection of the organochlorine pesticide, dieldrin, in test pit TP13-S-0.5 however the concentration is below the Ecology Method B cancer CUL. Four samples had detections of the chlorinated herbicide compound pentachlorophenol (i.e., test pits TP01-S-0.5,

TP06-S-0.5, TP26-S-0.5, and TP30-S-0.5). These pentachlorophenol concentrations in soil are below the Ecology Method B cancer CUL.

4.2 PCBs

PCB Aroclor 1248 was detected above the MRLs (see Table 1 and Figure 6). Concentrations for Aroclor 1248 ranged from below the MRL to 118 mg/kg from soil collected at test pit TP42. Some samples were above the MTCA Method A CUL for total PCBs of 1 mg/kg for unrestricted land use and the MTCA Method A CUL of 10 mg/kg for industrial land use. The MTCA regulation states that 10 mg/kg may be used as the CUL for PCB mixtures in soil assuming all soils are capped and maintained with a cap monitoring and maintenance program. Without knowing the redevelopment plans for the Property, the conservative Method A CUL of 1 mg/kg for unrestricted land use is used to screen these soil data.

Soil samples collected at depth from multiple test pits including TP17, TP27, TP29, TP30, TP42, and TP51 showed total PCB concentrations elevated above the CULs. Aroclor 1248 impacts appear to extend to approximately 1.5 feet bgs, 6 feet bgs, 4 feet bgs, 2 feet bgs, and 2 feet bgs, respectively, at these locations. Test pits TP27 and TP29 were advanced near the eastern boundary of the Property in what appeared to be an artificially bermed area adjacent to the neighboring landfill.

Table 2 compares the presence of clarifier solids with the presence of PCBs above the Method A CUL for unrestricted land use. Out of the 53 test pits advanced, 25 locations were logged as having the presence of visible clarifier solids. Of these 25 locations, 8 locations with visible clarifier solids present had PCB concentrations below the Method A CUL for unrestricted land use. Of the 28 locations where clarifier solids was not observed, 5 locations had PCB exceedances of the Method A CUL for unrestricted land use. Observed clarifier solids and PCBs are not correlated.

4.3 Hydrocarbons

Diesel- and lube-oil-range hydrocarbons were detected in soil samples (see Table 1). Diesel-range concentrations ranged from below the MRL to 149 mg/kg, while lube-oil-range concentrations ranged from below the MRL to 855 mg/kg. The detected concentrations are below the MTCA Method A CULs of 2,000 mg/kg for unrestricted land use and the concentrations appear to decline with depth.

4.4 Metals

Total arsenic, chromium, copper, lead, nickel, and zinc were detected in the soil samples that were analyzed for metals (see Table 1). Mercury was detected in all but one soil sample. All detections for arsenic and chromium were below the MTCA Method A CULs for unrestricted land use, except for soil sample TP26-S-0.5, which had a chromium concentration of 26.2 mg/kg. The Method A CUL for hexavalent chromium is 19 mg/kg, while the CUL for trivalent chromium is 2,000 mg/kg. Ecology background concentrations calculated for Clark County show a mean chromium concentration of 22 mg/kg with a 90th percentile value of 27 mg/kg (Ecology, 1994). The

concentration of chromium is within the expected range of background concentrations in soils in the Clark County area.

Total mercury detections ranged from below the MRL to 0.114 mg/kg. These concentrations are below the mercury MTCA Method A CUL of 2 mg/kg for unrestricted land use.

Additionally, five surface soil samples were collected from test pits TP26, TP27, TP28, TP29, and TP30 located adjacent existing landfill and analyzed for iron and manganese. Analytical results for these samples analyzed for manganese included detections ranging from 88.6 mg/kg to 817 mg/kg, while iron concentrations ranged from 23,500 mg/kg to 47,400 mg/kg in soil. There is no established MTCA Method A CUL for these metals in soil; however, MTCA has established an industrial use Method B CUL of 11,200 mg/kg for manganese and 56,000 mg/kg for iron in soil.

4.5 Ammonia

Analysis for ammonia as nitrate was conducted on five surface samples from test pits adjacent to the landfill. The analytical results were below the MRL for each sample.

5 CONCEPTUAL SITE MODEL

The CSM describes potential chemical sources, release mechanisms, environmental transport processes, exposure routes, and receptors for the Property. The primary purpose of the CSM is to describe pathways by which human and ecological receptors could be exposed to site-related chemicals. A complete exposure pathway consists of four necessary elements: (1) a source and mechanism of chemical release to the environment, (2) an environmental transport medium for a released chemical, (3) a point of potential contact with the impacted medium (referred to as the exposure point), and (4) an exposure route (e.g., soil ingestion) at the exposure point. The CSM describes potential exposure scenarios based on information collected during the site assessment. Elements of potentially complete exposure scenarios relevant to human health and ecological receptors for the Property and to the IHS in soil, specifically PCB Aroclor 1248, are discussed below and are presented in Figure 7. The CSM diagram takes into account the risk screening discussed in Section 6.

5.1 Source Characterization

Based on available information, it appears that the following Property-related activity may have contributed to contamination of environmental media at the Property:

- Impacted clarifier solids placed on the Property

This potential source and release mechanism is likely to have resulted in contaminant releases to surface and subsurface soil. Groundwater was not encountered during this investigation.

As described in Section 4, the investigations have identified PCBs as the IHSs in soil for the Property. Impacts of PCBs in soil on the Property are believed to be related to clarifier solids, some of which has been removed; however, there is residual material in much of the Property (see Figure 5).

5.2 Fate and Transport of Contaminants

Contaminant releases to surface soil have the potential to migrate vertically downward to the water table. However, based on evaluation of empirical data, the contaminants at the Property do not appear likely to impact groundwater. Surface and subsurface soil contaminants may also partition to the vapor phase, potentially resulting in impacts to air quality.

According to the Agency for Toxic Substances and Disease Registry (ATSDR), PCBs have chemical and thermal stability, are non-polar, and are only slightly soluble in water making them persistent in the environment for decades (ATSDR, 2011). These characteristics make PCBs adsorb directly to soil particles which greatly inhibits transport. Based on nearby available groundwater data associated with the landfill, the shallow alluvial WBZ at the Property is approximately 25 to 40 feet bgs (SCS, 2013). Based on the chemical characteristics of PCBs and depth to shallow groundwater at the Property, it is not likely groundwater is impacted by PCBs from the Property.

5.3 Potential Soil Exposure Scenarios

The Property currently comprises three vacant tax parcels with abandoned buildings and an unused domestic well. The redevelopment plan for the Property is still to be determined but could include light industrial uses. The following are potentially current or future exposure pathways:

- Incidental ingestion of and dermal contact with PCBs in surface and/or subsurface soil.
- Inhalation of fugitive dusts generated from surface and/or subsurface soil.

5.3.1 Human Health

The Property is fenced and it currently is unlikely that the public will access the Property.

The following pathways are potentially complete for human exposure to PCB impacted soil:

Occupational workers—There are currently no workers on the Property, as it is undeveloped. However, there is the possibility for occupational workers to come in contact with chemicals in soil through incidental ingestion, dermal contact, and inhalation of impacted soil particulates.

Construction workers—There are currently no construction workers (e.g., excavation workers, trench workers) on the Property. However, construction activities would be performed as part of redevelopment. Construction workers could contact chemicals in soil through incidental ingestion, dermal contact, and inhalation of impacted soil particulates.

5.3.2 Ecological Receptors

The Property is a vacant lot, consisting of native soil and clarifier solids. Vegetation is present with sporadic weeds, plant species known for colonization of disturbed areas, trees, and shrubs. The Property provides minimal important resources to wildlife and is unlikely to attract wildlife in its current condition. Ecological receptors present may contact chemicals in soil through dermal contact and ingestion; however, the potential for ecological exposure is considered to be low given the Properties current condition.

5.4 Cleanup Standards

According to MTCA, the cleanup standards for a particular site have two primary components: chemical-specific CULs and points of compliance (POCs). The CUL is the concentration of a chemical, in a specific environmental medium that will not pose unacceptable risks to human health or the environment. The POC is the location where the CUL is evaluated.

MTCA provides three different options for establishing CULs for human health: Method A, Method B, and Method C. For Methods B and C, either the standard or the modified approach can be used. The standard method uses generic default assumptions to calculate CULs, and the modified method allows for site-specific adjustments to some assumptions when calculating CULs.

MTCA Method A is designed for cleanups at relatively simple sites, such as those that are small and that have only a few hazardous substances. Method B can be used at any site. Method C is used primarily for industrial sites.

5.4.1 Soil Cleanup Levels

The Property historically has been used for agricultural purposes and it is anticipated that it will be used for commercial or light industrial purposes in the future. Soil was screened to MTCA Method A CULs for unrestricted land use, when CULs were available.

Soil CULs for the protection of potable groundwater (leaching-to-groundwater pathway) are not recommended as potential cleanup targets for soil on the Property. Site characterization data indicate that contamination is confined to shallow soil.

5.4.1.1 Points of Compliance in Soil

The soil POC is the depth bgs at which soil CULs shall be attained. The standard POC is soil within 15 feet of the ground surface at the Property. This standard POC is applied to soil on the Property.

6 RISK EVALUATION

Soil analytical results of this and previous investigations were compared to MTCA CULs for unrestricted land use, as described in Section 5.4. IHSs were evaluated by comparing the concentrations found in soil to their respective CULs. An IHS is defined as a chemical exceeding a CUL at one or more locations. An ecological assessment is provided in Section 6.2. For reference, analytical results from the 2010 GeoDesign investigation are included in Appendix A and analytical laboratory reports from the 2014 MFA investigation are included in Appendix B. Table 1 shows 2014 data as compared to various screening criteria. Appendix C contains a data validation memorandum describing the quality and usability of these data.

6.1 Soil

Based on current and historical investigations, there are known impacts on the Property. Therefore, the following risk screening discussion focuses on CUL chemical exceedances observed in soil on the Property (see Figure 6, Appendix B, and Table 1):

- Chemical exceedances in soil include PCBs, specifically Aroclor 1248.

In summary, IHSs in soil are limited to Aroclor 1248. PCBs are present in soil above CULs at the Property (see Figure 6). Based on these data, there is the potential for construction workers or occupational workers to come in contact with impacted soil on the Property.

6.2 Terrestrial Ecological Evaluation

Under MTCA, a terrestrial ecological evaluation (TEE) is performed to determine if hazardous substances in soil pose a potential threat to the environment (WAC 173-340-7490). A site may be excluded from the TEE process if any of the criteria in WAC 173-340-7491 (1a-d) are met, as specified below:

> All soil contaminated with hazardous substances is, or will be, covered by buildings, paved roads, pavement, or other physical barriers that will prevent plants or wildlife from being exposed to the soil contamination. To qualify for this exclusion, an institutional control shall be required by the department under WAC 173-340-440. An exclusion based on planned future land use shall include a completion date for such future development that is acceptable to the department. (WAC 173-340-7491 (1b))

The Property may qualify for a TEE exclusion based on the reuse plan for the Property.

6.3 Summary

In general, concentrations of IHSs in soil are in surface soils. IHSs at the Property and are generally within 2 feet to 3 feet bgs.

7 FOCUSED CLEANUP ACTION EVALUATION

This section summarizes remedial alternatives for addressing the contamination identified at the Property. These alternatives are not all-inclusive, but represent the potential cleanup scenarios and encompass a range of remedial actions that may integrate with redevelopment plans. There is no current redevelopment strategy. Current zoning of the Property is light industrial (IL) and a similar use is assumed.

The cleanup alternatives address soil on the Property impacted by PCBs. PCB impacts were observed at the Property in surface soils generally 2 feet to 3 feet bgs.

7.1 Alternative 1: Excavation and Off-Site Disposal of Contaminated Soil

Alternative 1 includes excavation and off-site disposal at an appropriate landfill of soil that exceeds MTCA CULs. The remedial action components are summarized in Table 3.

- Excavation. The lateral extent of PCB contamination, shown in Figure 6, will be excavated to a depth of 2 feet to 3 feet. Characterization samples will be collected from soil stockpiles for waste profiling. The excavation volume is estimated to be approximately 46,286 cubic yards. For the purpose of estimating costs, and based on existing data, it is assumed that all material will be classified as nonhazardous and disposed of at a Resource Conservation and Recovery Act (RCRA) Subtitle D permitted landfill.
- Backfill/grading. The site will be backfilled with clean, imported fill to the recommended ground surface elevation for stormwater management and redevelopment. Finished grade is to be constructed of a crushed gravel surface to stabilize and prevent soil erosion.
- Institutional controls. No institutional controls are warranted.
- Estimated cost. The estimated cost for alternative 1 is $3,349,900 (including 20 percent contingency). Details are presented in Table 3.

7.2 Alternative 2: Capping of Contaminated Soils

Alternative 2 is summarized in Table 4. Alternative 2 grades and caps the entire site to provide a barrier from PCB contaminated soil. The remedial action includes:

- Grading and capping. The existing grade may be modified to allow for stormwater drainage. Contaminants in soil that are left in place will be capped with a minimum 2 foot of clean soil and demarcation layer (e.g., landscape area), asphalt surface (e.g.,

parking lot), and concrete surface (e.g., walkway). The cap will apply to the entire Property. Clean soil will be imported and placed on top of a demarcation fabric, delineating the contaminated soil from clean cap material for future site workers.

- Institutional controls. A soil management plan will be developed and an environmental covenant placed on the Property to protect the engineered cap. The soil management plan will describe the nature and locations of contaminated soil that is left in place, discuss potential worker safety considerations, and identify the type of demarcation fabric that is placed for future site activities that involve penetration of the soil cap. In addition, a cap inspection plan will be implemented to provide annual inspections to ensure that the demarcation material is not visible in any area of the Property.

- Estimated cost. The estimated cost for alternative 2 is $1,039,500 (including 20 percent contingency). Details are presented in Table 4.

7.3 Alternative 3: Targeted Excavation and Capping of Contaminated Soils

Alternative 3 is summarized in Table 5 and includes targeted soil excavation with off-site disposal, and capping of the Property integrated with the assumption that a light industrial use may require buildings and associated parking areas. This alternative is based on a redevelopment scenario where approximately 1/3 (approximately 3 acres) of the Property would be fully cleaned up to create an unencumbered property that fronts on 94th Avenue. The remedial action includes:

- Targeted soil removal. Excavate areas necessary to provide adequate cap cover based on the final site grade. The excavation volume is estimated to be 15,413 cubic yards. For cost estimating purposes, it is assumed that the soil may be disposed of at a RCRA Subtitle D landfill.

- Soil consolidation. If final site grade allows, soil excavated during redevelopment may be consolidated on site beneath the cap. For conservative cost estimating, it is assumed that all excavated material will require off-site disposal.

- Capping. Contaminants in soil that are left in place will be capped with a minimum 2 foot of clean soil and demarcation layer (e.g., landscape area), asphalt surface (e.g., parking lot), and concrete surface (e.g., walkway), or located within the footprint of a building. The cap will apply to the entire Property. Clean soil will be imported and placed on top of a demarcation fabric, delineating the contaminated soil from clean cap material for future site workers.

- Institutional controls. A soil management plan will be developed and an environmental covenant placed on the Property to protect the engineered cap. The soil management plan will describe the nature and locations of contaminated soil that is left in place, discuss potential worker safety considerations, and identify the type of demarcation fabric that is placed for future site activities that involve penetration of the soil cap.

In addition, a cap inspection plan will be implemented to provide annual inspections to ensure that the demarcation material is not visible in any area of the Property.

- Estimated cost. The estimated cost for alternative 3 is $1,842,300 (including 20 percent contingency). Details are presented in Table 5.

7.4 Cleanup Alternative Evaluation Requirements

7.4.1 MTCA Threshold Requirements

While no ultimate cleanup action is selected in this report, upon selection of a redevelopment scenario a cleanup action plan (CAP) will be needed. Cleanup actions are subject to the threshold requirements set forth in WAC 173-340-360 (2)(a). Under the threshold requirements, the cleanup action shall:

- Protect human health and the environment.
- Comply with cleanup standards.
- Comply with applicable state and federal laws.
- Provide for compliance monitoring.

7.4.1.1 Protect Human Health and Environment and Comply with Cleanup Standards

The three alternatives reduce or eliminate risk due to contaminated soil through removal or a combination of removal, consolidation, and capping. Therefore, they would eliminate exposure pathways and protect human health and the environment and would comply with cleanup standards.

7.4.1.2 Comply with Applicable State and Federal Laws

The selected CULs are consistent with MTCA. Additionally, local, state, and federal laws related to environmental protection, health and safety, transportation, and disposal apply to the proposed alternatives. During remedial design, the selected alternative can be implemented to comply with applicable, relevant, and appropriate requirements. Any eventual CAP will need to ensure any applicable state and federal regulations will be specified and used as a compliance guide during implementation.

7.4.1.3 Provide for Compliance Monitoring

There are three types of compliance monitoring: protection, performance, and conformational. Protection monitoring is intended to protect human health and the environment during the construction and operation and maintenance phases of a cleanup action. Performance monitoring is used to evaluate if the cleanup action has met cleanup and/or performance standards. Conformational monitoring is used to evaluate the long-term effectiveness of the cleanup action once cleanup standards have been met or other performance standards have been attained. The cleanup alternatives can be implemented to meet this provision.

7.5 Evaluation of Site Cleanup Alternatives

MTCA states that when selecting a cleanup alternative, preference shall be given to "permanent solutions to the maximum extent practicable." "Permanent" is defined in WAC 173-340-200 as a cleanup action in which the cleanup standards of WAC 173-340-700 through 760 are met without further action being required at the site being cleaned up or at any other site involved with the cleanup action, other than the approved disposal of any residue from the treatment of hazardous substances.

In order to determine the "maximum extent practicable" for each alternative, a disproportionate-cost analysis outlined in WAC 173-340-360(3)(e) is used. Costs are determined to be disproportionate to benefits if the incremental cost of a more expensive alternative over that of a lower-cost alternative exceeds the incremental degree of benefits achieved by the more expensive alternative. Consistent with WAC 173-340-360(3)(f), the evaluation criteria used were a mix of qualitative and quantitative factors, including protectiveness, permanence, effectiveness over the long term, management of short-term risks, technical and administrative implementability, and consideration of public concerns.

The cleanup alternatives are evaluated by the criteria below.

7.5.1 Protectiveness

Protectiveness is a factor by which human health and the environment are protected by the cleanup action, including the degree to which existing risks are reduced; time required to reduce risk at the facility and attain cleanup standards; on-site and off-site risks resulting from implementing the cleanup action alternative; and improvement of the overall environmental quality. The three alternatives are equally protective, preventing human and ecological exposure by removing soils exceeding CULs from the Property or capping them in place.

7.5.2 Permanence

Permanence is a factor by which the cleanup action alternative permanently reduces the toxicity, mobility, or volume of hazardous substances. It takes into account the adequacy of the alternative in destroying the hazardous substances, the reduction or elimination of hazardous-substance releases and sources of releases, the degree of irreversibility of the waste-treatment process, and the characteristics and quantity of treatment residuals generated. Removal of impacted soil would be considered the most permanent soil action because it permanently eliminates the source of releases at the Property. Alternatives that include less soil removal would be less permanent because they would rely on institutional controls, which could be violated or removed from the Property in the future. Therefore, alternative 1 would be ranked higher for permanence than alternatives 2 or 3.

7.5.3 Effectiveness over Long Term

Long-term effectiveness includes the degree of certainty that the alternative will be successful; the reliability of the alternative for the expected duration of hazardous substances remaining on site at

concentrations that exceed CULs; the magnitude of residual risk with the alternative in place; and the effectiveness of controls required to manage treatment residues or remaining wastes. Long-term effectiveness of alternative 1 would be considered slightly higher than for alternative 2 or 3, since it removes contaminated soil above MTCA criteria.

7.5.4 Management of Short-Term Risks

Short-term risks to remediation workers, the public, and the environment are assessed under this criterion. Generally, short-term risks are expected to be linearly related to the amount of material handled, treated, and/or transported and disposed of (e.g., worker injury per cubic yard excavated [equipment failure], public exposure per cubic yard-mile transported [highway accident]).

This factor addresses the risk to human health and the environment associated with the alternative during construction and implementation, and the effectiveness of measures that will be taken to manage such risks. Potential public exposure during transport, handling, and excavation required for the alternatives could lead to short-term risks. Alternative 3 requires less off-site transportation and handling of impacted soil and so would involve lower short-term risks; it is therefore ranked higher than alternative 1. Alternative 2 would rank the highest as no off-site transportation is needed.

7.5.5 Technical and Administrative Implementability

This factor addresses whether the alternative can be implemented and is technically possible. The availability of necessary materials, regulatory requirements, scheduling, access for construction operations and monitoring, and integration with existing and neighboring site uses must be considered. The proposed alternatives have been employed at many sites throughout the United States, so the alternatives are readily implementable and rank equivalently.

7.5.6 Public Concerns

This factor includes considering concerns from individuals, community groups, local governments, tribes, federal and state agencies, and any other organization that may have an interest in or knowledge of the Property and that may have a preferred alternative. The County hosted a public open house on April 29, 2014 to give local residents and the general public information pertaining to the redevelopment plan for the adjacent landfill properties. During this open house information pertaining to the County's interest in investigation and possible acquisition of the Property for redevelopment was released to the public. No concerns were voiced at that time. No remedial options were presented at that time. Future public meetings will be held pertaining to the landfill planning process at which point additional information pertaining to the Property and other adjacent properties may be conveyed.

The alternatives can provide opportunity for further public review of and comment on the plans.

7.5.7 Disproportionate-Cost Analysis

In accordance with WAC 173-340-360(3)(e), the most practicable permanent solution evaluated will be the baseline cleanup action alternative to which the other cleanup action alternatives are compared. On this basis, alternative 1 is the baseline alternative for this analysis. Table 6 summarizes the comparative analysis. Each alternative was given a rating between 1 and 5 (5 being optimal, 1 being inadequate). Where there were only slight differences, fractional ratings were applied.

Based on these criteria, alternatives 1, 2, and 3 have close ratings, ranging from 4.4 to 4.8, respectively (see Table 6). Evaluating the above factors with the estimated cost for each alternative and a relative increased benefit, alternative 1 is preferred by 8 percent; however, the cost of alternative 1 is nearly three and one half times the cost of alternative 2.

LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, expressed or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

The purpose of an environmental assessment is to reasonably evaluate the potential for or actual impact of past practices on a given site area. In performing an environmental assessment, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern. The following paragraphs discuss the assumptions and parameters under which such an opinion is rendered.

No investigation is thorough enough to exclude the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not, therefore, be construed as a guarantee of the absence of such materials on the site.

Environmental conditions that cannot be identified by visual observation may exist at the site. Where subsurface work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions at unsampled locations.

Except where there is express concern of our client, or where specific environmental contaminants have been previously reported by others, naturally occurring toxic substances, potential environmental contaminants inside buildings, or contaminant concentrations that are not of current environmental concern may not be reflected in this document.

The purpose of a geology/hydrogeology study is to reasonably characterize existing site conditions based on the geology/hydrogeology of the area. In performing such a study, it is understood that a balance must be struck between a reasonable inquiry into the site conditions and an exhaustive analysis of each conceivable environmental characteristic. The following paragraphs discuss the assumptions and parameters under which such an opinion is rendered.

No investigation is thorough enough to describe all geologic/hydrogeologic conditions of interest at a given site. If conditions have not been identified during the study, such a finding should not, therefore, be construed as a guarantee of the absence of such conditions at the site, but rather as the result of the services performed within the scope, limitations, and cost of the work performed.

We are unable to report on or accurately predict events that may change the site conditions after the described services are performed, whether they occur naturally or are caused by external forces. We

assume no responsibility for conditions we were not authorized to evaluate, or conditions not generally recognized as predictable when services were performed.

Geologic/hydrogeologic conditions that cannot be identified solely by visual observation may exist at the site. Where subsurface exploratory work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations. These data may not represent actual conditions at unsampled locations.

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TABLES

Table 1
Soil Analytical Results
Focused Site Characterization
Fleischer Properties
Vancouver, Washington

			Location:	TP01	TP02		TP03	TP04		TP05		TP06	
			Sample Name:	TP01-S-0.5	TP02-S-0.5	TP02-S-2.0	TP03-S-0.5	TP04-S-0.25	TP04-S-1.0	TP05-S-0.5	TP05-S-1.5	TP06-S-0.5	TP06-S-2.0
			Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
			Collection Depth (ft bgs):	0.5	0.5	2	0.5	0.25	1	0.5	1.5	0.5	2
	MTCA A, Soil Unrestricted Land Use	MTCA A, Soil Industrial Properties	MTCA B, Soil										
Metals (mg/kg)													
Arsenic	20	20	NA	--	**2.57**	--	**2.95**	**3.09**	--	--	--	**2.05**	--
Chromium[a]	2000	2000	NA	--	**14.8**	--	**9.98**	**14.1**	--	--	--	**16**	--
Copper	NV	NV	3200	--	**35.7**	--	**29.7**	**43.2**	--	--	--	**44.4**	--
Iron	NV	NV	56000	--	--	--	--	--	--	--	--	--	--
Lead	250	1000	NA	--	**38.8**	--	**7.71**	**53.6**	--	--	--	**45.9**	--
Manganese	NV	NV	11200	--	--	--	--	--	--	--	--	--	--
Mercury	2	2	NA	--	**0.0341**	--	0.0192 U	**0.0631**	--	--	--	**0.0485**	--
Nickel	NV	NV	1600	--	**16.3**	--	**10.1**	**12.6**	--	--	--	**11.4**	--
Zinc	NV	NV	24000	--	**601**	--	**78.5**	**836**	--	--	--	**2380**	--
PCBs (mg/kg)													
Aroclor 1016	NV	NV	5.6	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1221	NV	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1232	NV	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1242	NV	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1248	NV	NV	NV	**0.389** J	**32.4**	**0.185**	0.000406 U	**6.13**	**0.0667**	**38** J	**0.0458**	**48.3**	**0.114**
Aroclor 1254	NV	NV	0.5	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1260	NV	NV	0.5	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1262	NV	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1268	NV	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Total PCBs	1	10	NA	**0.389** J	**32.4**	**0.185**	0.000406 U	**6.13**	**0.0667**	**38** J	**0.0458**	**48.3**	**0.114**
Chlorinated Herbicides (mg/kg)													
2,4,5-T	NV	NV	800	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
2,4-D	NV	NV	800	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
2,4-DB	NV	NV	640	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
4-Nitrophenol	NV	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
Dicamba	NV	NV	2400	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
Dichlorprop	NV	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
Dinoseb	NV	NV	80	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
MCPA	NV	NV	40	0.801 U	0.726 U	--	0.813 U	--	0.856 U	0.779 U	--	0.759 U	--

			Location:	TP01	TP02		TP03	TP04		TP05		TP06	
			Sample Name:	TP01-S-0.5	TP02-S-0.5	TP02-S-2.0	TP03-S-0.5	TP04-S-0.25	TP04-S-1.0	TP05-S-0.5	TP05-S-1.5	TP06-S-0.5	TP06-S-2.0
			Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
			Collection Depth (ft bgs):	0.5	0.5	2	0.5	0.25	1	0.5	1.5	0.5	2
MCPP	NV	NV	80	0.801 U	0.726 U	--	0.813 U	--	0.856 U	0.779 U	--	0.759 U	--
Pentachlorophenol	NV	NV	2.5	**0.0191**	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	**0.0144**	--
Silvex	NV	NV	640	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
Organophosphorus Pesticides (mg/kg)													
Bladan	NV	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Coumaphos	NV	NV	NV	0.12 U	0.109 U	--	0.122 U	--	0.128 U	0.117 U	--	0.114 U	--
Demeton-S	NV	NV	NV	0.0601 U	0.0545 U	--	0.061 U	--	0.0642 U	0.0584 U	--	0.0569 U	--
Diazinon	NV	NV	56	0.0601 U	0.0545 U	--	0.061 U	--	0.0642 U	0.0584 U	--	0.0569 U	--
Dichlorvos	NV	NV	3.45	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Dimethoate	NV	NV	16	0.0601 U	0.0545 U	--	0.061 U	--	0.0642 U	0.0584 U	--	0.0569 U	--
Disulfoton	NV	NV	3.2	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Dursban	NV	NV	80	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Ethoprop	NV	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Fensulfothion	NV	NV	NV	0.12 U	0.109 U	--	0.122 U	--	0.128 U	0.117 U	--	0.114 U	--
Fenthion	NV	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Guthion	NV	NV	NV	0.3 U	0.272 U	--	0.305 U	--	0.321 U	0.292 U	--	0.285 U	--
Merphos oxide	NV	NV	2.4	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Methyl parathion	NV	NV	20	0.12 U	0.109 U	--	0.122 U	--	0.128 U	0.117 U	--	0.114 U	--
Mevinphos	NV	NV	NV	0.12 U	0.109 U	--	0.122 U	--	0.128 U	0.117 U	--	0.114 U	--
Naled	NV	NV	160	0.3 U	0.272 U	--	0.305 U	--	0.321 U	0.292 U	--	0.285 U	--
Parathion	NV	NV	480	0.0601 U	0.0545 U	--	0.061 U	--	0.0642 U	0.0584 U	--	0.0569 U	--
Phorate	NV	NV	16	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Ronnel	NV	NV	4000	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Santox	NV	NV	0.8	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Stirofos	NV	NV	41.7	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Sulfotepp	NV	NV	40	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Sulprofos	NV	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Sumitox	NV	NV	1600	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Tokuthion	NV	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Trichloronate	NV	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--

			Location:	TP01	TP02		TP03	TP04		TP05		TP06	
			Sample Name:	TP01-S-0.5	TP02-S-0.5	TP02-S-2.0	TP03-S-0.5	TP04-S-0.25	TP04-S-1.0	TP05-S-0.5	TP05-S-1.5	TP06-S-0.5	TP06-S-2.0
			Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
			Collection Depth (ft bgs):	0.5	0.5	2	0.5	0.25	1	0.5	1.5	0.5	2
Organochlorine Pesticides (mg/kg)													
4,4'-DDD	NV	NV	4.17	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
4,4'-DDE	NV	NV	2.94	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
4,4'-DDT	3	4	NA	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Aldrin	NV	NV	0.059	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
alpha-BHC	NV	NV	0.159	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
alpha-Chlordane	NV	NV	2.86	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
beta-BHC	NV	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Chlordane	NV	NV	2.86	0.00801 UJ	0.00726 UJ	--	0.00813 UJ	--	0.00856 UJ	0.00779 UJ	--	0.00759 UJ	--
delta-BHC	NV	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Dieldrin	NV	NV	0.063	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endosulfan I	NV	NV	480	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endosulfan II	NV	NV	480	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endosulfan sulfate	NV	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endrin	NV	NV	24	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endrin aldehyde	NV	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endrin ketone	NV	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Gamma-Chlordane	NV	NV	2.86	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Heptachlor	NV	NV	0.222	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Heptachlor epoxide	NV	NV	0.11	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Lindane	0.01	0.01	NA	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Methoxychlor	NV	NV	400	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Toxaphene	NV	NV	0.909	0.00801 UJ	0.00726 UJ	--	0.00813 UJ	--	0.00856 UJ	0.00779 UJ	--	0.00759 UJ	--
TPH (mg/kg)													
Diesel	2000	2000	NA	--	**138** J	--	18.3 U	**85.7** J	--	--	--	**111** J	--
Lube Oil	2000	2000	NA	--	**855**	--	**67** J	**659** J	--	--	--	**386** J	--
Ammonia (mg/kg)													
Nitrogen, Ammonia as N	NV	NV	NV	--	--	--	--	--	--	--	--	--	--

Table 1
Soil Analytical Results
Focused Site Characterization
Fleischer Properties
Vancouver, Washington

			Location:	TP07		TP08	TP09		TP10			TP11	
			Sample Name:	TP07-S-0.25	TP07-S-1.0	TP08-S-0.5	TP09-S-0.5	TP09-S-4.5	TP10-S-0.5	TP-S-0.5DUP	TP10-S-1.5	TP11-S-0.5	TP11-S-4.5
			Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
			Collection Depth (ft bgs):	0.25	1	0.5	0.5	4.5	0.5	0.5	1.5	0.5	4.5
	MTCA A, Soil Unrestricted Land Use	MTCA A, Soil Industrial Properties	MTCA B, Soil										
Metals (mg/kg)													
Arsenic	20	20	NA	**3.9**	--	**2.51**	--	--	**2.96**	**2.74**	--	--	--
Chromium[a]	2000	2000	NA	**13.8**	--	**9.87**	--	--	**14.3**	**14.4**	--	--	--
Copper	NV	NV	3200	**40.1**	--	**28.3**	--	--	**38.1**	**45.3**	--	--	--
Iron	NV	NV	56000	--	--	--	--	--	--	--	--	--	--
Lead	250	1000	NA	**56.3**	--	**15.4**	--	--	**39.3**	**34.8**	--	--	--
Manganese	NV	NV	11200	--	--	--	--	--	--	--	--	--	--
Mercury	2	2	NA	**0.075**	--	**0.0277**	--	--	**0.055**	**0.0608**	--	--	--
Nickel	NV	NV	1600	**20.2**	--	**10.4**	--	--	**20.4**	**11.3**	--	--	--
Zinc	NV	NV	24000	**238**	--	**83.8**	--	--	**1030**	**1340**	--	--	--
PCBs (mg/kg)													
Aroclor 1016	NV	NV	5.6	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1221	NV	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1232	NV	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1242	NV	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1248	NV	NV	NV	**1.26** J	**0.045**	**0.0822**	**0.997**	0.000366 U	**68.5**	**53.2**	**0.0343**	**5.66**	0.000374 U
Aroclor 1254	NV	NV	0.5	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1260	NV	NV	0.5	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1262	NV	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1268	NV	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Total PCBs	1	10	NA	**1.26** J	**0.045**	**0.0822**	**0.997**	0.000366 U	**68.5**	**53.2**	**0.0343**	**5.66**	0.000374 U
Chlorinated Herbicides (mg/kg)													
2,4,5-T	NV	NV	800	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
2,4-D	NV	NV	800	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
2,4-DB	NV	NV	640	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
4-Nitrophenol	NV	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Dicamba	NV	NV	2400	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Dichlorprop	NV	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Dinoseb	NV	NV	80	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
MCPA	NV	NV	40	--	0.814 U	0.76 U	0.861 U	--	--	--	0.809 U	0.782 U	--

			Location:	TP07		TP08	TP09		TP10			TP11	
			Sample Name:	TP07-S-0.25	TP07-S-1.0	TP08-S-0.5	TP09-S-0.5	TP09-S-4.5	TP10-S-0.5	TP-S-0.5DUP	TP10-S-1.5	TP11-S-0.5	TP11-S-4.5
			Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
			Collection Depth (ft bgs):	0.25	1	0.5	0.5	4.5	0.5	0.5	1.5	0.5	4.5
MCPP	NV	NV	80	--	0.814 U	0.76 U	0.861 U	--	--	--	0.809 U	0.782 U	--
Pentachlorophenol	NV	NV	2.5	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Silvex	NV	NV	640	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Organophosphorus Pesticides (mg/kg)													
Bladan	NV	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Coumaphos	NV	NV	NV	--	0.122 U	0.114 U	0.129 U	--	--	--	0.121 U	0.117 U	--
Demeton-S	NV	NV	NV	--	0.061 U	0.057 U	0.0646 U	--	--	--	0.0607 U	0.0586 U	--
Diazinon	NV	NV	56	--	0.061 U	0.057 U	0.0646 U	--	--	--	0.0607 U	0.0586 U	--
Dichlorvos	NV	NV	3.45	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Dimethoate	NV	NV	16	--	0.061 U	0.057 U	0.0646 U	--	--	--	0.0607 U	0.0586 U	--
Disulfoton	NV	NV	3.2	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Dursban	NV	NV	80	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Ethoprop	NV	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Fensulfothion	NV	NV	NV	--	0.122 U	0.114 U	0.129 U	--	--	--	0.121 U	0.117 U	--
Fenthion	NV	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Guthion	NV	NV	NV	--	0.305 U	0.285 U	0.323 U	--	--	--	0.303 U	0.293 U	--
Merphos oxide	NV	NV	2.4	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Methyl parathion	NV	NV	20	--	0.122 U	0.114 U	0.129 U	--	--	--	0.121 U	0.117 U	--
Mevinphos	NV	NV	NV	--	0.122 U	0.114 U	0.129 U	--	--	--	0.121 U	0.117 U	--
Naled	NV	NV	160	--	0.305 U	0.285 U	0.323 U	--	--	--	0.303 U	0.293 U	--
Parathion	NV	NV	480	--	0.061 U	0.057 U	0.0646 U	--	--	--	0.0607 U	0.0586 U	--
Phorate	NV	NV	16	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Ronnel	NV	NV	4000	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Santox	NV	NV	0.8	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Stirofos	NV	NV	41.7	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Sulfotepp	NV	NV	40	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Sulprofos	NV	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Sumitox	NV	NV	1600	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Tokuthion	NV	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Trichloronate	NV	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--

Table 1
Soil Analytical Results
Focused Site Characterization
Fleischer Properties
Vancouver, Washington

			Location:	TP07		TP08	TP09		TP10			TP11	
			Sample Name:	TP07-S-0.25	TP07-S-1.0	TP08-S-0.5	TP09-S-0.5	TP09-S-4.5	TP10-S-0.5	TP-S-0.5DUP	TP10-S-1.5	TP11-S-0.5	TP11-S-4.5
			Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
			Collection Depth (ft bgs):	0.25	1	0.5	0.5	4.5	0.5	0.5	1.5	0.5	4.5
Organochlorine Pesticides (mg/kg)													
4,4'-DDD	NV	NV	4.17	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
4,4'-DDE	NV	NV	2.94	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
4,4'-DDT	3	4	NA	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Aldrin	NV	NV	0.059	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
alpha-BHC	NV	NV	0.159	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
alpha-Chlordane	NV	NV	2.86	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
beta-BHC	NV	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Chlordane	NV	NV	2.86	--	0.00814 UJ	0.0076 UJ	0.00861 UJ	--	--	--	0.00809 UJ	0.00782 UJ	--
delta-BHC	NV	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Dieldrin	NV	NV	0.063	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endosulfan I	NV	NV	480	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endosulfan II	NV	NV	480	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endosulfan sulfate	NV	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endrin	NV	NV	24	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endrin aldehyde	NV	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endrin ketone	NV	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Gamma-Chlordane	NV	NV	2.86	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Heptachlor	NV	NV	0.222	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Heptachlor epoxide	NV	NV	0.11	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Lindane	0.01	0.01	NA	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Methoxychlor	NV	NV	400	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Toxaphene	NV	NV	0.909	--	0.00814 UJ	0.0076 UJ	0.00861 UJ	--	--	--	0.00809 UJ	0.00782 UJ	--
TPH (mg/kg)													
Diesel	2000	2000	NA	**149** J	--	**52.3**	--	--	**98.8** J	**78.2** J	--	--	--
Lube Oil	2000	2000	NA	**825** J	--	**405** J	--	--	**359** J	**232** J	--	--	--
Ammonia (mg/kg)													
Nitrogen, Ammonia as N	NV	NV	NV	--	--	--	--	--	--	--	--	--	--

Table 1
Soil Analytical Results
Focused Site Characterization
Fleischer Properties
Vancouver, Washington

			Location:	TP12	TP13			TP14		TP15		
			Sample Name:	TP12-S-0.5	TP13-S-0.5	TP13-S-1.5	TP13-S-5.5	TP14-S-0.5	TP14-S-4.5	TP15-S-0.5	TP15-S-1.75	TP15-S-6.0
			Collection Date:	7/15/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	1.5	5.5	0.5	4.5	0.5	1.75	6
	MTCA A, Soil Unrestricted Land Use	MTCA A, Soil Industrial Properties	MTCA B, Soil									
Metals (mg/kg)												
Arsenic	20	20	NA	**2.61**	--	**3.95**	--	--	--	--	**2.67**	--
Chromium[a]	2000	2000	NA	**12.1**	--	**16**	--	--	--	--	**15.7**	--
Copper	NV	NV	3200	**30.7**	--	**41.5**	--	--	--	--	**28.8**	--
Iron	NV	NV	56000	--	--	--	--	--	--	--	--	--
Lead	250	1000	NA	**8.65**	--	**52.5**	--	--	--	--	**33.3**	--
Manganese	NV	NV	11200	--	--	--	--	--	--	--	--	--
Mercury	2	2	NA	**0.0235**	--	**0.0899**	--	--	--	--	**0.0877**	--
Nickel	NV	NV	1600	**11.5**	--	**14.6**	--	--	--	--	**9.86**	--
Zinc	NV	NV	24000	**89.9**	--	**893**	--	--	--	--	**1320**	--
PCBs (mg/kg)												
Aroclor 1016	NV	NV	5.6	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1221	NV	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1232	NV	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1242	NV	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1248	NV	NV	NV	**0.493**	0.000399 U	**11.2** J	**0.124**	**13.9** J	**0.0256**	**0.108**	**39.2**	**0.0871**
Aroclor 1254	NV	NV	0.5	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1260	NV	NV	0.5	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1262	NV	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1268	NV	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Total PCBs	1	10	NA	**0.493**	0.000399 U	**11.2** J	**0.124**	**13.9** J	**0.0256**	**0.108**	**39.2**	**0.0871**
Chlorinated Herbicides (mg/kg)												
2,4,5-T	NV	NV	800	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
2,4-D	NV	NV	800	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
2,4-DB	NV	NV	640	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
4-Nitrophenol	NV	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Dicamba	NV	NV	2400	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Dichlorprop	NV	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Dinoseb	NV	NV	80	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
MCPA	NV	NV	40	0.792 U	0.799 U	--	--	0.824 U	--	--	0.841 U	--

			Location:	TP12	TP13			TP14		TP15		
			Sample Name:	TP12-S-0.5	TP13-S-0.5	TP13-S-1.5	TP13-S-5.5	TP14-S-0.5	TP14-S-4.5	TP15-S-0.5	TP15-S-1.75	TP15-S-6.0
			Collection Date:	7/15/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	1.5	5.5	0.5	4.5	0.5	1.75	6
MCPP	NV	NV	80	0.792 U	0.799 U	--	--	0.824 U	--	--	0.841 U	--
Pentachlorophenol	NV	NV	2.5	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Silvex	NV	NV	640	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Organophosphorus Pesticides (mg/kg)												
Bladan	NV	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Coumaphos	NV	NV	NV	0.119 U	0.12 U	--	--	0.124 U	--	--	0.126 U	--
Demeton-S	NV	NV	NV	0.0594 U	0.0599 U	--	--	0.0618 U	--	--	0.0631 U	--
Diazinon	NV	NV	56	0.0594 U	0.0599 U	--	--	0.0618 U	--	--	0.0631 U	--
Dichlorvos	NV	NV	3.45	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Dimethoate	NV	NV	16	0.0594 U	0.0599 U	--	--	0.0618 U	--	--	0.0631 U	--
Disulfoton	NV	NV	3.2	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Dursban	NV	NV	80	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Ethoprop	NV	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Fensulfothion	NV	NV	NV	0.119 U	0.12 U	--	--	0.124 U	--	--	0.126 U	--
Fenthion	NV	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Guthion	NV	NV	NV	0.297 U	0.3 U	--	--	0.309 U	--	--	0.315 U	--
Merphos oxide	NV	NV	2.4	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Methyl parathion	NV	NV	20	0.119 U	0.12 U	--	--	0.124 U	--	--	0.126 U	--
Mevinphos	NV	NV	NV	0.119 U	0.12 U	--	--	0.124 U	--	--	0.126 U	--
Naled	NV	NV	160	0.297 U	0.3 U	--	--	0.309 U	--	--	0.315 U	--
Parathion	NV	NV	480	0.0594 U	0.0599 U	--	--	0.0618 U	--	--	0.0631 U	--
Phorate	NV	NV	16	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Ronnel	NV	NV	4000	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Santox	NV	NV	0.8	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Stirofos	NV	NV	41.7	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Sulfotepp	NV	NV	40	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Sulprofos	NV	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Sumitox	NV	NV	1600	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Tokuthion	NV	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Trichloronate	NV	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--

			Location:	TP12	TP13			TP14		TP15		
			Sample Name:	TP12-S-0.5	TP13-S-0.5	TP13-S-1.5	TP13-S-5.5	TP14-S-0.5	TP14-S-4.5	TP15-S-0.5	TP15-S-1.75	TP15-S-6.0
			Collection Date:	7/15/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	1.5	5.5	0.5	4.5	0.5	1.75	6
Organochlorine Pesticides (mg/kg)												
4,4'-DDD	NV	NV	4.17	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
4,4'-DDE	NV	NV	2.94	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
4,4'-DDT	3	4	NA	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Aldrin	NV	NV	0.059	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
alpha-BHC	NV	NV	0.159	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
alpha-Chlordane	NV	NV	2.86	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
beta-BHC	NV	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Chlordane	NV	NV	2.86	0.00792 UJ	0.00799 UJ	--	--	0.00824 UJ	--	--	0.00841 UJ	--
delta-BHC	NV	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Dieldrin	NV	NV	0.063	0.000396 UJ	**0.00241** J	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endosulfan I	NV	NV	480	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endosulfan II	NV	NV	480	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endosulfan sulfate	NV	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endrin	NV	NV	24	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endrin aldehyde	NV	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endrin ketone	NV	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Gamma-Chlordane	NV	NV	2.86	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Heptachlor	NV	NV	0.222	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Heptachlor epoxide	NV	NV	0.11	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Lindane	0.01	0.01	NA	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Methoxychlor	NV	NV	400	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Toxaphene	NV	NV	0.909	0.00792 UJ	0.00799 UJ	--	--	0.00824 UJ	--	--	0.00841 UJ	--
TPH (mg/kg)												
Diesel	2000	2000	NA	17.8 U	--	**25.8** J	--	--	--	--	**65.7** J	--
Lube Oil	2000	2000	NA	**85.2** J	--	**91.7** J	--	--	--	--	**201** J	--
Ammonia (mg/kg)												
Nitrogen, Ammonia as N	NV	NV	NV	--	--	--	--	--	--	--	--	--

Table 1
Soil Analytical Results
Focused Site Characterization
Fleischer Properties
Vancouver, Washington

			Location:	TP16	TP17			TP18	TP19	TP20	TP21	
			Sample Name:	TP16-S-0.5	TP17-S-0.5	TP17-S-1.25	TP17-S-4.5	TP18-S-0.5	TP19-S-0.5	TP20-S-0.5	TP21-S-0.5	TP21-S-5.0
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	1.25	4.5	0.5	0.5	0.5	0.5	5
	MTCA A, Soil Unrestricted Land Use	MTCA A, Soil Industrial Properties	MTCA B, Soil									
Metals (mg/kg)												
Arsenic	20	20	NA	**3.62**	--	**2.48**	--	**2.5**	--	**2.07**	**4.9**	--
Chromium[a]	2000	2000	NA	**15.6**	--	**12.8**	--	**11.9**	--	**12.7**	**15.3**	--
Copper	NV	NV	3200	**33.2**	--	**29.3**	--	**27.5**	--	**24.3**	**28.8**	--
Iron	NV	NV	56000	--	--	--	--	--	--	--	--	--
Lead	250	1000	NA	**8.1**	--	**38.1**	--	**6.98**	--	**6.14**	**18.5**	--
Manganese	NV	NV	11200	--	--	--	--	--	--	--	--	--
Mercury	2	2	NA	0.0214 U	--	**0.067**	--	**0.0286**	--	0.0186 U	**0.0304**	--
Nickel	NV	NV	1600	**18.8**	--	**7.71**	--	**7.42**	--	**19.4**	**13.8**	--
Zinc	NV	NV	24000	**5010**	--	**694**	--	**1250**	--	**348**	**2700**	--
PCBs (mg/kg)												
Aroclor 1016	NV	NV	5.6	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1221	NV	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1232	NV	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1242	NV	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1248	NV	NV	NV	**0.0191**	**1.71**	**86.6** J	**0.134**	**0.793**	**0.187**	**0.803**	**13.4**	0.000375 U
Aroclor 1254	NV	NV	0.5	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1260	NV	NV	0.5	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1262	NV	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1268	NV	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Total PCBs	1	10	NA	**0.0191**	**1.71**	**86.6**	**0.134**	**0.793**	**0.187**	**0.803**	**13.4**	0.000375 U
Chlorinated Herbicides (mg/kg)												
2,4,5-T	NV	NV	800	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
2,4-D	NV	NV	800	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
2,4-DB	NV	NV	640	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
4-Nitrophenol	NV	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Dicamba	NV	NV	2400	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Dichlorprop	NV	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Dinoseb	NV	NV	80	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
MCPA	NV	NV	40	0.856 U	--	0.837 U	--	0.79 U	0.853 U	0.815 U	0.768 U	--

			Location:	TP16	TP17			TP18	TP19	TP20	TP21	
			Sample Name:	TP16-S-0.5	TP17-S-0.5	TP17-S-1.25	TP17-S-4.5	TP18-S-0.5	TP19-S-0.5	TP20-S-0.5	TP21-S-0.5	TP21-S-5.0
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	1.25	4.5	0.5	0.5	0.5	0.5	5
MCPP	NV	NV	80	0.856 U	--	0.837 U	--	0.79 U	0.853 U	0.815 U	0.768 U	--
Pentachlorophenol	NV	NV	2.5	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Silvex	NV	NV	640	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Organophosphorus Pesticides (mg/kg)												
Bladan	NV	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Coumaphos	NV	NV	NV	0.128 U	--	0.125 U	--	0.118 U	0.128 U	0.122 U	0.115 U	--
Demeton-S	NV	NV	NV	0.0642 U	--	0.0627 U	--	0.0592 U	0.0639 U	0.0611 U	0.0576 U	--
Diazinon	NV	NV	56	0.0642 U	--	0.0627 U	--	0.0592 U	0.0639 U	0.0611 U	0.0576 U	--
Dichlorvos	NV	NV	3.45	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Dimethoate	NV	NV	16	0.0642 U	--	0.0627 U	--	0.0592 U	0.0639 U	0.0611 U	0.0576 U	--
Disulfoton	NV	NV	3.2	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Dursban	NV	NV	80	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Ethoprop	NV	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Fensulfothion	NV	NV	NV	0.128 U	--	0.125 U	--	0.118 U	0.128 U	0.122 U	0.115 U	--
Fenthion	NV	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Guthion	NV	NV	NV	0.321 U	--	0.314 U	--	0.296 U	0.32 U	0.306 U	0.288 U	--
Merphos oxide	NV	NV	2.4	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Methyl parathion	NV	NV	20	0.128 U	--	0.125 U	--	0.118 U	0.128 U	0.122 U	0.115 U	--
Mevinphos	NV	NV	NV	0.128 U	--	0.125 U	--	0.118 U	0.128 U	0.122 U	0.115 U	--
Naled	NV	NV	160	0.321 U	--	0.314 U	--	0.296 U	0.32 U	0.306 U	0.288 U	--
Parathion	NV	NV	480	0.0642 U	--	0.0627 U	--	0.0592 U	0.0639 U	0.0611 U	0.0576 U	--
Phorate	NV	NV	16	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Ronnel	NV	NV	4000	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Santox	NV	NV	0.8	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Stirofos	NV	NV	41.7	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Sulfotepp	NV	NV	40	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Sulprofos	NV	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Sumitox	NV	NV	1600	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Tokuthion	NV	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Trichloronate	NV	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--

			Location:	TP16	TP17			TP18	TP19	TP20	TP21	
			Sample Name:	TP16-S-0.5	TP17-S-0.5	TP17-S-1.25	TP17-S-4.5	TP18-S-0.5	TP19-S-0.5	TP20-S-0.5	TP21-S-0.5	TP21-S-5.0
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	1.25	4.5	0.5	0.5	0.5	0.5	5
Organochlorine Pesticides (mg/kg)												
4,4'-DDD	NV	NV	4.17	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
4,4'-DDE	NV	NV	2.94	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
4,4'-DDT	3	4	NA	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Aldrin	NV	NV	0.059	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
alpha-BHC	NV	NV	0.159	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
alpha-Chlordane	NV	NV	2.86	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
beta-BHC	NV	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Chlordane	NV	NV	2.86	0.00856 UJ	--	0.00837 UJ	--	0.0079 UJ	0.00853 UJ	0.00815 UJ	0.00768 UJ	--
delta-BHC	NV	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Dieldrin	NV	NV	0.063	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endosulfan I	NV	NV	480	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endosulfan II	NV	NV	480	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endosulfan sulfate	NV	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endrin	NV	NV	24	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endrin aldehyde	NV	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endrin ketone	NV	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Gamma-Chlordane	NV	NV	2.86	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Heptachlor	NV	NV	0.222	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Heptachlor epoxide	NV	NV	0.11	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Lindane	0.01	0.01	NA	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Methoxychlor	NV	NV	400	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Toxaphene	NV	NV	0.909	0.00856 UJ	--	0.00837 UJ	--	0.0079 UJ	0.00853 UJ	0.00815 UJ	0.00768 UJ	--
TPH (mg/kg)												
Diesel	2000	2000	NA	19.3 U	--	**59.7** J	--	17.8 U	--	**22.6** J	**37.5** J	--
Lube Oil	2000	2000	NA	**82.2** J	--	**165** J	--	**79.4** J	--	**105** J	**162** J	--
Ammonia (mg/kg)												
Nitrogen, Ammonia as N	NV	NV	NV	--	--	--	--	--	--	--	--	--

Table 1
Soil Analytical Results
Focused Site Characterization
Fleischer Properties
Vancouver, Washington

			Location:	TP22	TP23		TP24	TP25		TP26	
			Sample Name:	TP22-S-0.5	TP23-S-0.5	TP23-S-4.5	TP24-S-0.5	TP25-S-0.5	TP25-S-4.5	TP26-S-0.5	TP26-S-5.0
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	4.5	0.5	0.5	4.5	0.5	5
	MTCA A, Soil Unrestricted Land Use	MTCA A, Soil Industrial Properties	MTCA B, Soil								
Metals (mg/kg)											
Arsenic	20	20	NA	**2.5**	**2.24**	--	**2.18**	**3.7**	--	**4.19**	--
Chromium[a]	2000	2000	NA	**9.46**	**10.6**	--	**10.1**	**12.6**	--	**26.2**	--
Copper	NV	NV	3200	**41.6**	**22.8**	--	**27.4**	**29.2**	--	**35.5**	--
Iron	NV	NV	56000	--	--	--	--	--	--	**31200**	--
Lead	250	1000	NA	**7.13**	**13.7**	--	**32.2**	**23.8**	--	**95.3**	--
Manganese	NV	NV	11200	--	--	--	--	--	--	**538**	--
Mercury	2	2	NA	0.0201 U	**0.0497**	--	**0.114**	**0.0597**	--	**0.0723**	--
Nickel	NV	NV	1600	**10.6**	**10.1**	--	**8.7**	**10.6** J	--	**11.3**	--
Zinc	NV	NV	24000	**168**	**608**	--	**177**	**314**	--	**2380**	--
PCBs (mg/kg)											
Aroclor 1016	NV	NV	5.6	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1221	NV	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1232	NV	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1242	NV	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1248	NV	NV	NV	**0.635**	**17.1**	0.000363 U	**0.514** J	**26.9**	0.00037 U	**33.2** J	0.00036 U
Aroclor 1254	NV	NV	0.5	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1260	NV	NV	0.5	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1262	NV	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1268	NV	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Total PCBs	1	10	NA	**0.635**	**17.1**	0.000363 U	**0.514** J	**26.9**	0.000185 U	**33.2** J	0.00036 U
Chlorinated Herbicides (mg/kg)											
2,4,5-T	NV	NV	800	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
2,4-D	NV	NV	800	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
2,4-DB	NV	NV	640	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
4-Nitrophenol	NV	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
Dicamba	NV	NV	2400	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
Dichlorprop	NV	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
Dinoseb	NV	NV	80	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
MCPA	NV	NV	40	0.868 U	0.796 UJ	--	0.772 U	0.774 U	--	0.787 U	--

			Location:	TP22	TP23		TP24	TP25		TP26	
			Sample Name:	TP22-S-0.5	TP23-S-0.5	TP23-S-4.5	TP24-S-0.5	TP25-S-0.5	TP25-S-4.5	TP26-S-0.5	TP26-S-5.0
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	4.5	0.5	0.5	4.5	0.5	5
MCPP	NV	NV	80	0.868 U	0.796 UJ	--	0.772 U	0.774 U	--	0.787 U	--
Pentachlorophenol	NV	NV	2.5	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	**0.172**	--
Silvex	NV	NV	640	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
Organophosphorus Pesticides (mg/kg)											
Bladan	NV	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Coumaphos	NV	NV	NV	0.13 U	0.119 U	--	0.116 U	0.116 U	--	0.118 U	--
Demeton-S	NV	NV	NV	0.0651 U	0.0597 U	--	0.0579 U	0.0581 U	--	0.059 U	--
Diazinon	NV	NV	56	0.0651 U	0.0597 U	--	0.0579 U	0.0581 U	--	0.059 U	--
Dichlorvos	NV	NV	3.45	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Dimethoate	NV	NV	16	0.0651 U	0.0597 U	--	0.0579 U	0.0581 U	--	0.059 U	--
Disulfoton	NV	NV	3.2	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Dursban	NV	NV	80	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Ethoprop	NV	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Fensulfothion	NV	NV	NV	0.13 U	0.119 U	--	0.116 U	0.116 U	--	0.118 U	--
Fenthion	NV	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Guthion	NV	NV	NV	0.326 U	0.298 U	--	0.289 U	0.29 U	--	0.295 U	--
Merphos oxide	NV	NV	2.4	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Methyl parathion	NV	NV	20	0.13 U	0.119 U	--	0.116 U	0.116 U	--	0.118 U	--
Mevinphos	NV	NV	NV	0.13 U	0.119 U	--	0.116 U	0.116 U	--	0.118 U	--
Naled	NV	NV	160	0.326 U	0.298 U	--	0.289 U	0.29 U	--	0.295 U	--
Parathion	NV	NV	480	0.0651 U	0.0597 U	--	0.0579 U	0.0581 U	--	0.059 U	--
Phorate	NV	NV	16	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Ronnel	NV	NV	4000	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Santox	NV	NV	0.8	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Stirofos	NV	NV	41.7	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Sulfotepp	NV	NV	40	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Sulprofos	NV	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Sumitox	NV	NV	1600	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Tokuthion	NV	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Trichloronate	NV	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--

			Location:	TP22	TP23		TP24	TP25		TP26	
			Sample Name:	TP22-S-0.5	TP23-S-0.5	TP23-S-4.5	TP24-S-0.5	TP25-S-0.5	TP25-S-4.5	TP26-S-0.5	TP26-S-5.0
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	4.5	0.5	0.5	4.5	0.5	5
Organochlorine Pesticides (mg/kg)											
4,4'-DDD	NV	NV	4.17	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
4,4'-DDE	NV	NV	2.94	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
4,4'-DDT	3	4	NA	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Aldrin	NV	NV	0.059	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
alpha-BHC	NV	NV	0.159	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
alpha-Chlordane	NV	NV	2.86	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
beta-BHC	NV	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Chlordane	NV	NV	2.86	0.00868 UJ	0.00796 UJ	--	0.00772 UJ	0.00774 UJ	--	0.00787 UJ	--
delta-BHC	NV	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Dieldrin	NV	NV	0.063	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endosulfan I	NV	NV	480	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endosulfan II	NV	NV	480	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endosulfan sulfate	NV	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endrin	NV	NV	24	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endrin aldehyde	NV	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endrin ketone	NV	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Gamma-Chlordane	NV	NV	2.86	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Heptachlor	NV	NV	0.222	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Heptachlor epoxide	NV	NV	0.11	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Lindane	0.01	0.01	NA	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Methoxychlor	NV	NV	400	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Toxaphene	NV	NV	0.909	0.00868 UJ	0.00796 UJ	--	0.00772 UJ	0.00774 UJ	--	0.00787 UJ	--
TPH (mg/kg)											
Diesel	2000	2000	NA	19.5 U	**23.2** J	--	**19.3**	**62.4** J	--	**44.9**	--
Lube Oil	2000	2000	NA	65.1 U	**104** J	--	**104** J	**215** J	--	**133**	--
Ammonia (mg/kg)											
Nitrogen, Ammonia as N	NV	NV	NV	--	--	--	--	--	--	4.72 U	--

Table 1
Soil Analytical Results
Focused Site Characterization
Fleischer Properties
Vancouver, Washington

			Location:	TP27			TP28	TP29				TP30		TP31
			Sample Name:	TP27-S-0.5	TP27-S-5.5	TP27-S-8.5	TP28-S-0.5	TP29-S-0.5	TP-S-0.5DUP	TP29-S-3.5	TP29-S-7.5	TP30-S-0.5	TP30-S-4.0	TP31-S-0.5
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	10/1/2014
			Collection Depth (ft bgs):	0.5	5.5	8.5	0.5	0.5	0.5	3.5	7.5	0.5	4	0.5
	MTCA A, Soil Unrestricted Land Use	MTCA A, Soil Industrial Properties	MTCA B, Soil											
Metals (mg/kg)														
Arsenic	20	20	NA	**14.6**	--	--	--	**3.08**	**2.88**	--	--	--	--	--
Chromium[a]	2000	2000	NA	**17**	--	--	--	**11.9**	**15.5**	--	--	--	--	--
Copper	NV	NV	3200	**35.5**	--	--	--	**25.7**	**24.5**	--	--	--	--	--
Iron	NV	NV	56000	**27200**	--	--	**47400**	**36900**	**43300**	--	--	**41700**	--	--
Lead	250	1000	NA	**96.4**	--	--	--	**15.5**	**12.6**	--	--	--	--	--
Manganese	NV	NV	11200	**333**	--	--	**817**	**429**	**437**	--	--	**517**	--	--
Mercury	2	2	NA	**0.11**	--	--	--	**0.0444**	**0.0405**	--	--	--	--	--
Nickel	NV	NV	1600	**8.97**	--	--	--	**10.5**	**15.3**	--	--	--	--	--
Zinc	NV	NV	24000	**448**	--	--	--	**382**	**390**	--	--	--	--	--
PCBs (mg/kg)														
Aroclor 1016	NV	NV	5.6	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U
Aroclor 1221	NV	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U
Aroclor 1232	NV	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U
Aroclor 1242	NV	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U
Aroclor 1248	NV	NV	NV	**63.1** J	**1.56**	**0.392**	**0.532** J	**3.98** J	**3.64** J	**4.21**	**0.186**	**17.3** J	0.000362 U	**0.0694**
Aroclor 1254	NV	NV	0.5	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U
Aroclor 1260	NV	NV	0.5	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U
Aroclor 1262	NV	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U
Aroclor 1268	NV	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U
Total PCBs	1	10	NA	**63.1** J	**1.56**	**0.392**	**0.532** J	**3.98** J	**3.64** J	**4.21**	**0.186**	**17.3** J	0.000362 U	**0.0694**
Chlorinated Herbicides (mg/kg)														
2,4,5-T	NV	NV	800	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--
2,4-D	NV	NV	800	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--
2,4-DB	NV	NV	640	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--
4-Nitrophenol	NV	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--
Dicamba	NV	NV	2400	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--
Dichlorprop	NV	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--
Dinoseb	NV	NV	80	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--
MCPA	NV	NV	40	0.923 U	--	--	0.782 U	0.765 U	0.773 U	--	--	0.764 U	--	--

			Location:	TP27			TP28	TP29				TP30		TP31
			Sample Name:	TP27-S-0.5	TP27-S-5.5	TP27-S-8.5	TP28-S-0.5	TP29-S-0.5	TP-S-0.5DUP	TP29-S-3.5	TP29-S-7.5	TP30-S-0.5	TP30-S-4.0	TP31-S-0.5
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	10/1/2014
			Collection Depth (ft bgs):	0.5	5.5	8.5	0.5	0.5	0.5	3.5	7.5	0.5	4	0.5
MCPP	NV	NV	80	0.923 U	--	--	0.782 U	0.765 U	0.773 U	--	--	0.764 U	--	--
Pentachlorophenol	NV	NV	2.5	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	**0.00902**	--	--
Silvex	NV	NV	640	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--
Organophosphorus Pesticides (mg/kg)														
Bladan	NV	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Coumaphos	NV	NV	NV	0.138 U	--	--	0.117 U	0.115 U	0.116 U	--	--	0.115 U	--	--
Demeton-S	NV	NV	NV	0.0692 U	--	--	0.0587 U	0.0574 U	0.058 U	--	--	0.0573 U	--	--
Diazinon	NV	NV	56	0.0692 U	--	--	0.0587 U	0.0574 U	0.058 U	--	--	0.0573 U	--	--
Dichlorvos	NV	NV	3.45	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Dimethoate	NV	NV	16	0.0692 U	--	--	0.0587 U	0.0574 U	0.058 U	--	--	0.0573 U	--	--
Disulfoton	NV	NV	3.2	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Dursban	NV	NV	80	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Ethoprop	NV	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Fensulfothion	NV	NV	NV	0.138 U	--	--	0.117 U	0.115 U	0.116 U	--	--	0.115 U	--	--
Fenthion	NV	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Guthion	NV	NV	NV	0.346 U	--	--	0.293 U	0.287 U	0.29 U	--	--	0.287 U	--	--
Merphos oxide	NV	NV	2.4	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Methyl parathion	NV	NV	20	0.138 U	--	--	0.117 U	0.115 U	0.116 U	--	--	0.115 U	--	--
Mevinphos	NV	NV	NV	0.138 U	--	--	0.117 U	0.115 U	0.116 U	--	--	0.115 U	--	--
Naled	NV	NV	160	0.346 U	--	--	0.293 U	0.287 U	0.29 U	--	--	0.287 U	--	--
Parathion	NV	NV	480	0.0692 U	--	--	0.0587 U	0.0574 U	0.058 U	--	--	0.0573 U	--	--
Phorate	NV	NV	16	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Ronnel	NV	NV	4000	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Santox	NV	NV	0.8	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Stirofos	NV	NV	41.7	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Sulfotepp	NV	NV	40	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Sulprofos	NV	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Sumitox	NV	NV	1600	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Tokuthion	NV	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Trichloronate	NV	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--

Table 1
Soil Analytical Results
Focused Site Characterization
Fleischer Properties
Vancouver, Washington

			Location:	TP27			TP28	TP29				TP30		TP31
			Sample Name:	TP27-S-0.5	TP27-S-5.5	TP27-S-8.5	TP28-S-0.5	TP29-S-0.5	TP-S-0.5DUP	TP29-S-3.5	TP29-S-7.5	TP30-S-0.5	TP30-S-4.0	TP31-S-0.5
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	10/1/2014
			Collection Depth (ft bgs):	0.5	5.5	8.5	0.5	0.5	0.5	3.5	7.5	0.5	4	0.5
Organochlorine Pesticides (mg/kg)														
4,4'-DDD	NV	NV	4.17	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
4,4'-DDE	NV	NV	2.94	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
4,4'-DDT	3	4	NA	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Aldrin	NV	NV	0.059	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
alpha-BHC	NV	NV	0.159	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
alpha-Chlordane	NV	NV	2.86	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
beta-BHC	NV	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Chlordane	NV	NV	2.86	0.00923 UJ	--	--	0.00782 UJ	0.00765 UJ	0.00773 UJ	--	--	0.00764 UJ	--	--
delta-BHC	NV	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Dieldrin	NV	NV	0.063	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Endosulfan I	NV	NV	480	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Endosulfan II	NV	NV	480	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Endosulfan sulfate	NV	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Endrin	NV	NV	24	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Endrin aldehyde	NV	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Endrin ketone	NV	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Gamma-Chlordane	NV	NV	2.86	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Heptachlor	NV	NV	0.222	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Heptachlor epoxide	NV	NV	0.11	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Lindane	0.01	0.01	NA	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Methoxychlor	NV	NV	400	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Toxaphene	NV	NV	0.909	0.00923 UJ	--	--	0.00782 UJ	0.00765 UJ	0.00773 UJ	--	--	0.00764 UJ	--	--
TPH (mg/kg)														
Diesel	2000	2000	NA	**69.3**	--	--	--	**19.7**	**23.1**	--	--	--	--	--
Lube Oil	2000	2000	NA	**162**	--	--	--	**104**	**105**	--	--	--	--	--
Ammonia (mg/kg)														
Nitrogen, Ammonia as N	NV	NV	NV	5.54 U	--	--	4.69 U	4.59 U	4.64 U	--	--	4.59 U	--	--

Table 1
Soil Analytical Results
Focused Site Characterization
Fleischer Properties
Vancouver, Washington

			Location:	TP32	TP33	TP34	TP35	TP36	TP37	TP38	TP39		TP40
			Sample Name:	TP32-S-0.5	TP33-S-0.5	TP34-S-0.5	TP35-S-0.5	TP36-S-0.5	TP37-S-0.5	TP38-S-0.5	TP39-S-0.5	TP39-S-2.0	TP40-S-0.5
			Collection Date:	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
			Collection Depth (ft bgs):	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5
	MTCA A, Soil Unrestricted Land Use	MTCA A, Soil Industrial Properties	MTCA B, Soil										
Metals (mg/kg)													
Arsenic	20	20	NA	--	--	--	--	--	--	--	--	--	--
Chromium[a]	2000	2000	NA	--	--	--	--	--	--	--	--	--	--
Copper	NV	NV	3200	--	--	--	--	--	--	--	--	--	--
Iron	NV	NV	56000	--	--	--	--	--	--	--	--	--	--
Lead	250	1000	NA	--	--	--	--	--	--	--	--	--	--
Manganese	NV	NV	11200	--	--	--	--	--	--	--	--	--	--
Mercury	2	2	NA	--	--	--	--	--	--	--	--	--	--
Nickel	NV	NV	1600	--	--	--	--	--	--	--	--	--	--
Zinc	NV	NV	24000	--	--	--	--	--	--	--	--	--	--
PCBs (mg/kg)													
Aroclor 1016	NV	NV	5.6	0.000401 U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1221	NV	NV	NV	0.000401 U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1232	NV	NV	NV	0.000401 U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1242	NV	NV	NV	0.000401 U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1248	NV	NV	NV	**0.0187**	0.000337 U	0.000347 U	**0.0431**	**0.00404**	0.000362 U	0.000383 U	**19.6** J	**0.434**	0.000359 U
Aroclor 1254	NV	NV	0.5	0.000401 U	0.000337 U	**0.00955**	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1260	NV	NV	0.5	0.000401 U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1262	NV	NV	NV	0.000401 U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1268	NV	NV	NV	0.000401 U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Total PCBs	1	10	NA	**0.0187**	0.000337 U	**0.00955**	**0.0431**	**0.00404**	0.000362 U	0.000383 U	**19.6** J	**0.434**	0.000359 U
Chlorinated Herbicides (mg/kg)													
2,4,5-T	NV	NV	800	--	--	--	--	--	--	--	--	--	--
2,4-D	NV	NV	800	--	--	--	--	--	--	--	--	--	--
2,4-DB	NV	NV	640	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	NV	NV	NV	--	--	--	--	--	--	--	--	--	--
Dicamba	NV	NV	2400	--	--	--	--	--	--	--	--	--	--
Dichlorprop	NV	NV	NV	--	--	--	--	--	--	--	--	--	--
Dinoseb	NV	NV	80	--	--	--	--	--	--	--	--	--	--
MCPA	NV	NV	40	--	--	--	--	--	--	--	--	--	--

			Location:	TP32	TP33	TP34	TP35	TP36	TP37	TP38	TP39		TP40
			Sample Name:	TP32-S-0.5	TP33-S-0.5	TP34-S-0.5	TP35-S-0.5	TP36-S-0.5	TP37-S-0.5	TP38-S-0.5	TP39-S-0.5	TP39-S-2.0	TP40-S-0.5
			Collection Date:	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
			Collection Depth (ft bgs):	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5
MCPP	NV	NV	80	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	NV	NV	2.5	--	--	--	--	--	--	--	--	--	--
Silvex	NV	NV	640	--	--	--	--	--	--	--	--	--	--
Organophosphorus Pesticides (mg/kg)													
Bladan	NV	NV	NV	--	--	--	--	--	--	--	--	--	--
Coumaphos	NV	NV	NV	--	--	--	--	--	--	--	--	--	--
Demeton-S	NV	NV	NV	--	--	--	--	--	--	--	--	--	--
Diazinon	NV	NV	56	--	--	--	--	--	--	--	--	--	--
Dichlorvos	NV	NV	3.45	--	--	--	--	--	--	--	--	--	--
Dimethoate	NV	NV	16	--	--	--	--	--	--	--	--	--	--
Disulfoton	NV	NV	3.2	--	--	--	--	--	--	--	--	--	--
Dursban	NV	NV	80	--	--	--	--	--	--	--	--	--	--
Ethoprop	NV	NV	NV	--	--	--	--	--	--	--	--	--	--
Fensulfothion	NV	NV	NV	--	--	--	--	--	--	--	--	--	--
Fenthion	NV	NV	NV	--	--	--	--	--	--	--	--	--	--
Guthion	NV	NV	NV	--	--	--	--	--	--	--	--	--	--
Merphos oxide	NV	NV	2.4	--	--	--	--	--	--	--	--	--	--
Methyl parathion	NV	NV	20	--	--	--	--	--	--	--	--	--	--
Mevinphos	NV	NV	NV	--	--	--	--	--	--	--	--	--	--
Naled	NV	NV	160	--	--	--	--	--	--	--	--	--	--
Parathion	NV	NV	480	--	--	--	--	--	--	--	--	--	--
Phorate	NV	NV	16	--	--	--	--	--	--	--	--	--	--
Ronnel	NV	NV	4000	--	--	--	--	--	--	--	--	--	--
Santox	NV	NV	0.8	--	--	--	--	--	--	--	--	--	--
Stirofos	NV	NV	41.7	--	--	--	--	--	--	--	--	--	--
Sulfotepp	NV	NV	40	--	--	--	--	--	--	--	--	--	--
Sulprofos	NV	NV	NV	--	--	--	--	--	--	--	--	--	--
Sumitox	NV	NV	1600	--	--	--	--	--	--	--	--	--	--
Tokuthion	NV	NV	NV	--	--	--	--	--	--	--	--	--	--
Trichloronate	NV	NV	NV	--	--	--	--	--	--	--	--	--	--

			Location:	TP32	TP33	TP34	TP35	TP36	TP37	TP38	TP39		TP40
			Sample Name:	TP32-S-0.5	TP33-S-0.5	TP34-S-0.5	TP35-S-0.5	TP36-S-0.5	TP37-S-0.5	TP38-S-0.5	TP39-S-0.5	TP39-S-2.0	TP40-S-0.5
			Collection Date:	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
			Collection Depth (ft bgs):	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5
Organochlorine Pesticides (mg/kg)													
4,4'-DDD	NV	NV	4.17	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	NV	NV	2.94	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	3	4	NA	--	--	--	--	--	--	--	--	--	--
Aldrin	NV	NV	0.059	--	--	--	--	--	--	--	--	--	--
alpha-BHC	NV	NV	0.159	--	--	--	--	--	--	--	--	--	--
alpha-Chlordane	NV	NV	2.86	--	--	--	--	--	--	--	--	--	--
beta-BHC	NV	NV	NV	--	--	--	--	--	--	--	--	--	--
Chlordane	NV	NV	2.86	--	--	--	--	--	--	--	--	--	--
delta-BHC	NV	NV	NV	--	--	--	--	--	--	--	--	--	--
Dieldrin	NV	NV	0.063	--	--	--	--	--	--	--	--	--	--
Endosulfan I	NV	NV	480	--	--	--	--	--	--	--	--	--	--
Endosulfan II	NV	NV	480	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	NV	NV	NV	--	--	--	--	--	--	--	--	--	--
Endrin	NV	NV	24	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	NV	NV	NV	--	--	--	--	--	--	--	--	--	--
Endrin ketone	NV	NV	NV	--	--	--	--	--	--	--	--	--	--
Gamma-Chlordane	NV	NV	2.86	--	--	--	--	--	--	--	--	--	--
Heptachlor	NV	NV	0.222	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	NV	NV	0.11	--	--	--	--	--	--	--	--	--	--
Lindane	0.01	0.01	NA	--	--	--	--	--	--	--	--	--	--
Methoxychlor	NV	NV	400	--	--	--	--	--	--	--	--	--	--
Toxaphene	NV	NV	0.909	--	--	--	--	--	--	--	--	--	--
TPH (mg/kg)													
Diesel	2000	2000	NA	--	--	--	--	--	--	--	--	--	--
Lube Oil	2000	2000	NA	--	--	--	--	--	--	--	--	--	--
Ammonia (mg/kg)													
Nitrogen, Ammonia as N	NV	NV	NV	--	--	--	--	--	--	--	--	--	--

Table 1
Soil Analytical Results
Focused Site Characterization
Fleischer Properties
Vancouver, Washington

			Location:	TP42		TP43	TP45			TP46	TP48	TP51		TP52
			Sample Name:	TP42-S-0.5	TP42-S-2.0	TP43-S-0.5	TP45-S-0.5	TP-S-DUP	TP45-S-2.5	TP46-S-0.5	TP48-S-0.5	TP51-S-0.5	TP51-S-2.0	TP52-S-0.5
			Collection Date:	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
			Collection Depth (ft bgs):	0.5	2	0.5	0.5	0.5	2.5	0.5	0.5	0.5	2	0.5
	MTCA A, Soil Unrestricted Land Use	MTCA A, Soil Industrial Properties	MTCA B, Soil											
Metals (mg/kg)														
Arsenic	20	20	NA	--	--	--	--	--	--	--	--	--	--	--
Chromium[a]	2000	2000	NA	--	--	--	--	--	--	--	--	--	--	--
Copper	NV	NV	3200	--	--	--	--	--	--	--	--	--	--	--
Iron	NV	NV	56000	--	--	--	--	--	--	--	--	--	--	--
Lead	250	1000	NA	--	--	--	--	--	--	--	--	--	--	--
Manganese	NV	NV	11200	--	--	--	--	--	--	--	--	--	--	--
Mercury	2	2	NA	--	--	--	--	--	--	--	--	--	--	--
Nickel	NV	NV	1600	--	--	--	--	--	--	--	--	--	--	--
Zinc	NV	NV	24000	--	--	--	--	--	--	--	--	--	--	--
PCBs (mg/kg)														
Aroclor 1016	NV	NV	5.6	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Aroclor 1221	NV	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Aroclor 1232	NV	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Aroclor 1242	NV	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Aroclor 1248	NV	NV	NV	**118**	**3.93**	**0.605**	**10.8**	**9.84**	**0.818**	0.000385 U	0.000356 U	**40.3**	**2.84**	0.000358 U
Aroclor 1254	NV	NV	0.5	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	**0.0119**	0.000368 U	0.000369 U	0.000358 U
Aroclor 1260	NV	NV	0.5	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	**0.0319**
Aroclor 1262	NV	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Aroclor 1268	NV	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Total PCBs	1	10	NA	**118**	**3.93**	**0.605**	**10.8**	**9.84**	**0.818**	0.000385 U	**0.0119**	**40.3**	**2.84**	**0.0319**
Chlorinated Herbicides (mg/kg)														
2,4,5-T	NV	NV	800	--	--	--	--	--	--	--	--	--	--	--
2,4-D	NV	NV	800	--	--	--	--	--	--	--	--	--	--	--
2,4-DB	NV	NV	640	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dicamba	NV	NV	2400	--	--	--	--	--	--	--	--	--	--	--
Dichlorprop	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dinoseb	NV	NV	80	--	--	--	--	--	--	--	--	--	--	--
MCPA	NV	NV	40	--	--	--	--	--	--	--	--	--	--	--

			Location:	TP42		TP43	TP45			TP46	TP48	TP51		TP52
			Sample Name:	TP42-S-0.5	TP42-S-2.0	TP43-S-0.5	TP45-S-0.5	TP-S-DUP	TP45-S-2.5	TP46-S-0.5	TP48-S-0.5	TP51-S-0.5	TP51-S-2.0	TP52-S-0.5
			Collection Date:	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
			Collection Depth (ft bgs):	0.5	2	0.5	0.5	0.5	2.5	0.5	0.5	0.5	2	0.5
MCPP	NV	NV	80	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	NV	NV	2.5	--	--	--	--	--	--	--	--	--	--	--
Silvex	NV	NV	640	--	--	--	--	--	--	--	--	--	--	--
Organophosphorus Pesticides (mg/kg)														
Bladan	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Coumaphos	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Demeton-S	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Diazinon	NV	NV	56	--	--	--	--	--	--	--	--	--	--	--
Dichlorvos	NV	NV	3.45	--	--	--	--	--	--	--	--	--	--	--
Dimethoate	NV	NV	16	--	--	--	--	--	--	--	--	--	--	--
Disulfoton	NV	NV	3.2	--	--	--	--	--	--	--	--	--	--	--
Dursban	NV	NV	80	--	--	--	--	--	--	--	--	--	--	--
Ethoprop	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Fensulfothion	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Fenthion	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Guthion	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Merphos oxide	NV	NV	2.4	--	--	--	--	--	--	--	--	--	--	--
Methyl parathion	NV	NV	20	--	--	--	--	--	--	--	--	--	--	--
Mevinphos	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Naled	NV	NV	160	--	--	--	--	--	--	--	--	--	--	--
Parathion	NV	NV	480	--	--	--	--	--	--	--	--	--	--	--
Phorate	NV	NV	16	--	--	--	--	--	--	--	--	--	--	--
Ronnel	NV	NV	4000	--	--	--	--	--	--	--	--	--	--	--
Santox	NV	NV	0.8	--	--	--	--	--	--	--	--	--	--	--
Stirofos	NV	NV	41.7	--	--	--	--	--	--	--	--	--	--	--
Sulfotepp	NV	NV	40	--	--	--	--	--	--	--	--	--	--	--
Sulprofos	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Sumitox	NV	NV	1600	--	--	--	--	--	--	--	--	--	--	--
Tokuthion	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Trichloronate	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--

Table 1
Soil Analytical Results
Focused Site Characterization
Fleischer Properties
Vancouver, Washington

			Location:	TP42		TP43	TP45			TP46	TP48	TP51		TP52
			Sample Name:	TP42-S-0.5	TP42-S-2.0	TP43-S-0.5	TP45-S-0.5	TP-S-DUP	TP45-S-2.5	TP46-S-0.5	TP48-S-0.5	TP51-S-0.5	TP51-S-2.0	TP52-S-0.5
			Collection Date:	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
			Collection Depth (ft bgs):	0.5	2	0.5	0.5	0.5	2.5	0.5	0.5	0.5	2	0.5
Organochlorine Pesticides (mg/kg)														
4,4'-DDD	NV	NV	4.17	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	NV	NV	2.94	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	3	4	NA	--	--	--	--	--	--	--	--	--	--	--
Aldrin	NV	NV	0.059	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	NV	NV	0.159	--	--	--	--	--	--	--	--	--	--	--
alpha-Chlordane	NV	NV	2.86	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Chlordane	NV	NV	2.86	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	NV	NV	0.063	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	NV	NV	480	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	NV	NV	480	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Endrin	NV	NV	24	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Endrin ketone	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Gamma-Chlordane	NV	NV	2.86	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	NV	NV	0.222	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	NV	NV	0.11	--	--	--	--	--	--	--	--	--	--	--
Lindane	0.01	0.01	NA	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	NV	NV	400	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	NV	NV	0.909	--	--	--	--	--	--	--	--	--	--	--
TPH (mg/kg)														
Diesel	2000	2000	NA	--	--	--	--	--	--	--	--	--	--	--
Lube Oil	2000	2000	NA	--	--	--	--	--	--	--	--	--	--	--
Ammonia (mg/kg)														
Nitrogen, Ammonia as N	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--

NOTES:
Detections are in **bold** font.
Detections that exceed one or more MTCA cleanup level are shaded gray. Non-detect results are not evaluated against cleanup criteria.
MTCA B values are used when no MTCA A values are available. The lower of MTCA B cancer or non-cancer value is used.
-- = not analyzed.
ft bgs = feet below ground surface.
J = Result is an estimated value.
mg/kg = milligrams per kilogram (parts per million).
MTCA = Model Toxics Control Act.
NA = not applicable.
ND = not detected at or above the method reporting limit.
NV = no value.
PCB = polychlorinated biphenyl.
Total PCBs = sum of PCB Aroclors. Non-detect results are summed as zero. For samples in which all Aroclors are non-detect, total PCB is assigned the highest reporting limit value.
TPH = total petroleum hydrocarbon.
U = Result is non-detect based on the method reporting limit.
UJ = Result is non-detect and an estimated value.
[a]Trivalent chromium MTCA cleanup levels are used.

Table 2
Comparison of Clarifier Solids Present and PCB Concentrations
Focused Site Characterization
Fleischer Properties

Test Pit	Clarifier Solids Observed	PCBs Present (above CUL[a])
TP01	No	No
TP02	**Yes**	**Yes**
TP03	**Yes**	No
TP04	**Yes**	**Yes**
TP05	No	**Yes**
TP06	**Yes**	**Yes**
TP07	**Yes**	**Yes**
TP08	No	No
TP09	No	No
TP10	**Yes**	**Yes**
TP11	No	**Yes**
TP12	**Yes**	No
TP13	**Yes**	**Yes**
TP14	No	**Yes**
TP15	**Yes**	**Yes**
TP16	**Yes**	No
TP17	**Yes**	**Yes**
TP18	**Yes**	No
TP19	No	No
TP20	**Yes**	No
TP21	**Yes**	**Yes**
TP22	**Yes**	No
TP23	**Yes**	**Yes**
TP24	**Yes**	No
TP25	**Yes**	**Yes**
TP26	**Yes**	**Yes**
TP27	**Yes**	**Yes**
TP28	No	No
TP29	No	**Yes**
TP30	No	**Yes**
TP31	No	No
TP32	No	No
TP33	No	No
TP34	No	No
TP35	No	No
TP36	No	No
TP37	No	No
TP38	No	No
TP39	**Yes**	**Yes**
TP40	No	No
TP41	No	--
TP42	**Yes**	**Yes**
TP43	No	No
TP44	No	--
TP45	**Yes**	**Yes**
TP46	No	No
TP47	No	--
TP48	**Yes**	No
TP49	No	--
TP50	No	--
TP51	**Yes**	**Yes**
TP52	No	No
TP53	No	--

NOTES:
CUL = cleanup level.
PCBs = polychlorinated biphenyls.
TP = test pit.
-- = not analyzed.
Bold = yes.
[a]Method A for unrestricted land use cleanup level used.

Table 3
Cost Estimate Alternative 1—Excavation of Contaminated Soils
Focused Site Characterization
Fleischer Properties
Vancouver, Washington

Remedy Components

1 Excavate soil above the MTCA CUL and dispose of off site.
2 Backfill with clean, imported material.
3 Grade site for stormwater drainage.

Assumptions

1 Density of soil = 1.85 tons/cy.
2 Density of select borrow = 1.85 tons/cy.
3 The volume of impacted soil reflects a site-wide average of 3 feet of excavation.
4 Excavated material has been characterized for off-site disposal. For cost estimating purposes, it is assumed that material will be nonhazardous and disposed of at a Subtitle D landfill.
5 Import fill will be clean material and compacted to a minimum of 95 percent, based on the Modified Proctor Test (ASTM, 2012).
6 Final grade will be made consistent with surrounding grades.
7 Twenty percent contingency.

Item	Description	Quantity	Units	Unit Cost	Total Cost
Remedial Action					
Mobilization		1	LS	$50,000	$50,000
High Visibility Construction Fencing		2,983	LF	$4	$11,932
Silt Fencing		2,983	LF	$4	$11,932
Construction Entrance		1	EA	$8,000	$8,000
Clear and Grub		9.56	AC	$1,000	$9,560
Excavate 3 feet of Contaminated Soil		46,286	CY	$8	$370,288
Transport and Dispose of Contaminated Soil		62,486	TON	$34	$2,124,524
Perform Grading		46,286	SY	$1	$46,286
Hydroseed		9.56	AC	$1,500	$14,340
	Contingency			20%	$529,000
				Remedial Action Subtotal	**$3,175,900**
Professional Services					
Permitting and agency negotiations		1	LS	$5,000	$5,000
Survey		1	LS	$5,000	$5,000
Remedial design		1	LS	$25,000	$25,000
Procurement		1	LS	$5,000	$5,000
Construction oversight		5	WK	$14,000	$70,000
Confirmation Soil Sampling		1	LS	$25,000	$25,000
Reporting		1	LS	$10,000	$10,000
	Contingency			20%	$29,000
				Professional Services Subtotal	**$174,000**
ESTIMATED COST					**$3,349,900**

NOTES: % = percent; ASTM = American Society for Testing and Materials; AC = acre; CUL = cleanup level; CY = cubic yard; EA = each; LF = linear foot; LS = lump sum; MTCA = Model Toxics Control Act; SY = square yard; WK = week.

Table 4
Cost Estimate Alternative 2—Capping of Contaminated Soils
Focused Site Characterization
Fleischer Properties
Vancouver, Washington

Remedy Components

1 Regrade and cap existing soil.
2 Cap with clean, imported material.
3 Grade site for stormwater drainage.

Assumptions

1 Density of soil = 1.85 tons/cy.
2 Density of select borrow = 1.85 tons/cy.
3 Import fill will be clean material and compacted to a minimum of 95 percent, based on the Modified Proctor Test (ASTM, 2012).
4 Final grade will be made consistent with surrounding grades.
5 Twenty percent contingency.

Item	Description	Quantity	Units	Unit Cost	Total Cost
Remedial Action					
Mobilization		1	LS	$50,000	$50,000
High Visibility Construction Fencing		2,983	LF	$4	$11,932
Silt Fencing		2,983	LF	$4	$11,932
Construction Entrance		1	EA	$8,000	$8,000
Clear and Grub		9.56	AC	$1,000	$9,560
Perform Grading		46,286	SY	$1	$46,286
Place Demarcation Fabric		46,286	SY	$2	$92,572
Place 2 feet of Clean Soil Cap		30,857	CY	$15	$462,855
Hydroseed		9.56	AC	$1,500	$14,340
	Contingency			20%	$141,000
				Remedial Action Subtotal	**$848,500**
Professional Services					
Permitting and agency negotiations		1	LS	$5,000	$5,000
Survey		1	LS	$5,000	$5,000
Remedial design		1	LS	$25,000	$25,000
Procurement		1	LS	$5,000	$5,000
Construction oversight		6	WK	$14,000	$84,000
Documentation Soil Sampling		1	LS	$25,000	$25,000
Reporting		1	LS	$10,000	$10,000
	Contingency			20%	$32,000
				Professional Services Subtotal	**$191,000**
ESTIMATED COST					**$1,039,500**

NOTES: % = percent; ASTM = American Society for Testing and Materials; AC = acre; CY = cubic yard; EA = each; LF = linear foot; LS = lump sum; PID = photoionization detector; SY = square yard; WK = week.

Table 5
Cost Estimate Alternative 3—Targeted Excavation and Capping of Contaminated Soils
Focused Site Characterization
Fleischer Properties
Vancouver, Washington

Remedy Components

1 Excavate impacted soil necessary to support redevelopment (e.g., foundation, utility corridors) and dispose of off site.
2 Cap site through redevelopment (building footprint, parking/walkways, and landscaped areas).

Assumptions

1 Density of soil = 1.85 tons/cy.
2 Density of select borrow = 1.85 tons/cy.
3 Density of asphalt = 2 tons/cy.
4 The volume of excavated soil based on 1/3 of Property area estimate for redevelopment.
5 Import fill (landscape cap) will be clean material and compacted to a minimum of 95 percent, based on the Modified Proctor Test (ASTM, 2012).
6 Excavated material has been characterized for off-site disposal. For cost estimating purposes, it is assumed that material will be nonhazardous and disposed of at a Subtitle D landfill.
7 Twenty percent contingency.

Item	Description	Quantity	Units	Unit Cost	Total Cost
Remedial Action					
Mobilization		1	LS	$50,000	$50,000
High Visibility Construction Fencing		2,983	LF	$4	$11,932
Silt Fencing		2,983	LF	$4	$11,932
Construction Entrance		1	EA	$8,000	$8,000
Clear and Grub		9.56	AC	$1,000	$9,560
Excavate 3 feet of Contaminated Soil		15,413	CY	$8	$123,304
Transport and Dispose of Contaminated Soil		20,808	TN	$34	$707,472
Perform Grading		46,286	SY	$1	$46,286
Place Demarcation Fabric		30,873	SY	$2	$61,746
Place 2 Feet Clean Import Soil Cap		20,583	CY	$15.00	$308,745
Hydroseed		9.56	AC	$1,500	$14,340
	Contingency			20%	$271,000
			Remedial Action Subtotal		**$1,624,300**
Professional Services					
Permitting and agency negotiations		1	LS	$5,000	$5,000
Environmental covenant		1	LS	$2,000	$2,000
Soil management plan		1	LS	$5,000	$5,000
Survey		1	LS	$5,000	$5,000
Remedial design		1	LS	$25,000	$25,000
Procurement		1	LS	$5,000	$5,000
Construction oversight		7	WK	$14,000	$98,000
Confirmation/Documentation Soil Sampling		1	LS	$25,000	$25,000
Reporting		1	LS	$12,000	$12,000
	Contingency			20%	$36,000
			Professional Services Subtotal		**$218,000**
ESTIMATED COST					**$1,842,300**

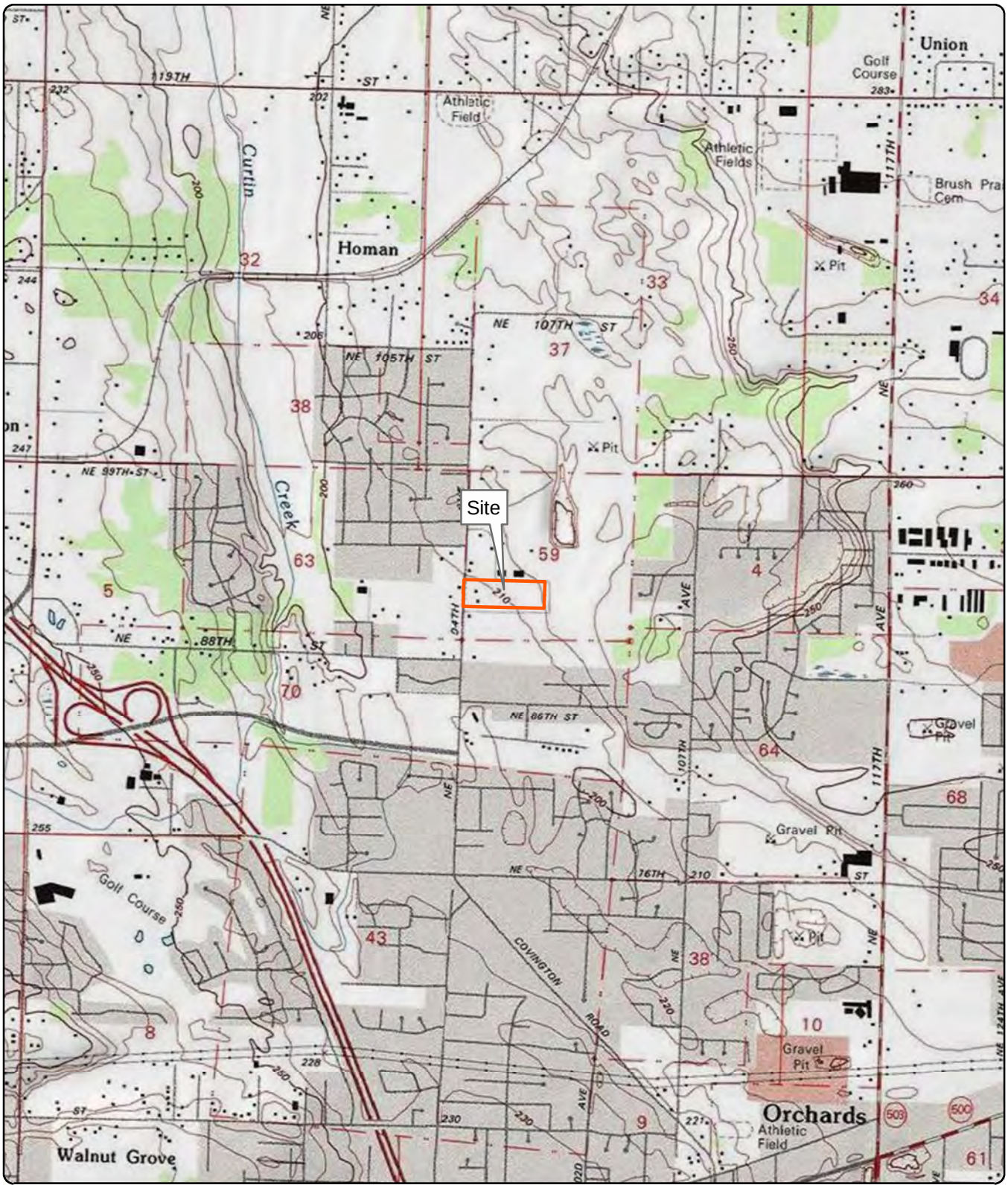
NOTES: % = percent; AC = acre; ASTM = American Society for Testing and Materials; CF = cubic feet; cy = cubic yard; EA = each; LF = linear foot; LS = lump sum; SF = square foot; SY = square yard; TN = ton; WK= week.

Table 6
Disproportionate Cost Analysis
Focused Site Characterization
Fleischer Properties
Vancouver, Washington

Alternative	Description	Protectiveness	Permanence	Long-Term Effectiveness	Management of Short-Term Risks	Implementability	**Average**	Public Concerns	**Estimated Cost**
Alternative 1	Excavation and off-site disposal of impacted soil.	5	5	5	4	5	**4.8**	TBD	**$ 3,349,900**
Alternative 2	Capping of impacted soil.	5	3	4	5	5	**4.4**	TBD	**$ 1,039,500**
Alternative 3	Targeted excavation of impacted soil supporting redevelopment. Capping of remaining impacted soil.	5	4	4	4	5	**4.4**	TBD	**$ 1,842,300**

Notes: TBD = to be determined.

FIGURES



Site Address: 9109 and 9115 Northeast 94th Avenue, Vancouver, Washington
Source: U.S. Geological Survey (1990) 7.5-minute topographic quadrangle: Orchards
Section 59, Township 2 North, Range 2 East

Figure 1
Site Location

Fleischer Properties
Focused Site Characterization
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington

0 1,000 2,000
Feet

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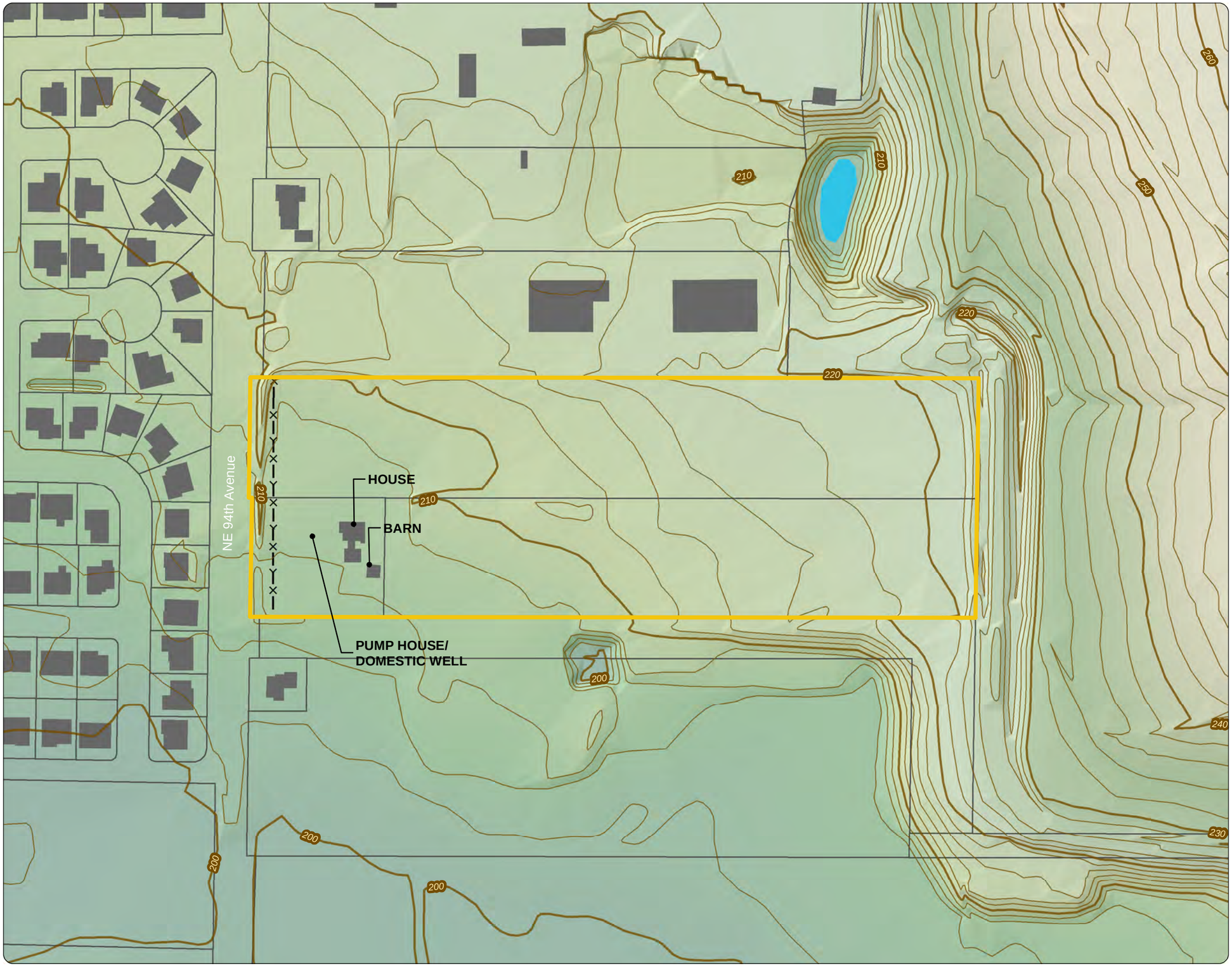
Path: X:\9059.07 Clark County\04 Fleischer IPG\Projects\PreliminaryRiandFS\Fig1_Site Location.mxd
Print Date: 12/10/2014
Approved By: E. Hess
Produced By: gherbert
Project: 9059.07

Figure 2
Site Topography

Fleischer Properties
Focused Site Characterization
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington



Legend

- Fence
- Elevation Contour (10 Feet)
- Elevation Contour (2 Feet)
- Building Footprint
- Surface Water
- Site Boundary
- Tax Lot Boundary

Elevation
263 Feet
198 Feet

Notes:
1. All site feature locations are approximate.
2. Elevation contours are LIDAR derived.
3. LIDAR = Light Detection and Ranging/ Laser Imaging Detection and Ranging (system)

0 75 150
Feet

Source: Elevation data, tax lots, hydrology, and building footprints obtained from Clark County.

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Print Date: 12/10/2014
Approved By: krosiund
Produced By: gherbert
Project: 9059.07.04

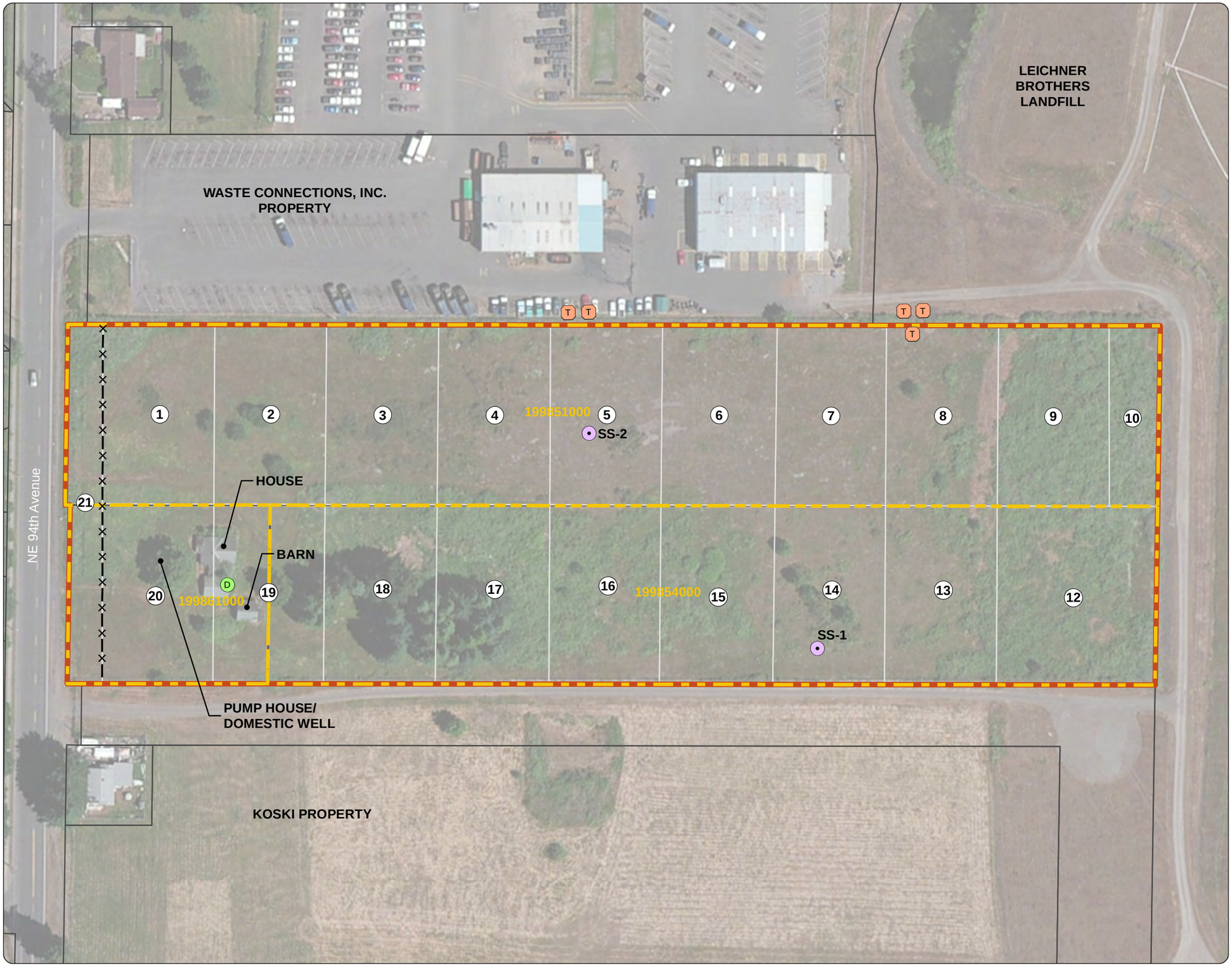

Figure 3
Site Features

Fleischer Properties
Focused Site Characterization
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington

Legend

- D Drum
- T Pole-mounted Transformer
- Residual Fill Material Sample Location from 2010 GeoDesign, Inc. Investigation
- Fence
- Composite Soil Sample Section from 2010 GeoDesign, Inc. Investigation
- Site Boundary
- Site Tax Lot
- Tax Lot Boundary

Note: All site feature locations are approximate.

0 50 100
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots obtained from Clark County

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Print Date: 12/10/2014
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Produced By: gherbert
Project: 9059.07.04

Figure 4
Investigation Locations

Fleischer Properties
Focused Site Characterization
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington

Legend

- Test Pit
- Pole-mounted Transformer
- Residual Fill Material Sample Location from 2010 GeoDesign, Inc. Investigation
- Site Boundary
- Site Tax Lot
- Tax Lot Boundary

Note: All site feature locations are approximate.

0 50 100
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots obtained from Clark County

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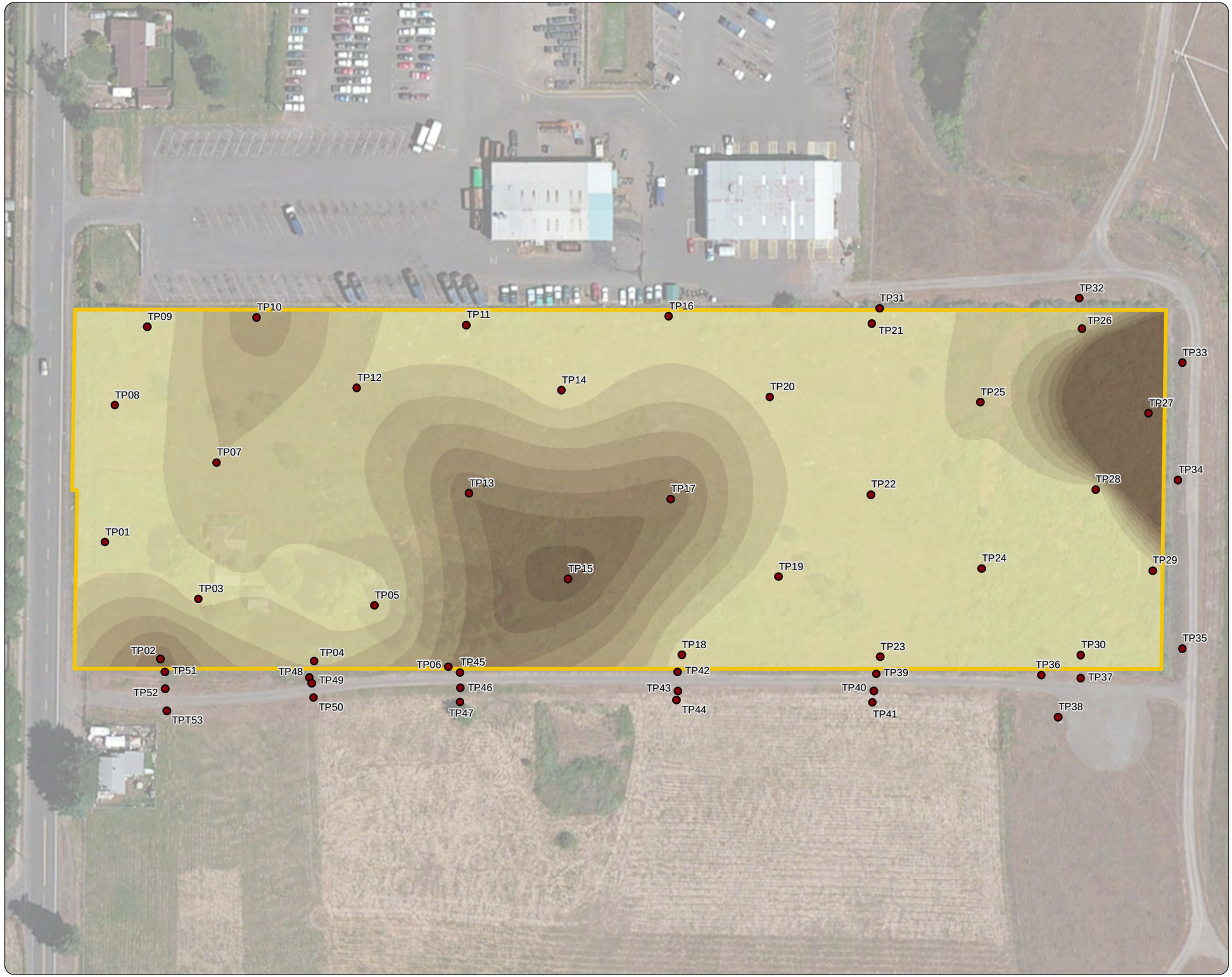
Print Date: 12/10/2014
Approved By: kroslund
Produced By: gherbert
Project: 9059.07.04

Figure 5
Clarifier Solids Depth

Fleischer Properties
Focused Site Characterization
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington



Legend

- Test Pit
- Site Boundary

Interpolated Fill Depth (ft)

- 0 - 0.25
- 0.25 - 0.5
- 0.5 - 0.75
- 0.75 - 1
- 1 - 1.25
- 1.25 - 1.5
- 1.5 - 1.75
- > 1.75

Notes:
1. All site feature locations are approximate.
2. The Natural Neighbor method was used to interpolate measured Fill Depth.

0 50 100
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots obtained from Clark County

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Path: X:\9059.07 Clark County\04 Fleischer IPG\Projects\Preliminary\Rland\FS\Fig5_Clarifier Solids Depth.mxd
Print Date: 12/10/2014
Approved By: kroslund
Produced By: ghiebert
Project: 9059.07.04

Figure 6
PCB Concentrations

Fleischer Properties
Focused Site Characterization
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington

Legend

- Test Pit
- Site Boundary

PCB Concentrations (mg/kg)

- < 1
- 1-10
- > 10

Notes:
1. All site feature locations are approximate.
2. Dpth = depth in feet below ground surface.
3. mg/kg = milligrams per kilogram.
4. PCB = polychlorinated biphenyl.
5. PCB Concentrations value is for total PCBs.
6. Model Toxics Control Act Method A cleanup level for unrestricted land use is 1mg/kg for PCB mixtures in soil.

0 50 100
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots obtained from Clark County

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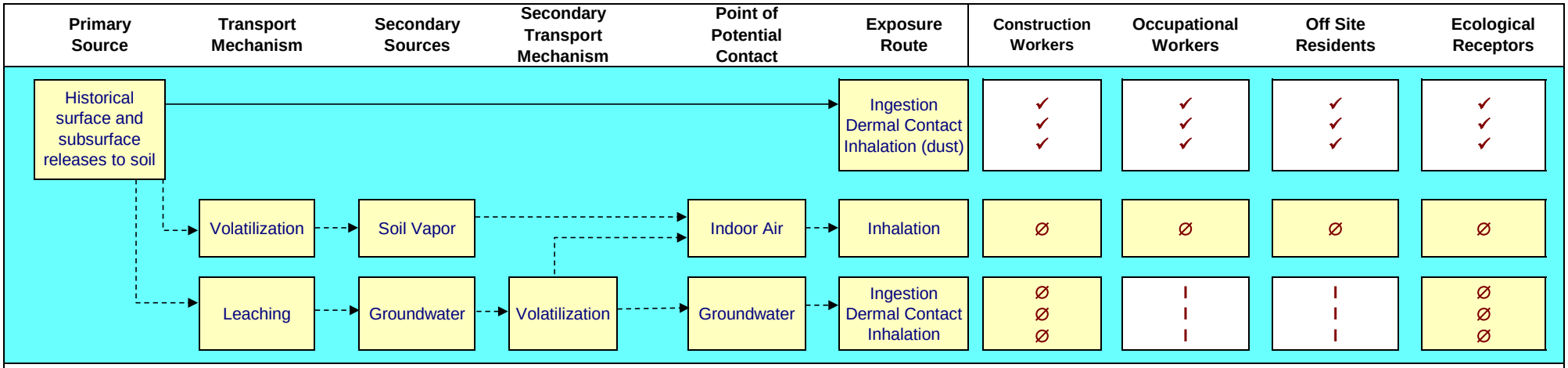
Path: X:\9059.07 Clark County\04 Fleischer IP\GIP\Projects\PreliminaryRiandFSI\Fig6_PCB Concentrations.mxd
Print Date: 12/10/2014
Approved By: kroslund
Produced By: gherbert
Project: 9059.07.04

Figure 7
Conceptual Site Model of Potential Human and Ecological Exposure Pathways
Fleischer Properties
Focused Site Characterization
Vancouver, Washington



Notes:

Primary pathway ⟶
Potential pathway - - ->
Potentially complete exposure route ✓
Incomplete exposure route ∅
Insignificant exposure route I

APPENDIX A

2010 LABORATORY ANALYTICAL RESULTS

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Friday, September 4, 2009

Colby Hunt
GeoDesign, Inc.
15575 SW Sequoia Pkwy, Ste 100
Portland, OR 97224

RE: NE 94th Ave Property / GillilandJ-1-01

Enclosed are the results of analyses for work order A908221, which was received by the laboratory on 8/24/2009 at 1:06:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-1	A908221-01	Soil	08/18/09 08:45	08/24/09 13:06
SS-2	A908221-02	Soil	08/18/09 09:00	08/24/09 13:06

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Philip Nerenberg, Lab Director

Apex Labs

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Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

ANALYTICAL SAMPLE RESULTS

Hydrocarbon Identification (HCID) Screen by NWTPH

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
SS-1 (A908221-01)			**Matrix: Soil**					
Gasoline Range Organics	ND	---	16.5	mg/kg dry	1	08/25/09 02:17	NWTPH-HCID	
Diesel Range Organics	DET	---	41.3	"	"	"	"	F-05
Oil Range Organics	DET	---	82.6	"	"	"	"	F-03
Surrogate: o-Terphenyl (Surr)			*Recovery: 82 %*	*Limits: 50-150 %*	"	"	"	
SS-2 (A908221-02)			**Matrix: Soil**					
Gasoline Range Organics	ND	---	23.7	mg/kg dry	1	08/25/09 03:05	NWTPH-HCID	
Diesel Range Organics	ND	---	59.2	"	"	"	"	
Oil Range Organics	ND	---	118	"	"	"	"	
Surrogate: o-Terphenyl (Surr)			*Recovery: 94 %*	*Limits: 50-150 %*	"	"	"	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

ANALYTICAL SAMPLE RESULTS

Diesel Range (C10-C22) and Oil Range (C22-C40) Hydrocarbons by NWTPH-Dx - Silica Gel Cleanup

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
SS-1 (A908221-01)			**Matrix: Soil**					
Diesel Range Organics	**127**	---	24.4	mg/kg dry	1	09/02/09 10:15	NWTPH-Dx(SG)	F-03, F-05
Oil Range Organics	**387**	---	48.7	"	"	"	"	F-03
Surrogate: o-Terphenyl (Surr)			*Recovery: 91 %*	*Limits: 50-150 %*	"	"	"	

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Labs

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
SS-1 (A908221-01RE2)			**Matrix: Soil**					**C-07**
Aroclor 1016	ND	---	7250	ug/kg dry	1000	08/27/09 10:14	EPA 8082A	
Aroclor 1221	ND	---	7250	"	"	"	"	
Aroclor 1232	ND	---	7250	"	"	"	"	
Aroclor 1242	ND	---	7250	"	"	"	"	
Aroclor 1248	**128000**	---	7250	"	"	"	"	
Aroclor 1254	ND	---	7250	"	"	"	"	
Aroclor 1260	ND	---	7250	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 150 %*	*Limits: 50-125 %*	"	"	"	*S-05*
Decachlorobiphenyl (Surr)			*317 %*	*Limits: 55-130 %*	"	"	"	*S-05*
SS-2 (A908221-02RE1)			**Matrix: Soil**					**C-07**
Aroclor 1016	ND	---	1050	ug/kg dry	100	08/27/09 10:29	EPA 8082A	
Aroclor 1221	ND	---	1050	"	"	"	"	
Aroclor 1232	ND	---	1050	"	"	"	"	
Aroclor 1242	ND	---	1050	"	"	"	"	
Aroclor 1248	**30100**	---	1050	"	"	"	"	
Aroclor 1254	ND	---	1050	"	"	"	"	
Aroclor 1260	ND	---	1050	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 118 %*	*Limits: 50-125 %*	"	"	"	
Decachlorobiphenyl (Surr)			*133 %*	*Limits: 55-130 %*	"	"	"	*Q-23, S-09*

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Labs

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Tigard, OR 97223
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503-718-0333 Fax

GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
SS-1 (A908221-01)			**Matrix: Soil**					
Antimony	ND	---	1.10	mg/kg dry	10	08/27/09 15:44	EPA 6020	
Arsenic	**2.63**	---	1.10	"	"	"	"	
Beryllium	ND	---	2.20	"	"	"	"	
Cadmium	ND	---	1.10	"	"	"	"	
Chromium	**19.8**	---	2.20	"	"	"	"	
Copper	**38.7**	---	4.40	"	"	"	"	
Lead	**44.2**	---	1.10	"	"	"	"	
Mercury	**0.0989**	---	0.0879	"	"	"	"	
Nickel	**9.27**	---	2.20	"	"	"	"	
Selenium	ND	---	1.10	"	"	"	"	
Silver	ND	---	1.10	"	"	"	"	
Thallium	ND	---	1.10	"	"	"	"	
Zinc	**1130**	---	22.0	"	50	08/27/09 16:22	"	
SS-2 (A908221-02)			**Matrix: Soil**					
Antimony	ND	---	1.56	mg/kg dry	10	08/27/09 16:15	EPA 6020	
Arsenic	**2.06**	---	1.56	"	"	"	"	
Beryllium	ND	---	3.11	"	"	"	"	
Cadmium	ND	---	1.56	"	"	"	"	
Chromium	**11.8**	---	3.11	"	"	"	"	
Copper	**23.3**	---	6.23	"	"	"	"	
Lead	**16.1**	---	1.56	"	"	"	"	
Mercury	ND	---	0.125	"	"	"	"	
Nickel	**11.4**	---	3.11	"	"	"	"	
Selenium	ND	---	1.56	"	"	"	"	
Silver	ND	---	1.56	"	"	"	"	
Thallium	ND	---	1.56	"	"	"	"	
Zinc	**1200**	---	31.1	"	50	08/27/09 17:04	"	

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Labs

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503-718-2323 Phone
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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight by D2216

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
SS-1 (A908221-01)			**Matrix: Soil**					
% Solids	**94.4**	---	1.00	% by Weight	1	08/25/09 08:04	D2216	
SS-2 (A908221-02)			**Matrix: Soil**					
% Solids	**69.5**	---	1.00	% by Weight	1	08/25/09 08:04	D2216	

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

QUALITY CONTROL (QC) SAMPLE RESULTS

Hydrocarbon Identification (HCID) Screen by NWTPH

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080386 - EPA 3546 (Fuels)							**Soil**					
Blank (9080386-BLK1)					Prepared: 08/24/09 11:38 Analyzed: 08/24/09 18:05							
NWTPH-HCID												
Gasoline Range Organics	ND	---	20.0	mg/kg wet	1	---	---	---	---	---	---	B-02
Diesel Range Organics	ND	---	50.0	"	"	---	---	---	---	---	---	
Oil Range Organics	ND	---	100	"	"	---	---	---	---	---	---	

Surr: o-Terphenyl (Surr) *Recovery: 76 %* *Limits: 50-150 %* *Dilution: 1x*

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Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel Range (C10-C22) and Oil Range (C22-C40) Hydrocarbons by NWTPH-Dx - Silica Gel Cleanup

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9090018 - EPA 3546 (Fuels)							**Soil**					
Blank (9090018-BLK1)					Prepared: 09/01/09 14:11		Analyzed: 09/02/09 09:22					
NWTPH-Dx(SG)												
Diesel Range Organics	ND	---	20.0	mg/kg wet	1	---	---	---	---	---	---	
Oil Range Organics	ND	---	40.0	"	"	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 102 %*	*Limits: 50-150 %*			*Dilution: 1x*					
LCS (9090018-BS1)					Prepared: 09/01/09 14:11		Analyzed: 09/02/09 09:45					
NWTPH-Dx(SG)												
Diesel Range Organics	82.4	---	20.0	mg/kg wet	1	83.3	---	99	70-130%	---	---	
Oil Range Organics	101	---	40.0	"	"	"	---	121	"	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 106 %*	*Limits: 50-150 %*			*Dilution: 1x*					
Duplicate (9090018-DUP1)					Prepared: 09/01/09 14:11		Analyzed: 09/02/09 11:00					
QC Source Sample: SS-1 (A908221-01)												
NWTPH-Dx(SG)												
Diesel Range Organics	**99.7**	---	26.2	mg/kg dry	1	---	127	---	---	24	40%	F-03, F-05
Oil Range Organics	**292**	---	52.4	"	"	---	387	---	---	28	40%	F-03
Surr: o-Terphenyl (Surr)			*Recovery: 84 %*	*Limits: 50-150 %*			*Dilution: 1x*					

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080425 - EPA 3546							**Soil**					
Blank (9080425-BLK1)					Prepared: 08/26/09 11:05	Analyzed: 08/26/09 15:34						**C-07**
EPA 8082A												
Aroclor 1016	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1232	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1242	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1248	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1254	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1260	ND	---	10.0	"	"	---	---	---	---	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 121 %*	*Limits: 50-125 %*			*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*134 %*	*55-130 %*			*"*					*Q-23, S-09*
LCS (9080425-BS1)					Prepared: 08/26/09 11:05	Analyzed: 08/26/09 15:49						**C-07**
EPA 8082A												
Aroclor 1016	202	---	10.0	ug/kg wet	1	250	---	81	40-140%	---	---	
Aroclor 1260	231	---	10.0	"	"	"	---	93	60-130%	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 116 %*	*Limits: 50-125 %*			*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*131 %*	*55-130 %*			*"*					*Q-23, S-09*
Duplicate (9080425-DUP2)					Prepared: 08/26/09 11:05	Analyzed: 08/27/09 09:59						**C-07**
QC Source Sample: SS-1 (A908221-01RE2)												
EPA 8082A												
Aroclor 1016	ND	---	7290	ug/kg dry	1000	---	ND	---	---	---	30%	
Aroclor 1221	ND	---	7290	"	"	---	ND	---	---	---	30%	
Aroclor 1232	ND	---	7290	"	"	---	ND	---	---	---	30%	
Aroclor 1242	ND	---	7290	"	"	---	ND	---	---	---	30%	
Aroclor 1248	**148000**	---	7290	"	"	---	128000	---	---	15	30%	
Aroclor 1254	ND	---	7290	"	"	---	ND	---	---	---	30%	
Aroclor 1260	ND	---	7290	"	"	---	ND	---	---	---	30%	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 150 %*	*Limits: 50-125 %*			*Dilution: 1000x*					*S-05*
Decachlorobiphenyl (Surr)			*297 %*	*55-130 %*			*"*					*S-05*

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080400 - EPA 3051							**Soil**					
Blank (9080400-BLK1)					Prepared: 08/25/09 08:55 Analyzed: 08/27/09 14:40							
EPA 6020												
Antimony	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Arsenic	ND	---	1.00	"	"	---	---	---	---	---	---	
Beryllium	ND	---	2.00	"	"	---	---	---	---	---	---	
Cadmium	ND	---	1.00	"	"	---	---	---	---	---	---	
Chromium	ND	---	2.00	"	"	---	---	---	---	---	---	
Copper	ND	---	4.00	"	"	---	---	---	---	---	---	
Lead	ND	---	1.00	"	"	---	---	---	---	---	---	
Mercury	ND	---	0.0800	"	"	---	---	---	---	---	---	
Nickel	ND	---	2.00	"	"	---	---	---	---	---	---	
Selenium	ND	---	1.00	"	"	---	---	---	---	---	---	
Silver	ND	---	1.00	"	"	---	---	---	---	---	---	
Thallium	ND	---	1.00	"	"	---	---	---	---	---	---	
Zinc	ND	---	4.00	"	"	---	---	---	---	---	---	
LCS (9080400-BS1)					Prepared: 08/25/09 08:55 Analyzed: 08/27/09 14:43							
EPA 6020												
Antimony	29.9	---	1.00	mg/kg wet	10	25.0	---	120	80-120%	---	---	
Arsenic	50.2	---	1.00	"	"	50.0	---	100	"	---	---	
Beryllium	24.8	---	2.00	"	"	25.0	---	99	"	---	---	
Cadmium	50.4	---	1.00	"	"	50.0	---	101	"	---	---	
Chromium	49.2	---	2.00	"	"	"	---	98	"	---	---	
Copper	54.1	---	4.00	"	"	"	---	108	"	---	---	
Lead	50.9	---	1.00	"	"	"	---	102	"	---	---	
Mercury	2.02	---	0.0800	"	"	2.00	---	101	"	---	---	
Nickel	52.5	---	2.00	"	"	50.0	---	105	"	---	---	
Selenium	24.7	---	1.00	"	"	25.0	---	99	"	---	---	
Silver	25.3	---	1.00	"	"	"	---	101	"	---	---	
Thallium	25.2	---	1.00	"	"	"	---	101	"	---	---	
Zinc	50.6	---	4.00	"	"	50.0	---	101	"	---	---	
Duplicate (9080400-DUP1)					Prepared: 08/25/09 08:55 Analyzed: 08/27/09 15:47							
QC Source Sample: SS-1 (A908221-01)												
EPA 6020												
Antimony	ND	---	1.12	mg/kg dry	10	---	ND	---	---	---	40%	

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080400 - EPA 3051							**Soil**					
Duplicate (9080400-DUP1)					Prepared: 08/25/09 08:55		Analyzed: 08/27/09 15:47					
QC Source Sample: SS-1 (A908221-01)												
Arsenic	**2.56**	---	1.12	mg/kg dry	"	---	2.63	---	---	2	40%	
Beryllium	ND	---	2.24	"	"	---	ND	---	---	---	40%	
Cadmium	ND	---	1.12	"	"	---	ND	---	---	---	40%	
Chromium	**21.0**	---	2.24	"	"	---	19.8	---	---	6	40%	
Copper	**40.6**	---	4.48	"	"	---	38.7	---	---	5	40%	
Lead	**48.1**	---	1.12	"	"	---	44.2	---	---	8	40%	
Mercury	**0.101**	---	0.0896	"	"	---	0.0989	---	---	2	40%	
Nickel	**9.47**	---	2.24	"	"	---	9.27	---	---	2	40%	
Selenium	ND	---	1.12	"	"	---	ND	---	---	---	40%	
Silver	ND	---	1.12	"	"	---	ND	---	---	---	40%	
Thallium	ND	---	1.12	"	"	---	ND	---	---	---	40%	
Duplicate (9080400-DUP2)					Prepared: 08/25/09 08:55		Analyzed: 08/27/09 16:58					
QC Source Sample: SS-1 (A908221-01)												
EPA 6020												
Zinc	**1140**	---	22.4	mg/kg dry	50	---	1130	---	---	0.7	40%	Q-16
Matrix Spike (9080400-MS1)					Prepared: 08/25/09 08:55		Analyzed: 08/27/09 16:12					
QC Source Sample: SS-1 (A908221-01)												
EPA 6020												
Antimony	26.2	---	1.08	mg/kg dry	10	26.9	0.396	96	75-125%	---	---	
Arsenic	54.1	---	1.08	"	"	54.0	2.63	95	"	---	---	
Beryllium	28.7	---	2.16	"	"	26.9	ND	107	"	---	---	
Cadmium	54.0	---	1.08	"	"	54.0	ND	100	"	---	---	
Chromium	69.3	---	2.16	"	"	"	19.8	92	"	---	---	
Copper	95.5	---	4.31	"	"	"	38.7	105	"	---	---	
Lead	98.5	---	1.08	"	"	"	44.2	101	"	---	---	
Mercury	2.16	---	0.0863	"	"	2.16	0.0989	95	"	---	---	
Nickel	65.0	---	2.16	"	"	54.0	9.27	103	"	---	---	
Selenium	27.1	---	1.08	"	"	26.9	ND	101	"	---	---	
Silver	28.5	---	1.08	"	"	"	0.242	105	"	---	---	
Thallium	27.6	---	1.08	"	"	"	ND	102	"	---	---	
Matrix Spike (9080400-MS2)					Prepared: 08/25/09 08:55		Analyzed: 08/27/09 16:19					

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080400 - EPA 3051							**Soil**					
Matrix Spike (9080400-MS2)					Prepared: 08/25/09 08:55		Analyzed: 08/27/09 16:19					
QC Source Sample: SS-2 (A908221-02)												
EPA 6020												
Antimony	42.6	---	1.57	mg/kg dry	10	39.2	0.452	108	75-125%	---	---	
Arsenic	76.7	---	1.57	"	"	78.6	2.06	95	"	---	---	
Beryllium	42.1	---	3.14	"	"	39.2	ND	107	"	---	---	
Cadmium	79.8	---	1.57	"	"	78.6	ND	102	"	---	---	
Chromium	91.5	---	3.14	"	"	"	11.8	101	"	---	---	
Copper	116	---	6.28	"	"	"	23.3	118	"	---	---	
Lead	97.7	---	1.57	"	"	"	16.1	104	"	---	---	
Mercury	3.08	---	0.126	"	"	3.14	ND	98	"	---	---	
Nickel	92.1	---	3.14	"	"	78.6	11.4	103	"	---	---	
Selenium	38.5	---	1.57	"	"	39.2	ND	98	"	---	---	
Silver	41.7	---	1.57	"	"	"	0.327	105	"	---	---	
Thallium	40.3	---	1.57	"	"	"	ND	103	"	---	---	
Matrix Spike (9080400-MS3)					Prepared: 08/25/09 08:55		Analyzed: 08/27/09 17:01					
QC Source Sample: SS-1 (A908221-01)												
EPA 6020												
Zinc	1180	---	21.6	mg/kg dry	50	54.0	1130	95	75-125%	---	---	Q-16
Matrix Spike (9080400-MS4)					Prepared: 08/25/09 08:55		Analyzed: 08/27/09 17:12					
QC Source Sample: SS-2 (A908221-02)												
EPA 6020												
Zinc	1850	---	31.4	mg/kg dry	50	78.6	1200	820	75-125%	---	---	Q-04, Q-16

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight by D2216

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080380 - Dry Weight							**Soil**					

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

SAMPLE PREPARATION INFORMATION

Hydrocarbon Identification (HCID) Screen by NWTPH

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9080386							
A908221-01	Soil	NWTPH-HCID	08/18/09 08:45	08/24/09 11:38	12.83g/10mL	10g/10mL	0.78
A908221-02	Soil	NWTPH-HCID	08/18/09 09:00	08/24/09 11:38	12.15g/10mL	10g/10mL	0.82

Diesel Range (C10-C22) and Oil Range (C22-C40) Hydrocarbons by NWTPH-Dx - Silica Gel Cleanup

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9090018							
A908221-01	Soil	NWTPH-Dx(SG)	08/18/09 08:45	09/01/09 14:11	13.05g/5mL	15g/5mL	1.15

Polychlorinated Biphenyls by EPA 8082A

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9080425							
A908221-01RE2	Soil	EPA 8082A	08/18/09 08:45	08/26/09 11:05	14.62g/5mL	10g/5mL	0.68
A908221-02RE1	Soil	EPA 8082A	08/18/09 09:00	08/26/09 11:05	13.66g/5mL	10g/5mL	0.73

Total Metals by EPA 6020 (ICPMS)

Prep: EPA 3051

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9080400							
A908221-01	Soil	EPA 6020	08/18/09 08:45	08/25/09 08:55	0.482g/50mL	0.5g/50mL	1.04
A908221-02	Soil	EPA 6020	08/18/09 09:00	08/25/09 08:55	0.462g/50mL	0.5g/50mL	1.08

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-01	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	09/04/09 13:58

Notes and Definitions

Qualifiers:

B-02	Analyte detected in the extraction blank at a level below the MRL, but greater than one-half the MRL.
C-07	Extract has undergone Sulfuric Acid Cleanup by EPA 3665A, Sulfur Cleanup by EPA 3660B, and Florisil Cleanup by EPA 3620B in order to minimize matrix interferance.
F-03	The result for this hydrocarbon range is elevated due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
F-05	The sample chromatographic pattern does not resemble the fuel standard used for quantitation.
Q-04	The RPD and/or Percent Recovery for this QC sample is outside control limits due to a non-homogeneous sample matrix.
Q-16	Reanalysis of an original Batch QC sample.
Q-23	Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Data is likely biased high.
S-05	Surrogate recovery cannot be accurately quantified due to sample dilution required from high analyte concentration and/or matrix interference.
S-09	Surrogate failed. Data accepted based on acceptable recovery of 2nd Surrogate.

Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

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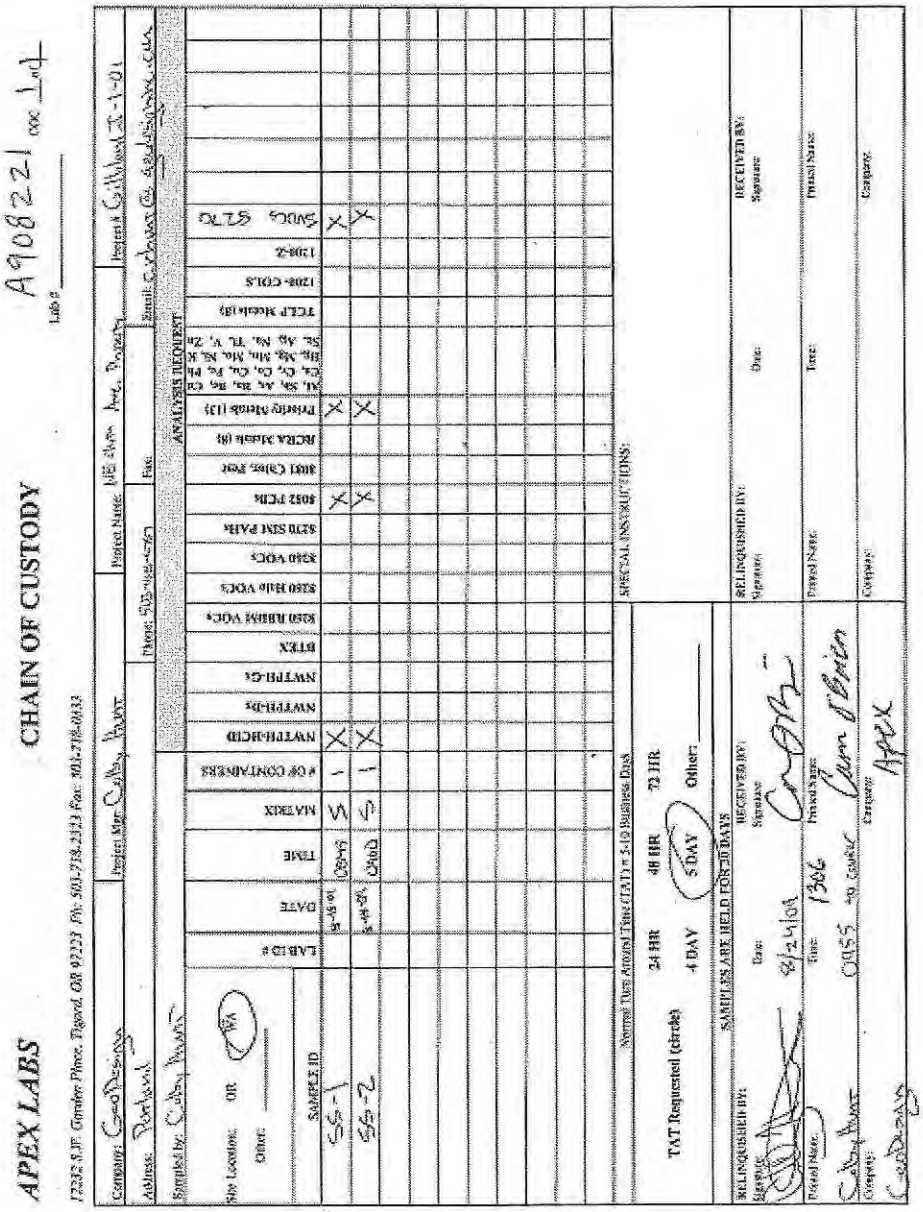
GeoDesign, Inc. 15575 SW Sequoia Pkwy, Ste 100 Portland, OR 97224	Project: **NE 94th Ave Property** Project Number: GillilandJ-1-01 Project Manager: Colby Hunt	**Reported:** 09/04/09 13:58



APEX LABS

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CHAIN OF CUSTODY

A908221 ok 1nd

Lab #: _____

Company: GeoDesign
Address: Portland
Project Mgr: Colby Hunt
Phone: 503-968-6767
Project Name: NE 94th Ave. Property
Fax:
Project #: GillilandJ-1-01
Email: Colby.Hunt@geodesigninc.com
Sampled by: Colby Hunt

Site Location: OR WA
Other: _____

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	BTEX	8260 HHPH VOCs	8260 HALO VOCs	8260 VOCs	8270 SIM PAHs	8082 PCBs	8081 Chlor. Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn	TCLP Metals (8)	1208-COLS	1208-Z	SUDS SETG
SS-1		9-4-09	0845	S	1	X								X			X					
SS-2		9-4-09	0900	S	1	X								X			X					

Normal Turn Around Time (TAT) = 3-10 Business Days

TAT Requested (circle): 24 HR 48 HR 72 HR 4 DAY 5 DAY Other: _____

SAMPLES ARE HELD FOR 30 DAYS

SPECIAL INSTRUCTIONS:

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 8/24/09	Date:	Date:	Date:
Time: 1306	Time:	Time:	Time:
Printed Name: Colby Hunt	Printed Name: Sam O'Brien	Printed Name:	Printed Name:
Company: GeoDesign	Company: Apex	Company:	Company:

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Philip Nerenberg

Philip Nerenberg, Lab Director

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

Certificate of Analysis Number:

09081304

Report To:		Project Name:	A908221
APEX Laboratories		Site:	Tigard, OR
Philip Nerenberg		Site Address:	
12232 SW Garden Place			
Portland		PO Number:	
OR		State:	Oregon
97223-		State Cert. No.:	TX200001
ph (503) 718-2323	fax:	Date Reported:	8/31/2009

This Report Contains A Total Of 19 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

8/31/2009

Date

Test results meet all requirements of NELAC, unless specified in the narrative.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Case Narrative for:
APEX Laboratories

Certificate of Analysis Number:
09081304

Report To:		Project Name:	A908221
APEX Laboratories		Site:	Tigard, OR
Philip Nerenberg		Site Address:	
12232 SW Garden Place			
Portland		PO Number:	
OR		State:	Oregon
97223-		State Cert. No.:	TX200001
ph (503) 718-2323	fax:	Date Reported:	8/31/2009

SAMPLE RECEIPT:

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg\kg-dry " or " ug\kg-dry ").

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or by his designee, as verified by the following signature.

Alisha C. Rodriguez

8/31/2009

Alisha C. Rodriguez
Project Manager

Date

Test results meet all requirements of NELAC, unless specified in the narrative.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

Certificate of Analysis Number:

09081304

Report To: APEX Laboratories
Philip Nerenberg
12232 SW Garden Place

Portland
OR
97223-
ph (503) 718-2323 fax: (503) 718-0333

Fax To:

Project Name: A908221
Site: Tigard, OR
Site Address:

PO Number:
State: Oregon
State Cert. No.: TX200001
Date Reported: 8/31/2009

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
SS-1	09081304-01	Soil	8/18/2009 8:45:00 AM	8/26/2009 9:00:00 AM		☐
SS-2	09081304-02	Soil	8/18/2009 9:00:00 AM	8/26/2009 9:00:00 AM		☐

Alisha C. Rodriguez

8/31/2009

Alisha C. Rodriguez
Project Manager

Date

Kesavalu M. Bagawandoss Ph.D., J.D.
Laboratory Director

Ted Yen
Quality Assurance Officer

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID SS-1 **Collected:** 08/18/2009 8:45 **SPL Sample ID:** 09081304-01

Site: **Tigard, OR**

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
PERCENT MOISTURE				**MCL**	**D2216**	**Units: wt%**	
Percent Moisture	5.87		0	1	08/27/09 12:40	EB1	5179401

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID SS-1 **Collected:** 08/18/2009 8:45 **SPL Sample ID:** 09081304-01

Site: Tigard, OR

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS BY METHOD 8270C			**MCL**	**SW8270C**	**Units: ug/kg-dry**		
1,2,4-Trichlorobenzene	ND		180	1	08/28/09 14:54	E_R	5182006
1,2-Dichlorobenzene	ND		180	1	08/28/09 14:54	E_R	5182006
1,2-Diphenylhydrazine	ND		180	1	08/28/09 14:54	E_R	5182006
1,3-Dichlorobenzene	ND		180	1	08/28/09 14:54	E_R	5182006
1,4-Dichlorobenzene	ND		180	1	08/28/09 14:54	E_R	5182006
2,4,5-Trichlorophenol	ND		180	1	08/28/09 14:54	E_R	5182006
2,4,6-Trichlorophenol	ND		180	1	08/28/09 14:54	E_R	5182006
2,4-Dichlorophenol	ND		180	1	08/28/09 14:54	E_R	5182006
2,4-Dimethylphenol	ND		180	1	08/28/09 14:54	E_R	5182006
2,4-Dinitrophenol	ND		180	1	08/28/09 14:54	E_R	5182006
2,4-Dinitrotoluene	ND		180	1	08/28/09 14:54	E_R	5182006
2,6-Dinitrotoluene	ND		180	1	08/28/09 14:54	E_R	5182006
2-Chloronaphthalene	ND		180	1	08/28/09 14:54	E_R	5182006
2-Chlorophenol	ND		180	1	08/28/09 14:54	E_R	5182006
2-Methylnaphthalene	ND		180	1	08/28/09 14:54	E_R	5182006
2-Nitroaniline	ND		180	1	08/28/09 14:54	E_R	5182006
2-Nitrophenol	ND		180	1	08/28/09 14:54	E_R	5182006
3,3'-Dichlorobenzidine	ND		180	1	08/28/09 14:54	E_R	5182006
3-Nitroaniline	ND		180	1	08/28/09 14:54	E_R	5182006
4,6-Dinitro-2-methylphenol	ND		180	1	08/28/09 14:54	E_R	5182006
4-Bromophenyl phenyl ether	ND		180	1	08/28/09 14:54	E_R	5182006
4-Chloro-3-methylphenol	ND		180	1	08/28/09 14:54	E_R	5182006
4-Chloroaniline	ND		180	1	08/28/09 14:54	E_R	5182006
4-Chlorophenyl phenyl ether	ND		180	1	08/28/09 14:54	E_R	5182006
4-Nitroaniline	ND		180	1	08/28/09 14:54	E_R	5182006
4-Nitrophenol	ND		180	1	08/28/09 14:54	E_R	5182006
Acenaphthene	ND		180	1	08/28/09 14:54	E_R	5182006
Acenaphthylene	ND		180	1	08/28/09 14:54	E_R	5182006
Aniline	ND		180	1	08/28/09 14:54	E_R	5182006
Anthracene	ND		180	1	08/28/09 14:54	E_R	5182006
Benz(a)anthracene	ND		180	1	08/28/09 14:54	E_R	5182006
Benzo(a)pyrene	ND		180	1	08/28/09 14:54	E_R	5182006
Benzo(b)fluoranthene	ND		180	1	08/28/09 14:54	E_R	5182006
Benzo(g,h,i)perylene	ND		180	1	08/28/09 14:54	E_R	5182006
Benzo(k)fluoranthene	ND		180	1	08/28/09 14:54	E_R	5182006
Benzoic acid	ND		710	1	08/28/09 14:54	E_R	5182006
Benzyl alcohol	ND		180	1	08/28/09 14:54	E_R	5182006
Bis(2-chloroethoxy)methane	ND		180	1	08/28/09 14:54	E_R	5182006
Bis(2-chloroethyl)ether	ND		180	1	08/28/09 14:54	E_R	5182006

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID SS-1 **Collected:** 08/18/2009 8:45 **SPL Sample ID:** 09081304-01

Site: Tigard, OR

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		180	1	08/28/09 14:54	E_R	5182006
Bis(2-ethylhexyl)phthalate	ND		180	1	08/28/09 14:54	E_R	5182006
Butyl benzyl phthalate	ND		180	1	08/28/09 14:54	E_R	5182006
Carbazole	ND		180	1	08/28/09 14:54	E_R	5182006
Chrysene	ND		180	1	08/28/09 14:54	E_R	5182006
Dibenz(a,h)anthracene	ND		180	1	08/28/09 14:54	E_R	5182006
Dibenzofuran	ND		180	1	08/28/09 14:54	E_R	5182006
Diethyl phthalate	ND		180	1	08/28/09 14:54	E_R	5182006
Dimethyl phthalate	ND		180	1	08/28/09 14:54	E_R	5182006
Di-n-butyl phthalate	ND		180	1	08/28/09 14:54	E_R	5182006
Di-n-octyl phthalate	ND		180	1	08/28/09 14:54	E_R	5182006
Fluoranthene	ND		180	1	08/28/09 14:54	E_R	5182006
Fluorene	ND		180	1	08/28/09 14:54	E_R	5182006
Hexachlorobenzene	ND		180	1	08/28/09 14:54	E_R	5182006
Hexachlorobutadiene	ND		180	1	08/28/09 14:54	E_R	5182006
Hexachlorocyclopentadiene	ND		180	1	08/28/09 14:54	E_R	5182006
Hexachloroethane	ND		180	1	08/28/09 14:54	E_R	5182006
Indeno(1,2,3-cd)pyrene	ND		180	1	08/28/09 14:54	E_R	5182006
Isophorone	ND		180	1	08/28/09 14:54	E_R	5182006
Naphthalene	ND		180	1	08/28/09 14:54	E_R	5182006
Nitrobenzene	ND		180	1	08/28/09 14:54	E_R	5182006
N-Nitrosodi-n-propylamine	ND		180	1	08/28/09 14:54	E_R	5182006
N-Nitrosodiphenylamine	ND		350	1	08/28/09 14:54	E_R	5182006
Pentachlorophenol	ND		180	1	08/28/09 14:54	E_R	5182006
Phenanthrene	ND		180	1	08/28/09 14:54	E_R	5182006
Phenol	ND		180	1	08/28/09 14:54	E_R	5182006
Pyrene	ND		180	1	08/28/09 14:54	E_R	5182006
Pyridine	ND		180	1	08/28/09 14:54	E_R	5182006
2-Methylphenol	ND		180	1	08/28/09 14:54	E_R	5182006
3 & 4-Methylphenol	ND		350	1	08/28/09 14:54	E_R	5182006
Surr: 2,4,6-Tribromophenol	26.4		% 19-135	1	08/28/09 14:54	E_R	5182006
Surr: 2-Fluorobiphenyl	28.4		% 15-140	1	08/28/09 14:54	E_R	5182006
Surr: 2-Fluorophenol	28.1		% 15-122	1	08/28/09 14:54	E_R	5182006
Surr: Nitrobenzene-d5	27.2		% 10-134	1	08/28/09 14:54	E_R	5182006
Surr: Phenol-d5	26.7		% 10-123	1	08/28/09 14:54	E_R	5182006
Surr: Terphenyl-d14	27.6		% 18-166	1	08/28/09 14:54	E_R	5182006

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550C	08/27/2009 13:43	QMT	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit
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J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID SS-2 **Collected:** 08/18/2009 9:00 **SPL Sample ID:** 09081304-02

Site: Tigard, OR

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
PERCENT MOISTURE				**MCL**	**D2216**	**Units: wt%**	
Percent Moisture	26.6		0	1	08/27/09 12:40	EB1	5179399

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID SS-2 **Collected:** 08/18/2009 9:00 **SPL Sample ID:** 09081304-02

Site: Tigard, OR

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS BY METHOD 8270C			**MCL**	**SW8270C**	**Units: ug/kg-dry**		
1,2,4-Trichlorobenzene	ND		230	1	08/28/09 15:29	E_R	5182007
1,2-Dichlorobenzene	ND		230	1	08/28/09 15:29	E_R	5182007
1,2-Diphenylhydrazine	ND		230	1	08/28/09 15:29	E_R	5182007
1,3-Dichlorobenzene	ND		230	1	08/28/09 15:29	E_R	5182007
1,4-Dichlorobenzene	ND		230	1	08/28/09 15:29	E_R	5182007
2,4,5-Trichlorophenol	ND		230	1	08/28/09 15:29	E_R	5182007
2,4,6-Trichlorophenol	ND		230	1	08/28/09 15:29	E_R	5182007
2,4-Dichlorophenol	ND		230	1	08/28/09 15:29	E_R	5182007
2,4-Dimethylphenol	ND		230	1	08/28/09 15:29	E_R	5182007
2,4-Dinitrophenol	ND		230	1	08/28/09 15:29	E_R	5182007
2,4-Dinitrotoluene	ND		230	1	08/28/09 15:29	E_R	5182007
2,6-Dinitrotoluene	ND		230	1	08/28/09 15:29	E_R	5182007
2-Chloronaphthalene	ND		230	1	08/28/09 15:29	E_R	5182007
2-Chlorophenol	ND		230	1	08/28/09 15:29	E_R	5182007
2-Methylnaphthalene	ND		230	1	08/28/09 15:29	E_R	5182007
2-Nitroaniline	ND		230	1	08/28/09 15:29	E_R	5182007
2-Nitrophenol	ND		230	1	08/28/09 15:29	E_R	5182007
3,3'-Dichlorobenzidine	ND		230	1	08/28/09 15:29	E_R	5182007
3-Nitroaniline	ND		230	1	08/28/09 15:29	E_R	5182007
4,6-Dinitro-2-methylphenol	ND		230	1	08/28/09 15:29	E_R	5182007
4-Bromophenyl phenyl ether	ND		230	1	08/28/09 15:29	E_R	5182007
4-Chloro-3-methylphenol	ND		230	1	08/28/09 15:29	E_R	5182007
4-Chloroaniline	ND		230	1	08/28/09 15:29	E_R	5182007
4-Chlorophenyl phenyl ether	ND		230	1	08/28/09 15:29	E_R	5182007
4-Nitroaniline	ND		230	1	08/28/09 15:29	E_R	5182007
4-Nitrophenol	ND		230	1	08/28/09 15:29	E_R	5182007
Acenaphthene	ND		230	1	08/28/09 15:29	E_R	5182007
Acenaphthylene	ND		230	1	08/28/09 15:29	E_R	5182007
Aniline	ND		230	1	08/28/09 15:29	E_R	5182007
Anthracene	ND		230	1	08/28/09 15:29	E_R	5182007
Benz(a)anthracene	ND		230	1	08/28/09 15:29	E_R	5182007
Benzo(a)pyrene	ND		230	1	08/28/09 15:29	E_R	5182007
Benzo(b)fluoranthene	ND		230	1	08/28/09 15:29	E_R	5182007
Benzo(g,h,i)perylene	ND		230	1	08/28/09 15:29	E_R	5182007
Benzo(k)fluoranthene	ND		230	1	08/28/09 15:29	E_R	5182007
Benzoic acid	ND		910	1	08/28/09 15:29	E_R	5182007
Benzyl alcohol	ND		230	1	08/28/09 15:29	E_R	5182007
Bis(2-chloroethoxy)methane	ND		230	1	08/28/09 15:29	E_R	5182007
Bis(2-chloroethyl)ether	ND		230	1	08/28/09 15:29	E_R	5182007

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID SS-2 **Collected:** 08/18/2009 9:00 **SPL Sample ID:** 09081304-02

Site: Tigard, OR

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		230	1	08/28/09 15:29	E_R	5182007
Bis(2-ethylhexyl)phthalate	ND		230	1	08/28/09 15:29	E_R	5182007
Butyl benzyl phthalate	ND		230	1	08/28/09 15:29	E_R	5182007
Carbazole	ND		230	1	08/28/09 15:29	E_R	5182007
Chrysene	ND		230	1	08/28/09 15:29	E_R	5182007
Dibenz(a,h)anthracene	ND		230	1	08/28/09 15:29	E_R	5182007
Dibenzofuran	ND		230	1	08/28/09 15:29	E_R	5182007
Diethyl phthalate	ND		230	1	08/28/09 15:29	E_R	5182007
Dimethyl phthalate	ND		230	1	08/28/09 15:29	E_R	5182007
Di-n-butyl phthalate	ND		230	1	08/28/09 15:29	E_R	5182007
Di-n-octyl phthalate	ND		230	1	08/28/09 15:29	E_R	5182007
Fluoranthene	ND		230	1	08/28/09 15:29	E_R	5182007
Fluorene	ND		230	1	08/28/09 15:29	E_R	5182007
Hexachlorobenzene	ND		230	1	08/28/09 15:29	E_R	5182007
Hexachlorobutadiene	ND		230	1	08/28/09 15:29	E_R	5182007
Hexachlorocyclopentadiene	ND		230	1	08/28/09 15:29	E_R	5182007
Hexachloroethane	ND		230	1	08/28/09 15:29	E_R	5182007
Indeno(1,2,3-cd)pyrene	ND		230	1	08/28/09 15:29	E_R	5182007
Isophorone	ND		230	1	08/28/09 15:29	E_R	5182007
Naphthalene	ND		230	1	08/28/09 15:29	E_R	5182007
Nitrobenzene	ND		230	1	08/28/09 15:29	E_R	5182007
N-Nitrosodi-n-propylamine	ND		230	1	08/28/09 15:29	E_R	5182007
N-Nitrosodiphenylamine	ND		450	1	08/28/09 15:29	E_R	5182007
Pentachlorophenol	ND		230	1	08/28/09 15:29	E_R	5182007
Phenanthrene	ND		230	1	08/28/09 15:29	E_R	5182007
Phenol	ND		230	1	08/28/09 15:29	E_R	5182007
Pyrene	ND		230	1	08/28/09 15:29	E_R	5182007
Pyridine	ND		230	1	08/28/09 15:29	E_R	5182007
2-Methylphenol	ND		230	1	08/28/09 15:29	E_R	5182007
3 & 4-Methylphenol	ND		450	1	08/28/09 15:29	E_R	5182007
Surr: 2,4,6-Tribromophenol	75.6	%	19-135	1	08/28/09 15:29	E_R	5182007
Surr: 2-Fluorobiphenyl	74.7	%	15-140	1	08/28/09 15:29	E_R	5182007
Surr: 2-Fluorophenol	71.6	%	15-122	1	08/28/09 15:29	E_R	5182007
Surr: Nitrobenzene-d5	68.2	%	10-134	1	08/28/09 15:29	E_R	5182007
Surr: Phenol-d5	72.8	%	10-123	1	08/28/09 15:29	E_R	5182007
Surr: Terphenyl-d14	76.5	%	18-166	1	08/28/09 15:29	E_R	5182007

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550C	08/27/2009 13:43	QMT	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

Quality Control Documentation

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A908221

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 09081304
Lab Batch ID: 93321

Method Blank

RunID: R_090828B-5180902 Units: ug/kg
Analysis Date: 08/28/2009 11:22 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09081304-01A	SS-1
09081304-02A	SS-2

Analyte	Result	Rep Limit
1,2,4-Trichlorobenzene	ND	170
1,2-Dichlorobenzene	ND	170
1,2-Diphenylhydrazine	ND	170
1,3-Dichlorobenzene	ND	170
1,4-Dichlorobenzene	ND	170
2,4,5-Trichlorophenol	ND	170
2,4,6-Trichlorophenol	ND	170
2,4-Dichlorophenol	ND	170
2,4-Dimethylphenol	ND	170
2,4-Dinitrophenol	ND	170
2,4-Dinitrotoluene	ND	170
2,6-Dinitrotoluene	ND	170
2-Chloronaphthalene	ND	170
2-Chlorophenol	ND	170
2-Methylnaphthalene	ND	170
2-Nitroaniline	ND	170
2-Nitrophenol	ND	170
3,3'-Dichlorobenzidine	ND	170
3-Nitroaniline	ND	170
4,6-Dinitro-2-methylphenol	ND	170
4-Bromophenyl phenyl ether	ND	170
4-Chloro-3-methylphenol	ND	170
4-Chloroaniline	ND	170
4-Chlorophenyl phenyl ether	ND	170
4-Nitroaniline	ND	170
4-Nitrophenol	ND	170
Acenaphthene	ND	170
Acenaphthylene	ND	170
Aniline	ND	170
Anthracene	ND	170
Benz(a)anthracene	ND	170
Benzo(a)pyrene	ND	170
Benzo(b)fluoranthene	ND	170
Benzo(g,h,i)perylene	ND	170
Benzo(k)fluoranthene	ND	170
Benzoic acid	ND	670
Benzyl alcohol	ND	170
Bis(2-chloroethoxy)methane	ND	170
Bis(2-chloroethyl)ether	ND	170
Bis(2-chloroisopropyl)ether	ND	170
Bis(2-ethylhexyl)phthalate	ND	170
Butyl benzyl phthalate	ND	170
Carbazole	ND	170
Chrysene	ND	170
Dibenz(a,h)anthracene	ND	170
Dibenzofuran	ND	170

Qualifiers:
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B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
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(713) 660-0901

Quality Control Report

APEX Laboratories

A908221

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 09081304
Lab Batch ID: 93321

Method Blank

RunID: R_090828B-5180902 Units: ug/kg
Analysis Date: 08/28/2009 11:22 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Analyte	Result	Rep Limit
Diethyl phthalate	ND	170
Dimethyl phthalate	ND	170
Di-n-butyl phthalate	ND	170
Di-n-octyl phthalate	ND	170
Fluoranthene	ND	170
Fluorene	ND	170
Hexachlorobenzene	ND	170
Hexachlorobutadiene	ND	170
Hexachlorocyclopentadiene	ND	170
Hexachloroethane	ND	170
Indeno(1,2,3-cd)pyrene	ND	170
Isophorone	ND	170
Naphthalene	ND	170
Nitrobenzene	ND	170
N-Nitrosodi-n-propylamine	ND	170
N-Nitrosodiphenylamine	ND	330
Pentachlorophenol	ND	170
Phenanthrene	ND	170
Phenol	ND	170
Pyrene	ND	170
Pyridine	ND	170
2-Methylphenol	ND	170
3 & 4-Methylphenol	ND	330
Surr: 2,4,6-Tribromophenol	75.6	19-135
Surr: 2-Fluorobiphenyl	81.8	15-140
Surr: 2-Fluorophenol	84.4	15-122
Surr: Nitrobenzene-d5	75.3	10-134
Surr: Phenol-d5	84.4	10-123
Surr: Terphenyl-d14	84.7	18-166

Laboratory Control Sample (LCS)

RunID: R_090828B-5181574 Units: ug/kg
Analysis Date: 08/28/2009 11:57 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,2,4-Trichlorobenzene	850	510	60.0	34	116
1,2-Dichlorobenzene	850	545	64.1	32	129
1,2-Diphenylhydrazine	850	561	66.0	10	256

Qualifiers:
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B/V - Analyte detected in the associated Method Blank
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Quality Control Report

APEX Laboratories

A908221

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 09081304
Lab Batch ID: 93321

Laboratory Control Sample (LCS)

RunID: R_090828B-5181574 Units: ug/kg
Analysis Date: 08/28/2009 11:57 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,3-Dichlorobenzene	850	517	60.8	10	172
1,4-Dichlorobenzene	850	522	61.4	20	124
2,4,5-Trichlorophenol	850	533	62.7	40	150
2,4,6-Trichlorophenol	850	524	61.6	37	144
2,4-Dichlorophenol	850	519	61.1	39	135
2,4-Dimethylphenol	850	538	63.3	32	119
2,4-Dinitrophenol	850	502	59.1	10	191
2,4-Dinitrotoluene	850	601	70.7	30	150
2,6-Dinitrotoluene	850	554	65.2	30	150
2-Chloronaphthalene	850	519	61.1	20	175
2-Chlorophenol	850	590	69.4	23	134
2-Methylnaphthalene	850	541	63.6	30	135
2-Nitroaniline	850	541	63.6	20	175
2-Nitrophenol	850	504	59.3	29	182
3,3´-Dichlorobenzidine	850	565	66.5	10	261
3-Nitroaniline	850	556	65.4	20	175
4,6-Dinitro-2-methylphenol	850	504	59.3	10	181
4-Bromophenyl phenyl ether	850	535	62.9	20	175
4-Chloro-3-methylphenol	850	555	65.3	22	147
4-Chloroaniline	850	545	64.1	20	175
4-Chlorophenyl phenyl ether	850	536	63.1	25	158
4-Nitroaniline	850	620	72.9	20	175
4-Nitrophenol	850	532	62.6	10	132
Acenaphthene	850	514	60.5	30	160
Acenaphthylene	850	535	62.9	10	150
Aniline	1700	993	58.4	10	160
Anthracene	850	555	65.3	27	133
Benz(a)anthracene	850	597	70.2	33	143
Benzo(a)pyrene	850	553	65.1	17	163
Benzo(b)fluoranthene	850	585	68.8	24	159
Benzo(g,h,i)perylene	850	621	73.1	10	219
Benzo(k)fluoranthene	850	615	72.4	11	162
Benzoic acid	850	592	69.6	10	450
Benzyl alcohol	850	553	65.1	30	160

Qualifiers:
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B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
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MI - Matrix Interference
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8880 INTERCHANGE DRIVE
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Quality Control Report

APEX Laboratories

A908221

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 09081304
Lab Batch ID: 93321

Laboratory Control Sample (LCS)

RunID: R_090828B-5181574 Units: ug/kg
Analysis Date: 08/28/2009 11:57 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Bis(2-chloroethoxy)methane	850	501	58.9	33	184
Bis(2-chloroethyl)ether	850	579	68.1	28	158
Bis(2-chloroisopropyl)ether	850	552	64.9	36	166
Bis(2-ethylhexyl)phthalate	850	657	77.3	10	158
Butyl benzyl phthalate	850	619	72.8	10	152
Carbazole	850	598	70.4	45	135
Chrysene	850	584	68.7	17	168
Dibenz(a,h)anthracene	850	592	69.6	10	227
Dibenzofuran	850	535	62.9	30	160
Diethyl phthalate	850	590	69.4	10	160
Dimethyl phthalate	850	562	66.1	10	112
Di-n-butyl phthalate	850	632	74.4	10	118
Di-n-octyl phthalate	850	620	72.9	10	146
Fluoranthene	850	607	71.4	26	137
Fluorene	850	540	63.5	35	135
Hexachlorobenzene	850	549	64.6	10	152
Hexachlorobutadiene	850	495	58.2	20	140
Hexachlorocyclopentadiene	850	164	19.3	10	152
Hexachloroethane	850	516	60.7	25	118
Indeno(1,2,3-cd)pyrene	850	627	73.8	10	171
Isophorone	850	598	70.4	21	196
Naphthalene	850	529	62.2	21	133
Nitrobenzene	850	505	59.4	35	180
N-Nitrosodi-n-propylamine	850	556	65.4	10	230
N-Nitrosodiphenylamine	1700	1350	79.4	30	160
Pentachlorophenol	850	424	49.9	14	176
Phenanthrene	850	572	67.3	35	135
Phenol	850	515	60.6	44	120
Pyrene	850	606	71.3	34	138
Pyridine	1700	918	54.0	10	150
2-Methylphenol	850	583	68.6	40	160
3 & 4-Methylphenol	850	617	72.6	40	160
Surr: 2,4,6-Tribromophenol	2500	1660	66.4	19	135
Surr: 2-Fluorobiphenyl	1700	1000	58.8	15	140

Qualifiers:
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B/V - Analyte detected in the associated Method Blank
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E - Estimated Value exceeds calibration curve
MI - Matrix Interference
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8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
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Quality Control Report

APEX Laboratories

A908221

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 09081304
Lab Batch ID: 93321

Laboratory Control Sample (LCS)

RunID: R_090828B-5181574 Units: ug/kg
Analysis Date: 08/28/2009 11:57 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Surr: 2-Fluorophenol	2500	1660	66.4	15	122
Surr: Nitrobenzene-d5	1700	1000	58.8	32	153
Surr: Phenol-d5	2500	1670	66.8	10	123
Surr: Terphenyl-d14	1700	1060	62.4	18	166

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 09081338-06
RunID: R_090828B-5181577 Units: ug/kg-dry
Analysis Date: 08/28/2009 13:43 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,2,4-Trichlorobenzene	ND	1290	841	65.3	1290	889	69.1	5.60	28	34	116
1,2-Dichlorobenzene	ND	1290	841	65.3	1290	895	69.5	6.28	60	32	129
1,2-Diphenylhydrazine	ND	1290	932	72.4	1290	983	76.4	5.38	60	10	256
1,3-Dichlorobenzene	ND	1290	797	61.9	1290	847	65.8	6.08	60	10	172
1,4-Dichlorobenzene	ND	1290	815	63.3	1290	841	65.3	3.11	28	20	124
2,4,5-Trichlorophenol	ND	1290	874	67.9	1290	879	68.2	0.519	60	40	150
2,4,6-Trichlorophenol	ND	1290	900	69.9	1290	929	72.1	3.15	60	37	144
2,4-Dichlorophenol	ND	1290	877	68.1	1290	886	68.8	1.03	60	39	135
2,4-Dimethylphenol	ND	1290	871	67.6	1290	923	71.6	5.74	60	32	119
2,4-Dinitrophenol	ND	1290	379	29.4	1290	298	23.2	23.7	60	10	191
2,4-Dinitrotoluene	ND	1290	903	70.1	1290	868	67.4	3.93	50	30	150
2,6-Dinitrotoluene	ND	1290	909	70.6	1290	926	71.9	1.82	60	30	150
2-Chloronaphthalene	ND	1290	929	72.1	1290	955	74.1	2.74	60	20	175
2-Chlorophenol	ND	1290	923	71.6	1290	982	76.2	6.21	40	23	134
2-Methylnaphthalene	ND	1290	885	68.7	1290	918	71.3	3.70	60	30	135
2-Nitroaniline	ND	1290	964	74.8	1290	929	72.1	3.68	60	20	175
2-Nitrophenol	ND	1290	847	65.8	1290	891	69.2	5.06	60	29	182
3,3'-Dichlorobenzidine	ND	1290	877	68.1	1290	877	68.1	0	60	10	261

Qualifiers:
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E - Estimated Value exceeds calibration curve
MI - Matrix Interference
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Quality Control Report

APEX Laboratories

A908221

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 09081304
Lab Batch ID: 93321

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 09081338-06
RunID: R_090828B-5181577 Units: ug/kg-dry
Analysis Date: 08/28/2009 13:43 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
3-Nitroaniline	ND	1290	717	55.6	1290	783	60.8	8.89	60	20	175
4,6-Dinitro-2-methylphenol	ND	1290	382	29.6	1290	235	18.2	47.7	60	10	181
4-Bromophenyl phenyl ether	ND	1290	839	65.2	1290	903	70.1	7.30	60	20	175
4-Chloro-3-methylphenol	ND	1290	944	73.3	1290	955	74.1	1.12	42	22	147
4-Chloroaniline	ND	1290	832	64.6	1290	859	66.7	3.23	60	20	175
4-Chlorophenyl phenyl ether	ND	1290	882	68.5	1290	918	71.3	4.04	60	25	158
4-Nitroaniline	ND	1290	894	69.4	1290	992	77.1	10.4	60	20	175
4-Nitrophenol	ND	1290	814	63.2	1290	820	63.6	0.742	50	10	132
Acenaphthene	ND	1290	909	70.6	1290	892	69.3	1.85	31	30	160
Acenaphthylene	ND	1290	948	73.6	1290	958	74.4	0.954	50	10	150
Aniline	ND	2580	1520	58.8	2580	1550	60.0	1.98	60	10	160
Anthracene	ND	1290	876	68.0	1290	942	73.2	7.33	50	27	133
Benz(a)anthracene	ND	1290	898	69.8	1290	945	73.4	5.09	50	33	143
Benzo(a)pyrene	ND	1290	792	61.5	1290	791	61.4	0.191	60	17	163
Benzo(b)fluoranthene	ND	1290	823	63.9	1290	883	68.6	7.10	60	24	159
Benzo(g,h,i)perylene	ND	1290	824	64.0	1290	820	63.6	0.553	60	10	219
Benzo(k)fluoranthene	ND	1290	856	66.5	1290	852	66.1	0.532	60	11	162
Benzoic acid	ND	1290	836	64.9	1290	835	64.8	0.181	60	10	450
Benzyl alcohol	ND	1290	927	72.0	1290	994	77.2	6.94	60	30	160
Bis(2-chloroethoxy)methane	ND	1290	845	65.6	1290	838	65.1	0.900	60	33	184
Bis(2-chloroethyl)ether	ND	1290	876	68.0	1290	959	74.5	9.08	60	28	158
Bis(2-chloroisopropyl)ether	ND	1290	853	66.2	1290	882	68.5	3.32	60	36	166
Bis(2-ethylhexyl)phthalate	ND	1290	1070	82.7	1290	1140	88.7	7.00	60	10	158
Butyl benzyl phthalate	ND	1290	985	76.5	1290	1040	81.1	5.83	60	10	152
Carbazole	ND	1290	882	68.5	1290	933	72.5	5.68	60	45	135
Chrysene	ND	1290	897	69.6	1290	952	73.9	5.90	60	17	168
Dibenz(a,h)anthracene	ND	1290	839	65.2	1290	841	65.3	0.180	60	10	227
Dibenzofuran	ND	1290	924	71.8	1290	927	72.0	0.327	60	45	135
Diethyl phthalate	ND	1290	924	71.8	1290	930	72.2	0.654	60	10	160
Dimethyl phthalate	ND	1290	902	70.0	1290	920	71.4	2.00	60	10	112
Di-n-butyl phthalate	ND	1290	935	72.6	1290	979	76.0	4.59	60	40	132
Di-n-octyl phthalate	ND	1290	1010	78.4	1290	1090	84.6	7.65	60	10	146

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HOUSTON, TX 77054
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Quality Control Report

APEX Laboratories

A908221

Analysis: Semivolatile Organics by Method 8270C
Method: SW8270C
WorkOrder: 09081304
Lab Batch ID: 93321

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 09081338-06
RunID: R_090828B-5181577 Units: ug/kg-dry
Analysis Date: 08/28/2009 13:43 Analyst: E_R
Preparation Date: 08/27/2009 13:43 Prep By: QMT Method SW3550C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Fluoranthene	ND	1290	868	67.4	1290	906	70.4	4.27	60	26	137
Fluorene	ND	1290	897	69.6	1290	917	71.2	2.17	60	45	135
Hexachlorobenzene	ND	1290	838	65.1	1290	876	68.0	4.42	60	10	152
Hexachlorobutadiene	ND	1290	812	63.1	1290	885	68.7	8.57	60	20	140
Hexachlorocyclopentadiene	ND	1290	339	26.4	1290	286	22.2	16.9	60	10	152
Hexachloroethane	ND	1290	761	59.1	1290	791	61.4	3.91	60	25	118
Indeno(1,2,3-cd)pyrene	ND	1290	880	68.4	1290	923	71.6	4.71	60	10	171
Isophorone	ND	1290	992	77.1	1290	1000	78.0	1.21	60	21	196
Naphthalene	ND	1290	870	67.5	1290	892	69.3	2.58	60	21	133
Nitrobenzene	ND	1290	848	65.9	1290	842	65.4	0.717	60	35	180
N-Nitrosodi-n-propylamine	ND	1290	880	68.4	1290	914	70.9	3.72	38	10	230
N-Nitrosodiphenylamine	ND	2580	2170	84.1	2580	2300	89.4	6.10	60	30	160
Pentachlorophenol	ND	1290	841	65.3	1290	897	69.6	6.45	50	14	176
Phenanthrene	ND	1290	879	68.2	1290	924	71.8	5.04	60	45	135
Phenol	332	1290	1310	76.0	1290	1480	88.8	11.9	42	44	120
Pyrene	ND	1290	994	77.2	1290	1040	80.9	4.76	31	26	127
Pyridine	ND	2580	1410	54.9	2580	1470	56.9	3.58	60	10	150
2-Methylphenol	ND	1290	938	72.8	1290	965	74.9	2.87	60	40	160
3 & 4-Methylphenol	ND	1290	1070	83.1	1290	1150	89.1	6.97	60	40	160
Surr: 2,4,6-Tribromophenol	ND	3790	2520	66.4	3790	2610	68.8	3.55	30	19	135
Surr: 2-Fluorobiphenyl	ND	2580	1860	72.4	2580	1860	72.4	0	30	15	140
Surr: 2-Fluorophenol	ND	3790	2670	70.4	3790	2830	74.8	6.06	30	15	122
Surr: Nitrobenzene-d5	ND	2580	1700	65.9	2580	1760	68.2	3.51	30	10	134
Surr: Phenol-d5	ND	3790	2640	69.6	3790	2860	75.6	8.26	30	10	123
Surr: Terphenyl-d14	ND	2580	1730	67.1	2580	1820	70.6	5.13	30	18	166

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A908221

Analysis:	**PERCENT MOISTURE**	**WorkOrder:**	**09081304**
Method:	**D2216**	**Lab Batch ID:**	**R282195C**

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
09081304-01A	SS-1
09081304-02A	SS-2

Sample Duplicate

Original Sample:	09081304-01		
RunID:	WET_090827C-5179401	Units:	wt%
Analysis Date:	08/27/2009 12:40	Analyst:	EB1

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Percent Moisture	5.87	5.866	0.140	20

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

Sample Receipt Checklist

And

Chain of Custody

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	09081304	Received By:	T_B
Date and Time Received:	8/26/2009 9:00:00 AM	Carrier name:	Fedex-Standard Overnight
Temperature:	1.5°C	Chilled by:	Water Ice

1.	Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2.	Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3.	Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4.	Chain of custody present?	Yes ☑	No ☐	
5.	Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
6.	Chain of custody agrees with sample labels?	Yes ☑	No ☐	
7.	Samples in proper container/bottle?	Yes ☑	No ☐	
8.	Sample containers intact?	Yes ☑	No ☐	
9.	Sufficient sample volume for indicated test?	Yes ☑	No ☐	
10.	All samples received within holding time?	Yes ☑	No ☐	
11.	Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
12.	Water - VOA vials have zero headspace?	Yes ☐	No ☐	VOA Vials Not Present ☑
13.	Water - Preservation checked upon receipt (except VOA*)?	Yes ☐	No ☐	Not Applicable ☑

*VOA Preservation Checked After Sample Analysis

SPL Representative: _____ Contact Date & Time: _____

Client Name Contacted: _____

Non Conformance Issues: _____

Client Instructions: _____

09081304

SUBCONTRACT ORDER

Apex Laboratories

A908221

SENDING LABORATORY:

Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0333
Project Manager: Philip Nerenberg

RECEIVING LABORATORY:

SPL, Inc Houston
8880 Interchange Dr.
Houston, TX 77054
Phone :(800) 969-6775
Fax: (713) 660-8975

Sample Name: SS-1 Soil **Sampled: 08/18/09 08:45** (A908221-01)

Analysis	Due	Expires	Comments
8270C Semivolatiles (BNA)	08/31/09 17:00	09/01/09 08:45	
Containers Supplied:			
(B)4 oz Glass Jar			

Sample Name: SS-2 Soil **Sampled: 08/18/09 09:00** (A908221-02)

Analysis	Due	Expires	Comments
8270C Semivolatiles (BNA)	08/31/09 17:00	09/01/09 09:00	
Containers Supplied:			
(B)4 oz Glass Jar			

Released By	Date	Received By	Date
[signature]	8/25/09	[signature]	8/26/09 9:

AF

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Thursday, November 12, 2009

Colby Hunt
GeoDesign, Inc.
15575 SW Sequoia Pkwy, Ste 100
Portland, OR 97224

RE: NE 94th Ave Property / GillilandJ-1-02

Enclosed are the results of analyses for work order A910341, which was received by the laboratory on 10/30/2009 at 12:45:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 15:10

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CS-21(0-0.5)	A910341-01	Soil	10/29/09 16:30	10/30/09 12:45
Decan Water	A910341-02	Water	10/29/09 16:45	10/30/09 12:45

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 15:10

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-21(0-0.5) (A910341-01RE1)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	423	ug/kg dry	50	11/09/09 19:25	EPA 8082A	
Aroclor 1221	ND	---	423	"	"	"	"	
Aroclor 1232	ND	---	423	"	"	"	"	
Aroclor 1242	ND	---	423	"	"	"	"	
Aroclor 1248	**3000**	---	423	"	"	"	"	
Aroclor 1254	ND	---	423	"	"	"	"	
Aroclor 1260	ND	---	423	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 94 %*	*Limits: 50-125 %*	"	"	"	*S-05*
Decachlorobiphenyl (Surr)			*102 %*	*Limits: 55-130 %*	"	"	"	*S-05*
Decan Water (A910341-02)			**Matrix: Water**					**C-03, C-04**
Aroclor 1016	ND	---	0.118	ug/L	1	11/07/09 10:45	EPA 8082A	
Aroclor 1221	ND	---	0.118	"	"	"	"	
Aroclor 1232	ND	---	0.118	"	"	"	"	
Aroclor 1242	ND	---	0.118	"	"	"	"	
Aroclor 1248	**2.30**	---	0.118	"	"	"	"	
Aroclor 1254	ND	---	0.118	"	"	"	"	
Aroclor 1260	ND	---	0.118	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 45 %*	*Limits: 50-125 %*	"	"	"	*S-04*
Decachlorobiphenyl (Surr)			*11 %*	*Limits: 55-130 %*	"	"	"	*S-04*

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Labs

12232 S.W. Garden Place
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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 15:10

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight by D2216

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-21(0-0.5) (A910341-01)			**Matrix: Soil**					
% Solids	**81.4**	—	1.00	% by Weight	1	11/04/09 08:34	D2216	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 15:10

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9110015 - EPA 3510C (Neutral pH)							**Water**					
Blank (9110015-BLK1)					Prepared: 11/02/09 12:13		Analyzed: 11/07/09 10:01					**C-03, C-04**
EPA 8082A												
Aroclor 1016	ND	---	0.100	ug/L	1	---	---	---	---	---	---	
Aroclor 1221	ND	---	0.100	"	"	---	---	---	---	---	---	
Aroclor 1232	ND	---	0.100	"	"	---	---	---	---	---	---	
Aroclor 1242	ND	---	0.100	"	"	---	---	---	---	---	---	
Aroclor 1248	ND	---	0.100	"	"	---	---	---	---	---	---	
Aroclor 1254	ND	---	0.100	"	"	---	---	---	---	---	---	
Aroclor 1260	ND	---	0.100	"	"	---	---	---	---	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 104 %*	*Limits: 50-125 %*			*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*100 %*	*55-130 %*			*"*					
LCS (9110015-BS1)					Prepared: 11/02/09 12:13		Analyzed: 11/07/09 10:15					**C-03, C-04**
EPA 8082A												
Aroclor 1016	2.24	---	0.100	ug/L	1	2.50	---	90	40-140%	---	---	
Aroclor 1260	2.39	---	0.100	"	"	"	---	96	60-130%	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 98 %*	*Limits: 50-125 %*			*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*103 %*	*55-130 %*			*"*					
LCS Dup (9110015-BSD1)					Prepared: 11/02/09 12:13		Analyzed: 11/07/09 10:30					**C-03, C-04**
EPA 8082A												
Aroclor 1016	2.42	---	0.100	ug/L	1	2.50	---	97	40-140%	8	30%	
Aroclor 1260	2.46	---	0.100	"	"	"	---	99	60-130%	3	30%	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 109 %*	*Limits: 50-125 %*			*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*103 %*	*55-130 %*			*"*					
Batch 9110081 - EPA 3546							**Soil**					
Blank (9110081-BLK1)					Prepared: 11/06/09 11:13		Analyzed: 11/07/09 10:59					**C-03, C-04**
EPA 8082A												
Aroclor 1016	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1232	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1242	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1248	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1254	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1260	ND	---	10.0	"	"	---	---	---	---	---	---	

Apex Laboratories

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Philip Nerenberg, Lab Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 15:10

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9110081 - EPA 3546							**Soil**					
Blank (9110081-BLK1)					Prepared: 11/06/09 11:13		Analyzed: 11/07/09 10:59					**C-03, C-04**
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 80 %*		*Limits: 50-125 %*		*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*77 %*		*55-130 %*		*"*					
LCS (9110081-BS1)					Prepared: 11/06/09 11:13		Analyzed: 11/07/09 11:14					**C-03, C-04**
EPA 8082A												
Aroclor 1016	237	---	10.0	ug/kg wet	1	250	---	95	40-140%	---	---	
Aroclor 1260	236	---	10.0	"	"	"	---	94	60-130%	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 91 %*		*Limits: 50-125 %*		*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*81 %*		*55-130 %*		*"*					

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 15:10

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight by D2216

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9110032 - Dry Weight							**Soil**					

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

Apex Laboratories

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Philip Nerenberg, Lab Director

Apex Labs

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 15:10

SAMPLE PREPARATION INFORMATION

Polychlorinated Biphenyls by EPA 8082A

Prep: EPA 3510C (Neutral pH)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9110015							
A910341-02	Water	EPA 8082A	10/29/09 16:45	11/02/09 12:13	850mL/5mL	1000mL/5mL	1.18

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9110081							
A910341-01RE1	Soil	EPA 8082A	10/29/09 16:30	11/06/09 11:13	14.52g/5mL	10g/5mL	0.69

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Philip Nerenberg

Philip Nerenberg, Lab Director

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 15:10

Notes and Definitions

Qualifiers:

C-03	Extract has undergone Sulfuric Acid Cleanup in order to minimize matrix interferance.
C-04	Extract has undergone a Sulfur Cleanup using EPA 3660B.
S-04	Surrogate recovery is outside of established control limits due to a sample matrix effect.
S-05	Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy	Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses. For accurate comparison of volatile results to the level found in the blank, water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor. Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
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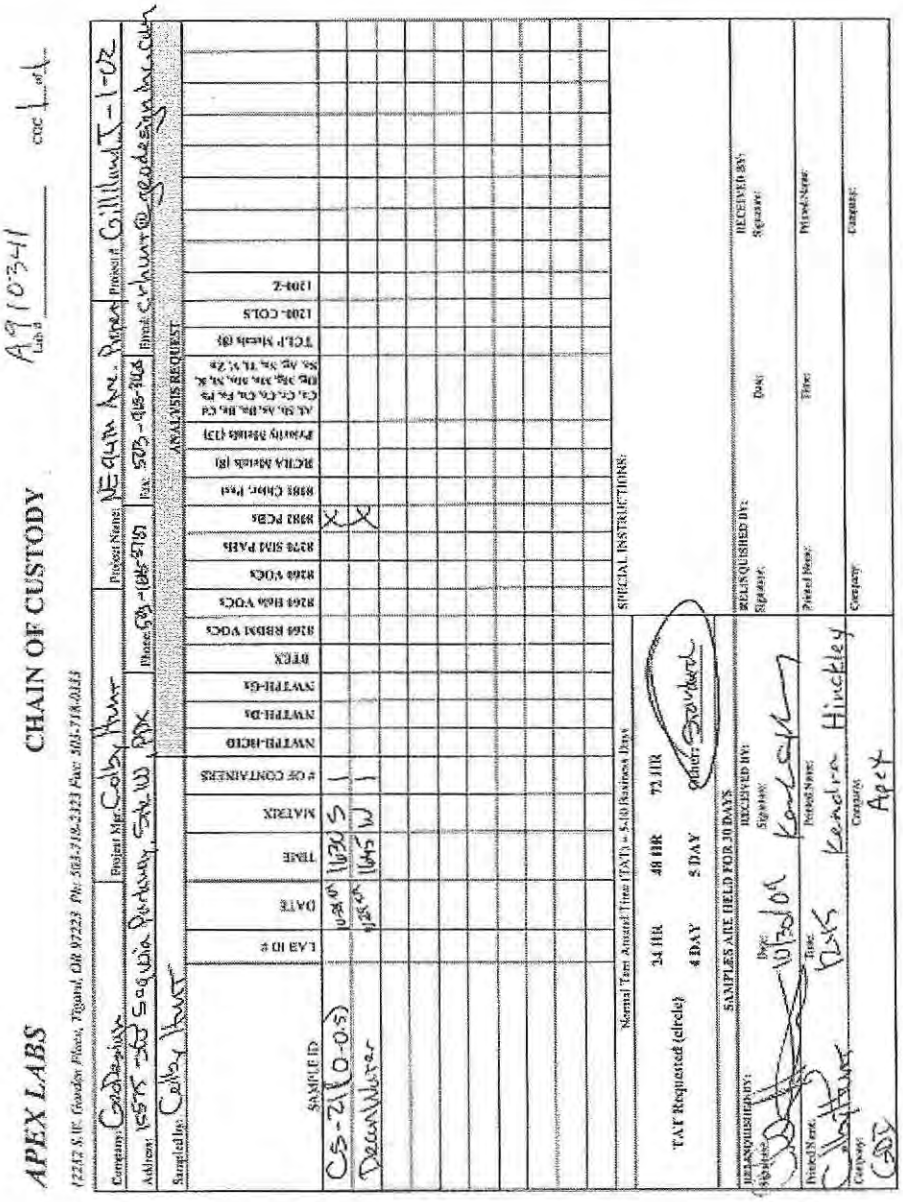
503-718-0333 Fax

GeoDesign, Inc. 15575 SW Sequoia Pkwy, Ste 100 Portland, OR 97224	Project: **NE 94th Ave Property** Project Number: GillilandJ-1-02 Project Manager: Colby Hunt	**Reported:** 11/12/09 15:10



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Labs

12232 S.W. Garden Place
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503-718-2323 Phone
503-718-0333 Fax

Thursday, November 12, 2009

Colby Hunt
GeoDesign, Inc.
15575 SW Sequoia Pkwy, Ste 100
Portland, OR 97224

RE: NE 94th Ave Property / GillilandJ-1-02

Enclosed are the results of analyses for work order A910329, which was received by the laboratory on 10/29/2009 at 11:28:00AM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CS-1 (0-0.5)	A910329-01	Soil	10/28/09 10:45	10/29/09 11:28
CS-2 (0-0.5)	A910329-02	Soil	10/28/09 11:05	10/29/09 11:28
CS-3 (0-0.5)	A910329-03	Soil	10/28/09 11:40	10/29/09 11:28
CS-4 (0-0.5)	A910329-04	Soil	10/28/09 12:00	10/29/09 11:28
CS-5 (0-0.5)	A910329-05	Soil	10/28/09 12:30	10/29/09 11:28
CS-6 (0-0.5)	A910329-06	Soil	10/28/09 13:30	10/29/09 11:28
CS-7 (0-0.5)	A910329-07	Soil	10/28/09 14:00	10/29/09 11:28
CS-8 (0-0.5)	A910329-08	Soil	10/28/09 14:25	10/29/09 11:28
CS-9 (0-0.5)	A910329-09	Soil	10/28/09 15:00	10/29/09 11:28
CS-12 (0-0.5)	A910329-10	Soil	10/28/09 16:10	10/29/09 11:28
CS-13 (0-0.5)	A910329-11	Soil	10/28/09 15:40	10/29/09 11:28
CS-14 (0-0.5)	A910329-12	Soil	10/28/09 15:30	10/29/09 11:28
CS-15 (0-0.5)	A910329-13	Soil	10/28/09 14:50	10/29/09 11:28
CS-16 (0-0.5)	A910329-14	Soil	10/28/09 14:07	10/29/09 11:28
CS-17 (0-0.5)	A910329-15	Soil	10/28/09 13:33	10/29/09 11:28
CS-18 (0-0.5)	A910329-16	Soil	10/28/09 12:21	10/29/09 11:28
CS-19 (0-0.5)	A910329-17	Soil	10/28/09 11:45	10/29/09 11:28
CS-20 (0-0.5)	A910329-18	Soil	10/28/09 11:12	10/29/09 11:28

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-1 (0-0.5) (A910329-01RE1)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	94.8	ug/kg dry	10	11/06/09 21:53	EPA 8082A	
Aroclor 1221	ND	---	94.8	"	"	"	"	
Aroclor 1232	ND	---	94.8	"	"	"	"	
Aroclor 1242	ND	---	94.8	"	"	"	"	
Aroclor 1248	**1870**	---	94.8	"	"	"	"	
Aroclor 1254	**396**	---	94.8	"	"	"	"	
Aroclor 1260	ND	---	94.8	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 112 %*	*Limits: 50-125 %*	"	"	"	*Q-23*
Decachlorobiphenyl (Surr)			*132 %*	*Limits: 55-130 %*	"	"	"	*Q-23*
CS-2 (0-0.5) (A910329-02RE1)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	462	ug/kg dry	50	11/06/09 22:07	EPA 8082A	
Aroclor 1221	ND	---	462	"	"	"	"	
Aroclor 1232	ND	---	462	"	"	"	"	
Aroclor 1242	ND	---	462	"	"	"	"	
Aroclor 1248	**10200**	---	462	"	"	"	"	
Aroclor 1254	ND	---	462	"	"	"	"	
Aroclor 1260	ND	---	462	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 248 %*	*Limits: 50-125 %*	"	"	"	*S-05, Q-23*
Decachlorobiphenyl (Surr)			*368 %*	*Limits: 55-130 %*	"	"	"	*S-05, Q-23*
CS-3 (0-0.5) (A910329-03RE1)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1016	ND	---	933	ug/kg dry	100	11/06/09 22:22	EPA 8082A	
Aroclor 1221	ND	---	933	"	"	"	"	
Aroclor 1232	ND	---	933	"	"	"	"	
Aroclor 1242	ND	---	933	"	"	"	"	
Aroclor 1248	**17100**	---	933	"	"	"	"	
Aroclor 1254	ND	---	933	"	"	"	"	
Aroclor 1260	ND	---	933	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 102 %*	*Limits: 50-125 %*	"	"	"	*S-05, Q-23*
Decachlorobiphenyl (Surr)			*111 %*	*Limits: 55-130 %*	"	"	"	*S-05, Q-23*
CS-4 (0-0.5) (A910329-04RE1)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1016	ND	---	1940	ug/kg dry	200	11/06/09 22:36	EPA 8082A	
Aroclor 1221	ND	---	1940	"	"	"	"	
Aroclor 1232	ND	---	1940	"	"	"	"	
Aroclor 1242	ND	---	1940	"	"	"	"	

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-4 (0-0.5) (A910329-04RE1)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1248	**27600**	---	1940	ug/kg dry	200	"	EPA 8082A	
Aroclor 1254	ND	---	1940	"	"	"	"	
Aroclor 1260	ND	---	1940	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 835 %*	*Limits: 50-125 %*	"	"	"	*Q-23, S-05*
Decachlorobiphenyl (Surr)			*1260 %*	*Limits: 55-130 %*	"	"	"	*Q-23, S-05*
CS-5 (0-0.5) (A910329-05)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1016	ND	---	899	ug/kg dry	100	11/06/09 18:14	EPA 8082A	
Aroclor 1221	ND	---	899	"	"	"	"	
Aroclor 1232	ND	---	899	"	"	"	"	
Aroclor 1242	ND	---	899	"	"	"	"	
Aroclor 1248	**32400**	---	899	"	"	"	"	
Aroclor 1254	ND	---	899	"	"	"	"	
Aroclor 1260	ND	---	899	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 92 %*	*Limits: 50-125 %*	"	"	"	*Q-23, S-05*
Decachlorobiphenyl (Surr)			*95 %*	*Limits: 55-130 %*	"	"	"	*Q-23, S-05*
CS-6 (0-0.5) (A910329-06)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	934	ug/kg dry	100	11/06/09 18:29	EPA 8082A	
Aroclor 1221	ND	---	934	"	"	"	"	
Aroclor 1232	ND	---	934	"	"	"	"	
Aroclor 1242	ND	---	934	"	"	"	"	
Aroclor 1248	**20900**	---	934	"	"	"	"	
Aroclor 1254	ND	---	934	"	"	"	"	
Aroclor 1260	ND	---	934	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 88 %*	*Limits: 50-125 %*	"	"	"	*Q-23, S-05*
Decachlorobiphenyl (Surr)			*90 %*	*Limits: 55-130 %*	"	"	"	*Q-23, S-05*
CS-7 (0-0.5) (A910329-07)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1016	ND	---	942	ug/kg dry	100	11/06/09 18:43	EPA 8082A	
Aroclor 1221	ND	---	942	"	"	"	"	
Aroclor 1232	ND	---	942	"	"	"	"	
Aroclor 1242	ND	---	942	"	"	"	"	
Aroclor 1248	**13700**	---	942	"	"	"	"	
Aroclor 1254	ND	---	942	"	"	"	"	
Aroclor 1260	ND	---	942	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 49 %*	*Limits: 50-125 %*	"	"	"	*S-05, Q-23*

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-7 (0-0.5) (A910329-07)			**Matrix: Soil**					**C-04, C-03**
Surrogate: Decachlorobiphenyl (Surr)			*Recovery: 55 %*	*Limits: 55-130 %*	100	"	EPA 8082A	*Q-23, S-05*
CS-8 (0-0.5) (A910329-08)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	943	ug/kg dry	100	11/06/09 18:58	EPA 8082A	
Aroclor 1221	ND	---	943	"	"	"	"	
Aroclor 1232	ND	---	943	"	"	"	"	
Aroclor 1242	ND	---	943	"	"	"	"	
Aroclor 1248	**3940**	---	943	"	"	"	"	
Aroclor 1254	ND	---	943	"	"	"	"	
Aroclor 1260	ND	---	943	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 68 %*	*Limits: 50-125 %*	"	"	"	*Q-23, S-05*
Decachlorobiphenyl (Surr)			*80 %*	*Limits: 55-130 %*	"	"	"	*Q-23, S-05*
CS-9 (0-0.5) (A910329-09)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1016	ND	---	909	ug/kg dry	100	11/06/09 19:12	EPA 8082A	
Aroclor 1221	ND	---	909	"	"	"	"	
Aroclor 1232	ND	---	909	"	"	"	"	
Aroclor 1242	ND	---	909	"	"	"	"	
Aroclor 1248	**4010**	---	909	"	"	"	"	
Aroclor 1254	ND	---	909	"	"	"	"	
Aroclor 1260	ND	---	909	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 54 %*	*Limits: 50-125 %*	"	"	"	*Q-23, S-05*
Decachlorobiphenyl (Surr)			*61 %*	*Limits: 55-130 %*	"	"	"	*Q-23, S-05*
CS-12 (0-0.5) (A910329-10RE1)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1016	ND	---	92.3	ug/kg dry	10	11/07/09 09:11	EPA 8082A	
Aroclor 1221	ND	---	92.3	"	"	"	"	
Aroclor 1232	ND	---	92.3	"	"	"	"	
Aroclor 1242	ND	---	92.3	"	"	"	"	
Aroclor 1248	**820**	---	92.3	"	"	"	"	
Aroclor 1254	ND	---	92.3	"	"	"	"	
Aroclor 1260	ND	---	92.3	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 64 %*	*Limits: 50-125 %*	"	"	"	
Decachlorobiphenyl (Surr)			*52 %*	*Limits: 55-130 %*	"	"	"	*S-06*
CS-13 (0-0.5) (A910329-11)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1016	ND	---	859	ug/kg dry	100	11/06/09 19:42	EPA 8082A	
Aroclor 1221	ND	---	859	"	"	"	"	

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-13 (0-0.5) (A910329-11)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1232	ND	---	859	ug/kg dry	100	"	EPA 8082A	
Aroclor 1242	ND	---	859	"	"	"	"	
Aroclor 1248	**3140**	---	859	"	"	"	"	
Aroclor 1254	ND	---	859	"	"	"	"	
Aroclor 1260	ND	---	859	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 87 %*	*Limits: 50-125 %*	"	"	"	*Q-23, S-05*
Decachlorobiphenyl (Surr)			*88 %*	*Limits: 55-130 %*	"	"	"	*Q-23, S-05*
CS-14 (0-0.5) (A910329-12)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	909	ug/kg dry	100	11/06/09 19:56	EPA 8082A	
Aroclor 1221	ND	---	909	"	"	"	"	
Aroclor 1232	ND	---	909	"	"	"	"	
Aroclor 1242	ND	---	909	"	"	"	"	
Aroclor 1248	**20600**	---	909	"	"	"	"	
Aroclor 1254	ND	---	909	"	"	"	"	
Aroclor 1260	ND	---	909	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 75 %*	*Limits: 50-125 %*	"	"	"	*Q-23, S-05*
Decachlorobiphenyl (Surr)			*77 %*	*Limits: 55-130 %*	"	"	"	*Q-23, S-05*
CS-15 (0-0.5) (A910329-13)			**Matrix: Soil**					**C-04, C-03**
Aroclor 1016	ND	---	847	ug/kg dry	100	11/06/09 20:11	EPA 8082A	
Aroclor 1221	ND	---	847	"	"	"	"	
Aroclor 1232	ND	---	847	"	"	"	"	
Aroclor 1242	ND	---	847	"	"	"	"	
Aroclor 1248	**8680**	---	847	"	"	"	"	
Aroclor 1254	ND	---	847	"	"	"	"	
Aroclor 1260	ND	---	847	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 63 %*	*Limits: 50-125 %*	"	"	"	*S-05, Q-23*
Decachlorobiphenyl (Surr)			*107 %*	*Limits: 55-130 %*	"	"	"	*S-05, Q-23*
CS-16 (0-0.5) (A910329-14RE2)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	453	ug/kg dry	50	11/07/09 09:46	EPA 8082A	
Aroclor 1221	ND	---	453	"	"	"	"	
Aroclor 1232	ND	---	453	"	"	"	"	
Aroclor 1242	ND	---	453	"	"	"	"	
Aroclor 1248	**4710**	---	453	"	"	"	"	
Aroclor 1254	ND	---	453	"	"	"	"	

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-16 (0-0.5) (A910329-14RE2)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1260	ND	---	453	ug/kg dry	50	"	EPA 8082A	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 50 %*	*Limits: 50-125 %*	"	"	"	*S-05*
Decachlorobiphenyl (Surr)			*52 %*	*Limits: 55-130 %*	"	"	"	*S-05*
CS-17 (0-0.5) (A910329-15)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	862	ug/kg dry	100	11/06/09 20:40	EPA 8082A	
Aroclor 1221	ND	---	862	"	"	"	"	
Aroclor 1232	ND	---	862	"	"	"	"	
Aroclor 1242	ND	---	862	"	"	"	"	
Aroclor 1248	**15900**	---	862	"	"	"	"	
Aroclor 1254	ND	---	862	"	"	"	"	
Aroclor 1260	ND	---	862	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 67 %*	*Limits: 50-125 %*	"	"	"	*Q-23, S-05*
Decachlorobiphenyl (Surr)			*77 %*	*Limits: 55-130 %*	"	"	"	*S-05, Q-23*
CS-18 (0-0.5) (A910329-16)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	890	ug/kg dry	100	11/06/09 20:54	EPA 8082A	
Aroclor 1221	ND	---	890	"	"	"	"	
Aroclor 1232	ND	---	890	"	"	"	"	
Aroclor 1242	ND	---	890	"	"	"	"	
Aroclor 1248	**2390**	---	890	"	"	"	"	
Aroclor 1254	ND	---	890	"	"	"	"	
Aroclor 1260	ND	---	890	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 44 %*	*Limits: 50-125 %*	"	"	"	*S-05, Q-23*
Decachlorobiphenyl (Surr)			*52 %*	*Limits: 55-130 %*	"	"	"	*S-05, Q-23*
CS-19 (0-0.5) (A910329-17)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	892	ug/kg dry	100	11/07/09 11:28	EPA 8082A	
Aroclor 1221	ND	---	892	"	"	"	"	
Aroclor 1232	ND	---	892	"	"	"	"	
Aroclor 1242	ND	---	892	"	"	"	"	
Aroclor 1248	**3840**	---	892	"	"	"	"	
Aroclor 1254	ND	---	892	"	"	"	"	
Aroclor 1260	ND	---	892	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 38 %*	*Limits: 50-125 %*	"	"	"	*S-05*
Decachlorobiphenyl (Surr)			*40 %*	*Limits: 55-130 %*	"	"	"	*S-05*

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-20 (0-0.5) (A910329-18)			**Matrix: Soil**					**C-03, C-04**
Aroclor 1016	ND	---	923	ug/kg dry	100	11/07/09 11:43	EPA 8082A	
Aroclor 1221	ND	---	923	"	"	"	"	
Aroclor 1232	ND	---	923	"	"	"	"	
Aroclor 1242	ND	---	923	"	"	"	"	
Aroclor 1248	**4140**	---	923	"	"	"	"	
Aroclor 1254	ND	---	923	"	"	"	"	
Aroclor 1260	ND	---	923	"	"	"	"	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 87 %*	*Limits: 50-125 %*	"	"	"	*S-05*
Decachlorobiphenyl (Surr)			*85 %*	*Limits: 55-130 %*	"	"	"	*S-05*

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight by D2216

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-1 (0-0.5) (A910329-01)			**Matrix: Soil**					
% Solids	**79.4**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-2 (0-0.5) (A910329-02)			**Matrix: Soil**					
% Solids	**79.1**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-3 (0-0.5) (A910329-03)			**Matrix: Soil**					
% Solids	**80.1**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-4 (0-0.5) (A910329-04)			**Matrix: Soil**					
% Solids	**74.7**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-5 (0-0.5) (A910329-05)			**Matrix: Soil**					
% Solids	**78.5**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-6 (0-0.5) (A910329-06)			**Matrix: Soil**					
% Solids	**77.3**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-7 (0-0.5) (A910329-07)			**Matrix: Soil**					
% Solids	**80.7**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-8 (0-0.5) (A910329-08)			**Matrix: Soil**					
% Solids	**80.3**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-9 (0-0.5) (A910329-09)			**Matrix: Soil**					
% Solids	**80.1**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-12 (0-0.5) (A910329-10)			**Matrix: Soil**					
% Solids	**80.4**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-13 (0-0.5) (A910329-11)			**Matrix: Soil**					
% Solids	**82.2**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-14 (0-0.5) (A910329-12)			**Matrix: Soil**					
% Solids	**77.1**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-15 (0-0.5) (A910329-13)			**Matrix: Soil**					
% Solids	**79.2**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-16 (0-0.5) (A910329-14)			**Matrix: Soil**					
% Solids	**81.4**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-17 (0-0.5) (A910329-15)			**Matrix: Soil**					
% Solids	**84.0**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-18 (0-0.5) (A910329-16)			**Matrix: Soil**					
% Solids	**82.8**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	

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Philip Nerenberg, Lab Director

Apex Labs

12232 S.W. Garden Place
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503-718-2323 Phone
503-718-0333 Fax

GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight by D2216

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
CS-19 (0-0.5) (A910329-17)			**Matrix: Soil**					
% Solids	**82.9**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	
CS-20 (0-0.5) (A910329-18)			**Matrix: Soil**					
% Solids	**81.6**	---	1.00	% by Weight	1	11/01/09 12:03	D2216	

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9110065 - EPA 3546							**Soil**					
Blank (9110065-BLK1)					Prepared: 11/05/09 11:12		Analyzed: 11/06/09 13:29					**C-03, C-04**
EPA 8082A												
Aroclor 1016	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1232	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1242	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1248	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1254	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1260	ND	---	10.0	"	"	---	---	---	---	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 85 %*	*Limits: 50-125 %*			*Dilution: 1x*					*Q-23*
Decachlorobiphenyl (Surr)			*101 %*	*55-130 %*			*"*					*Q-23*
LCS (9110065-BS1)					Prepared: 11/05/09 11:12		Analyzed: 11/06/09 13:44					**C-03, C-04**
EPA 8082A												
Aroclor 1016	249	---	10.0	ug/kg wet	1	250	---	100	40-140%	---	---	
Aroclor 1260	269	---	10.0	"	"	"	---	108	60-130%	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 88 %*	*Limits: 50-125 %*			*Dilution: 1x*					*Q-23*
Decachlorobiphenyl (Surr)			*98 %*	*55-130 %*			*"*					*Q-23*
Duplicate (9110065-DUP2)					Prepared: 11/05/09 11:12		Analyzed: 11/06/09 22:51					**C-03, C-04**
QC Source Sample: CS-4 (0-0.5) (A910329-04RE1)												
EPA 8082A												
Aroclor 1016	ND	---	1930	ug/kg dry	200	---	ND	---	---	---	30%	
Aroclor 1221	ND	---	1930	"	"	---	ND	---	---	---	30%	
Aroclor 1232	ND	---	1930	"	"	---	ND	---	---	---	30%	
Aroclor 1242	ND	---	1930	"	"	---	ND	---	---	---	30%	
Aroclor 1248	**23700**	---	1930	"	"	---	27600	---	---	15	30%	
Aroclor 1254	ND	---	1930	"	"	---	ND	---	---	---	30%	
Aroclor 1260	ND	---	1930	"	"	---	ND	---	---	---	30%	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 824 %*	*Limits: 50-125 %*			*Dilution: 200x*					*Q-23, S-05*
Decachlorobiphenyl (Surr)			*1290 %*	*55-130 %*			*"*					*Q-23, S-05*
Matrix Spike (9110065-MS1)					Prepared: 11/05/09 11:12		Analyzed: 11/06/09 21:09					**C-03, C-04, Q-11**
QC Source Sample: CS-18 (0-0.5) (A910329-16)												
EPA 8082A												
Aroclor 1016	ND	---	871	ug/kg dry	100	218	ND	218	40-140%	---	---	

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9110065 - EPA 3546							**Soil**					
Matrix Spike (9110065-MS1)					Prepared: 11/05/09 11:12		Analyzed: 11/06/09 21:09					**C-03, C-04, Q-11**
QC Source Sample: CS-18 (0-0.5) (A910329-16)												
Aroclor 1260	ND	---	871	ug/kg dry	"	"	ND		60-130%	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 70 %*		*Limits: 50-125 %*		*Dilution: 100x*					*Q-23*
Decachlorobiphenyl (Surr)			*78 %*		*55-130 %*		*"*					*Q-23*

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15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9110081 - EPA 3546							**Soil**					
Blank (9110081-BLK1)					Prepared: 11/06/09 11:13	Analyzed: 11/07/09 10:59						**C-03, C-04**
EPA 8082A												
Aroclor 1016	ND	---	10.0	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1232	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1242	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1248	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1254	ND	---	10.0	"	"	---	---	---	---	---	---	
Aroclor 1260	ND	---	10.0	"	"	---	---	---	---	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 80 %*	*Limits: 50-125 %*			*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*77 %*	*55-130 %*			*"*					
LCS (9110081-BS1)					Prepared: 11/06/09 11:13	Analyzed: 11/07/09 11:14						**C-03, C-04**
EPA 8082A												
Aroclor 1016	237	---	10.0	ug/kg wet	1	250	---	95	40-140%	---	---	
Aroclor 1260	236	---	10.0	"	"	"	---	94	60-130%	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 91 %*	*Limits: 50-125 %*			*Dilution: 1x*					
Decachlorobiphenyl (Surr)			*81 %*	*55-130 %*			*"*					

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight by D2216

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9100448 - Dry Weight							**Soil**					
Duplicate (9100448-DUP4)					Prepared: 10/30/09 12:50		Analyzed: 11/01/09 12:03					
QC Source Sample: CS-5 (0-0.5) (A910329-05)												
D2216												
% Solids	**80.0**	---	1.00	% by Weight	1	---	78.5	---	---	2	20%	
Duplicate (9100448-DUP5)					Prepared: 10/30/09 12:50		Analyzed: 11/01/09 12:03					
QC Source Sample: CS-20 (0-0.5) (A910329-18)												
D2216												
% Solids	**83.1**	---	1.00	% by Weight	1	---	81.6	---	---	2	20%	

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

SAMPLE PREPARATION INFORMATION

Polychlorinated Biphenyls by EPA 8082A

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9110065							
A910329-01RE1	Soil	EPA 8082A	10/28/09 10:45	11/05/09 11:12	13.29g/5mL	10g/5mL	0.75
A910329-02RE1	Soil	EPA 8082A	10/28/09 11:05	11/05/09 11:12	13.67g/5mL	10g/5mL	0.73
A910329-03RE1	Soil	EPA 8082A	10/28/09 11:40	11/05/09 11:12	13.38g/5mL	10g/5mL	0.75
A910329-04RE1	Soil	EPA 8082A	10/28/09 12:00	11/05/09 11:12	13.82g/5mL	10g/5mL	0.72
A910329-05	Soil	EPA 8082A	10/28/09 12:30	11/05/09 11:12	14.17g/5mL	10g/5mL	0.71
A910329-06	Soil	EPA 8082A	10/28/09 13:30	11/05/09 11:12	13.85g/5mL	10g/5mL	0.72
A910329-07	Soil	EPA 8082A	10/28/09 14:00	11/05/09 11:12	13.16g/5mL	10g/5mL	0.76
A910329-08	Soil	EPA 8082A	10/28/09 14:25	11/05/09 11:12	13.2g/5mL	10g/5mL	0.76
A910329-09	Soil	EPA 8082A	10/28/09 15:00	11/05/09 11:12	13.73g/5mL	10g/5mL	0.73
A910329-10RE1	Soil	EPA 8082A	10/28/09 16:10	11/05/09 11:12	13.48g/5mL	10g/5mL	0.74
A910329-11	Soil	EPA 8082A	10/28/09 15:40	11/05/09 11:12	14.17g/5mL	10g/5mL	0.71
A910329-12	Soil	EPA 8082A	10/28/09 15:30	11/05/09 11:12	14.27g/5mL	10g/5mL	0.70
A910329-13	Soil	EPA 8082A	10/28/09 14:50	11/05/09 11:12	14.9g/5mL	10g/5mL	0.67
A910329-14RE2	Soil	EPA 8082A	10/28/09 14:07	11/05/09 11:12	13.57g/5mL	10g/5mL	0.74
A910329-15	Soil	EPA 8082A	10/28/09 13:33	11/05/09 11:12	13.81g/5mL	10g/5mL	0.72
A910329-16	Soil	EPA 8082A	10/28/09 12:21	11/05/09 11:12	13.57g/5mL	10g/5mL	0.74
Batch: 9110081							
A910329-17	Soil	EPA 8082A	10/28/09 11:45	11/06/09 11:13	13.53g/5mL	10g/5mL	0.74
A910329-18	Soil	EPA 8082A	10/28/09 11:12	11/06/09 11:13	13.28g/5mL	10g/5mL	0.75

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GeoDesign, Inc.	Project: **NE 94th Ave Property**	
15575 SW Sequoia Pkwy, Ste 100	Project Number: GillilandJ-1-02	**Reported:**
Portland, OR 97224	Project Manager: Colby Hunt	11/12/09 14:21

Notes and Definitions

Qualifiers:

C-03	Extract has undergone Sulfuric Acid Cleanup in order to minimize matrix interferance.
C-04	Extract has undergone a Sulfur Cleanup using EPA 3660B.
Q-11	The spike recovery for this matrix spike cannot be accurately quantified due to sample dilution required from high analyte concentration and/or matrix interference.
Q-23	Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Data is likely biased high.
S-05	Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.
S-06	Surrogate recovery is outside of established control limits.

Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy	Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses. For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor. Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

Apex Labs

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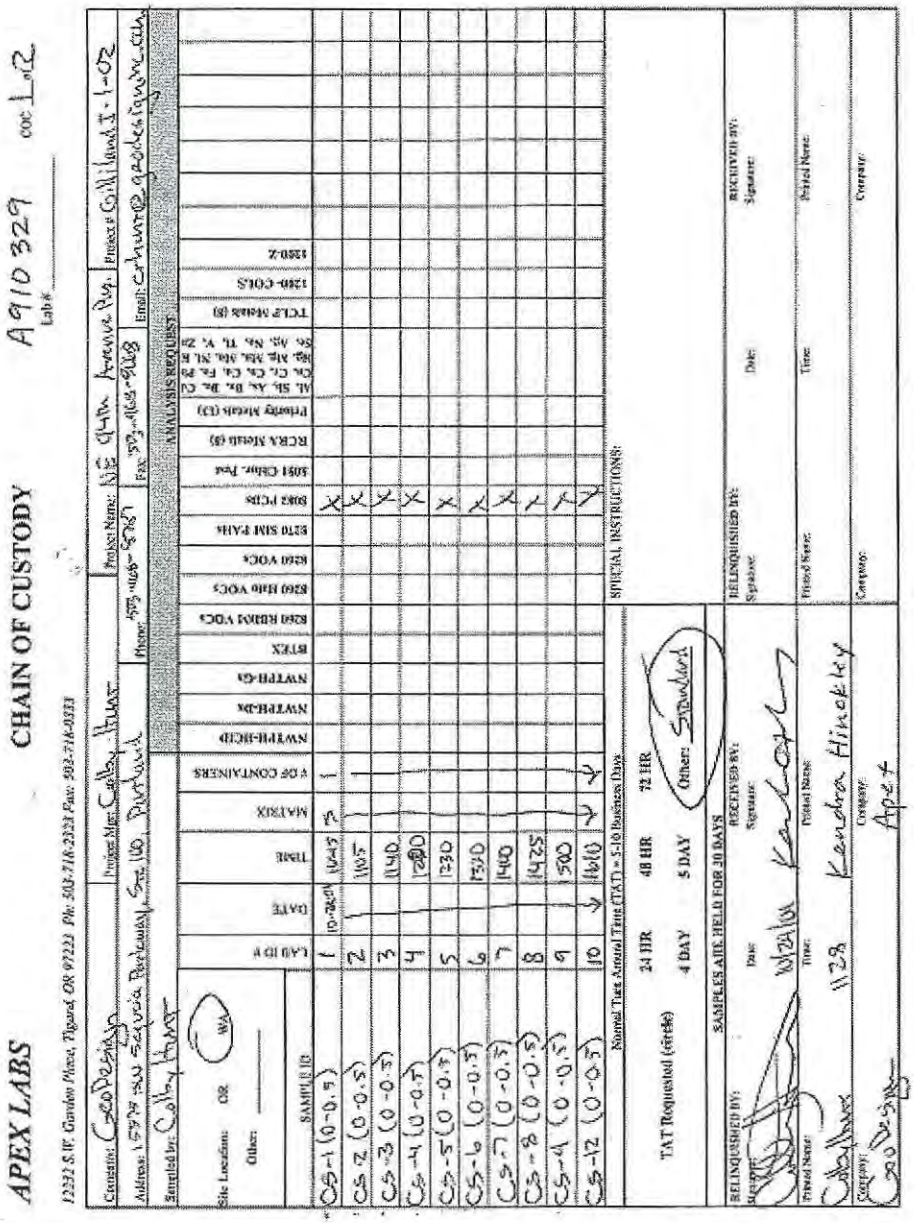
GeoDesign, Inc. 15575 SW Sequoia Pkwy, Ste 100 Portland, OR 97224	Project: **NE 94th Ave Property** Project Number: GillilandJ-1-02 Project Manager: Colby Hunt	**Reported:** 11/12/09 14:21



APEX LABS

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

CHAIN OF CUSTODY

A910329

Lab #

COC: 1 of 2

Company: GeoDesign — Project Mgr: Colby Hunt — Project Name: NE 94th Avenue Prop. — Project #: GillilandJ-1-02

Address: 15575 SW Sequoia Parkway, Ste 100, Portland — Phone: 503-968-6500 — Fax: 503-968-6507 — Email: chunt@geodesign.com

Sampled by: Colby Hunt

Site Location: OR WA

Other: ____

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	BTEX	8260 BRMS VOCs	8260 HHS VOCs	8260 VOCs	8270 SIM PAHs	8082 PCBs	8081 Chlor. Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn	TCLP Metals (8)	1280-COLS	1280-Z
CS-1 (0-0.5)	1	10-30-09	1045	S	1									X							
CS-2 (0-0.5)	2		1105											X							
CS-3 (0-0.5)	3		1140											X							
CS-4 (0-0.5)	4		1200											X							
CS-5 (0-0.5)	5		1230											X							
CS-6 (0-0.5)	6		1310											X							
CS-7 (0-0.5)	7		1400											X							
CS-8 (0-0.5)	8		1425											X							
CS-9 (0-0.5)	9		1500											X							
CS-10 (0-0.5)	10		1610											X							

Normal Turn Around Time (TAT) = 5-10 Business Days

TAT Requested (circle): 24 HR, 48 HR, 72 HR, 4 DAY, 5 DAY, Other: Standard

SPECIAL INSTRUCTIONS:

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature:	RECEIVED BY: Signature:	RELINQUISHED BY: Signature:
Date: 10/30/09	Date:	Date:
Time: 1130	Time:	Time:
Printed Name: Colby Hunt	Printed Name: Kendra Hinckley	Printed Name:
Company: GeoDesign	Company: Apex	Company:

RECEIVED BY: Signature: Date: Time: Printed Name: Company:

Apex Laboratories

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Philip Nerenberg, Lab Director

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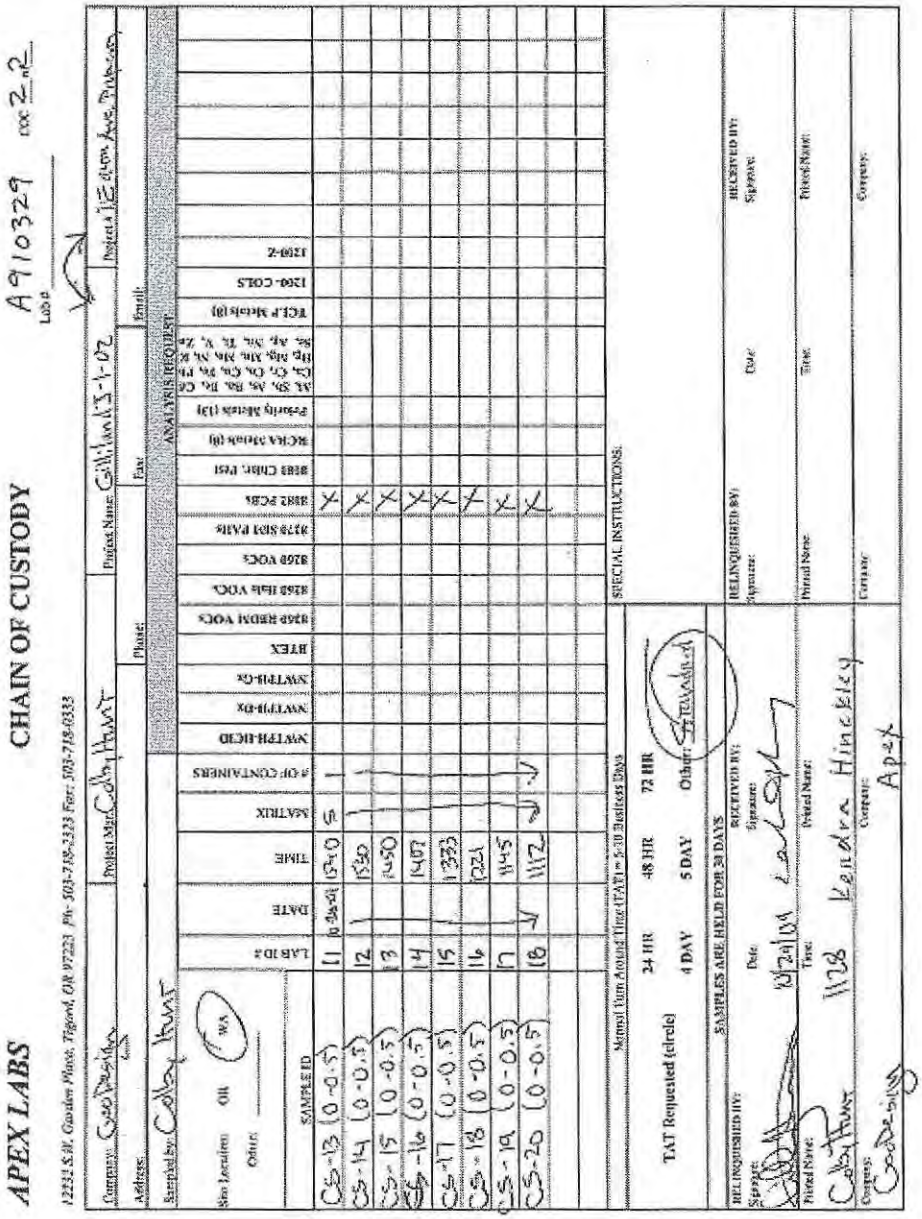
GeoDesign, Inc. 15575 SW Sequoia Pkwy, Ste 100 Portland, OR 97224	Project: **NE 94th Ave Property** Project Number: GillilandJ-1-02 Project Manager: Colby Hunt	**Reported:** 11/12/09 14:21



APEX LABS

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

CHAIN OF CUSTODY

A9110329 Lab #

Company: GeoDesign Project Mgr: Colby Hunt Project Name: Gilliland 3-1-02 Project # 12 94th Ave. Property

Address: Phone: Fax: Email:

Sampled by: Colby Hunt

Site Location: OR WA Other: ____

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	BTEX	8260 REDUX VOCs	8260 Halo VOCs	8260 VOCs	8270 SIM PAHs	8082 PCBs	8082 Chlor. Pest	8270C Acids (8)	Priority Metals (13)	As, Sb, Ag, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mn, Mo, Ni, Se, Ag, Na, Tl, V, Zn	TCLP Metals (8)	1260-COLS	1260-Z
CS-13 (0-0.5)	11	10/29/09	1340	S	1									X							
CS-14 (0-0.5)	12		1350											X							
CS-15 (0-0.5)	13		1400											X							
CS-16 (0-0.5)	14		1407											X							
CS-17 (0-0.5)	15		1333											X							
CS-18 (0-0.5)	16		1321											X							
CS-19 (0-0.5)	17		1445											X							
CS-20 (0-0.5)	18		1412											X							

Normal Turn Around Time (TAT) is 5-10 Business Days

TAT Requested (circle): 24 HR 48 HR 72 HR 4 DAY 5 DAY Other: Standard

SPECIAL INSTRUCTIONS:

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date:	Date: 10/29/09	Date:	Date:
Time:	Time: 1138	Time:	Time:
Printed Name: Colby Hunt	Printed Name: Leslie Hinckley	Printed Name:	Printed Name:
Company: GeoDesign	Company: Apex	Company:	Company:

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Philip Nerenberg

Philip Nerenberg, Lab Director

APPENDIX B

2014 LABORATORY ANALYTICAL RESULTS

Specialty Analytical

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TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

August 11, 2014

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TEL: (360) 694-2691
FAX (360) 906-1958

RE: Fleischer / 9059.07.04

Dear Seth Otto: Order No.: 1407110

Specialty Analytical received 42 sample(s) on 7/16/2014 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Marty French
Lab Director

Case Narrative

WO#: **1407110**

Date: **8/11/2014**

Specialty Analytical

CLIENT: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

Due to the presence of multi-component PCB compounds causing co-elution and matrix interferences with the EPA 8081 Pesticide compounds, multiple sample clean-up steps were required to achieve the detection limits reported. Use of silica gel per EPA 3630C, and additional clean-up using CarboPrep SPE cartridges was performed. During the multiple clean-up and concentration steps, TCMX was recovered at levels below the laboratory control limits. LCS and other QC parameters, where not impacted by matrix interferences, show the clean-ups performed well, and should allow usable data.

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 8:32:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-001
Client Sample ID: TP01-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	300		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Bolstar	ND	24.0		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Chloropyrifos	ND	24.0		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Coumaphos	ND	120		µg/Kg-dry	1	7/23/2014 11:38:00 AM
DEF	ND	24.0		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Demeton-S	ND	60.1		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Diazinon	ND	60.1		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Dichlorovos	ND	24.0		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Dimethoate	ND	60.1		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Disulfoton	ND	24.0		µg/Kg-dry	1	7/23/2014 11:38:00 AM
EPN	ND	24.0		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Ethion	ND	24.0		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Ethoprop	ND	24.0		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Fensulfothion	ND	120		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Fenthion	ND	24.0		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Malathion	ND	24.0		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Methyl parathion	ND	120		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Mevinphos	ND	120		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Naled	ND	300		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Parathion	ND	60.1		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Phorate	ND	24.0		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Ronnel	ND	24.0		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Stirofos	ND	24.0		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Sulfotepp	ND	24.0		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Tokuthion	ND	24.0		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Trichloronate	ND	24.0		µg/Kg-dry	1	7/23/2014 11:38:00 AM
Surr: Tributylphosphate (Surr.)	120	50-150		%REC	1	7/23/2014 11:38:00 AM
Surr: Triphenylphosphate (Surr.)	94.0	50-150		%REC	1	7/23/2014 11:38:00 AM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
4,4´-DDE	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
4,4´-DDT	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
Aldrin	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
alpha-BHC	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
alpha-Chlordane	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
beta-BHC	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
Chlordane	ND	8.01		µg/Kg-dry	1	7/27/2014 2:53:00 PM
delta-BHC	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 8:32:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-001
Client Sample ID: TP01-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
Dieldrin	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
Endosulfan I	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
Endosulfan II	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
Endosulfan Sulfate	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
Endrin	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
Endrin aldehyde	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
Endrin ketone	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
gamma-BHC	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
gamma-Chlordane	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
Heptachlor	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
Heptachlor epoxide	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
Methoxychlor	ND	0.400		µg/Kg-dry	1	7/27/2014 2:53:00 PM
Toxaphene	ND	8.01		µg/Kg-dry	1	7/27/2014 2:53:00 PM
Surr: Decachlorobiphenyl	52.6	25.9-136		%REC	1	7/27/2014 2:53:00 PM
Surr: Tetrachloro-m-xylene	2.57	15-124	S	%REC	1	7/27/2014 2:53:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.400		µg/Kg-dry	1	7/18/2014 11:44:00 AM
Aroclor 1221	ND	0.400		µg/Kg-dry	1	7/18/2014 11:44:00 AM
Aroclor 1232	ND	0.400		µg/Kg-dry	1	7/18/2014 11:44:00 AM
Aroclor 1242	ND	0.400		µg/Kg-dry	1	7/18/2014 11:44:00 AM
Aroclor 1248	389	0.400		µg/Kg-dry	1	7/21/2014 10:00:00 AM
Aroclor 1254	ND	0.400		µg/Kg-dry	1	7/18/2014 11:44:00 AM
Aroclor 1260	ND	0.400		µg/Kg-dry	1	7/18/2014 11:44:00 AM
Aroclor 1262	ND	0.400		µg/Kg-dry	1	7/18/2014 11:44:00 AM
Aroclor 1268	ND	0.400		µg/Kg-dry	1	7/18/2014 11:44:00 AM
Surr: Decachlorobiphenyl	77.0	56.5-130		%REC	1	7/18/2014 11:44:00 AM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	8.01		µg/Kg-dry	1	7/23/2014 3:43:00 PM
2,4,5-TP (Silvex)	ND	8.01		µg/Kg-dry	1	7/23/2014 3:43:00 PM
2,4-D	ND	8.01		µg/Kg-dry	1	7/23/2014 3:43:00 PM
2,4-DB	ND	8.01		µg/Kg-dry	1	7/23/2014 3:43:00 PM
4-Nitrophenol	ND	8.01		µg/Kg-dry	1	7/23/2014 3:43:00 PM
Dicamba	ND	8.01		µg/Kg-dry	1	7/23/2014 3:43:00 PM
Dichlorprop	ND	8.01		µg/Kg-dry	1	7/23/2014 3:43:00 PM
Dinoseb	ND	8.01		µg/Kg-dry	1	7/23/2014 3:43:00 PM
MCPA	ND	801		µg/Kg-dry	1	7/23/2014 3:43:00 PM
MCPP	ND	801		µg/Kg-dry	1	7/23/2014 3:43:00 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 8:32:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-001		
Client Sample ID:	TP01-S-0.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
Pentachlorophenol	19.1	8.01		µg/Kg-dry	1	7/23/2014 3:43:00 PM
Surr: 2,4-DCAA	52.4	34.3-141		%REC	1	7/23/2014 3:43:00 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 8:37:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-002		
Client Sample ID:	TP01-S-4.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 8:42:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-003		
Client Sample ID:	TP01-S-8.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 9:15:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-004
Client Sample ID: TP02-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	138	16.3	K	mg/Kg-dry	1	7/18/2014 10:39:28 PM
Lube Oil	855	54.5		mg/Kg-dry	1	7/18/2014 10:39:28 PM
Surr: o-Terphenyl	111	50-150		%REC	1	7/18/2014 10:39:28 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	2570	923		µg/Kg-dry	10	7/24/2014 7:31:00 PM
Chromium	14800	923		µg/Kg-dry	10	7/24/2014 7:31:00 PM
Copper	35700	462		µg/Kg-dry	10	7/24/2014 7:31:00 PM
Lead	38800	231		µg/Kg-dry	10	7/24/2014 7:31:00 PM
Nickel	16300	462		µg/Kg-dry	10	7/28/2014 12:32:00 PM
Zinc	601000	92300		µg/Kg-dry	100	7/25/2014 1:07:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0341	0.0160		mg/Kg-dry	1	7/18/2014 10:49:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	272		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Bolstar	ND	21.8		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Chloropyrifos	ND	21.8		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Coumaphos	ND	109		µg/Kg-dry	1	7/23/2014 12:03:00 PM
DEF	ND	21.8		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Demeton-S	ND	54.5		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Diazinon	ND	54.5		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Dichlorovos	ND	21.8		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Dimethoate	ND	54.5		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Disulfoton	ND	21.8		µg/Kg-dry	1	7/23/2014 12:03:00 PM
EPN	ND	21.8		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Ethion	ND	21.8		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Ethoprop	ND	21.8		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Fensulfothion	ND	109		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Fenthion	ND	21.8		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Malathion	ND	21.8		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Methyl parathion	ND	109		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Mevinphos	ND	109		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Naled	ND	272		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Parathion	ND	54.5		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Phorate	ND	21.8		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Ronnel	ND	21.8		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Stirofos	ND	21.8		µg/Kg-dry	1	7/23/2014 12:03:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 9:15:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-004
Client Sample ID: TP02-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Sulfotepp	ND	21.8		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Tokuthion	ND	21.8		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Trichloronate	ND	21.8		µg/Kg-dry	1	7/23/2014 12:03:00 PM
Surr: Tributylphosphate (Surr.)	71.0	50-150		%REC	1	7/23/2014 12:03:00 PM
Surr: Triphenylphosphate (Surr.)	133	50-150		%REC	1	7/23/2014 12:03:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
4,4´-DDE	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
4,4´-DDT	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
Aldrin	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
alpha-BHC	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
alpha-Chlordane	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
beta-BHC	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
Chlordane	ND	7.26		µg/Kg-dry	1	7/27/2014 3:08:00 PM
delta-BHC	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
Dieldrin	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
Endosulfan I	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
Endosulfan II	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
Endosulfan Sulfate	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
Endrin	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
Endrin aldehyde	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
Endrin ketone	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
gamma-BHC	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
gamma-Chlordane	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
Heptachlor	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
Heptachlor epoxide	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
Methoxychlor	ND	0.363		µg/Kg-dry	1	7/27/2014 3:08:00 PM
Toxaphene	ND	7.26		µg/Kg-dry	1	7/27/2014 3:08:00 PM
Surr: Decachlorobiphenyl	29.8	25.9-136		%REC	1	7/27/2014 3:08:00 PM
Surr: Tetrachloro-m-xylene	6.91	15-124	S	%REC	1	7/27/2014 3:08:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.363		µg/Kg-dry	1	7/18/2014 2:14:00 PM
Aroclor 1221	ND	0.363		µg/Kg-dry	1	7/18/2014 2:14:00 PM
Aroclor 1232	ND	0.363		µg/Kg-dry	1	7/18/2014 2:14:00 PM
Aroclor 1242	ND	0.363		µg/Kg-dry	1	7/18/2014 2:14:00 PM
Aroclor 1248	32400	36.3		µg/Kg-dry	100	7/21/2014 10:16:00 AM
Aroclor 1254	ND	0.363		µg/Kg-dry	1	7/18/2014 2:14:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 9:15:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-004
Client Sample ID: TP02-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1260	ND	0.363		µg/Kg-dry	1	7/18/2014 2:14:00 PM
Aroclor 1262	ND	0.363		µg/Kg-dry	1	7/18/2014 2:14:00 PM
Aroclor 1268	ND	0.363		µg/Kg-dry	1	7/18/2014 2:14:00 PM
Surr: Decachlorobiphenyl	78.0	56.5-130		%REC	1	7/18/2014 2:14:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	7.26		µg/Kg-dry	1	7/24/2014 1:03:46 PM
2,4,5-TP (Silvex)	ND	7.26		µg/Kg-dry	1	7/24/2014 1:03:46 PM
2,4-D	ND	7.26		µg/Kg-dry	1	7/24/2014 1:03:46 PM
2,4-DB	ND	7.26		µg/Kg-dry	1	7/24/2014 1:03:46 PM
4-Nitrophenol	ND	7.26		µg/Kg-dry	1	7/24/2014 1:03:46 PM
Dicamba	ND	7.26		µg/Kg-dry	1	7/24/2014 1:03:46 PM
Dichlorprop	ND	7.26		µg/Kg-dry	1	7/24/2014 1:03:46 PM
Dinoseb	ND	7.26		µg/Kg-dry	1	7/24/2014 1:03:46 PM
MCPA	ND	726		µg/Kg-dry	1	7/24/2014 1:03:46 PM
MCPP	ND	726		µg/Kg-dry	1	7/24/2014 1:03:46 PM
Pentachlorophenol	ND	7.26		µg/Kg-dry	1	7/24/2014 1:03:46 PM
Surr: 2,4-DCAA	59.7	34.3-141		%REC	1	7/24/2014 1:03:46 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 9:20:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-005
Client Sample ID: TP02-S-2.0
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.377		µg/Kg-dry	1	7/25/2014 9:29:00 PM
Aroclor 1221	ND	0.377		µg/Kg-dry	1	7/25/2014 9:29:00 PM
Aroclor 1232	ND	0.377		µg/Kg-dry	1	7/25/2014 9:29:00 PM
Aroclor 1242	ND	0.377		µg/Kg-dry	1	7/25/2014 9:29:00 PM
Aroclor 1248	185	0.377		µg/Kg-dry	1	7/25/2014 9:29:00 PM
Aroclor 1254	ND	0.377		µg/Kg-dry	1	7/25/2014 9:29:00 PM
Aroclor 1260	ND	0.377		µg/Kg-dry	1	7/25/2014 9:29:00 PM
Aroclor 1262	ND	0.377		µg/Kg-dry	1	7/25/2014 9:29:00 PM
Aroclor 1268	ND	0.377		µg/Kg-dry	1	7/25/2014 9:29:00 PM
Surr: Decachlorobiphenyl	79.2	56.5-130		%REC	1	7/25/2014 9:29:00 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 9:30:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-006		
Client Sample ID:	TP02-S-7.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 9:51:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-007
Client Sample ID: TP03-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	ND	18.3		mg/Kg-dry	1	7/18/2014 1:39:28 PM
Lube Oil	67.0	61.0	A2	mg/Kg-dry	1	7/18/2014 1:39:28 PM
Surr: o-Terphenyl	97.3	50-150		%REC	1	7/18/2014 1:39:28 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	2950	859		µg/Kg-dry	10	7/24/2014 4:03:00 PM
Chromium	9980	859		µg/Kg-dry	10	7/25/2014 1:59:00 PM
Copper	29700	430		µg/Kg-dry	10	7/24/2014 4:03:00 PM
Lead	7710	215		µg/Kg-dry	10	7/24/2014 4:03:00 PM
Nickel	10100	430		µg/Kg-dry	10	7/25/2014 1:59:00 PM
Zinc	78500	8590		µg/Kg-dry	10	7/24/2014 4:03:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	ND	0.0192		mg/Kg-dry	1	7/18/2014 10:52:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	305		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Bolstar	ND	24.4		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Chloropyrifos	ND	24.4		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Coumaphos	ND	122		µg/Kg-dry	1	7/23/2014 12:27:00 PM
DEF	ND	24.4		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Demeton-S	ND	61.0		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Diazinon	ND	61.0		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Dichlorovos	ND	24.4		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Dimethoate	ND	61.0		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Disulfoton	ND	24.4		µg/Kg-dry	1	7/23/2014 12:27:00 PM
EPN	ND	24.4		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Ethion	ND	24.4		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Ethoprop	ND	24.4		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Fensulfothion	ND	122		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Fenthion	ND	24.4		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Malathion	ND	24.4		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Methyl parathion	ND	122		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Mevinphos	ND	122		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Naled	ND	305		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Parathion	ND	61.0		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Phorate	ND	24.4		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Ronnel	ND	24.4		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Stirofos	ND	24.4		µg/Kg-dry	1	7/23/2014 12:27:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 9:51:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-007
Client Sample ID: TP03-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Sulfotepp	ND	24.4		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Tokuthion	ND	24.4		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Trichloronate	ND	24.4		µg/Kg-dry	1	7/23/2014 12:27:00 PM
Surr: Tributylphosphate (Surr.)	95.0	50-150		%REC	1	7/23/2014 12:27:00 PM
Surr: Triphenylphosphate (Surr.)	100	50-150		%REC	1	7/23/2014 12:27:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
4,4´-DDE	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
4,4´-DDT	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
Aldrin	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
alpha-BHC	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
alpha-Chlordane	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
beta-BHC	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
Chlordane	ND	8.13		µg/Kg-dry	1	7/27/2014 3:36:00 PM
delta-BHC	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
Dieldrin	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
Endosulfan I	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
Endosulfan II	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
Endosulfan Sulfate	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
Endrin	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
Endrin aldehyde	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
Endrin ketone	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
gamma-BHC	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
gamma-Chlordane	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
Heptachlor	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
Heptachlor epoxide	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
Methoxychlor	ND	0.407		µg/Kg-dry	1	7/27/2014 3:36:00 PM
Toxaphene	ND	8.13		µg/Kg-dry	1	7/27/2014 3:36:00 PM
Surr: Decachlorobiphenyl	102	25.9-136		%REC	1	7/27/2014 3:36:00 PM
Surr: Tetrachloro-m-xylene	2.61	15-124	S	%REC	1	7/27/2014 3:36:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.406		µg/Kg-dry	1	7/18/2014 2:31:00 PM
Aroclor 1221	ND	0.406		µg/Kg-dry	1	7/18/2014 2:31:00 PM
Aroclor 1232	ND	0.406		µg/Kg-dry	1	7/18/2014 2:31:00 PM
Aroclor 1242	ND	0.406		µg/Kg-dry	1	7/18/2014 2:31:00 PM
Aroclor 1248	ND	0.406		µg/Kg-dry	1	7/18/2014 2:31:00 PM
Aroclor 1254	ND	0.406		µg/Kg-dry	1	7/18/2014 2:31:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 9:51:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-007
Client Sample ID: TP03-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1260	ND	0.406		µg/Kg-dry	1	7/18/2014 2:31:00 PM
Aroclor 1262	ND	0.406		µg/Kg-dry	1	7/18/2014 2:31:00 PM
Aroclor 1268	ND	0.406		µg/Kg-dry	1	7/18/2014 2:31:00 PM
Surr: Decachlorobiphenyl	61.8	56.5-130		%REC	1	7/18/2014 2:31:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	8.13		µg/Kg-dry	1	7/23/2014 4:04:00 PM
2,4,5-TP (Silvex)	ND	8.13		µg/Kg-dry	1	7/23/2014 4:04:00 PM
2,4-D	ND	8.13		µg/Kg-dry	1	7/23/2014 4:04:00 PM
2,4-DB	ND	8.13		µg/Kg-dry	1	7/23/2014 4:04:00 PM
4-Nitrophenol	ND	8.13		µg/Kg-dry	1	7/23/2014 4:04:00 PM
Dicamba	ND	8.13		µg/Kg-dry	1	7/23/2014 4:04:00 PM
Dichlorprop	ND	8.13		µg/Kg-dry	1	7/23/2014 4:04:00 PM
Dinoseb	ND	8.13		µg/Kg-dry	1	7/23/2014 4:04:00 PM
MCPA	ND	813		µg/Kg-dry	1	7/23/2014 4:04:00 PM
MCPP	ND	813		µg/Kg-dry	1	7/23/2014 4:04:00 PM
Pentachlorophenol	ND	8.13		µg/Kg-dry	1	7/23/2014 4:04:00 PM
Surr: 2,4-DCAA	53.3	34.3-141		%REC	1	7/23/2014 4:04:00 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 9:56:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-008		
Client Sample ID:	TP03-S-4.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 10:13:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-009		
Client Sample ID:	TP03-S-8.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 10:40:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-010
Client Sample ID: TP04-S-0.25
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	85.7	17.9	A1	mg/Kg-dry	1	7/18/2014 11:09:28 PM
Lube Oil	659	59.7	A2	mg/Kg-dry	1	7/18/2014 11:09:28 PM
Surr: o-Terphenyl	122	50-150		%REC	1	7/18/2014 11:09:28 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	3090	1080		µg/Kg-dry	10	7/24/2014 4:10:00 PM
Chromium	14100	1080		µg/Kg-dry	10	7/24/2014 4:10:00 PM
Copper	43200	542		µg/Kg-dry	10	7/24/2014 4:10:00 PM
Lead	53600	271		µg/Kg-dry	10	7/24/2014 4:10:00 PM
Nickel	12600	542		µg/Kg-dry	10	7/24/2014 4:10:00 PM
Zinc	836000	108000		µg/Kg-dry	100	7/25/2014 2:06:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0631	0.0166		mg/Kg-dry	1	7/18/2014 10:55:04 AM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.397		µg/Kg-dry	1	7/18/2014 2:48:00 PM
Aroclor 1221	ND	0.397		µg/Kg-dry	1	7/18/2014 2:48:00 PM
Aroclor 1232	ND	0.397		µg/Kg-dry	1	7/18/2014 2:48:00 PM
Aroclor 1242	ND	0.397		µg/Kg-dry	1	7/18/2014 2:48:00 PM
Aroclor 1248	6130	19.9		µg/Kg-dry	50	7/21/2014 10:33:00 AM
Aroclor 1254	ND	0.397		µg/Kg-dry	1	7/18/2014 2:48:00 PM
Aroclor 1260	ND	0.397		µg/Kg-dry	1	7/18/2014 2:48:00 PM
Aroclor 1262	ND	0.397		µg/Kg-dry	1	7/18/2014 2:48:00 PM
Aroclor 1268	ND	0.397		µg/Kg-dry	1	7/18/2014 2:48:00 PM
Surr: Decachlorobiphenyl	106	56.5-130		%REC	1	7/18/2014 2:48:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 10:41:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-011
Client Sample ID: TP04-S-1.0
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	321		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Bolstar	ND	25.7		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Chloropyrifos	ND	25.7		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Coumaphos	ND	128		µg/Kg-dry	1	7/23/2014 12:52:00 PM
DEF	ND	25.7		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Demeton-S	ND	64.2		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Diazinon	ND	64.2		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Dichlorovos	ND	25.7		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Dimethoate	ND	64.2		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Disulfoton	ND	25.7		µg/Kg-dry	1	7/23/2014 12:52:00 PM
EPN	ND	25.7		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Ethion	ND	25.7		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Ethoprop	ND	25.7		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Fensulfothion	ND	128		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Fenthion	ND	25.7		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Malathion	ND	25.7		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Methyl parathion	ND	128		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Mevinphos	ND	128		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Naled	ND	321		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Parathion	ND	64.2		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Phorate	ND	25.7		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Ronnel	ND	25.7		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Stirofos	ND	25.7		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Sulfotepp	ND	25.7		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Tokuthion	ND	25.7		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Trichloronate	ND	25.7		µg/Kg-dry	1	7/23/2014 12:52:00 PM
Surr: Tributylphosphate (Surr.)	109	50-150		%REC	1	7/23/2014 12:52:00 PM
Surr: Triphenylphosphate (Surr.)	85.0	50-150		%REC	1	7/23/2014 12:52:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
4,4´-DDE	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
4,4´-DDT	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
Aldrin	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
alpha-BHC	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
alpha-Chlordane	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
beta-BHC	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
Chlordane	ND	8.56		µg/Kg-dry	1	7/27/2014 3:51:00 PM
delta-BHC	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 10:41:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-011
Client Sample ID: TP04-S-1.0
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
Dieldrin	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
Endosulfan I	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
Endosulfan II	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
Endosulfan Sulfate	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
Endrin	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
Endrin aldehyde	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
Endrin ketone	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
gamma-BHC	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
gamma-Chlordane	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
Heptachlor	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
Heptachlor epoxide	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
Methoxychlor	ND	0.428		µg/Kg-dry	1	7/27/2014 3:51:00 PM
Toxaphene	ND	8.56		µg/Kg-dry	1	7/27/2014 3:51:00 PM
Surr: Decachlorobiphenyl	49.8	25.9-136		%REC	1	7/27/2014 3:51:00 PM
Surr: Tetrachloro-m-xylene	2.17	15-124	S	%REC	1	7/27/2014 3:51:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.427		µg/Kg-dry	1	7/25/2014 9:46:00 PM
Aroclor 1221	ND	0.427		µg/Kg-dry	1	7/25/2014 9:46:00 PM
Aroclor 1232	ND	0.427		µg/Kg-dry	1	7/25/2014 9:46:00 PM
Aroclor 1242	ND	0.427		µg/Kg-dry	1	7/25/2014 9:46:00 PM
Aroclor 1248	66.7	0.427		µg/Kg-dry	1	7/25/2014 9:46:00 PM
Aroclor 1254	ND	0.427		µg/Kg-dry	1	7/25/2014 9:46:00 PM
Aroclor 1260	ND	0.427		µg/Kg-dry	1	7/25/2014 9:46:00 PM
Aroclor 1262	ND	0.427		µg/Kg-dry	1	7/25/2014 9:46:00 PM
Aroclor 1268	ND	0.427		µg/Kg-dry	1	7/25/2014 9:46:00 PM
Surr: Decachlorobiphenyl	78.7	56.5-130		%REC	1	7/25/2014 9:46:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	8.56		µg/Kg-dry	1	7/23/2014 4:25:00 PM
2,4,5-TP (Silvex)	ND	8.56		µg/Kg-dry	1	7/23/2014 4:25:00 PM
2,4-D	ND	8.56		µg/Kg-dry	1	7/23/2014 4:25:00 PM
2,4-DB	ND	8.56		µg/Kg-dry	1	7/23/2014 4:25:00 PM
4-Nitrophenol	ND	8.56		µg/Kg-dry	1	7/23/2014 4:25:00 PM
Dicamba	ND	8.56		µg/Kg-dry	1	7/23/2014 4:25:00 PM
Dichlorprop	ND	8.56		µg/Kg-dry	1	7/23/2014 4:25:00 PM
Dinoseb	ND	8.56		µg/Kg-dry	1	7/23/2014 4:25:00 PM
MCPA	ND	856		µg/Kg-dry	1	7/23/2014 4:25:00 PM
MCPP	ND	856		µg/Kg-dry	1	7/23/2014 4:25:00 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 10:41:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-011		
Client Sample ID:	TP04-S-1.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
Pentachlorophenol	ND	8.56		µg/Kg-dry	1	7/23/2014 4:25:00 PM
Surr: 2,4-DCAA	55.2	34.3-141		%REC	1	7/23/2014 4:25:00 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 10:50:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-012		
Client Sample ID:	TP04-S-5.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 11:00:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-013		
Client Sample ID:	TP04-S-7.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 11:25:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-014
Client Sample ID: TP05-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	292		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Bolstar	ND	23.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Chloropyrifos	ND	23.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Coumaphos	ND	117		µg/Kg-dry	1	7/23/2014 1:15:00 PM
DEF	ND	23.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Demeton-S	ND	58.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Diazinon	ND	58.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Dichlorovos	ND	23.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Dimethoate	ND	58.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Disulfoton	ND	23.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
EPN	ND	23.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Ethion	ND	23.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Ethoprop	ND	23.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Fensulfothion	ND	117		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Fenthion	ND	23.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Malathion	ND	23.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Methyl parathion	ND	117		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Mevinphos	ND	117		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Naled	ND	292		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Parathion	ND	58.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Phorate	ND	23.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Ronnel	ND	23.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Stirofos	ND	23.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Sulfotepp	ND	23.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Tokuthion	ND	23.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Trichloronate	ND	23.4		µg/Kg-dry	1	7/23/2014 1:15:00 PM
Surr: Tributylphosphate (Surr.)	132	50-150		%REC	1	7/23/2014 1:15:00 PM
Surr: Triphenylphosphate (Surr.)	104	50-150		%REC	1	7/23/2014 1:15:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
4,4´-DDE	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
4,4´-DDT	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
Aldrin	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
alpha-BHC	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
alpha-Chlordane	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
beta-BHC	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
Chlordane	ND	7.79		µg/Kg-dry	1	7/27/2014 4:05:00 PM
delta-BHC	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 11:25:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-014
Client Sample ID: TP05-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
Dieldrin	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
Endosulfan I	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
Endosulfan II	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
Endosulfan Sulfate	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
Endrin	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
Endrin aldehyde	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
Endrin ketone	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
gamma-BHC	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
gamma-Chlordane	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
Heptachlor	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
Heptachlor epoxide	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
Methoxychlor	ND	0.390		µg/Kg-dry	1	7/27/2014 4:05:00 PM
Toxaphene	ND	7.79		µg/Kg-dry	1	7/27/2014 4:05:00 PM
Surr: Decachlorobiphenyl	83.6	25.9-136		%REC	1	7/27/2014 4:05:00 PM
Surr: Tetrachloro-m-xylene	3.89	15-124	S	%REC	1	7/27/2014 4:05:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.389		µg/Kg-dry	1	7/18/2014 3:04:00 PM
Aroclor 1221	ND	0.389		µg/Kg-dry	1	7/18/2014 3:04:00 PM
Aroclor 1232	ND	0.389		µg/Kg-dry	1	7/18/2014 3:04:00 PM
Aroclor 1242	ND	0.389		µg/Kg-dry	1	7/18/2014 3:04:00 PM
Aroclor 1248	38000	38.9		µg/Kg-dry	100	7/21/2014 10:50:00 AM
Aroclor 1254	ND	0.389		µg/Kg-dry	1	7/18/2014 3:04:00 PM
Aroclor 1260	ND	0.389		µg/Kg-dry	1	7/18/2014 3:04:00 PM
Aroclor 1262	ND	0.389		µg/Kg-dry	1	7/18/2014 3:04:00 PM
Aroclor 1268	ND	0.389		µg/Kg-dry	1	7/18/2014 3:04:00 PM
Surr: Decachlorobiphenyl	133	56.5-130	S	%REC	1	7/18/2014 3:04:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	7.79		µg/Kg-dry	1	7/23/2014 4:46:00 PM
2,4,5-TP (Silvex)	ND	7.79		µg/Kg-dry	1	7/23/2014 4:46:00 PM
2,4-D	ND	7.79		µg/Kg-dry	1	7/23/2014 4:46:00 PM
2,4-DB	ND	7.79		µg/Kg-dry	1	7/23/2014 4:46:00 PM
4-Nitrophenol	ND	7.79		µg/Kg-dry	1	7/23/2014 4:46:00 PM
Dicamba	ND	7.79		µg/Kg-dry	1	7/23/2014 4:46:00 PM
Dichlorprop	ND	7.79		µg/Kg-dry	1	7/23/2014 4:46:00 PM
Dinoseb	ND	7.79		µg/Kg-dry	1	7/23/2014 4:46:00 PM
MCPA	ND	779		µg/Kg-dry	1	7/23/2014 4:46:00 PM
MCPP	ND	779		µg/Kg-dry	1	7/23/2014 4:46:00 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 11:25:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-014		
Client Sample ID:	TP05-S-0.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
Pentachlorophenol	ND	7.79		µg/Kg-dry	1	7/23/2014 4:46:00 PM
Surr: 2,4-DCAA	119	34.3-141		%REC	1	7/23/2014 4:46:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 11:28:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-015
Client Sample ID: TP05-S-1.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.406		µg/Kg-dry	1	7/25/2014 10:03:00 PM
Aroclor 1221	ND	0.406		µg/Kg-dry	1	7/25/2014 10:03:00 PM
Aroclor 1232	ND	0.406		µg/Kg-dry	1	7/25/2014 10:03:00 PM
Aroclor 1242	ND	0.406		µg/Kg-dry	1	7/25/2014 10:03:00 PM
Aroclor 1248	45.8	0.406		µg/Kg-dry	1	7/25/2014 10:03:00 PM
Aroclor 1254	ND	0.406		µg/Kg-dry	1	7/25/2014 10:03:00 PM
Aroclor 1260	ND	0.406		µg/Kg-dry	1	7/25/2014 10:03:00 PM
Aroclor 1262	ND	0.406		µg/Kg-dry	1	7/25/2014 10:03:00 PM
Aroclor 1268	ND	0.406		µg/Kg-dry	1	7/25/2014 10:03:00 PM
Surr: Decachlorobiphenyl	88.0	56.5-130		%REC	1	7/25/2014 10:03:00 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 11:33:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-016		
Client Sample ID:	TP05-S-4.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 11:40:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-017		
Client Sample ID:	TP05-S-8.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 11:57:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-018
Client Sample ID: TP06-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	111	17.1	A1	mg/Kg-dry	1	7/18/2014 11:39:28 PM
Lube Oil	386	56.9	A2	mg/Kg-dry	1	7/18/2014 11:39:28 PM
Surr: o-Terphenyl	103	50-150		%REC	1	7/18/2014 11:39:28 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	2050	933		µg/Kg-dry	10	7/24/2014 4:17:00 PM
Chromium	16000	933		µg/Kg-dry	10	7/24/2014 4:17:00 PM
Copper	44400	467		µg/Kg-dry	10	7/24/2014 4:17:00 PM
Lead	45900	233		µg/Kg-dry	10	7/24/2014 4:17:00 PM
Nickel	11400	467		µg/Kg-dry	10	7/24/2014 4:17:00 PM
Zinc	2380000	373000		µg/Kg-dry	400	7/28/2014 1:02:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0485	0.0183		mg/Kg-dry	1	7/18/2014 10:58:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	285		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Bolstar	ND	22.8		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Chloropyrifos	ND	22.8		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Coumaphos	ND	114		µg/Kg-dry	1	7/23/2014 1:39:00 PM
DEF	ND	22.8		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Demeton-S	ND	56.9		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Diazinon	ND	56.9		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Dichlorovos	ND	22.8		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Dimethoate	ND	56.9		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Disulfoton	ND	22.8		µg/Kg-dry	1	7/23/2014 1:39:00 PM
EPN	ND	22.8		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Ethion	ND	22.8		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Ethoprop	ND	22.8		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Fensulfothion	ND	114		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Fenthion	ND	22.8		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Malathion	ND	22.8		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Methyl parathion	ND	114		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Mevinphos	ND	114		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Naled	ND	285		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Parathion	ND	56.9		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Phorate	ND	22.8		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Ronnel	ND	22.8		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Stirofos	ND	22.8		µg/Kg-dry	1	7/23/2014 1:39:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 11:57:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-018
Client Sample ID: TP06-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Sulfotepp	ND	22.8		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Tokuthion	ND	22.8		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Trichloronate	ND	22.8		µg/Kg-dry	1	7/23/2014 1:39:00 PM
Surr: Tributylphosphate (Surr.)	141	50-150		%REC	1	7/23/2014 1:39:00 PM
Surr: Triphenylphosphate (Surr.)	939	50-150	SMI	%REC	1	7/23/2014 1:39:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
4,4´-DDE	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
4,4´-DDT	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
Aldrin	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
alpha-BHC	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
alpha-Chlordane	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
beta-BHC	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
Chlordane	ND	7.59		µg/Kg-dry	1	7/27/2014 4:34:00 PM
delta-BHC	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
Dieldrin	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
Endosulfan I	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
Endosulfan II	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
Endosulfan Sulfate	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
Endrin	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
Endrin aldehyde	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
Endrin ketone	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
gamma-BHC	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
gamma-Chlordane	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
Heptachlor	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
Heptachlor epoxide	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
Methoxychlor	ND	0.379		µg/Kg-dry	1	7/27/2014 4:34:00 PM
Toxaphene	ND	7.59		µg/Kg-dry	1	7/27/2014 4:34:00 PM
Surr: Decachlorobiphenyl	73.7	25.9-136		%REC	1	7/27/2014 4:34:00 PM
Surr: Tetrachloro-m-xylene	5.29	15-124	S	%REC	1	7/27/2014 4:34:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.379		µg/Kg-dry	1	7/18/2014 3:21:00 PM
Aroclor 1221	ND	0.379		µg/Kg-dry	1	7/18/2014 3:21:00 PM
Aroclor 1232	ND	0.379		µg/Kg-dry	1	7/18/2014 3:21:00 PM
Aroclor 1242	ND	0.379		µg/Kg-dry	1	7/18/2014 3:21:00 PM
Aroclor 1248	48300	37.9		µg/Kg-dry	100	7/21/2014 11:07:00 AM
Aroclor 1254	ND	0.379		µg/Kg-dry	1	7/18/2014 3:21:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 11:57:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-018
Client Sample ID: TP06-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1260	ND	0.379		µg/Kg-dry	1	7/18/2014 3:21:00 PM
Aroclor 1262	ND	0.379		µg/Kg-dry	1	7/18/2014 3:21:00 PM
Aroclor 1268	ND	0.379		µg/Kg-dry	1	7/18/2014 3:21:00 PM
Surr: Decachlorobiphenyl	91.6	56.5-130		%REC	1	7/18/2014 3:21:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	7.59		µg/Kg-dry	1	7/23/2014 5:08:00 PM
2,4,5-TP (Silvex)	ND	7.59		µg/Kg-dry	1	7/23/2014 5:08:00 PM
2,4-D	ND	7.59		µg/Kg-dry	1	7/23/2014 5:08:00 PM
2,4-DB	ND	7.59		µg/Kg-dry	1	7/23/2014 5:08:00 PM
4-Nitrophenol	ND	7.59		µg/Kg-dry	1	7/23/2014 5:08:00 PM
Dicamba	ND	7.59		µg/Kg-dry	1	7/23/2014 5:08:00 PM
Dichlorprop	ND	7.59		µg/Kg-dry	1	7/23/2014 5:08:00 PM
Dinoseb	ND	7.59		µg/Kg-dry	1	7/23/2014 5:08:00 PM
MCPA	ND	759		µg/Kg-dry	1	7/23/2014 5:08:00 PM
MCPP	ND	759		µg/Kg-dry	1	7/23/2014 5:08:00 PM
Pentachlorophenol	14.4	7.59		µg/Kg-dry	1	7/23/2014 5:08:00 PM
Surr: 2,4-DCAA	63.0	34.3-141		%REC	1	7/23/2014 5:08:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 11:59:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-019
Client Sample ID: TP06-S-2.0
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.380		µg/Kg-dry	1	7/25/2014 10:20:00 PM
Aroclor 1221	ND	0.380		µg/Kg-dry	1	7/25/2014 10:20:00 PM
Aroclor 1232	ND	0.380		µg/Kg-dry	1	7/25/2014 10:20:00 PM
Aroclor 1242	ND	0.380		µg/Kg-dry	1	7/25/2014 10:20:00 PM
Aroclor 1248	114	0.380		µg/Kg-dry	1	7/25/2014 10:20:00 PM
Aroclor 1254	ND	0.380		µg/Kg-dry	1	7/25/2014 10:20:00 PM
Aroclor 1260	ND	0.380		µg/Kg-dry	1	7/25/2014 10:20:00 PM
Aroclor 1262	ND	0.380		µg/Kg-dry	1	7/25/2014 10:20:00 PM
Aroclor 1268	ND	0.380		µg/Kg-dry	1	7/25/2014 10:20:00 PM
Surr: Decachlorobiphenyl	75.5	56.5-130		%REC	1	7/25/2014 10:20:00 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 12:06:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-020		
Client Sample ID:	TP06-S-4.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 12:19:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-021		
Client Sample ID:	TP06-S-7.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 1:11:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-022
Client Sample ID: TP07-S-0.25
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	149	16.3	A1	mg/Kg-dry	1	7/19/2014 12:09:28 AM
Lube Oil	825	54.3	A2	mg/Kg-dry	1	7/19/2014 12:09:28 AM
Surr: o-Terphenyl	100	50-150		%REC	1	7/19/2014 12:09:28 AM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	3900	743		µg/Kg-dry	10	7/24/2014 4:25:00 PM
Chromium	13800	743		µg/Kg-dry	10	7/24/2014 4:25:00 PM
Copper	40100	372		µg/Kg-dry	10	7/24/2014 4:25:00 PM
Lead	56300	186		µg/Kg-dry	10	7/24/2014 4:25:00 PM
Nickel	20200	372		µg/Kg-dry	10	7/24/2014 4:25:00 PM
Zinc	238000	74300		µg/Kg-dry	100	7/25/2014 2:21:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0750	0.0171		mg/Kg-dry	1	7/18/2014 11:01:04 AM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.361		µg/Kg-dry	1	7/18/2014 3:38:00 PM
Aroclor 1221	ND	0.361		µg/Kg-dry	1	7/18/2014 3:38:00 PM
Aroclor 1232	ND	0.361		µg/Kg-dry	1	7/18/2014 3:38:00 PM
Aroclor 1242	ND	0.361		µg/Kg-dry	1	7/18/2014 3:38:00 PM
Aroclor 1248	1260	0.361		µg/Kg-dry	1	7/21/2014 11:24:00 AM
Aroclor 1254	ND	0.361		µg/Kg-dry	1	7/18/2014 3:38:00 PM
Aroclor 1260	ND	0.361		µg/Kg-dry	1	7/18/2014 3:38:00 PM
Aroclor 1262	ND	0.361		µg/Kg-dry	1	7/18/2014 3:38:00 PM
Aroclor 1268	ND	0.361		µg/Kg-dry	1	7/18/2014 3:38:00 PM
Surr: Decachlorobiphenyl	282	56.5-130	SMI	%REC	1	7/18/2014 3:38:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 1:12:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-023
Client Sample ID: TP07-S-1.0
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	305		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Bolstar	ND	24.4		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Chloropyrifos	ND	24.4		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Coumaphos	ND	122		µg/Kg-dry	1	7/23/2014 2:04:00 PM
DEF	ND	24.4		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Demeton-S	ND	61.0		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Diazinon	ND	61.0		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Dichlorovos	ND	24.4		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Dimethoate	ND	61.0		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Disulfoton	ND	24.4		µg/Kg-dry	1	7/23/2014 2:04:00 PM
EPN	ND	24.4		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Ethion	ND	24.4		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Ethoprop	ND	24.4		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Fensulfothion	ND	122		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Fenthion	ND	24.4		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Malathion	ND	24.4		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Methyl parathion	ND	122		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Mevinphos	ND	122		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Naled	ND	305		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Parathion	ND	61.0		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Phorate	ND	24.4		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Ronnel	ND	24.4		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Stirofos	ND	24.4		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Sulfotepp	ND	24.4		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Tokuthion	ND	24.4		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Trichloronate	ND	24.4		µg/Kg-dry	1	7/23/2014 2:04:00 PM
Surr: Tributylphosphate (Surr.)	102	50-150		%REC	1	7/23/2014 2:04:00 PM
Surr: Triphenylphosphate (Surr.)	68.0	50-150		%REC	1	7/23/2014 2:04:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
4,4´-DDE	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
4,4´-DDT	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
Aldrin	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
alpha-BHC	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
alpha-Chlordane	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
beta-BHC	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
Chlordane	ND	8.14		µg/Kg-dry	1	7/27/2014 5:03:00 PM
delta-BHC	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 1:12:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-023
Client Sample ID: TP07-S-1.0
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
Dieldrin	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
Endosulfan I	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
Endosulfan II	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
Endosulfan Sulfate	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
Endrin	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
Endrin aldehyde	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
Endrin ketone	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
gamma-BHC	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
gamma-Chlordane	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
Heptachlor	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
Heptachlor epoxide	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
Methoxychlor	ND	0.407		µg/Kg-dry	1	7/27/2014 5:03:00 PM
Toxaphene	ND	8.14		µg/Kg-dry	1	7/27/2014 5:03:00 PM
Surr: Decachlorobiphenyl	74.6	25.9-136		%REC	1	7/27/2014 5:03:00 PM
Surr: Tetrachloro-m-xylene	7.17	15-124	S	%REC	1	7/27/2014 5:03:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.406		µg/Kg-dry	1	7/25/2014 10:37:00 PM
Aroclor 1221	ND	0.406		µg/Kg-dry	1	7/25/2014 10:37:00 PM
Aroclor 1232	ND	0.406		µg/Kg-dry	1	7/25/2014 10:37:00 PM
Aroclor 1242	ND	0.406		µg/Kg-dry	1	7/25/2014 10:37:00 PM
Aroclor 1248	45.0	0.406		µg/Kg-dry	1	7/25/2014 10:37:00 PM
Aroclor 1254	ND	0.406		µg/Kg-dry	1	7/25/2014 10:37:00 PM
Aroclor 1260	ND	0.406		µg/Kg-dry	1	7/25/2014 10:37:00 PM
Aroclor 1262	ND	0.406		µg/Kg-dry	1	7/25/2014 10:37:00 PM
Aroclor 1268	ND	0.406		µg/Kg-dry	1	7/25/2014 10:37:00 PM
Surr: Decachlorobiphenyl	92.2	56.5-130		%REC	1	7/25/2014 10:37:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	8.14		µg/Kg-dry	1	7/23/2014 5:29:00 PM
2,4,5-TP (Silvex)	ND	8.14		µg/Kg-dry	1	7/23/2014 5:29:00 PM
2,4-D	ND	8.14		µg/Kg-dry	1	7/23/2014 5:29:00 PM
2,4-DB	ND	8.14		µg/Kg-dry	1	7/23/2014 5:29:00 PM
4-Nitrophenol	ND	8.14		µg/Kg-dry	1	7/23/2014 5:29:00 PM
Dicamba	ND	8.14		µg/Kg-dry	1	7/23/2014 5:29:00 PM
Dichlorprop	ND	8.14		µg/Kg-dry	1	7/23/2014 5:29:00 PM
Dinoseb	ND	8.14		µg/Kg-dry	1	7/23/2014 5:29:00 PM
MCPA	ND	814		µg/Kg-dry	1	7/23/2014 5:29:00 PM
MCPP	ND	814		µg/Kg-dry	1	7/23/2014 5:29:00 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 1:12:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-023		
Client Sample ID:	TP07-S-1.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
Pentachlorophenol	ND	8.14		µg/Kg-dry	1	7/23/2014 5:29:00 PM
Surr: 2,4-DCAA	60.9	34.3-141		%REC	1	7/23/2014 5:29:00 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 1:26:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-024		
Client Sample ID:	TP07-S-5.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 1:31:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-025		
Client Sample ID:	TP07-S-7.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 1:53:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-026
Client Sample ID: TP08-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	52.3	17.1		mg/Kg-dry	1	7/19/2014 12:39:28 AM
Lube Oil	405	57.0		mg/Kg-dry	1	7/19/2014 12:39:28 AM
Surr: o-Terphenyl	112	50-150		%REC	1	7/19/2014 12:39:28 AM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	2510	966		µg/Kg-dry	10	7/24/2014 4:32:00 PM
Chromium	9870	966		µg/Kg-dry	10	7/24/2014 4:32:00 PM
Copper	28300	483		µg/Kg-dry	10	7/24/2014 4:32:00 PM
Lead	15400	242		µg/Kg-dry	10	7/24/2014 4:32:00 PM
Nickel	10400	483		µg/Kg-dry	10	7/24/2014 4:32:00 PM
Zinc	83800	9660		µg/Kg-dry	10	7/24/2014 4:32:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0277	0.0173		mg/Kg-dry	1	7/18/2014 11:04:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	285		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Bolstar	ND	22.8		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Chloropyrifos	ND	22.8		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Coumaphos	ND	114		µg/Kg-dry	1	7/23/2014 2:28:00 PM
DEF	ND	22.8		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Demeton-S	ND	57.0		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Diazinon	ND	57.0		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Dichlorovos	ND	22.8		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Dimethoate	ND	57.0		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Disulfoton	ND	22.8		µg/Kg-dry	1	7/23/2014 2:28:00 PM
EPN	ND	22.8		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Ethion	ND	22.8		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Ethoprop	ND	22.8		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Fensulfothion	ND	114		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Fenthion	ND	22.8		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Malathion	ND	22.8		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Methyl parathion	ND	114		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Mevinphos	ND	114		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Naled	ND	285		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Parathion	ND	57.0		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Phorate	ND	22.8		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Ronnel	ND	22.8		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Stirofos	ND	22.8		µg/Kg-dry	1	7/23/2014 2:28:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 1:53:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-026
Client Sample ID: TP08-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Sulfotepp	ND	22.8		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Tokuthion	ND	22.8		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Trichloronate	ND	22.8		µg/Kg-dry	1	7/23/2014 2:28:00 PM
Surr: Tributylphosphate (Surr.)	112	50-150		%REC	1	7/23/2014 2:28:00 PM
Surr: Triphenylphosphate (Surr.)	80.0	50-150		%REC	1	7/23/2014 2:28:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
4,4´-DDE	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
4,4´-DDT	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
Aldrin	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
alpha-BHC	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
alpha-Chlordane	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
beta-BHC	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
Chlordane	ND	7.60		µg/Kg-dry	1	7/27/2014 5:17:00 PM
delta-BHC	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
Dieldrin	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
Endosulfan I	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
Endosulfan II	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
Endosulfan Sulfate	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
Endrin	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
Endrin aldehyde	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
Endrin ketone	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
gamma-BHC	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
gamma-Chlordane	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
Heptachlor	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
Heptachlor epoxide	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
Methoxychlor	ND	0.380		µg/Kg-dry	1	7/27/2014 5:17:00 PM
Toxaphene	ND	7.60		µg/Kg-dry	1	7/27/2014 5:17:00 PM
Surr: Decachlorobiphenyl	59.8	25.9-136		%REC	1	7/27/2014 5:17:00 PM
Surr: Tetrachloro-m-xylene	9.98	15-124	S	%REC	1	7/27/2014 5:17:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.380		µg/Kg-dry	1	7/18/2014 3:55:00 PM
Aroclor 1221	ND	0.380		µg/Kg-dry	1	7/18/2014 3:55:00 PM
Aroclor 1232	ND	0.380		µg/Kg-dry	1	7/18/2014 3:55:00 PM
Aroclor 1242	ND	0.380		µg/Kg-dry	1	7/18/2014 3:55:00 PM
Aroclor 1248	82.2	0.380		µg/Kg-dry	1	7/21/2014 11:41:00 AM
Aroclor 1254	ND	0.380		µg/Kg-dry	1	7/18/2014 3:55:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 1:53:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-026
Client Sample ID: TP08-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1260	ND	0.380		µg/Kg-dry	1	7/18/2014 3:55:00 PM
Aroclor 1262	ND	0.380		µg/Kg-dry	1	7/18/2014 3:55:00 PM
Aroclor 1268	ND	0.380		µg/Kg-dry	1	7/18/2014 3:55:00 PM
Surr: Decachlorobiphenyl	94.8	56.5-130		%REC	1	7/18/2014 3:55:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	7.60		µg/Kg-dry	1	7/23/2014 5:50:00 PM
2,4,5-TP (Silvex)	ND	7.60		µg/Kg-dry	1	7/23/2014 5:50:00 PM
2,4-D	ND	7.60		µg/Kg-dry	1	7/23/2014 5:50:00 PM
2,4-DB	ND	7.60		µg/Kg-dry	1	7/23/2014 5:50:00 PM
4-Nitrophenol	ND	7.60		µg/Kg-dry	1	7/23/2014 5:50:00 PM
Dicamba	ND	7.60		µg/Kg-dry	1	7/23/2014 5:50:00 PM
Dichlorprop	ND	7.60		µg/Kg-dry	1	7/23/2014 5:50:00 PM
Dinoseb	ND	7.60		µg/Kg-dry	1	7/23/2014 5:50:00 PM
MCPA	ND	760		µg/Kg-dry	1	7/23/2014 5:50:00 PM
MCPP	ND	760		µg/Kg-dry	1	7/23/2014 5:50:00 PM
Pentachlorophenol	ND	7.60		µg/Kg-dry	1	7/23/2014 5:50:00 PM
Surr: 2,4-DCAA	47.2	34.3-141		%REC	1	7/23/2014 5:50:00 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 2:01:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-027		
Client Sample ID:	TP08-S-4.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 2:10:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-028		
Client Sample ID:	TP08-S-7.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 2:29:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-029
Client Sample ID: TP09-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	323		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Bolstar	ND	25.8		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Chloropyrifos	ND	25.8		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Coumaphos	ND	129		µg/Kg-dry	1	7/23/2014 2:53:00 PM
DEF	ND	25.8		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Demeton-S	ND	64.6		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Diazinon	ND	64.6		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Dichlorovos	ND	25.8		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Dimethoate	ND	64.6		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Disulfoton	ND	25.8		µg/Kg-dry	1	7/23/2014 2:53:00 PM
EPN	ND	25.8		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Ethion	ND	25.8		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Ethoprop	ND	25.8		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Fensulfothion	ND	129		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Fenthion	ND	25.8		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Malathion	ND	25.8		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Methyl parathion	ND	129		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Mevinphos	ND	129		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Naled	ND	323		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Parathion	ND	64.6		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Phorate	ND	25.8		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Ronnel	ND	25.8		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Stirofos	ND	25.8		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Sulfotepp	ND	25.8		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Tokuthion	ND	25.8		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Trichloronate	ND	25.8		µg/Kg-dry	1	7/23/2014 2:53:00 PM
Surr: Tributylphosphate (Surr.)	105	50-150		%REC	1	7/23/2014 2:53:00 PM
Surr: Triphenylphosphate (Surr.)	66.0	50-150		%REC	1	7/23/2014 2:53:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
4,4´-DDE	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
4,4´-DDT	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
Aldrin	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
alpha-BHC	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
alpha-Chlordane	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
beta-BHC	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
Chlordane	ND	8.61		µg/Kg-dry	1	7/27/2014 5:31:00 PM
delta-BHC	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 2:29:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-029
Client Sample ID: TP09-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
Dieldrin	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
Endosulfan I	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
Endosulfan II	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
Endosulfan Sulfate	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
Endrin	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
Endrin aldehyde	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
Endrin ketone	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
gamma-BHC	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
gamma-Chlordane	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
Heptachlor	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
Heptachlor epoxide	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
Methoxychlor	ND	0.430		µg/Kg-dry	1	7/27/2014 5:31:00 PM
Toxaphene	ND	8.61		µg/Kg-dry	1	7/27/2014 5:31:00 PM
Surr: Decachlorobiphenyl	74.6	25.9-136		%REC	1	7/27/2014 5:31:00 PM
Surr: Tetrachloro-m-xylene	2.26	15-124	S	%REC	1	7/27/2014 5:31:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.430		µg/Kg-dry	1	7/18/2014 4:12:00 PM
Aroclor 1221	ND	0.430		µg/Kg-dry	1	7/18/2014 4:12:00 PM
Aroclor 1232	ND	0.430		µg/Kg-dry	1	7/18/2014 4:12:00 PM
Aroclor 1242	ND	0.430		µg/Kg-dry	1	7/18/2014 4:12:00 PM
Aroclor 1248	997	0.430		µg/Kg-dry	1	7/21/2014 11:58:00 AM
Aroclor 1254	ND	0.430		µg/Kg-dry	1	7/18/2014 4:12:00 PM
Aroclor 1260	ND	0.430		µg/Kg-dry	1	7/18/2014 4:12:00 PM
Aroclor 1262	ND	0.430		µg/Kg-dry	1	7/18/2014 4:12:00 PM
Aroclor 1268	ND	0.430		µg/Kg-dry	1	7/18/2014 4:12:00 PM
Surr: Decachlorobiphenyl	81.0	56.5-130		%REC	1	7/18/2014 4:12:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	8.61		µg/Kg-dry	1	7/23/2014 6:11:00 PM
2,4,5-TP (Silvex)	ND	8.61		µg/Kg-dry	1	7/23/2014 6:11:00 PM
2,4-D	ND	8.61		µg/Kg-dry	1	7/23/2014 6:11:00 PM
2,4-DB	ND	8.61		µg/Kg-dry	1	7/23/2014 6:11:00 PM
4-Nitrophenol	ND	8.61		µg/Kg-dry	1	7/23/2014 6:11:00 PM
Dicamba	ND	8.61		µg/Kg-dry	1	7/23/2014 6:11:00 PM
Dichlorprop	ND	8.61		µg/Kg-dry	1	7/23/2014 6:11:00 PM
Dinoseb	ND	8.61		µg/Kg-dry	1	7/23/2014 6:11:00 PM
MCPA	ND	861		µg/Kg-dry	1	7/23/2014 6:11:00 PM
MCPP	ND	861		µg/Kg-dry	1	7/23/2014 6:11:00 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 2:29:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-029		
Client Sample ID:	TP09-S-0.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
Pentachlorophenol	ND	8.61		µg/Kg-dry	1	7/23/2014 6:11:00 PM
Surr: 2,4-DCAA	49.8	34.3-141		%REC	1	7/23/2014 6:11:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 2:33:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-030
Client Sample ID: TP09-S-4.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.366		µg/Kg-dry	1	7/25/2014 10:53:00 PM
Aroclor 1221	ND	0.366		µg/Kg-dry	1	7/25/2014 10:53:00 PM
Aroclor 1232	ND	0.366		µg/Kg-dry	1	7/25/2014 10:53:00 PM
Aroclor 1242	ND	0.366		µg/Kg-dry	1	7/25/2014 10:53:00 PM
Aroclor 1248	ND	0.366		µg/Kg-dry	1	7/25/2014 10:53:00 PM
Aroclor 1254	ND	0.366		µg/Kg-dry	1	7/25/2014 10:53:00 PM
Aroclor 1260	ND	0.366		µg/Kg-dry	1	7/25/2014 10:53:00 PM
Aroclor 1262	ND	0.366		µg/Kg-dry	1	7/25/2014 10:53:00 PM
Aroclor 1268	ND	0.366		µg/Kg-dry	1	7/25/2014 10:53:00 PM
Surr: Decachlorobiphenyl	96.2	56.5-130		%REC	1	7/25/2014 10:53:00 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 2:38:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-031		
Client Sample ID:	TP09-S-7.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 3:00:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-032
Client Sample ID: TP10-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	98.8	18.0	A1	mg/Kg-dry	1	7/19/2014 1:39:28 AM
Lube Oil	359	59.9	A2	mg/Kg-dry	1	7/19/2014 1:39:28 AM
Surr: o-Terphenyl	108	50-150		%REC	1	7/19/2014 1:39:28 AM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	2960	758		µg/Kg-dry	10	7/24/2014 4:40:00 PM
Chromium	14300	758		µg/Kg-dry	10	7/24/2014 4:40:00 PM
Copper	38100	379		µg/Kg-dry	10	7/24/2014 4:40:00 PM
Lead	39300	190		µg/Kg-dry	10	7/24/2014 4:40:00 PM
Nickel	20400	379		µg/Kg-dry	10	7/24/2014 4:40:00 PM
Zinc	1030000	152000		µg/Kg-dry	200	7/28/2014 1:17:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0550	0.0179		mg/Kg-dry	1	7/18/2014 11:07:04 AM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.399		µg/Kg-dry	1	7/18/2014 4:28:00 PM
Aroclor 1221	ND	0.399		µg/Kg-dry	1	7/18/2014 4:28:00 PM
Aroclor 1232	ND	0.399		µg/Kg-dry	1	7/18/2014 4:28:00 PM
Aroclor 1242	ND	0.399		µg/Kg-dry	1	7/18/2014 4:28:00 PM
Aroclor 1248	68500	39.9		µg/Kg-dry	100	7/21/2014 12:14:00 PM
Aroclor 1254	ND	0.399		µg/Kg-dry	1	7/18/2014 4:28:00 PM
Aroclor 1260	ND	0.399		µg/Kg-dry	1	7/18/2014 4:28:00 PM
Aroclor 1262	ND	0.399		µg/Kg-dry	1	7/18/2014 4:28:00 PM
Aroclor 1268	ND	0.399		µg/Kg-dry	1	7/18/2014 4:28:00 PM
Surr: Decachlorobiphenyl	78.4	56.5-130		%REC	1	7/18/2014 4:28:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 3:02:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-033
Client Sample ID: TP10-S-1.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	303		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Bolstar	ND	24.3		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Chloropyrifos	ND	24.3		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Coumaphos	ND	121		µg/Kg-dry	1	7/23/2014 3:18:00 PM
DEF	ND	24.3		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Demeton-S	ND	60.7		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Diazinon	ND	60.7		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Dichlorovos	ND	24.3		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Dimethoate	ND	60.7		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Disulfoton	ND	24.3		µg/Kg-dry	1	7/23/2014 3:18:00 PM
EPN	ND	24.3		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Ethion	ND	24.3		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Ethoprop	ND	24.3		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Fensulfothion	ND	121		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Fenthion	ND	24.3		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Malathion	ND	24.3		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Methyl parathion	ND	121		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Mevinphos	ND	121		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Naled	ND	303		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Parathion	ND	60.7		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Phorate	ND	24.3		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Ronnel	ND	24.3		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Stirofos	ND	24.3		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Sulfotepp	ND	24.3		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Tokuthion	ND	24.3		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Trichloronate	ND	24.3		µg/Kg-dry	1	7/23/2014 3:18:00 PM
Surr: Tributylphosphate (Surr.)	121	50-150		%REC	1	7/23/2014 3:18:00 PM
Surr: Triphenylphosphate (Surr.)	62.0	50-150		%REC	1	7/23/2014 3:18:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
4,4´-DDE	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
4,4´-DDT	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
Aldrin	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
alpha-BHC	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
alpha-Chlordane	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
beta-BHC	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
Chlordane	ND	8.09		µg/Kg-dry	1	7/27/2014 5:46:00 PM
delta-BHC	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 3:02:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-033
Client Sample ID: TP10-S-1.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
Dieldrin	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
Endosulfan I	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
Endosulfan II	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
Endosulfan Sulfate	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
Endrin	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
Endrin aldehyde	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
Endrin ketone	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
gamma-BHC	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
gamma-Chlordane	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
Heptachlor	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
Heptachlor epoxide	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
Methoxychlor	ND	0.405		µg/Kg-dry	1	7/27/2014 5:46:00 PM
Toxaphene	ND	8.09		µg/Kg-dry	1	7/27/2014 5:46:00 PM
Surr: Decachlorobiphenyl	86.1	25.9-136		%REC	1	7/27/2014 5:46:00 PM
Surr: Tetrachloro-m-xylene	2.92	15-124	S	%REC	1	7/27/2014 5:46:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.404		µg/Kg-dry	1	7/25/2014 11:10:00 PM
Aroclor 1221	ND	0.404		µg/Kg-dry	1	7/25/2014 11:10:00 PM
Aroclor 1232	ND	0.404		µg/Kg-dry	1	7/25/2014 11:10:00 PM
Aroclor 1242	ND	0.404		µg/Kg-dry	1	7/25/2014 11:10:00 PM
Aroclor 1248	34.3	0.404		µg/Kg-dry	1	7/25/2014 11:10:00 PM
Aroclor 1254	ND	0.404		µg/Kg-dry	1	7/25/2014 11:10:00 PM
Aroclor 1260	ND	0.404		µg/Kg-dry	1	7/25/2014 11:10:00 PM
Aroclor 1262	ND	0.404		µg/Kg-dry	1	7/25/2014 11:10:00 PM
Aroclor 1268	ND	0.404		µg/Kg-dry	1	7/25/2014 11:10:00 PM
Surr: Decachlorobiphenyl	66.5	56.5-130		%REC	1	7/25/2014 11:10:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	8.09		µg/Kg-dry	1	7/23/2014 6:32:00 PM
2,4,5-TP (Silvex)	ND	8.09		µg/Kg-dry	1	7/23/2014 6:32:00 PM
2,4-D	ND	8.09		µg/Kg-dry	1	7/23/2014 6:32:00 PM
2,4-DB	ND	8.09		µg/Kg-dry	1	7/23/2014 6:32:00 PM
4-Nitrophenol	ND	8.09		µg/Kg-dry	1	7/23/2014 6:32:00 PM
Dicamba	ND	8.09		µg/Kg-dry	1	7/23/2014 6:32:00 PM
Dichlorprop	ND	8.09		µg/Kg-dry	1	7/23/2014 6:32:00 PM
Dinoseb	ND	8.09		µg/Kg-dry	1	7/23/2014 6:32:00 PM
MCPA	ND	809		µg/Kg-dry	1	7/23/2014 6:32:00 PM
MCPP	ND	809		µg/Kg-dry	1	7/23/2014 6:32:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 3:02:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-033		
Client Sample ID:	TP10-S-1.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
Pentachlorophenol	ND	8.09		µg/Kg-dry	1	7/23/2014 6:32:00 PM
Surr: 2,4-DCAA	74.7	34.3-141		%REC	1	7/23/2014 6:32:00 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 3:19:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-034		
Client Sample ID:	TP10-S-4.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 3:25:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-035		
Client Sample ID:	TP10-S-7.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 3:00:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-036
Client Sample ID: TP-S-0.5DUP
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	78.2	18.0	A1	mg/Kg-dry	1	7/18/2014 8:39:28 PM
Lube Oil	232	59.9	A2	mg/Kg-dry	1	7/18/2014 8:39:28 PM
Surr: o-Terphenyl	81.7	50-150		%REC	1	7/18/2014 8:39:28 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	2740	951		µg/Kg-dry	10	7/24/2014 4:47:00 PM
Chromium	14400	951		µg/Kg-dry	10	7/24/2014 4:47:00 PM
Copper	45300	476		µg/Kg-dry	10	7/24/2014 4:47:00 PM
Lead	34800	238		µg/Kg-dry	10	7/24/2014 4:47:00 PM
Nickel	11300	476		µg/Kg-dry	10	7/24/2014 4:47:00 PM
Zinc	1340000	190000		µg/Kg-dry	200	7/28/2014 5:22:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0608	0.0196		mg/Kg-dry	1	7/18/2014 11:10:04 AM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.399		µg/Kg-dry	1	7/18/2014 4:45:00 PM
Aroclor 1221	ND	0.399		µg/Kg-dry	1	7/18/2014 4:45:00 PM
Aroclor 1232	ND	0.399		µg/Kg-dry	1	7/18/2014 4:45:00 PM
Aroclor 1242	ND	0.399		µg/Kg-dry	1	7/18/2014 4:45:00 PM
Aroclor 1248	53200	39.9		µg/Kg-dry	100	7/21/2014 12:31:00 PM
Aroclor 1254	ND	0.399		µg/Kg-dry	1	7/18/2014 4:45:00 PM
Aroclor 1260	ND	0.399		µg/Kg-dry	1	7/18/2014 4:45:00 PM
Aroclor 1262	ND	0.399		µg/Kg-dry	1	7/18/2014 4:45:00 PM
Aroclor 1268	ND	0.399		µg/Kg-dry	1	7/18/2014 4:45:00 PM
Surr: Decachlorobiphenyl	76.6	56.5-130		%REC	1	7/18/2014 4:45:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 3:41:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-037
Client Sample ID: TP11-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	293		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Bolstar	ND	23.5		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Chloropyrifos	ND	23.5		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Coumaphos	ND	117		µg/Kg-dry	1	7/23/2014 3:42:00 PM
DEF	ND	23.5		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Demeton-S	ND	58.6		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Diazinon	ND	58.6		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Dichlorovos	ND	23.5		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Dimethoate	ND	58.6		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Disulfoton	ND	23.5		µg/Kg-dry	1	7/23/2014 3:42:00 PM
EPN	ND	23.5		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Ethion	ND	23.5		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Ethoprop	ND	23.5		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Fensulfothion	ND	117		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Fenthion	ND	23.5		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Malathion	ND	23.5		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Methyl parathion	ND	117		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Mevinphos	ND	117		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Naled	ND	293		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Parathion	ND	58.6		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Phorate	ND	23.5		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Ronnel	ND	23.5		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Stirofos	ND	23.5		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Sulfotepp	ND	23.5		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Tokuthion	ND	23.5		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Trichloronate	ND	23.5		µg/Kg-dry	1	7/23/2014 3:42:00 PM
Surr: Tributylphosphate (Surr.)	103	50-150		%REC	1	7/23/2014 3:42:00 PM
Surr: Triphenylphosphate (Surr.)	136	50-150		%REC	1	7/23/2014 3:42:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
4,4´-DDE	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
4,4´-DDT	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
Aldrin	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
alpha-BHC	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
alpha-Chlordane	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
beta-BHC	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
Chlordane	ND	7.82		µg/Kg-dry	1	7/27/2014 6:00:00 PM
delta-BHC	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 3:41:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-037
Client Sample ID: TP11-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
Dieldrin	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
Endosulfan I	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
Endosulfan II	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
Endosulfan Sulfate	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
Endrin	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
Endrin aldehyde	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
Endrin ketone	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
gamma-BHC	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
gamma-Chlordane	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
Heptachlor	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
Heptachlor epoxide	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
Methoxychlor	ND	0.391		µg/Kg-dry	1	7/27/2014 6:00:00 PM
Toxaphene	ND	7.82		µg/Kg-dry	1	7/27/2014 6:00:00 PM
Surr: Decachlorobiphenyl	97.8	25.9-136		%REC	1	7/27/2014 6:00:00 PM
Surr: Tetrachloro-m-xylene	22.9	15-124		%REC	1	7/27/2014 6:00:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.391		µg/Kg-dry	1	7/18/2014 5:02:00 PM
Aroclor 1221	ND	0.391		µg/Kg-dry	1	7/18/2014 5:02:00 PM
Aroclor 1232	ND	0.391		µg/Kg-dry	1	7/18/2014 5:02:00 PM
Aroclor 1242	ND	0.391		µg/Kg-dry	1	7/18/2014 5:02:00 PM
Aroclor 1248	5660	19.5		µg/Kg-dry	50	7/21/2014 12:48:00 PM
Aroclor 1254	ND	0.391		µg/Kg-dry	1	7/18/2014 5:02:00 PM
Aroclor 1260	ND	0.391		µg/Kg-dry	1	7/18/2014 5:02:00 PM
Aroclor 1262	ND	0.391		µg/Kg-dry	1	7/18/2014 5:02:00 PM
Aroclor 1268	ND	0.391		µg/Kg-dry	1	7/18/2014 5:02:00 PM
Surr: Decachlorobiphenyl	76.2	56.5-130		%REC	1	7/18/2014 5:02:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	7.82		µg/Kg-dry	1	7/24/2014 12:42:46 PM
2,4,5-TP (Silvex)	ND	7.82		µg/Kg-dry	1	7/24/2014 12:42:46 PM
2,4-D	ND	7.82		µg/Kg-dry	1	7/24/2014 12:42:46 PM
2,4-DB	ND	7.82		µg/Kg-dry	1	7/24/2014 12:42:46 PM
4-Nitrophenol	ND	7.82		µg/Kg-dry	1	7/24/2014 12:42:46 PM
Dicamba	ND	7.82		µg/Kg-dry	1	7/24/2014 12:42:46 PM
Dichlorprop	ND	7.82		µg/Kg-dry	1	7/24/2014 12:42:46 PM
Dinoseb	ND	7.82		µg/Kg-dry	1	7/24/2014 12:42:46 PM
MCPA	ND	782		µg/Kg-dry	1	7/24/2014 12:42:46 PM
MCPP	ND	782		µg/Kg-dry	1	7/24/2014 12:42:46 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 3:41:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-037		
Client Sample ID:	TP11-S-0.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
Pentachlorophenol	ND	7.82		µg/Kg-dry	1	7/24/2014 12:42:46 PM
Surr: 2,4-DCAA	50.3	34.3-141		%REC	1	7/24/2014 12:42:46 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 3:50:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-038
Client Sample ID: TP11-S-4.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.374		µg/Kg-dry	1	7/25/2014 11:27:00 PM
Aroclor 1221	ND	0.374		µg/Kg-dry	1	7/25/2014 11:27:00 PM
Aroclor 1232	ND	0.374		µg/Kg-dry	1	7/25/2014 11:27:00 PM
Aroclor 1242	ND	0.374		µg/Kg-dry	1	7/25/2014 11:27:00 PM
Aroclor 1248	ND	0.374		µg/Kg-dry	1	7/25/2014 11:27:00 PM
Aroclor 1254	ND	0.374		µg/Kg-dry	1	7/25/2014 11:27:00 PM
Aroclor 1260	ND	0.374		µg/Kg-dry	1	7/25/2014 11:27:00 PM
Aroclor 1262	ND	0.374		µg/Kg-dry	1	7/25/2014 11:27:00 PM
Aroclor 1268	ND	0.374		µg/Kg-dry	1	7/25/2014 11:27:00 PM
Surr: Decachlorobiphenyl	88.6	56.5-130		%REC	1	7/25/2014 11:27:00 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 3:57:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-039		
Client Sample ID:	TP11-S-7.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 4:18:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-040
Client Sample ID: TP12-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	ND	17.8		mg/Kg-dry	1	7/18/2014 2:39:28 PM
Lube Oil	85.2	59.4	A2	mg/Kg-dry	1	7/18/2014 2:39:28 PM
Surr: o-Terphenyl	91.6	50-150		%REC	1	7/18/2014 2:39:28 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	2610	914		µg/Kg-dry	10	7/24/2014 4:55:00 PM
Chromium	12100	914		µg/Kg-dry	10	7/24/2014 4:55:00 PM
Copper	30700	457		µg/Kg-dry	10	7/24/2014 4:55:00 PM
Lead	8650	229		µg/Kg-dry	10	7/24/2014 4:55:00 PM
Nickel	11500	457		µg/Kg-dry	10	7/24/2014 4:55:00 PM
Zinc	89900	9140		µg/Kg-dry	10	7/24/2014 4:55:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0235	0.0195		mg/Kg-dry	1	7/18/2014 11:13:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	297		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Bolstar	ND	23.8		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Chloropyrifos	ND	23.8		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Coumaphos	ND	119		µg/Kg-dry	1	7/23/2014 4:07:00 PM
DEF	ND	23.8		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Demeton-S	ND	59.4		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Diazinon	ND	59.4		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Dichlorovos	ND	23.8		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Dimethoate	ND	59.4		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Disulfoton	ND	23.8		µg/Kg-dry	1	7/23/2014 4:07:00 PM
EPN	ND	23.8		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Ethion	ND	23.8		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Ethoprop	ND	23.8		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Fensulfothion	ND	119		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Fenthion	ND	23.8		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Malathion	ND	23.8		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Methyl parathion	ND	119		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Mevinphos	ND	119		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Naled	ND	297		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Parathion	ND	59.4		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Phorate	ND	23.8		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Ronnel	ND	23.8		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Stirofos	ND	23.8		µg/Kg-dry	1	7/23/2014 4:07:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 4:18:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-040
Client Sample ID: TP12-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Sulfotepp	ND	23.8		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Tokuthion	ND	23.8		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Trichloronate	ND	23.8		µg/Kg-dry	1	7/23/2014 4:07:00 PM
Surr: Tributylphosphate (Surr.)	118	50-150		%REC	1	7/23/2014 4:07:00 PM
Surr: Triphenylphosphate (Surr.)	66.0	50-150		%REC	1	7/23/2014 4:07:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
4,4´-DDE	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
4,4´-DDT	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
Aldrin	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
alpha-BHC	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
alpha-Chlordane	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
beta-BHC	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
Chlordane	ND	7.92		µg/Kg-dry	1	7/27/2014 6:57:00 PM
delta-BHC	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
Dieldrin	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
Endosulfan I	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
Endosulfan II	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
Endosulfan Sulfate	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
Endrin	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
Endrin aldehyde	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
Endrin ketone	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
gamma-BHC	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
gamma-Chlordane	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
Heptachlor	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
Heptachlor epoxide	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
Methoxychlor	ND	0.396		µg/Kg-dry	1	7/27/2014 6:57:00 PM
Toxaphene	ND	7.92		µg/Kg-dry	1	7/27/2014 6:57:00 PM
Surr: Decachlorobiphenyl	112	25.9-136		%REC	1	7/27/2014 6:57:00 PM
Surr: Tetrachloro-m-xylene	0.406	15-124	S	%REC	1	7/27/2014 6:57:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.396		µg/Kg-dry	1	7/18/2014 5:19:00 PM
Aroclor 1221	ND	0.396		µg/Kg-dry	1	7/18/2014 5:19:00 PM
Aroclor 1232	ND	0.396		µg/Kg-dry	1	7/18/2014 5:19:00 PM
Aroclor 1242	ND	0.396		µg/Kg-dry	1	7/18/2014 5:19:00 PM
Aroclor 1248	493	0.396		µg/Kg-dry	1	7/21/2014 1:05:00 PM
Aroclor 1254	ND	0.396		µg/Kg-dry	1	7/18/2014 5:19:00 PM

Specialty Analytical

Date Reported: 11-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/15/2014 4:18:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407110-040
Client Sample ID: TP12-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1260	ND	0.396		µg/Kg-dry	1	7/18/2014 5:19:00 PM
Aroclor 1262	ND	0.396		µg/Kg-dry	1	7/18/2014 5:19:00 PM
Aroclor 1268	ND	0.396		µg/Kg-dry	1	7/18/2014 5:19:00 PM
Surr: Decachlorobiphenyl	95.9	56.5-130		%REC	1	7/18/2014 5:19:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	7.92		µg/Kg-dry	1	7/23/2014 6:53:00 PM
2,4,5-TP (Silvex)	ND	7.92		µg/Kg-dry	1	7/23/2014 6:53:00 PM
2,4-D	ND	7.92		µg/Kg-dry	1	7/23/2014 6:53:00 PM
2,4-DB	ND	7.92		µg/Kg-dry	1	7/23/2014 6:53:00 PM
4-Nitrophenol	ND	7.92		µg/Kg-dry	1	7/23/2014 6:53:00 PM
Dicamba	ND	7.92		µg/Kg-dry	1	7/23/2014 6:53:00 PM
Dichlorprop	ND	7.92		µg/Kg-dry	1	7/23/2014 6:53:00 PM
Dinoseb	ND	7.92		µg/Kg-dry	1	7/23/2014 6:53:00 PM
MCPA	ND	792		µg/Kg-dry	1	7/23/2014 6:53:00 PM
MCPP	ND	792		µg/Kg-dry	1	7/23/2014 6:53:00 PM
Pentachlorophenol	ND	7.92		µg/Kg-dry	1	7/23/2014 6:53:00 PM
Surr: 2,4-DCAA	54.2	34.3-141		%REC	1	7/23/2014 6:53:00 PM

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 4:25:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-041		
Client Sample ID:	TP12-S-4.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: **11-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/15/2014 4:30:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407110-042		
Client Sample ID:	TP12-S-7.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **ICV** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/24/2014** SeqNo: **211203**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5050	100	5000	0	101	90	110				
Chromium	4990	100	5000	0	99.8	90	110				
Copper	5010	50.0	5000	0	100	90	110				
Lead	4710	25.0	5000	0	94.2	90	110				
Nickel	4990	50.0	5000	0	99.7	90	110				
Zinc	5200	1000	5000	0	104	90	110				

Sample ID: **LCS-7873** SampType: **LCS** TestCode: **6020_S** Units: **µg/Kg** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **LCSS** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/24/2014** SeqNo: **211205**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	27600	1000	25000	0	110	80	120				
Copper	57500	500	50000	0	115	80	120				
Nickel	27900	500	25000	0	112	80	120				
Zinc	55700	10000	50000	0	111	69	129				

Sample ID: **1407110-004AMS** SampType: **MS** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **TP02-S-0.5** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/24/2014** SeqNo: **211208**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	96600	991	99060	2573	94.9	70	130				
Chromium	35300	991	24770	14840	82.6	70	130				
Copper	85200	495	49530	35660	100	70	130				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **1407110-004AMS** SampType: **MS** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **TP02-S-0.5** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/24/2014** SeqNo: **211208**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	34500	495	24770	17330	69.1	70	130				S

Sample ID: **1407110-004AMSD** SampType: **MSD** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **TP02-S-0.5** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/24/2014** SeqNo: **211209**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	97700	991	99060	2573	96.0	70	130	96570	1.18	20	
Chromium	32800	991	24770	14840	72.5	70	130	35300	7.36	20	
Copper	76800	495	49530	35660	83.1	70	130	85220	10.3	20	
Nickel	35400	495	24770	17330	73.0	70	130	34450	2.72	20	

Sample ID: **1407110-004ADUP** SampType: **DUP** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **TP02-S-0.5** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/24/2014** SeqNo: **211235**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2130	923						2573	19.0	20	
Chromium	12900	923						14840	13.6	20	
Copper	31500	462						35660	12.3	20	
Lead	41100	231						38800	5.76	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04 **TestCode:** **6020_S**

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **ICV** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211640**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4990	100	5000	0	99.8	90	110				
Chromium	5080	100	5000	0	102	90	110				
Copper	4990	50.0	5000	0	99.9	90	110				
Lead	5070	25.0	5000	0	101	90	110				
Nickel	5110	50.0	5000	0	102	90	110				
Zinc	5100	1000	5000	0	102	90	110				

Sample ID: **MBLK-7827** SampType: **MBLK** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **PBS** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211641**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	100									
Chromium	ND	100									
Copper	ND	50.0									
Lead	ND	25.0									
Nickel	ND	50.0									
Zinc	ND	1000									

Sample ID: **LCS-7827** SampType: **LCS** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **LCSS** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211642**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	104000	2000	100000	0	104	73.4	120				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **LCS-7827** SampType: **LCS** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **LCSS** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211642**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	101000	500	100000	0	101	80	120				

Sample ID: **1407110-004ADUP** SampType: **DUP** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **TP02-S-0.5** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211644**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	633000	92300						600800	5.19	20	

Sample ID: **1407110-004AMS** SampType: **MS** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **TP02-S-0.5** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211645**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	137000	4950	99060	32260	106	70	130				

Sample ID: **1407110-004AMSD** SampType: **MSD** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **TP02-S-0.5** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211646**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	123000	4950	99060	32260	91.2	70	130	137100	11.2	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04 **TestCode:** **6020_S**

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **CCV** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211647**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5020	100	5000	0	100	90	110				
Chromium	5150	100	5000	0	103	90	110				
Copper	5120	50.0	5000	0	102	90	110				
Lead	4970	25.0	5000	0	99.4	90	110				
Nickel	5260	50.0	5000	0	105	90	110				
Zinc	5140	1000	5000	0	103	90	110				

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **ICV** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211767**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	5390	25.0	5000	0	108	90	110				
Nickel	5380	50.0	5000	0	108	90	110				
Zinc	5440	1000	5000	0	109	90	110				

Sample ID: **1407110-004ADUP** SampType: **DUP** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **TP02-S-0.5** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211769**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	12200	462						16330	29.3	20	R

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **1407110-004AMS** SampType: **MS** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **TP02-S-0.5** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211770**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	136000	4950	99060	35430	101	70	130				
Zinc	912000	198000	49530	640500	548	70	130				SMC

Sample ID: **1407110-004AMSD** SampType: **MSD** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **TP02-S-0.5** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211771**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	122000	4950	99060	35430	87.5	70	130	135700	10.5	20	
Zinc	736000	198000	49530	640500	193	70	130	912000	21.3	20	SRMC

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **CCV** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211828**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	5340	1000	5000	0	107	90	110				

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **CCV** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211831**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	5400	1000	5000	0	108	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **8081BLL_S**

Sample ID: **CCV 100**	SampType: **CCV**	TestCode: **8081BLL_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16233**
Client ID: **CCV**	Batch ID: **7838**	TestNo: **SW8081B**	**3545_PESTLL**	Analysis Date: **7/27/2014**	SeqNo: **213343**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDD	6.58	0.333	6.700	0	98.2	80	120				
4,4´-DDE	7.07	0.333	6.700	0	106	80	120				
4,4´-DDT	6.80	0.333	6.700	0	101	80	120				
Aldrin	7.02	0.333	6.700	0	105	80	120				
alpha-BHC	7.36	0.333	6.700	0	110	80	120				
alpha-Chlordane	6.88	0.333	6.700	0	103	80	120				
beta-BHC	6.64	0.333	6.700	0	99.1	80	120				
delta-BHC	6.69	0.333	6.700	0	99.8	80	120				
Dieldrin	6.96	0.333	6.700	0	104	80	120				
Endosulfan I	6.82	0.333	6.700	0	102	80	120				
Endosulfan II	6.40	0.333	6.700	0	95.6	80	120				
Endosulfan Sulfate	6.06	0.333	6.700	0	90.4	80	120				
Endrin	6.53	0.333	6.700	0	97.4	80	120				
Endrin aldehyde	6.86	0.333	6.700	0	102	80	120				
Endrin ketone	6.48	0.333	6.700	0	96.7	80	120				
gamma-BHC	7.01	0.333	6.700	0	105	80	120				
gamma-Chlordane	6.85	0.333	6.700	0	102	80	120				
Heptachlor	7.04	0.333	6.700	0	105	80	120				
Heptachlor epoxide	6.79	0.333	6.700	0	101	80	120				
Methoxychlor	6.41	0.333	6.700	0	95.6	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **8081BLL_S**

Sample ID: **CCV 100**	SampType: **CCV**	TestCode: **8081BLL_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16233**
Client ID: **CCV**	Batch ID: **7838**	TestNo: **SW8081B**	**3545_PESTLL**	Analysis Date: **7/28/2014**	SeqNo: **213344**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDD	8.62	0.333	6.700	0	129	80	120				SC
4,4´-DDE	7.94	0.333	6.700	0	119	80	120				
4,4´-DDT	7.36	0.333	6.700	0	110	80	120				
Aldrin	8.03	0.333	6.700	0	120	80	120				
alpha-BHC	8.52	0.333	6.700	0	127	80	120				SC
alpha-Chlordane	7.82	0.333	6.700	0	117	80	120				
beta-BHC	7.62	0.333	6.700	0	114	80	120				
delta-BHC	7.94	0.333	6.700	0	118	80	120				
Dieldrin	8.02	0.333	6.700	0	120	80	120				
Endosulfan I	7.82	0.333	6.700	0	117	80	120				
Endosulfan II	7.56	0.333	6.700	0	113	80	120				
Endosulfan Sulfate	6.99	0.333	6.700	0	104	80	120				
Endrin	7.00	0.333	6.700	0	105	80	120				
Endrin aldehyde	8.14	0.333	6.700	0	122	80	120				SC
Endrin ketone	7.96	0.333	6.700	0	119	80	120				
gamma-BHC	8.28	0.333	6.700	0	124	80	120				SC
gamma-Chlordane	7.91	0.333	6.700	0	118	80	120				
Heptachlor	8.61	0.333	6.700	0	129	80	120				SC
Heptachlor epoxide	7.80	0.333	6.700	0	116	80	120				
Methoxychlor	7.59	0.333	6.700	0	113	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **8081BLL_S**

Sample ID: **MB-7838**	SampType: **MBLK**	TestCode: **8081BLL_S**	Units: **µg/Kg**	Prep Date: **7/21/2014**	RunNo: **16233**
Client ID: **PBS**	Batch ID: **7838**	TestNo: **SW8081B**	**3545_PESTLL**	Analysis Date: **7/27/2014**	SeqNo: **213346**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDD	ND	0.333									
4,4´-DDE	ND	0.333									
4,4´-DDT	ND	0.333									
Aldrin	ND	0.333									
alpha-BHC	ND	0.333									
alpha-Chlordane	ND	0.333									
beta-BHC	ND	0.333									
Chlordane	ND	6.67									
delta-BHC	ND	0.333									
Dieldrin	ND	0.333									
Endosulfan I	ND	0.333									
Endosulfan II	ND	0.333									
Endosulfan Sulfate	ND	0.333									
Endrin	ND	0.333									
Endrin aldehyde	ND	0.333									
Endrin ketone	ND	0.333									
gamma-BHC	ND	0.333									
gamma-Chlordane	ND	0.333									
Heptachlor	ND	0.333									
Heptachlor epoxide	ND	0.333									
Methoxychlor	ND	0.333									
Toxaphene	ND	6.67									
Surr: Decachlorobiphenyl	8.50		6.700		127	53.2	136				
Surr: Tetrachloro-m-xylene	3.90		6.700		58.2	32.3	84.1				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8081BLL_S**

Sample ID: **1407119-012AMS** SampType: **MS** TestCode: **8081BLL_S** Units: **µg/Kg-dry** Prep Date: **7/21/2014** RunNo: **16233**
Client ID: **ZZZZZZ** Batch ID: **7838** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/27/2014** SeqNo: **213349**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDT	5.00	0.428	8.605	0	58.1	36.6	123				
Aldrin	4.32	0.428	8.605	0	50.2	41.9	100				
Dieldrin	4.14	0.428	8.605	0	48.1	44.3	108				
Endrin	4.42	0.428	8.605	0	51.3	32.1	103				
gamma-BHC	3.88	0.428	8.605	0	45.0	42	102				
Heptachlor	3.98	0.428	8.605	0	46.3	45.7	98.9				

Sample ID: **1407119-012AMSD** SampType: **MSD** TestCode: **8081BLL_S** Units: **µg/Kg-dry** Prep Date: **7/21/2014** RunNo: **16233**
Client ID: **ZZZZZZ** Batch ID: **7838** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/27/2014** SeqNo: **213350**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDT	4.31	0.428	8.605	0	50.1	36.6	123	4.999	14.7	20	
Aldrin	4.05	0.428	8.605	0	47.1	41.9	100	4.324	6.47	20	
Dieldrin	4.02	0.428	8.605	0	46.7	44.3	108	4.141	3.06	20	
Endrin	3.82	0.428	8.605	0	44.4	32.1	103	4.416	14.5	20	
gamma-BHC	3.67	0.428	8.605	0	42.6	42	102	3.612	1.48	20	
Heptachlor	4.00	0.428	8.605	0	46.5	45.7	98.9	3.981	0.532	20	

Sample ID: **LCS-7838** SampType: **LCS** TestCode: **8081BLL_S** Units: **µg/Kg** Prep Date: **7/21/2014** RunNo: **16233**
Client ID: **LCSS** Batch ID: **7838** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/27/2014** SeqNo: **213392**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDT	4.78	0.333	6.700	0	71.4	65.2	128				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **8081BLL_S**

Sample ID: **LCS-7838**	SampType: **LCS**	TestCode: **8081BLL_S**	Units: **µg/Kg**	Prep Date: **7/21/2014**	RunNo: **16233**
Client ID: **LCSS**	Batch ID: **7838**	TestNo: **SW8081B**	**3545_PESTLL**	Analysis Date: **7/27/2014**	SeqNo: **213392**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aldrin	4.16	0.333	6.700	0	62.1	52.9	129				
Dieldrin	3.81	0.333	6.700	0	56.8	52.8	136				
Endrin	4.02	0.333	6.700	0	60.0	53.9	150				
gamma-BHC	3.28	0.333	6.700	0	49.0	44	134				
Heptachlor	3.35	0.333	6.700	0	50.1	47.4	116				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8082LL_S**

Sample ID: **MB-7820** SampType: **MBLK** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **7/17/2014** RunNo: **16049**
Client ID: **PBS** Batch ID: **7820** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/18/2014** SeqNo: **210434**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	6650		6667		99.8	56.5	130				

Sample ID: **LCS-7820** SampType: **LCS** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **7/17/2014** RunNo: **16049**
Client ID: **LCSS** Batch ID: **7820** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/18/2014** SeqNo: **210435**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	68.9	0.333	66.67	0	103	44.3	137				

Sample ID: **1016/1260 CCV** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **16049**
Client ID: **CCV** Batch ID: **7820** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/18/2014** SeqNo: **210436**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	64.6	0.333	66.67	0	97.0	85	115				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8082LL_S**

Sample ID: **1407110-001AMS**	SampType: **MS**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date: **7/18/2014**	RunNo: **16049**
Client ID: **TP01-S-0.5**	Batch ID: **7820**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **7/18/2014**	SeqNo: **210575**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	428	0.333	66.67	0	642	56.6	123				SMI

Sample ID: **1407110-001AMSD**	SampType: **MSD**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date: **7/18/2014**	RunNo: **16049**
Client ID: **TP01-S-0.5**	Batch ID: **7820**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **7/18/2014**	SeqNo: **210576**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	697	0.333	66.67	0	1040	56.6	123	427.9	47.8	20	SRMI

Sample ID: **1248 CCV**	SampType: **CCV**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16049**
Client ID: **CCV**	Batch ID: **7820**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **7/21/2014**	SeqNo: **210686**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	66.7	0.333	66.67	0	100	85	115				

Sample ID: **1248 CCV**	SampType: **CCV**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16049**
Client ID: **CCV**	Batch ID: **7820**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **7/21/2014**	SeqNo: **210687**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	66.8	0.333	66.67	0	100	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8082LL_S**

Sample ID: **MB-7851** SampType: **MBLK** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **7/23/2014** RunNo: **16126**
Client ID: **PBS** Batch ID: **7851** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/25/2014** SeqNo: **211572**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	8030		6667		120	56.5	130				

Sample ID: **LCS-7851** SampType: **LCS** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **7/23/2014** RunNo: **16126**
Client ID: **LCSS** Batch ID: **7851** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/25/2014** SeqNo: **211573**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	73.7	0.333	66.67	0	111	44.3	137				

Sample ID: **1407119-058AMS** SampType: **MS** TestCode: **8082LL_S** Units: **µg/Kg-dry** Prep Date: **7/23/2014** RunNo: **16126**
Client ID: **ZZZZZZ** Batch ID: **7851** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/25/2014** SeqNo: **211584**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	183	0.386	77.30	0	237	56.6	123				SMI

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8082LL_S**

Sample ID: **1407119-058AMSD** SampType: **MSD** TestCode: **8082LL_S** Units: **µg/Kg-dry** Prep Date: **7/23/2014** RunNo: **16126**
Client ID: **ZZZZZZ** Batch ID: **7851** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/26/2014** SeqNo: **211585**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	397	0.386	77.30	0	513	56.6	123	183.0	73.7	20	SRMI

Sample ID: **1248 CCV** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **16126**
Client ID: **CCV** Batch ID: **7851** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/25/2014** SeqNo: **211587**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	66.7	0.333	66.67	0	100	85	115				

Sample ID: **1248 CCV** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **16126**
Client ID: **CCV** Batch ID: **7851** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/26/2014** SeqNo: **211727**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	66.7	0.333	66.67	0	100	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8151_S**

Sample ID: **MB-7830** SampType: **MBLK** TestCode: **8151_S** Units: **µg/Kg** Prep Date: **7/18/2014** RunNo: **16088**
Client ID: **PBS** Batch ID: **7830** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/23/2014** SeqNo: **210979**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	ND	6.67									
2,4,5-TP (Silvex)	ND	6.67									
2,4-D	ND	6.67									
2,4-DB	ND	6.67									
4-Nitrophenol	ND	6.67									
Dicamba	ND	6.67									
Dichlorprop	ND	6.67									
Dinoseb	ND	6.67									
MCPA	ND	667									
MCPP	ND	667									
Pentachlorophenol	ND	6.67									
Surr: 2,4-DCAA	4210		6665		63.2	34.3	141				

Sample ID: **LCS-7830** SampType: **LCS** TestCode: **8151_S** Units: **µg/Kg** Prep Date: **7/18/2014** RunNo: **16088**
Client ID: **LCSS** Batch ID: **7830** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/23/2014** SeqNo: **210980**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	32.9	6.67	66.65	0	49.4	46.8	115				
2,4,5-TP (Silvex)	39.1	6.67	66.65	0	58.6	38.7	137				
2,4-D	43.6	6.67	66.65	0	65.4	34.2	123				
Dichlorprop	57.5	6.67	66.65	0	86.2	56.8	140				
Pentachlorophenol	32.1	6.67	66.65	0	48.2	26.5	117				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8151_S**

Sample ID: **HERB CCV 5/0.5** SampType: **CCV** TestCode: **8151_S** Units: **µg/Kg** Prep Date: RunNo: **16088**
Client ID: **CCV** Batch ID: **7830** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/23/2014** SeqNo: **210999**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	60.5	6.67	66.65	0	90.8	85	115				
2,4,5-TP (Silvex)	62.7	6.67	66.65	0	94.0	85	115				
2,4-D	74.6	6.67	66.65	0	112	85	115				
2,4-DB	61.7	6.67	66.65	0	92.6	85	115				
4-Nitrophenol	75.2	6.67	66.65	0	113	85	115				
Dicamba	63.2	6.67	66.65	0	94.8	85	115				
Dichlorprop	57.5	6.67	66.65	0	86.2	85	115				
Dinoseb	62.4	6.67	66.65	0	93.6	85	115				
MCPA	7050	666	6665	0	106	85	115				
MCPP	7160	666	6665	0	108	85	115				
Pentachlorophenol	60.3	6.67	66.65	0	90.4	85	115				

Sample ID: **1407110-018AMS** SampType: **MS** TestCode: **8151_S** Units: **µg/Kg-dry** Prep Date: **7/18/2014** RunNo: **16088**
Client ID: **TP06-S-0.5** Batch ID: **7830** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/23/2014** SeqNo: **211000**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	157	7.59	75.87	0	207	20	124				SMI
2,4,5-TP (Silvex)	151	7.59	75.87	0	199	16.4	131				SMI
2,4-D	47.2	7.59	75.87	0	62.2	20	123				
Dichlorprop	52.2	7.59	75.87	0	68.8	8.98	120				
Pentachlorophenol	53.7	7.59	75.87	14.42	51.8	18.4	137				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8151_S**

Sample ID: **1407110-018AMSD** SampType: **MSD** TestCode: **8151_S** Units: **µg/Kg-dry** Prep Date: **7/18/2014** RunNo: **16088**
Client ID: **TP06-S-0.5** Batch ID: **7830** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/23/2014** SeqNo: **211001**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	180	7.59	75.87	0	237	20	124	157.2	13.2	20	SMI
2,4,5-TP (Silvex)	228	7.59	75.87	0	300	16.4	131	150.7	40.7	20	SRMI
2,4-D	43.7	7.59	75.87	0	57.6	20	123	47.20	7.68	20	
Dichlorprop	48.1	7.59	75.87	0	63.4	8.98	120	52.21	8.17	20	
Pentachlorophenol	49.0	7.59	75.87	14.42	45.6	18.4	137	53.73	9.16	20	

Sample ID: **HERB CCV 5/0.5** SampType: **CCV** TestCode: **8151_S** Units: **µg/Kg** Prep Date: RunNo: **16088**
Client ID: **CCV** Batch ID: **7830** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/23/2014** SeqNo: **211002**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	59.3	6.67	66.65	0	89.0	85	115				
2,4,5-TP (Silvex)	59.9	6.67	66.65	0	89.8	85	115				
2,4-D	68.1	6.67	66.65	0	102	85	115				
2,4-DB	61.9	6.67	66.65	0	92.8	85	115				
4-Nitrophenol	75.7	6.67	66.65	0	114	85	115				
Dicamba	59.6	6.67	66.65	0	89.4	85	115				
Dichlorprop	58.4	6.67	66.65	0	87.6	85	115				
Dinoseb	61.7	6.67	66.65	0	92.6	85	115				
MCPA	6670	666	6665	0	100	85	115				
MCPP	7360	666	6665	0	110	85	115				
Pentachlorophenol	58.7	6.67	66.65	0	88.0	85	115				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8151_S**

Sample ID: **HERB CCV 5/0.5** SampType: **CCV** TestCode: **8151_S** Units: **µg/Kg** Prep Date: RunNo: **16088**
Client ID: **CCV** Batch ID: **7830** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/24/2014** SeqNo: **211003**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	62.0	6.67	66.65	0	93.0	85	115				
2,4,5-TP (Silvex)	66.1	6.67	66.65	0	99.2	85	115				
2,4-D	74.8	6.67	66.65	0	112	85	115				
2,4-DB	63.2	6.67	66.65	0	94.8	85	115				
4-Nitrophenol	75.2	6.67	66.65	0	113	85	115				
Dicamba	67.0	6.67	66.65	0	101	85	115				
Dichlorprop	60.8	6.67	66.65	0	91.2	85	115				
Dinoseb	65.5	6.67	66.65	0	98.2	85	115				
MCPA	7450	666	6665	0	112	85	115				
MCPP	7560	666	6665	0	113	85	115				
Pentachlorophenol	63.5	6.67	66.65	0	95.2	85	115				

Sample ID: **HERB CCV 5/0.5** SampType: **CCV** TestCode: **8151_S** Units: **µg/Kg** Prep Date: RunNo: **16088**
Client ID: **CCV** Batch ID: **7830** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/24/2014** SeqNo: **211006**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	59.3	6.67	66.65	0	89.0	85	115				
2,4,5-TP (Silvex)	60.7	6.67	66.65	0	91.0	85	115				
2,4-D	68.1	6.67	66.65	0	102	85	115				
2,4-DB	63.5	6.67	66.65	0	95.2	85	115				
4-Nitrophenol	71.7	6.67	66.65	0	108	85	115				
Dicamba	60.8	6.67	66.65	0	91.2	85	115				
Dichlorprop	60.8	6.67	66.65	0	91.2	85	115				
Dinoseb	56.9	6.67	66.65	0	85.4	85	115				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **8151_S**

Sample ID: **HERB CCV 5/0.5** SampType: **CCV** TestCode: **8151_S** Units: **µg/Kg** Prep Date: RunNo: **16088**

Client ID: **CCV** Batch ID: **7830** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/24/2014** SeqNo: **211006**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MCPA	6830	666	6665	0	103	85	115				
MCPP	7030	666	6665	0	105	85	115				
Pentachlorophenol	58.4	6.67	66.65	0	87.6	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **HG_CTS**

Sample ID: **MB-7826**	SampType: **MBLK**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date: **7/17/2014**	RunNo: **16042**
Client ID: **PBS**	Batch ID: **7826**	TestNo: **SW 7471B**	**SW 7471B**	Analysis Date: **7/18/2014**	SeqNo: **210342**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0167									

Sample ID: **LCS-7826**	SampType: **LCS**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date: **7/17/2014**	RunNo: **16042**
Client ID: **LCSS**	Batch ID: **7826**	TestNo: **SW 7471B**	**SW 7471B**	Analysis Date: **7/18/2014**	SeqNo: **210343**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.373	0.0167	0.4000	0	93.3	80	120				

Sample ID: **1407083-001BDUP**	SampType: **DUP**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date: **7/17/2014**	RunNo: **16042**
Client ID: **ZZZZZZ**	Batch ID: **7826**	TestNo: **SW 7471B**	**SW 7471B**	Analysis Date: **7/18/2014**	SeqNo: **210345**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0144						0	0	20	

Sample ID: **1407083-001BMS**	SampType: **MS**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date: **7/17/2014**	RunNo: **16042**
Client ID: **ZZZZZZ**	Batch ID: **7826**	TestNo: **SW 7471B**	**SW 7471B**	Analysis Date: **7/18/2014**	SeqNo: **210346**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.298	0.0158	0.3774	0.004071	77.8	75	125				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **HG_CTS**

Sample ID: **1407083-001BMSD**	SampType: **MSD**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date: **7/17/2014**	RunNo: **16042**
Client ID: **ZZZZZZ**	Batch ID: **7826**	TestNo: **SW 7471B**	**SW 7471B**	Analysis Date: **7/18/2014**	SeqNo: **210347**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.262	0.0146	0.3509	0.004071	73.4	75	125	0.2976	12.9	20	S

Sample ID: **CCV**	SampType: **CCV**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date:	RunNo: **16042**
Client ID: **CCV**	Batch ID: **7826**	TestNo: **SW 7471B**	**SW 7471B**	Analysis Date: **7/18/2014**	SeqNo: **210375**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.374	0.0167	0.4000	0	93.6	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **NWTPHDX_S**

Sample ID: **CCV**	SampType: **CCV**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date:	RunNo: **16057**
Client ID: **CCV**	Batch ID: **7819**	TestNo: **NWTPH-Dx**	**SW3545A**	Analysis Date: **7/18/2014**	SeqNo: **210502**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1170	15.0	1332	0	88.2	85	115				
Lube Oil	704	50.0	666.0	0	106	85	115				

Sample ID: **MB-7819**	SampType: **MBLK**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date: **7/17/2014**	RunNo: **16057**
Client ID: **PBS**	Batch ID: **7819**	TestNo: **NWTPH-Dx**	**SW3545A**	Analysis Date: **7/18/2014**	SeqNo: **210503**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	22.3		33.33		67.0	50	150				

Sample ID: **LCS-7819**	SampType: **LCS**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date: **7/17/2014**	RunNo: **16057**
Client ID: **LCSS**	Batch ID: **7819**	TestNo: **NWTPH-Dx**	**SW3545A**	Analysis Date: **7/18/2014**	SeqNo: **210504**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	128	15.0	166.7	0	76.6	76.3	125				
Lube Oil	121	50.0	166.7	0	72.4	69.9	127				

Sample ID: **CCV**	SampType: **CCV**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date:	RunNo: **16057**
Client ID: **CCV**	Batch ID: **7819**	TestNo: **NWTPH-Dx**	**SW3545A**	Analysis Date: **7/18/2014**	SeqNo: **210516**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **NWTPHDX_S**

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **16057**
Client ID: **CCV** Batch ID: **7819** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/18/2014** SeqNo: **210516**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1000	15.0	999.0	0	100	85	115				
Lube Oil	531	50.0	499.5	0	106	85	115				

Sample ID: **CCB** SampType: **CCB** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **16057**
Client ID: **CCB** Batch ID: **7819** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/18/2014** SeqNo: **210517**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	24.8		33.30		74.5	50	150				

Sample ID: **1407119-040ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: RunNo: **16057**
Client ID: **ZZZZZZ** Batch ID: **7819** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/18/2014** SeqNo: **210522**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	17.4						62.36	200	20	RF
Lube Oil	100	58.1						215.4	72.9	20	R,A2

Sample ID: **1407110-026ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **7/17/2014** RunNo: **16057**
Client ID: **TP08-S-0.5** Batch ID: **7819** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/19/2014** SeqNo: **210528**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

11-Aug-14

Specialty Analytical

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **NWTPHDX_S**

Sample ID: **1407110-026ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **7/17/2014** RunNo: **16057**

Client ID: **TP08-S-0.5** Batch ID: **7819** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/19/2014** SeqNo: **210528**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	42.1	17.1						52.34	21.6	20	RF,A1
Lube Oil	323	57.0						404.7	22.6	20	RA2

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **16057**

Client ID: **CCV** Batch ID: **7819** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/19/2014** SeqNo: **210530**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1050	15.0	999.0	0	105	85	115				
Lube Oil	569	50.0	499.5	0	114	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID: **CCV-7842**	SampType: **CCV**	TestCode: **OPEST_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16086**
Client ID: **CCV**	Batch ID: **7842**	TestNo: **SW8270D**	**SW 3545A**	Analysis Date: **7/23/2014**	SeqNo: **210928**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	361	20.0	333.4	0	108	80	120				
Bolstar	327	20.0	333.4	0	98.2	80	120				
Chloropyrifos	324	20.0	333.4	0	97.2	80	120				
Coumaphos	321	20.0	333.4	0	96.4	80	120				
DEF	359	20.0	333.4	0	108	80	120				
Demeton-S	295	20.0	333.4	0	88.4	80	120				
Diazinon	328	20.0	333.4	0	98.4	80	120				
Dichlorovos	319	20.0	333.4	0	95.8	80	120				
Dimethoate	315	20.0	333.4	0	94.6	80	120				
Disulfoton	305	20.0	333.4	0	91.4	80	120				
EPN	322	20.0	333.4	0	96.6	80	120				
Ethion	325	20.0	333.4	0	97.6	80	120				
Ethoprop	304	20.0	333.4	0	91.2	80	120				
Fensulfothion	334	20.0	333.4	0	100	80	120				
Fenthion	320	20.0	333.4	0	96.0	80	120				
Malathion	326	20.0	333.4	0	97.8	80	120				
Methyl parathion	305	20.0	333.4	0	91.6	80	120				
Mevinphos	315	20.0	333.4	0	94.4	80	120				
Naled	337	20.0	333.4	0	101	80	120				
Parathion	312	20.0	333.4	0	93.6	80	120				
Phorate	322	20.0	333.4	0	96.6	80	120				
Ronnel	319	20.0	333.4	0	95.6	80	120				
Stirofos	315	20.0	333.4	0	94.6	80	120				
Sulfotepp	303	20.0	333.4	0	90.8	80	120				
Tokuthion	329	20.0	333.4	0	98.8	80	120				
Trichloronate	321	20.0	333.4	0	96.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID: **CCV-7842**	SampType: **CCV**	TestCode: **OPEST_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16086**
Client ID: **CCV**	Batch ID: **7842**	TestNo: **SW8270D**	**SW 3545A**	Analysis Date: **7/23/2014**	SeqNo: **210928**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **LCS-7842**	SampType: **LCS**	TestCode: **OPEST_S**	Units: **µg/Kg**	Prep Date: **7/21/2014**	RunNo: **16086**
Client ID: **LCSS**	Batch ID: **7842**	TestNo: **SW8270D**	**SW 3545A**	Analysis Date: **7/23/2014**	SeqNo: **210929**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	37.3	10.0	66.67	0	56.0	37	150				
Chloropyrifos	44.0	10.0	66.67	0	66.0	48	150				
DEF	45.3	10.0	66.67	0	68.0	42	150				
Dimethoate	15.3	10.0	66.67	0	23.0	22	150				
Disulfoton	22.7	10.0	66.67	0	34.0	33	150				
Fensulfothion	48.0	10.0	66.67	0	72.0	65	150				
Malathion	35.3	10.0	66.67	0	53.0	50	150				
Methyl parathion	34.0	10.0	66.67	0	51.0	50	150				
Parathion	35.3	10.0	66.67	0	53.0	50	150				
Phorate	34.7	10.0	66.67	0	52.0	43	150				

Sample ID: **MB-7842**	SampType: **MBLK**	TestCode: **OPEST_S**	Units: **µg/Kg**	Prep Date: **7/21/2014**	RunNo: **16086**
Client ID: **PBS**	Batch ID: **7842**	TestNo: **SW8270D**	**SW 3545A**	Analysis Date: **7/23/2014**	SeqNo: **210930**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	ND	250									
Bolstar	ND	20.0									
Chloropyrifos	ND	20.0									

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID: **MB-7842**	SampType: **MBLK**	TestCode: **OPEST_S**	Units: **µg/Kg**	Prep Date: **7/21/2014**	RunNo: **16086**
Client ID: **PBS**	Batch ID: **7842**	TestNo: **SW8270D**	**SW 3545A**	Analysis Date: **7/23/2014**	SeqNo: **210930**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Coumaphos	ND	100									
DEF	ND	20.0									
Demeton-S	ND	50.0									
Diazinon	ND	50.0									
Dichlorovos	ND	20.0									
Dimethoate	ND	50.0									
Disulfoton	ND	20.0									
EPN	ND	20.0									
Ethion	ND	20.0									
Ethoprop	ND	20.0									
Fensulfothion	ND	100									
Fenthion	ND	20.0									
Malathion	ND	20.0									
Methyl parathion	ND	100									
Mevinphos	ND	100									
Naled	ND	250									
Parathion	ND	50.0									
Phorate	ND	20.0									
Ronnel	ND	20.0									
Stirofos	ND	20.0									
Sulfotepp	ND	20.0									
Tokuthion	ND	20.0									
Trichloronate	ND	20.0									
Surr: Tributylphosphate (Surr.)	34.0		66.67		51.0	50	150				
Surr: Triphenylphosphate (Surr.)	46.7		66.67		70.0	50	150				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID: **1407110-029AMS** SampType: **MS** TestCode: **OPEST_S** Units: **µg/Kg-dry** Prep Date: **7/21/2014** RunNo: **16086**
Client ID: **TP09-S-0.5** Batch ID: **7842** TestNo: **SW8270D** **SW 3545A** Analysis Date: **7/23/2014** SeqNo: **210943**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	98.2	25.8	86.10	0	114	37	150				
Chloropyrifos	62.9	25.8	86.10	0	73.0	48	150				
DEF	50.8	25.8	86.10	0	59.0	42	150				
Dimethoate	42.2	25.8	86.10	0	49.0	22	150				
Disulfoton	47.4	25.8	86.10	0	55.0	33	150				
Fensulfothion	113	25.8	86.10	0	131	55	150				
Malathion	46.5	25.8	86.10	7.749	45.0	50	150				
Methyl parathion	43.0	25.8	86.10	0	50.0	50	150				
Parathion	48.2	25.8	86.10	0	56.0	50	150				
Phorate	50.8	25.8	86.10	0	59.0	43	150				

Sample ID: **1407110-029AMSD** SampType: **MSD** TestCode: **OPEST_S** Units: **µg/Kg-dry** Prep Date: **7/21/2014** RunNo: **16086**
Client ID: **TP09-S-0.5** Batch ID: **7842** TestNo: **SW8270D** **SW 3545A** Analysis Date: **7/23/2014** SeqNo: **210944**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	92.1	25.8	86.10	0	107	37	150	98.15	6.33	20	
Chloropyrifos	62.9	25.8	86.10	0	73.0	48	150	62.85	0	20	
DEF	71.5	25.8	86.10	0	83.0	42	150	50.80	33.8	20	R
Dimethoate	36.2	25.8	86.10	0	42.0	22	150	42.19	15.4	20	
Disulfoton	47.4	25.8	86.10	0	55.0	33	150	47.35	0	20	
Fensulfothion	101	25.8	86.10	0	117	55	150	112.8	11.3	20	
Malathion	49.1	25.8	86.10	7.749	48.0	50	150	46.49	5.41	20	S
Methyl parathion	47.4	25.8	86.10	0	55.0	50	150	43.05	9.52	20	
Parathion	45.6	25.8	86.10	0	53.0	50	150	48.22	5.50	20	

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID: **1407110-029AMSD** SampType: **MSD** TestCode: **OPEST_S** Units: **µg/Kg-dry** Prep Date: **7/21/2014** RunNo: **16086**
Client ID: **TP09-S-0.5** Batch ID: **7842** TestNo: **SW8270D** **SW 3545A** Analysis Date: **7/23/2014** SeqNo: **210944**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phorate	49.1	25.8	86.10	0	57.0	43	150	50.80	3.45	20	

Sample ID: **CCV-7842** SampType: **CCV** TestCode: **OPEST_S** Units: **µg/Kg** Prep Date: RunNo: **16086**
Client ID: **CCV** Batch ID: **7842** TestNo: **SW8270D** **SW 3545A** Analysis Date: **7/24/2014** SeqNo: **211054**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	390	250	333.4	0	117	80	120				
Bolstar	319	20.0	333.4	0	95.6	80	120				
Chloropyrifos	285	20.0	333.4	0	85.4	80	120				
Coumaphos	339	100	333.4	0	102	80	120				
DEF	299	20.0	333.4	0	89.8	80	120				
Demeton-S	375	50.0	333.4	0	113	80	120				
Diazinon	277	50.0	333.4	0	83.2	80	120				
Dichlorovos	337	20.0	333.4	0	101	80	120				
Dimethoate	353	50.0	333.4	0	106	80	120				
Disulfoton	337	20.0	333.4	0	101	80	120				
EPN	347	20.0	333.4	0	104	80	120				
Ethion	319	20.0	333.4	0	95.6	80	120				
Ethoprop	299	20.0	333.4	0	89.6	80	120				
Fensulfothion	397	100	333.4	0	119	80	120				
Fenthion	289	20.0	333.4	0	86.6	80	120				
Malathion	311	20.0	333.4	0	93.4	80	120				
Methyl parathion	314	100	333.4	0	94.2	80	120				
Mevinphos	355	100	333.4	0	106	80	120				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID: **CCV-7842** SampType: **CCV** TestCode: **OPEST_S** Units: **µg/Kg** Prep Date: RunNo: **16086**
Client ID: **CCV** Batch ID: **7842** TestNo: **SW8270D** **SW 3545A** Analysis Date: **7/24/2014** SeqNo: **211054**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naled	399	250	333.4	0	120	80	120				
Parathion	308	50.0	333.4	0	92.4	80	120				
Phorate	286	20.0	333.4	0	85.8	80	120				
Ronnel	287	20.0	333.4	0	86.0	80	120				
Stirofos	330	20.0	333.4	0	99.0	80	120				
Sulfotepp	301	20.0	333.4	0	90.2	80	120				
Tokuthion	309	20.0	333.4	0	92.8	80	120				
Trichloronate	283	20.0	333.4	0	85.0	80	120				

Sample ID: **CCB-7842** SampType: **CCB** TestCode: **OPEST_S** Units: **µg/Kg** Prep Date: RunNo: **16086**
Client ID: **CCB** Batch ID: **7842** TestNo: **SW8270D** **SW 3545A** Analysis Date: **7/24/2014** SeqNo: **211055**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	ND	250									
Bolstar	ND	20.0									
Chloropyrifos	ND	20.0									
Coumaphos	ND	100									
DEF	ND	20.0									
Demeton-S	ND	50.0									
Diazinon	ND	50.0									
Dichlorovos	ND	20.0									
Dimethoate	ND	50.0									
Disulfoton	ND	20.0									
EPN	ND	20.0									

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407110**

Specialty Analytical

11-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID: **CCB-7842**	SampType: **CCB**	TestCode: **OPEST_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16086**
Client ID: **CCB**	Batch ID: **7842**	TestNo: **SW8270D**	**SW 3545A**	Analysis Date: **7/24/2014**	SeqNo: **211055**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethion	ND	20.0									
Ethoprop	ND	20.0									
Fensulfothion	ND	100									
Fenthion	ND	20.0									
Malathion	ND	20.0									
Methyl parathion	ND	100									
Mevinphos	ND	100									
Naled	ND	250									
Parathion	ND	50.0									
Phorate	ND	20.0									
Ronnel	ND	20.0									
Stirofos	ND	20.0									
Sulfotepp	ND	20.0									
Tokuthion	ND	20.0									
Trichloronate	ND	20.0									
Surr: Tributylphosphate (Surr.)	36.0		66.67		54.0	50	150				
Surr: Triphenylphosphate (Surr.)	42.7		66.67		64.0	50	150				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

KEY TO FLAGS

Rev. May 12, 2010

A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards

A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.

A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.

A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.

A4 The product appears to be aged or degraded diesel.

B The blank exhibited a positive result great than the reporting limit for this compound.

CN See Case Narrative.

D Result is based from a dilution.

E Result exceeds the calibration range for this compound. The result should be considered as estimate.

F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.

G Result may be biased high due to biogenic interferences. Clean up is recommended.

H Sample was analyzed outside recommended holding time.

HT At clients request, samples was analyzed outside of recommended holding time.

J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.

K Diesel result is biased high due to amount of Oil contained in the sample.

L Diesel result is biased high due to amount of Gasoline contained in the sample.

M Oil result is biased high due to amount of Diesel contained in the sample.

MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.

MI Result is outside control limits due to matrix interference.

MSA Value determined by Method of Standard Addition.

O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.

Q Detection levels elevated due to sample matrix.

R RPD control limits were exceeded.

RF Duplicate failed due to result being at or near the method-reporting limit.

RP Matrix spike values exceed established QC limits; post digestion spike is in control.

S Recovery is outside control limits.

SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.

* The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: Seth Otto
Company: MFA
Address: 400 E Mill Plain Suite 400
Vancouver WA
Phone: 360-694-2691 Fax:
Project No. 9059.07.04 Project Name: Fleischer
Project Site Location OR ___ WA X Other ___
Invoice To: MFA P.O. No.

Collected By:
Signature: Emily N. Hess
Printed: Emily N Hess
Signature: Courtney Savoie
Printed: Courtney Savoie

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. 1407110
Shipped Via: Specialty
Air Bill No.
Temperature On Receipt 4 °C
Specialty Analytical Containers? (Y) N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses										Comments	Lab I.D.
07/15/14	8:32	TP01-S-0.5	S	3												
	837	TP01-S-4.0														
	842	TP01-S-8.5														
	915	TP02-S-0.5														
	920	TP02-S-2.0														
	930	TP02-S-7.0														
	951	TP03-S-0.5														
	956	TP03-S-4.0														
	1013	TP03-S-8.0														
	1040	TP04-S-0.25														
	1041	TP04-S-1.0														
	1050	TP04-S-5.5														

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
Company: MFA	7/15	1815	Company:	Company:	7/16/14	1315

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By:	Date	Time
Cindy Hollyard	7/16/14	1315

Copies: White-Original Yellow-Project File Pink-Customer Copy

CHAIN OF CUSTODY RECORD

— Same —

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: Seth Otto
Company: MFA
Address: 400 E. Mill Plain Suite 400
Vancouver WA
Phone: _____ Fax: _____
Project No. _____ Project Name _____
Project Site Location OR _____ WA _____ Other _____
Invoice To _____ P.O. No. _____

Collected By:
Signature: Emily N. Hess
Printed: Emily N. Hess
Signature: Courtney Savoie
Printed: Courtney Savoie

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____
Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. 1407110
Shipped Via: Specialty
Air Bill No. _____
Temperature On Receipt 4 °C
Specialty Analytical Containers? (Y) / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses									Comments	Lab I.D.
071514	1100	TP04-S-7.0	S	3											
	1125	TP05-S-0.5													
	1128	TP05-S-1.5													
	1133	TP05-S-4.5													
	1140	TP05-S-8.0													
	1157	TP06-S-0.5													
	1159	TP06-S-2.0													
	1206	TP06-S-4.5													
	1219	TP06-S-7.5													
	1311	TP07-S-0.25													
	1312	TP07-S-1.0													
	1326	TP07-S-5.0													

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
Company: MFA	7/15	1815	Company:	Company:	7/16/14	1315

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Received For Lab By:	Date	Time
Cindy Hellyard	7/16/14	13:15

Copies: White-Original Yellow-Project File Pink-Customer Copy

CHAIN OF CUSTODY RECORD

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager — Same —
Company
Address
Phone Fax
Project No. Project Name
Project Site Location OR WA Other
Invoice To P.O. No.

Collected By:
Signature Emily N. Hess
Printed EMILY N. HESS
Signature Courtney Savore
Printed Courtney Savore

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. A07110
Shipped Via Specialty
Air Bill No.
Temperature On Receipt 4 °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses										Comments	Lab I.D.
07/15/14	1331	TP07-S-7.5	S	3												
	1353	TP08-S-0.5														
	1401	TP08-S-4.5														
	1410	TP08-S-7.5														
	1429	TP09-S-0.5														
	1433	TP09-S-4.5														
	1438	TP09-S-7.5														
	1500	TP10-S-0.5														
	1502	TP10-S-1.5														
	1519	TP10-S-4.5														
	1525	TP10-S-7.0														
	1500	TP-S-0.5 DUP														

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
Company: MFA	7/15	1815	Company:	Company:	7/16/14	1315

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Received For Lab By:	Date	Time
Cindy Hillyard	7/16/14	1315

Copies: White-Original Yellow-Project File Pink-Customer Copy

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Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: -Same-
Company:
Address:
Phone: Fax:
Project No.: Project Name:
Project Site Location OR: WA: Other:
Invoice To: P.O. No.:

Collected By:
Signature: Emily N. Hess
Printed: Emily N. Hess
Signature: Courtney Savoie
Printed: Courtney Savoie

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. 1407110
Shipped Via: Specialty
Air Bill No.:
Temperature On Receipt: 4 °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses	Comments	Lab I.D.
07/15/14	15:41	TP11-S-0.5	S	3			
	15:50	TP11-S-4.5		3			
	15:57	TP11-S-~~7~~ ENN 7.0		3			
	16:18	TP12-S-0.5		3			
	16:25	TP12-S-4.0		3			
	16:30	TP12-S-7.5		3			

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
Company: MFA	7/15	1875	Company:	Company:	7/16/14	1315

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Samples held beyond 60 days subject to storage fee(s)

Received For Lab By:	Date	Time
Cindy Hillyard	7/16/14	1315

Copies: White-Original Yellow-Project File Pink-Customer Copy

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Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
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Contact Person/Project Manager: Seth Otto
Company: MFA
Address: 400 E Mill Plain Suite 400
Vancouver WA
Phone: 360-694-2691 Fax:
Project No. 9059.07.04 Project Name: Fleischer
Project Site Location OR ____ WA X Other ____
Invoice To: MFA P.O. No. ____

Collected By:
Signature: Emily N. Hess
Printed: Emily Hess
Signature: Courtney Savoie
Printed: Courtney Savoie

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush ____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. ____
Shipped Via ____
Air Bill No. ____
Temperature On Receipt ____ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	PCBs EPA 8082	NWTPH-Dx Ext.	As, Cr, Cu, Pb, Ni, Zn	Hg EPA 7471	Herbicides EPA 8151	Org. Cl. Pest. 8081B	Org. P. Pest. 8270D				Comments	Lab I.D.
07/15/14	8:32	TP01-S-0.5	S	3	X				X	X	X					1
	837	TP01-S-4.0														2
	842	TP01-S-8.5														3
	915	TP02-S-0.5			X	X	X	X	X	X	X					4
	920	TP02-S-2.0			⊗											5
	930	TP02-S-7.0														6
	951	TP03-S-0.5			X	X	X	X	X	X	X					7
	956	TP03-S-4.0														8
	1013	TP03-S-8.0														9
	1040	TP04-S-0.25			X	X	X	X								10
	1041	TP04-S-1.0			⊗				X	X	X					11
	1050	TP04-S-5.5														12

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
Company:			Company:	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By:	Date	Time

Copies: White-Original Yellow-Project File Pink-Customer Copy

CHAIN OF CUSTODY RECORD

— Same —

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: Seth Otto
Company: MFA
Address: 400 E. Mill Plain Suite 400
Vancouver WA
Phone: _____ Fax: _____
Project No. _____ Project Name _____
Project Site Location OR _____ WA _____ Other _____
Invoice To _____ P.O. No. _____

Collected By:
Signature: Emily N. Hess
Printed: Emily N. Hess
Signature: Courtney Savoie
Printed: Courtney Savoie

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. _____
Shipped Via _____
Air Bill No. _____
Temperature On Receipt _____ °C
Specially Analytical Containers? Y / N
Specially Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	PCBs EPA 8082	NW TPH-Dx Ext.	As, Cr, Cu, Pb, Ni, Zn	Hg EPA 7471	Herbicides EPA 8151	Org. Cl. Pest. 8081B	Org. P. Pest. 8270D				Comments	Lab I.D.
071514	1100	TP04-S-7.0	S	3												13
	1125	TP05-S-0.5			X				X	X	X					14
	1128	TP05-S-1.5			X											15
	1133	TP05-S-4.5														16
	1140	TP05-S-8.0														17
	1157	TP06-S-0.5			X	X	X	X	X	X	X					18
	1159	TP06-S-2.0			X											19
	1206	TP06-S-4.5														20
	1219	TP06-S-7.5														21
	1311	TP07-S-0.25			X	X	X	X								22
	1312	TP07-S-1.0			X				X	X	X					23
	1326	TP07-S-5.0														24

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
Company:			Company:	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

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Address
Phone Fax
Project No. Project Name
Project Site Location OR WA Other
Invoice To P.O. No.

Collected By:
Signature Emily N. Hess
Printed Emily N. Hess
Signature Courtney Savoie
Printed Courtney Savoie

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____
Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No.
Shipped Via
Air Bill No.
Temperature On Receipt ____ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	PCBs EPA 8082	MWTPH-Dx Ext.	As, Cr, Cu, Pb, Ni, Zn	Hg EPA 7471	Herbicides EPA 8151	Org. Cl. Pest. 8081B	Org. P. Pest. 8270D				Comments	Lab I.D.
07/15/14	1331	TP07-S-7.5	S	3												25
	1353	TP08-S-0.5			X	X	X	X	X	X	X					26
	1401	TP08-S-4.5														27
	1410	TP08-S-7.5														28
	1429	TP09-S-0.5			X				X	X	X					29
	1433	TP09-S-4.5			X											30
	1438	TP09-S-7.5														31
	1500	TP10-S-0.5			X	X	X	X								32
	1502	TP10-S-1.5			X				X	X	X					33
	1519	TP10-S-4.5														34
	1525	TP10-S-7.0														35
	1500	TP-S-0.5 DUP			X	X	X	X								36

no analysis

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
Company:			Company:	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Date Time

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CHAIN OF CUSTODY RECORD

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11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: -Same-
Company:
Address:
Phone: Fax:
Project No.: Project Name:
Project Site Location OR: WA: Other:
Invoice To: P.O. No.:

Collected By:
Signature: Emily N. Hess
Printed: Emily N. Hess
Signature: Courtney Savoie
Printed: Courtney Savoie

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No.:
Shipped Via:
Air Bill No.:
Temperature On Receipt ____ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	PCBs EPA 8082	NWTPH-Dx Ext.	As, Cr, Cu, Pb, Ni, Zn	Hg EPA 7471	Herbicides EPA 8151	Org. Cl. Pest. 8081B	Org. P. Pest. 8270D				Comments	Lab I.D.
07/15/14	15:41	TP11-S-0.5	S	3	X				X	X	X					37
	15:50	TP11-S-4.5		3	X											38
	15:57	TP11-S-7.0		3												39
	16:18	TP12-S-0.5		3	X	X	X	X	X	X	X					40
	16:25	TP12-S-4.0		3												41
	16:30	TP12-S-7.5		3												42

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
Company:			Company:	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Date Time

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Specialty Analytical

11711 SE Capps Road, Ste B
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

August 28, 2014

Seth Otto
Maul Foster & Alongi
400 E. Mill Plain Blvd.
Suite 400
Vancouver, WA 98660

TEL: (360) 694-2691
FAX (360) 906-1958

RE: Fleischer / 9059.07.04

Dear Seth Otto: Order No.: 1407119

Specialty Analytical received 58 sample(s) on 7/17/2014 for the analyses presented in the following report.

REVISED REPORT: Please see case narrative for information on revision.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Marty French
Lab Director

Case Narrative

WO#: **1407119**

Date: **8/28/2014**

Specialty Analytical

CLIENT: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

Report Revision 1

At that client request Specialty Analytical samples 1407119-052 and 1407119-058 were reprepped and rerun for metals by EPA 6020 and PCB's by EPA 8082. The re-analyzed data is reported in this report. All other data remains unchanged.

Case Narrative

Due to the presence of multi-component PCB compounds causing co-elution and matrix interferences with the EPA 8081 Pesticide compounds, multiple sample clean-up steps were required to achieve the detection limits reported. Use of silica gel per EPA 3630C, and additional clean-up using CarboPrep SPE cartridges was performed. During the multiple clean-up and concentration steps, TCMX was recovered at levels below the laboratory control limits. LCS and other QC parameters, where not impacted by matrix interferences, show the clean-ups performed well, and should allow usable data.

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 7:07:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-001
Client Sample ID: TP13-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	300		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Bolstar	ND	24.0		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Chloropyrifos	ND	24.0		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Coumaphos	ND	120		µg/Kg-dry	1	7/23/2014 5:20:00 PM
DEF	ND	24.0		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Demeton-S	ND	59.9		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Diazinon	ND	59.9		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Dichlorovos	ND	24.0		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Dimethoate	ND	59.9		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Disulfoton	ND	24.0		µg/Kg-dry	1	7/23/2014 5:20:00 PM
EPN	ND	24.0		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Ethion	ND	24.0		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Ethoprop	ND	24.0		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Fensulfothion	ND	120		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Fenthion	ND	24.0		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Malathion	ND	24.0		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Methyl parathion	ND	120		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Mevinphos	ND	120		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Naled	ND	300		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Parathion	ND	59.9		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Phorate	ND	24.0		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Ronnel	ND	24.0		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Stirofos	ND	24.0		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Sulfotepp	ND	24.0		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Tokuthion	ND	24.0		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Trichloronate	ND	24.0		µg/Kg-dry	1	7/23/2014 5:20:00 PM
Surr: Tributylphosphate (Surr.)	90.0	50-150		%REC	1	7/23/2014 5:20:00 PM
Surr: Triphenylphosphate (Surr.)	56.0	50-150		%REC	1	7/23/2014 5:20:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
4,4´-DDE	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
4,4´-DDT	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
Aldrin	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
alpha-BHC	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
alpha-Chlordane	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
beta-BHC	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
Chlordane	ND	7.99		µg/Kg-dry	1	7/27/2014 7:12:00 PM
delta-BHC	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 7:07:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-001
Client Sample ID: TP13-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
Dieldrin	2.41	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
Endosulfan I	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
Endosulfan II	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
Endosulfan Sulfate	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
Endrin	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
Endrin aldehyde	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
Endrin ketone	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
gamma-BHC	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
gamma-Chlordane	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
Heptachlor	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
Heptachlor epoxide	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
Methoxychlor	ND	0.399		µg/Kg-dry	1	7/27/2014 7:12:00 PM
Toxaphene	ND	7.99		µg/Kg-dry	1	7/27/2014 7:12:00 PM
Surr: Decachlorobiphenyl	88.1	25.9-136		%REC	1	7/27/2014 7:12:00 PM
Surr: Tetrachloro-m-xylene	24.3	15-124		%REC	1	7/27/2014 7:12:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.399		µg/Kg-dry	1	7/25/2014 10:29:00 AM
Aroclor 1221	ND	0.399		µg/Kg-dry	1	7/25/2014 10:29:00 AM
Aroclor 1232	ND	0.399		µg/Kg-dry	1	7/25/2014 10:29:00 AM
Aroclor 1242	ND	0.399		µg/Kg-dry	1	7/25/2014 10:29:00 AM
Aroclor 1248	ND	0.399		µg/Kg-dry	1	7/25/2014 10:29:00 AM
Aroclor 1254	ND	0.399		µg/Kg-dry	1	7/25/2014 10:29:00 AM
Aroclor 1260	ND	0.399		µg/Kg-dry	1	7/25/2014 10:29:00 AM
Aroclor 1262	ND	0.399		µg/Kg-dry	1	7/25/2014 10:29:00 AM
Aroclor 1268	ND	0.399		µg/Kg-dry	1	7/25/2014 10:29:00 AM
Surr: Decachlorobiphenyl	57.7	56.5-130		%REC	1	7/25/2014 10:29:00 AM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	7.99		µg/Kg-dry	1	7/23/2014 7:14:00 PM
2,4,5-TP (Silvex)	ND	7.99		µg/Kg-dry	1	7/23/2014 7:14:00 PM
2,4-D	ND	7.99		µg/Kg-dry	1	7/23/2014 7:14:00 PM
2,4-DB	ND	7.99		µg/Kg-dry	1	7/23/2014 7:14:00 PM
4-Nitrophenol	ND	7.99		µg/Kg-dry	1	7/23/2014 7:14:00 PM
Dicamba	ND	7.99		µg/Kg-dry	1	7/23/2014 7:14:00 PM
Dichlorprop	ND	7.99		µg/Kg-dry	1	7/23/2014 7:14:00 PM
Dinoseb	ND	7.99		µg/Kg-dry	1	7/23/2014 7:14:00 PM
MCPA	ND	799		µg/Kg-dry	1	7/23/2014 7:14:00 PM
MCPP	ND	799		µg/Kg-dry	1	7/23/2014 7:14:00 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 7:07:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-001		
Client Sample ID:	TP13-S-0.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
Pentachlorophenol	ND	7.99		µg/Kg-dry	1	7/23/2014 7:14:00 PM
Surr: 2,4-DCAA	63.4	34.3-141		%REC	1	7/23/2014 7:14:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 7:15:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-002
Client Sample ID: TP13-S-1.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	25.8	19.0	A1	mg/Kg-dry	1	7/18/2014 3:09:28 PM
Lube Oil	91.7	63.2	A2	mg/Kg-dry	1	7/18/2014 3:09:28 PM
Surr: o-Terphenyl	93.7	50-150		%REC	1	7/18/2014 3:09:28 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	3950	973		µg/Kg-dry	10	7/24/2014 5:02:00 PM
Chromium	16000	973		µg/Kg-dry	10	7/24/2014 5:02:00 PM
Copper	41500	487		µg/Kg-dry	10	7/24/2014 5:02:00 PM
Lead	52500	243		µg/Kg-dry	10	7/24/2014 5:02:00 PM
Nickel	14600	487		µg/Kg-dry	10	7/24/2014 5:02:00 PM
Zinc	893000	195000		µg/Kg-dry	200	7/25/2014 2:43:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0899	0.0199		mg/Kg-dry	1	7/18/2014 11:16:04 AM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.421		µg/Kg-dry	1	7/25/2014 10:46:00 AM
Aroclor 1221	ND	0.421		µg/Kg-dry	1	7/25/2014 10:46:00 AM
Aroclor 1232	ND	0.421		µg/Kg-dry	1	7/25/2014 10:46:00 AM
Aroclor 1242	ND	0.421		µg/Kg-dry	1	7/25/2014 10:46:00 AM
Aroclor 1248	11200	42.1		µg/Kg-dry	100	7/26/2014 12:02:00 PM
Aroclor 1254	ND	0.421		µg/Kg-dry	1	7/25/2014 10:46:00 AM
Aroclor 1260	ND	0.421		µg/Kg-dry	1	7/25/2014 10:46:00 AM
Aroclor 1262	ND	0.421		µg/Kg-dry	1	7/25/2014 10:46:00 AM
Aroclor 1268	ND	0.421		µg/Kg-dry	1	7/25/2014 10:46:00 AM
Surr: Decachlorobiphenyl	933	56.5-130	SMI	%REC	1	7/25/2014 10:46:00 AM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 7:20:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-003
Client Sample ID: TP13-S-5.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.370		µg/Kg-dry	1	7/29/2014 2:54:00 PM
Aroclor 1221	ND	0.370		µg/Kg-dry	1	7/29/2014 2:54:00 PM
Aroclor 1232	ND	0.370		µg/Kg-dry	1	7/29/2014 2:54:00 PM
Aroclor 1242	ND	0.370		µg/Kg-dry	1	7/29/2014 2:54:00 PM
Aroclor 1248	124	0.370		µg/Kg-dry	1	7/29/2014 2:54:00 PM
Aroclor 1254	ND	0.370		µg/Kg-dry	1	7/29/2014 2:54:00 PM
Aroclor 1260	ND	0.370		µg/Kg-dry	1	7/29/2014 2:54:00 PM
Aroclor 1262	ND	0.370		µg/Kg-dry	1	7/29/2014 2:54:00 PM
Aroclor 1268	ND	0.370		µg/Kg-dry	1	7/29/2014 2:54:00 PM
Surr: Decachlorobiphenyl	72.6	56.5-130		%REC	1	7/29/2014 2:54:00 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 7:24:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-004		
Client Sample ID:	TP13-S-7.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 7:43:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-005
Client Sample ID: TP14-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	309		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Bolstar	ND	24.7		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Chloropyrifos	ND	24.7		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Coumaphos	ND	124		µg/Kg-dry	1	7/23/2014 5:45:00 PM
DEF	ND	24.7		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Demeton-S	ND	61.8		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Diazinon	ND	61.8		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Dichlorovos	ND	24.7		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Dimethoate	ND	61.8		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Disulfoton	ND	24.7		µg/Kg-dry	1	7/23/2014 5:45:00 PM
EPN	ND	24.7		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Ethion	ND	24.7		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Ethoprop	ND	24.7		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Fensulfothion	ND	124		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Fenthion	ND	24.7		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Malathion	ND	24.7		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Methyl parathion	ND	124		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Mevinphos	ND	124		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Naled	ND	309		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Parathion	ND	61.8		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Phorate	ND	24.7		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Ronnel	ND	24.7		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Stirofos	ND	24.7		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Sulfotepp	ND	24.7		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Tokuthion	ND	24.7		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Trichloronate	ND	24.7		µg/Kg-dry	1	7/23/2014 5:45:00 PM
Surr: Tributylphosphate (Surr.)	123	50-150		%REC	1	7/23/2014 5:45:00 PM
Surr: Triphenylphosphate (Surr.)	137	50-150		%REC	1	7/23/2014 5:45:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
4,4´-DDE	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
4,4´-DDT	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
Aldrin	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
alpha-BHC	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
alpha-Chlordane	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
beta-BHC	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
Chlordane	ND	8.24		µg/Kg-dry	1	7/27/2014 7:26:00 PM
delta-BHC	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 7:43:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-005
Client Sample ID: TP14-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
Dieldrin	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
Endosulfan I	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
Endosulfan II	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
Endosulfan Sulfate	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
Endrin	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
Endrin aldehyde	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
Endrin ketone	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
gamma-BHC	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
gamma-Chlordane	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
Heptachlor	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
Heptachlor epoxide	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
Methoxychlor	ND	0.412		µg/Kg-dry	1	7/27/2014 7:26:00 PM
Toxaphene	ND	8.24		µg/Kg-dry	1	7/27/2014 7:26:00 PM
Surr: Decachlorobiphenyl	118	25.9-136		%REC	1	7/27/2014 7:26:00 PM
Surr: Tetrachloro-m-xylene	12.0	15-124	S	%REC	1	7/27/2014 7:26:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.412		µg/Kg-dry	1	7/25/2014 11:03:00 AM
Aroclor 1221	ND	0.412		µg/Kg-dry	1	7/25/2014 11:03:00 AM
Aroclor 1232	ND	0.412		µg/Kg-dry	1	7/25/2014 11:03:00 AM
Aroclor 1242	ND	0.412		µg/Kg-dry	1	7/25/2014 11:03:00 AM
Aroclor 1248	13900	41.2		µg/Kg-dry	100	7/26/2014 12:19:00 PM
Aroclor 1254	ND	0.412		µg/Kg-dry	1	7/25/2014 11:03:00 AM
Aroclor 1260	ND	0.412		µg/Kg-dry	1	7/25/2014 11:03:00 AM
Aroclor 1262	ND	0.412		µg/Kg-dry	1	7/25/2014 11:03:00 AM
Aroclor 1268	ND	0.412		µg/Kg-dry	1	7/25/2014 11:03:00 AM
Surr: Decachlorobiphenyl	538	56.5-130	SMI	%REC	1	7/25/2014 11:03:00 AM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	8.24		µg/Kg-dry	1	7/23/2014 7:35:00 PM
2,4,5-TP (Silvex)	ND	8.24		µg/Kg-dry	1	7/23/2014 7:35:00 PM
2,4-D	ND	8.24		µg/Kg-dry	1	7/23/2014 7:35:00 PM
2,4-DB	ND	8.24		µg/Kg-dry	1	7/23/2014 7:35:00 PM
4-Nitrophenol	ND	8.24		µg/Kg-dry	1	7/23/2014 7:35:00 PM
Dicamba	ND	8.24		µg/Kg-dry	1	7/23/2014 7:35:00 PM
Dichlorprop	ND	8.24		µg/Kg-dry	1	7/23/2014 7:35:00 PM
Dinoseb	ND	8.24		µg/Kg-dry	1	7/23/2014 7:35:00 PM
MCPA	ND	824		µg/Kg-dry	1	7/23/2014 7:35:00 PM
MCPP	ND	824		µg/Kg-dry	1	7/23/2014 7:35:00 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 7:43:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-005		
Client Sample ID:	TP14-S-0.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
Pentachlorophenol	ND	8.24		µg/Kg-dry	1	7/23/2014 7:35:00 PM
Surr: 2,4-DCAA	36.6	34.3-141		%REC	1	7/23/2014 7:35:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 7:48:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-006
Client Sample ID: TP14-S-4.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.370		µg/Kg-dry	1	7/29/2014 3:11:00 PM
Aroclor 1221	ND	0.370		µg/Kg-dry	1	7/29/2014 3:11:00 PM
Aroclor 1232	ND	0.370		µg/Kg-dry	1	7/29/2014 3:11:00 PM
Aroclor 1242	ND	0.370		µg/Kg-dry	1	7/29/2014 3:11:00 PM
Aroclor 1248	25.6	0.370		µg/Kg-dry	1	7/29/2014 3:11:00 PM
Aroclor 1254	ND	0.370		µg/Kg-dry	1	7/29/2014 3:11:00 PM
Aroclor 1260	ND	0.370		µg/Kg-dry	1	7/29/2014 3:11:00 PM
Aroclor 1262	ND	0.370		µg/Kg-dry	1	7/29/2014 3:11:00 PM
Aroclor 1268	ND	0.370		µg/Kg-dry	1	7/29/2014 3:11:00 PM
Surr: Decachlorobiphenyl	74.9	56.5-130		%REC	1	7/29/2014 3:11:00 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 7:52:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-007		
Client Sample ID:	TP14-S-7.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 8:10:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-008
Client Sample ID: TP15-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.397		µg/Kg-dry	1	7/26/2014 11:28:00 AM
Aroclor 1221	ND	0.397		µg/Kg-dry	1	7/26/2014 11:28:00 AM
Aroclor 1232	ND	0.397		µg/Kg-dry	1	7/26/2014 11:28:00 AM
Aroclor 1242	ND	0.397		µg/Kg-dry	1	7/26/2014 11:28:00 AM
Aroclor 1248	108	0.397		µg/Kg-dry	1	7/26/2014 11:28:00 AM
Aroclor 1254	ND	0.397		µg/Kg-dry	1	7/26/2014 11:28:00 AM
Aroclor 1260	ND	0.397		µg/Kg-dry	1	7/26/2014 11:28:00 AM
Aroclor 1262	ND	0.397		µg/Kg-dry	1	7/26/2014 11:28:00 AM
Aroclor 1268	ND	0.397		µg/Kg-dry	1	7/26/2014 11:28:00 AM
Surr: Decachlorobiphenyl	78.6	56.5-130		%REC	1	7/26/2014 11:28:00 AM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 8:12:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-009
Client Sample ID: TP15-S-1.75
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	65.7	18.9	A1	mg/Kg-dry	1	7/18/2014 3:39:28 PM
Lube Oil	201	63.1	A2	mg/Kg-dry	1	7/18/2014 3:39:28 PM
Surr: o-Terphenyl	85.8	50-150		%REC	1	7/18/2014 3:39:28 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	2670	1090		µg/Kg-dry	10	7/24/2014 5:47:00 PM
Chromium	15700	1090		µg/Kg-dry	10	7/24/2014 5:47:00 PM
Copper	28800	544		µg/Kg-dry	10	7/24/2014 5:47:00 PM
Lead	33300	272		µg/Kg-dry	10	7/24/2014 5:47:00 PM
Nickel	9860	544		µg/Kg-dry	10	7/24/2014 5:47:00 PM
Zinc	1320000	217000		µg/Kg-dry	200	7/25/2014 2:51:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0877	0.0188		mg/Kg-dry	1	7/18/2014 11:19:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	315		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Bolstar	ND	25.2		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Chloropyrifos	ND	25.2		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Coumaphos	ND	126		µg/Kg-dry	1	7/23/2014 6:10:00 PM
DEF	ND	25.2		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Demeton-S	ND	63.1		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Diazinon	ND	63.1		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Dichlorovos	ND	25.2		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Dimethoate	ND	63.1		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Disulfoton	ND	25.2		µg/Kg-dry	1	7/23/2014 6:10:00 PM
EPN	ND	25.2		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Ethion	ND	25.2		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Ethoprop	ND	25.2		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Fensulfothion	ND	126		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Fenthion	ND	25.2		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Malathion	ND	25.2		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Methyl parathion	ND	126		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Mevinphos	ND	126		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Naled	ND	315		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Parathion	ND	63.1		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Phorate	ND	25.2		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Ronnel	ND	25.2		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Stirofos	ND	25.2		µg/Kg-dry	1	7/23/2014 6:10:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 8:12:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-009
Client Sample ID: TP15-S-1.75
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Sulfotepp	ND	25.2		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Tokuthion	ND	25.2		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Trichloronate	ND	25.2		µg/Kg-dry	1	7/23/2014 6:10:00 PM
Surr: Tributylphosphate (Surr.)	95.0	50-150		%REC	1	7/23/2014 6:10:00 PM
Surr: Triphenylphosphate (Surr.)	183	50-150	SMI	%REC	1	7/23/2014 6:10:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
4,4´-DDE	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
4,4´-DDT	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
Aldrin	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
alpha-BHC	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
alpha-Chlordane	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
beta-BHC	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
Chlordane	ND	8.41		µg/Kg-dry	1	7/27/2014 7:55:00 PM
delta-BHC	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
Dieldrin	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
Endosulfan I	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
Endosulfan II	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
Endosulfan Sulfate	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
Endrin	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
Endrin aldehyde	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
Endrin ketone	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
gamma-BHC	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
gamma-Chlordane	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
Heptachlor	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
Heptachlor epoxide	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
Methoxychlor	ND	0.420		µg/Kg-dry	1	7/27/2014 7:55:00 PM
Toxaphene	ND	8.41		µg/Kg-dry	1	7/27/2014 7:55:00 PM
Surr: Decachlorobiphenyl	92.6	25.9-136		%REC	1	7/27/2014 7:55:00 PM
Surr: Tetrachloro-m-xylene	12.4	15-124	S	%REC	1	7/27/2014 7:55:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.420		µg/Kg-dry	1	7/25/2014 11:37:00 AM
Aroclor 1221	ND	0.420		µg/Kg-dry	1	7/25/2014 11:37:00 AM
Aroclor 1232	ND	0.420		µg/Kg-dry	1	7/25/2014 11:37:00 AM
Aroclor 1242	ND	0.420		µg/Kg-dry	1	7/25/2014 11:37:00 AM
Aroclor 1248	39200	42.0		µg/Kg-dry	100	7/26/2014 12:36:00 PM
Aroclor 1254	ND	0.420		µg/Kg-dry	1	7/25/2014 11:37:00 AM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 8:12:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-009
Client Sample ID: TP15-S-1.75
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1260	ND	0.420		µg/Kg-dry	1	7/25/2014 11:37:00 AM
Aroclor 1262	ND	0.420		µg/Kg-dry	1	7/25/2014 11:37:00 AM
Aroclor 1268	ND	0.420		µg/Kg-dry	1	7/25/2014 11:37:00 AM
Surr: Decachlorobiphenyl	247	56.5-130	SMI	%REC	1	7/25/2014 11:37:00 AM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	8.41		µg/Kg-dry	1	7/23/2014 7:56:00 PM
2,4,5-TP (Silvex)	ND	8.41		µg/Kg-dry	1	7/23/2014 7:56:00 PM
2,4-D	ND	8.41		µg/Kg-dry	1	7/23/2014 7:56:00 PM
2,4-DB	ND	8.41		µg/Kg-dry	1	7/23/2014 7:56:00 PM
4-Nitrophenol	ND	8.41		µg/Kg-dry	1	7/23/2014 7:56:00 PM
Dicamba	ND	8.41		µg/Kg-dry	1	7/23/2014 7:56:00 PM
Dichlorprop	ND	8.41		µg/Kg-dry	1	7/23/2014 7:56:00 PM
Dinoseb	ND	8.41		µg/Kg-dry	1	7/23/2014 7:56:00 PM
MCPA	ND	841		µg/Kg-dry	1	7/23/2014 7:56:00 PM
MCPP	ND	841		µg/Kg-dry	1	7/23/2014 7:56:00 PM
Pentachlorophenol	ND	8.41		µg/Kg-dry	1	7/23/2014 7:56:00 PM
Surr: 2,4-DCAA	52.7	34.3-141		%REC	1	7/23/2014 7:56:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 8:17:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-010
Client Sample ID: TP15-S-6.0
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.373		µg/Kg-dry	1	7/29/2014 3:28:00 PM
Aroclor 1221	ND	0.373		µg/Kg-dry	1	7/29/2014 3:28:00 PM
Aroclor 1232	ND	0.373		µg/Kg-dry	1	7/29/2014 3:28:00 PM
Aroclor 1242	ND	0.373		µg/Kg-dry	1	7/29/2014 3:28:00 PM
Aroclor 1248	87.1	0.373		µg/Kg-dry	1	7/29/2014 3:28:00 PM
Aroclor 1254	ND	0.373		µg/Kg-dry	1	7/29/2014 3:28:00 PM
Aroclor 1260	ND	0.373		µg/Kg-dry	1	7/29/2014 3:28:00 PM
Aroclor 1262	ND	0.373		µg/Kg-dry	1	7/29/2014 3:28:00 PM
Aroclor 1268	ND	0.373		µg/Kg-dry	1	7/29/2014 3:28:00 PM
Surr: Decachlorobiphenyl	80.5	56.5-130		%REC	1	7/29/2014 3:28:00 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 8:22:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-011		
Client Sample ID:	TP15-S-8.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 8:40:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-012
Client Sample ID: TP16-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	ND	19.3		mg/Kg-dry	1	7/18/2014 4:09:28 PM
Lube Oil	82.2	64.2	A2	mg/Kg-dry	1	7/18/2014 4:09:28 PM
Surr: o-Terphenyl	81.5	50-150		%REC	1	7/18/2014 4:09:28 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	3620	1040		µg/Kg-dry	10	7/24/2014 5:54:00 PM
Chromium	15600	1040		µg/Kg-dry	10	7/24/2014 5:54:00 PM
Copper	33200	518		µg/Kg-dry	10	7/24/2014 5:54:00 PM
Lead	8100	259		µg/Kg-dry	10	7/24/2014 5:54:00 PM
Nickel	18800	518		µg/Kg-dry	10	7/24/2014 5:54:00 PM
Zinc	5010000	518000		µg/Kg-dry	500	7/25/2014 2:58:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	ND	0.0214		mg/Kg-dry	1	7/18/2014 11:22:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	321		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Bolstar	ND	25.7		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Chloropyrifos	ND	25.7		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Coumaphos	ND	128		µg/Kg-dry	1	7/23/2014 6:34:00 PM
DEF	ND	25.7		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Demeton-S	ND	64.2		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Diazinon	ND	64.2		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Dichlorovos	ND	25.7		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Dimethoate	ND	64.2		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Disulfoton	ND	25.7		µg/Kg-dry	1	7/23/2014 6:34:00 PM
EPN	ND	25.7		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Ethion	ND	25.7		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Ethoprop	ND	25.7		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Fensulfothion	ND	128		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Fenthion	ND	25.7		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Malathion	ND	25.7		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Methyl parathion	ND	128		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Mevinphos	ND	128		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Naled	ND	321		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Parathion	ND	64.2		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Phorate	ND	25.7		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Ronnel	ND	25.7		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Stirofos	ND	25.7		µg/Kg-dry	1	7/23/2014 6:34:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 8:40:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-012
Client Sample ID: TP16-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Sulfotepp	ND	25.7		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Tokuthion	ND	25.7		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Trichloronate	ND	25.7		µg/Kg-dry	1	7/23/2014 6:34:00 PM
Surr: Tributylphosphate (Surr.)	116	50-150		%REC	1	7/23/2014 6:34:00 PM
Surr: Triphenylphosphate (Surr.)	63.0	50-150		%REC	1	7/23/2014 6:34:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
4,4´-DDE	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
4,4´-DDT	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
Aldrin	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
alpha-BHC	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
alpha-Chlordane	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
beta-BHC	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
Chlordane	ND	8.56		µg/Kg-dry	1	7/27/2014 8:24:00 PM
delta-BHC	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
Dieldrin	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
Endosulfan I	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
Endosulfan II	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
Endosulfan Sulfate	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
Endrin	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
Endrin aldehyde	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
Endrin ketone	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
gamma-BHC	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
gamma-Chlordane	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
Heptachlor	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
Heptachlor epoxide	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
Methoxychlor	ND	0.428		µg/Kg-dry	1	7/27/2014 8:24:00 PM
Toxaphene	ND	8.56		µg/Kg-dry	1	7/27/2014 8:24:00 PM
Surr: Decachlorobiphenyl	67.2	25.9-136		%REC	1	7/27/2014 8:24:00 PM
Surr: Tetrachloro-m-xylene	4.98	15-124	S	%REC	1	7/27/2014 8:24:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.428		µg/Kg-dry	1	7/25/2014 12:10:00 PM
Aroclor 1221	ND	0.428		µg/Kg-dry	1	7/25/2014 12:10:00 PM
Aroclor 1232	ND	0.428		µg/Kg-dry	1	7/25/2014 12:10:00 PM
Aroclor 1242	ND	0.428		µg/Kg-dry	1	7/25/2014 12:10:00 PM
Aroclor 1248	19.1	0.428		µg/Kg-dry	1	7/25/2014 12:10:00 PM
Aroclor 1254	ND	0.428		µg/Kg-dry	1	7/25/2014 12:10:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 8:40:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-012
Client Sample ID: TP16-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1260	ND	0.428		µg/Kg-dry	1	7/25/2014 12:10:00 PM
Aroclor 1262	ND	0.428		µg/Kg-dry	1	7/25/2014 12:10:00 PM
Aroclor 1268	ND	0.428		µg/Kg-dry	1	7/25/2014 12:10:00 PM
Surr: Decachlorobiphenyl	74.0	56.5-130		%REC	1	7/25/2014 12:10:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	8.56		µg/Kg-dry	1	7/23/2014 8:17:00 PM
2,4,5-TP (Silvex)	ND	8.56		µg/Kg-dry	1	7/23/2014 8:17:00 PM
2,4-D	ND	8.56		µg/Kg-dry	1	7/23/2014 8:17:00 PM
2,4-DB	ND	8.56		µg/Kg-dry	1	7/23/2014 8:17:00 PM
4-Nitrophenol	ND	8.56		µg/Kg-dry	1	7/23/2014 8:17:00 PM
Dicamba	ND	8.56		µg/Kg-dry	1	7/23/2014 8:17:00 PM
Dichlorprop	ND	8.56		µg/Kg-dry	1	7/23/2014 8:17:00 PM
Dinoseb	ND	8.56		µg/Kg-dry	1	7/23/2014 8:17:00 PM
MCPA	ND	856		µg/Kg-dry	1	7/23/2014 8:17:00 PM
MCPP	ND	856		µg/Kg-dry	1	7/23/2014 8:17:00 PM
Pentachlorophenol	ND	8.56		µg/Kg-dry	1	7/23/2014 8:17:00 PM
Surr: 2,4-DCAA	61.0	34.3-141		%REC	1	7/23/2014 8:17:00 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 8:45:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-013		
Client Sample ID:	TP16-S-4.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 8:55:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-014		
Client Sample ID:	TP16-S-6.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 9:12:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-015
Client Sample ID: TP17-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.385		µg/Kg-dry	1	7/25/2014 12:27:00 PM
Aroclor 1221	ND	0.385		µg/Kg-dry	1	7/25/2014 12:27:00 PM
Aroclor 1232	ND	0.385		µg/Kg-dry	1	7/25/2014 12:27:00 PM
Aroclor 1242	ND	0.385		µg/Kg-dry	1	7/25/2014 12:27:00 PM
Aroclor 1248	1710	7.70		µg/Kg-dry	20	7/26/2014 12:53:00 PM
Aroclor 1254	ND	0.385		µg/Kg-dry	1	7/25/2014 12:27:00 PM
Aroclor 1260	ND	0.385		µg/Kg-dry	1	7/25/2014 12:27:00 PM
Aroclor 1262	ND	0.385		µg/Kg-dry	1	7/25/2014 12:27:00 PM
Aroclor 1268	ND	0.385		µg/Kg-dry	1	7/25/2014 12:27:00 PM
Surr: Decachlorobiphenyl	119	56.5-130		%REC	1	7/25/2014 12:27:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 9:17:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-016
Client Sample ID: TP17-S-1.25
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	59.7	18.8	A1	mg/Kg-dry	1	7/18/2014 4:39:28 PM
Lube Oil	165	62.7	A2	mg/Kg-dry	1	7/18/2014 4:39:28 PM
Surr: o-Terphenyl	95.9	50-150		%REC	1	7/18/2014 4:39:28 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	2480	884		µg/Kg-dry	10	7/24/2014 6:02:00 PM
Chromium	12800	884		µg/Kg-dry	10	7/24/2014 6:02:00 PM
Copper	29300	442		µg/Kg-dry	10	7/24/2014 6:02:00 PM
Lead	38100	221		µg/Kg-dry	10	7/24/2014 6:02:00 PM
Nickel	7710	442		µg/Kg-dry	10	7/24/2014 6:02:00 PM
Zinc	694000	88400		µg/Kg-dry	100	7/25/2014 3:28:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0670	0.0198		mg/Kg-dry	1	7/18/2014 11:25:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	314		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Bolstar	ND	25.1		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Chloropyrifos	ND	25.1		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Coumaphos	ND	125		µg/Kg-dry	1	7/23/2014 6:59:00 PM
DEF	ND	25.1		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Demeton-S	ND	62.7		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Diazinon	ND	62.7		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Dichlorovos	ND	25.1		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Dimethoate	ND	62.7		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Disulfoton	ND	25.1		µg/Kg-dry	1	7/23/2014 6:59:00 PM
EPN	ND	25.1		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Ethion	ND	25.1		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Ethoprop	ND	25.1		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Fensulfothion	ND	125		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Fenthion	ND	25.1		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Malathion	ND	25.1		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Methyl parathion	ND	125		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Mevinphos	ND	125		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Naled	ND	314		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Parathion	ND	62.7		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Phorate	ND	25.1		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Ronnel	ND	25.1		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Stirofos	ND	25.1		µg/Kg-dry	1	7/23/2014 6:59:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 9:17:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-016
Client Sample ID: TP17-S-1.25
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Sulfotepp	ND	25.1		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Tokuthion	ND	25.1		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Trichloronate	ND	25.1		µg/Kg-dry	1	7/23/2014 6:59:00 PM
Surr: Tributylphosphate (Surr.)	108	50-150		%REC	1	7/23/2014 6:59:00 PM
Surr: Triphenylphosphate (Surr.)	198	50-150	SMI	%REC	1	7/23/2014 6:59:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
4,4´-DDE	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
4,4´-DDT	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
Aldrin	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
alpha-BHC	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
alpha-Chlordane	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
beta-BHC	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
Chlordane	ND	8.37		µg/Kg-dry	1	7/27/2014 8:38:00 PM
delta-BHC	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
Dieldrin	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
Endosulfan I	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
Endosulfan II	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
Endosulfan Sulfate	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
Endrin	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
Endrin aldehyde	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
Endrin ketone	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
gamma-BHC	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
gamma-Chlordane	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
Heptachlor	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
Heptachlor epoxide	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
Methoxychlor	ND	0.418		µg/Kg-dry	1	7/27/2014 8:38:00 PM
Toxaphene	ND	8.37		µg/Kg-dry	1	7/27/2014 8:38:00 PM
Surr: Decachlorobiphenyl	107	25.9-136		%REC	1	7/27/2014 8:38:00 PM
Surr: Tetrachloro-m-xylene	5.49	15-124	S	%REC	1	7/27/2014 8:38:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.418		µg/Kg-dry	1	7/25/2014 12:44:00 PM
Aroclor 1221	ND	0.418		µg/Kg-dry	1	7/25/2014 12:44:00 PM
Aroclor 1232	ND	0.418		µg/Kg-dry	1	7/25/2014 12:44:00 PM
Aroclor 1242	ND	0.418		µg/Kg-dry	1	7/25/2014 12:44:00 PM
Aroclor 1248	86600	83.6		µg/Kg-dry	200	7/26/2014 1:09:00 PM
Aroclor 1254	ND	0.418		µg/Kg-dry	1	7/25/2014 12:44:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 9:17:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-016
Client Sample ID: TP17-S-1.25
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1260	ND	0.418		µg/Kg-dry	1	7/25/2014 12:44:00 PM
Aroclor 1262	ND	0.418		µg/Kg-dry	1	7/25/2014 12:44:00 PM
Aroclor 1268	ND	0.418		µg/Kg-dry	1	7/25/2014 12:44:00 PM
Surr: Decachlorobiphenyl	191	56.5-130	SMI	%REC	1	7/25/2014 12:44:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	8.37		µg/Kg-dry	1	7/23/2014 8:38:00 PM
2,4,5-TP (Silvex)	ND	8.37		µg/Kg-dry	1	7/23/2014 8:38:00 PM
2,4-D	ND	8.37		µg/Kg-dry	1	7/23/2014 8:38:00 PM
2,4-DB	ND	8.37		µg/Kg-dry	1	7/23/2014 8:38:00 PM
4-Nitrophenol	ND	8.37		µg/Kg-dry	1	7/23/2014 8:38:00 PM
Dicamba	ND	8.37		µg/Kg-dry	1	7/23/2014 8:38:00 PM
Dichlorprop	ND	8.37		µg/Kg-dry	1	7/23/2014 8:38:00 PM
Dinoseb	ND	8.37		µg/Kg-dry	1	7/23/2014 8:38:00 PM
MCPA	ND	837		µg/Kg-dry	1	7/23/2014 8:38:00 PM
MCPP	ND	837		µg/Kg-dry	1	7/23/2014 8:38:00 PM
Pentachlorophenol	ND	8.37		µg/Kg-dry	1	7/23/2014 8:38:00 PM
Surr: 2,4-DCAA	55.8	34.3-141		%REC	1	7/23/2014 8:38:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 9:22:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-017
Client Sample ID: TP17-S-4.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.375		µg/Kg-dry	1	7/29/2014 3:45:00 PM
Aroclor 1221	ND	0.375		µg/Kg-dry	1	7/29/2014 3:45:00 PM
Aroclor 1232	ND	0.375		µg/Kg-dry	1	7/29/2014 3:45:00 PM
Aroclor 1242	ND	0.375		µg/Kg-dry	1	7/29/2014 3:45:00 PM
Aroclor 1248	134	0.375		µg/Kg-dry	1	7/29/2014 3:45:00 PM
Aroclor 1254	ND	0.375		µg/Kg-dry	1	7/29/2014 3:45:00 PM
Aroclor 1260	ND	0.375		µg/Kg-dry	1	7/29/2014 3:45:00 PM
Aroclor 1262	ND	0.375		µg/Kg-dry	1	7/29/2014 3:45:00 PM
Aroclor 1268	ND	0.375		µg/Kg-dry	1	7/29/2014 3:45:00 PM
Surr: Decachlorobiphenyl	90.0	56.5-130		%REC	1	7/29/2014 3:45:00 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 9:27:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-018		
Client Sample ID:	TP17-S-7.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 9:45:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-019
Client Sample ID: TP18-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	ND	17.8		mg/Kg-dry	1	7/18/2014 5:09:28 PM
Lube Oil	79.4	59.2	A2	mg/Kg-dry	1	7/18/2014 5:09:28 PM
Surr: o-Terphenyl	93.8	50-150		%REC	1	7/18/2014 5:09:28 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	2500	884		µg/Kg-dry	10	7/24/2014 6:09:00 PM
Chromium	11900	884		µg/Kg-dry	10	7/25/2014 3:35:00 PM
Copper	27500	442		µg/Kg-dry	10	7/24/2014 6:09:00 PM
Lead	6980	221		µg/Kg-dry	10	7/24/2014 6:09:00 PM
Nickel	7420	442		µg/Kg-dry	10	7/25/2014 3:35:00 PM
Zinc	1250000	177000		µg/Kg-dry	200	7/25/2014 3:43:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0286	0.0168		mg/Kg-dry	1	7/18/2014 11:28:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	296		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Bolstar	ND	23.7		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Chloropyrifos	ND	23.7		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Coumaphos	ND	118		µg/Kg-dry	1	7/24/2014 12:24:00 PM
DEF	ND	23.7		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Demeton-S	ND	59.2		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Diazinon	ND	59.2		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Dichlorovos	ND	23.7		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Dimethoate	ND	59.2		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Disulfoton	ND	23.7		µg/Kg-dry	1	7/24/2014 12:24:00 PM
EPN	ND	23.7		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Ethion	ND	23.7		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Ethoprop	ND	23.7		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Fensulfothion	ND	118		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Fenthion	ND	23.7		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Malathion	ND	23.7		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Methyl parathion	ND	118		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Mevinphos	ND	118		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Naled	ND	296		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Parathion	ND	59.2		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Phorate	ND	23.7		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Ronnel	ND	23.7		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Stirofos	ND	23.7		µg/Kg-dry	1	7/24/2014 12:24:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 9:45:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-019
Client Sample ID: TP18-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Sulfotepp	ND	23.7		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Tokuthion	ND	23.7		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Trichloronate	ND	23.7		µg/Kg-dry	1	7/24/2014 12:24:00 PM
Surr: Tributylphosphate (Surr.)	116	50-150		%REC	1	7/24/2014 12:24:00 PM
Surr: Triphenylphosphate (Surr.)	61.0	50-150		%REC	1	7/24/2014 12:24:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
4,4´-DDE	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
4,4´-DDT	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
Aldrin	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
alpha-BHC	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
alpha-Chlordane	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
beta-BHC	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
Chlordane	ND	7.90		µg/Kg-dry	1	7/27/2014 9:07:00 PM
delta-BHC	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
Dieldrin	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
Endosulfan I	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
Endosulfan II	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
Endosulfan Sulfate	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
Endrin	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
Endrin aldehyde	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
Endrin ketone	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
gamma-BHC	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
gamma-Chlordane	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
Heptachlor	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
Heptachlor epoxide	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
Methoxychlor	ND	0.395		µg/Kg-dry	1	7/27/2014 9:07:00 PM
Toxaphene	ND	7.90		µg/Kg-dry	1	7/27/2014 9:07:00 PM
Surr: Decachlorobiphenyl	109	25.9-136		%REC	1	7/27/2014 9:07:00 PM
Surr: Tetrachloro-m-xylene	13.2	15-124	S	%REC	1	7/27/2014 9:07:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.395		µg/Kg-dry	1	7/25/2014 1:01:00 PM
Aroclor 1221	ND	0.395		µg/Kg-dry	1	7/25/2014 1:01:00 PM
Aroclor 1232	ND	0.395		µg/Kg-dry	1	7/25/2014 1:01:00 PM
Aroclor 1242	ND	0.395		µg/Kg-dry	1	7/25/2014 1:01:00 PM
Aroclor 1248	793	3.95		µg/Kg-dry	10	7/26/2014 1:26:00 PM
Aroclor 1254	ND	0.395		µg/Kg-dry	1	7/25/2014 1:01:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 9:45:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-019
Client Sample ID: TP18-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1260	ND	0.395		µg/Kg-dry	1	7/25/2014 1:01:00 PM
Aroclor 1262	ND	0.395		µg/Kg-dry	1	7/25/2014 1:01:00 PM
Aroclor 1268	ND	0.395		µg/Kg-dry	1	7/25/2014 1:01:00 PM
Surr: Decachlorobiphenyl	104	56.5-130		%REC	1	7/25/2014 1:01:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	7.90		µg/Kg-dry	1	7/23/2014 9:00:00 PM
2,4,5-TP (Silvex)	ND	7.90		µg/Kg-dry	1	7/23/2014 9:00:00 PM
2,4-D	ND	7.90		µg/Kg-dry	1	7/23/2014 9:00:00 PM
2,4-DB	ND	7.90		µg/Kg-dry	1	7/23/2014 9:00:00 PM
4-Nitrophenol	ND	7.90		µg/Kg-dry	1	7/23/2014 9:00:00 PM
Dicamba	ND	7.90		µg/Kg-dry	1	7/23/2014 9:00:00 PM
Dichlorprop	ND	7.90		µg/Kg-dry	1	7/23/2014 9:00:00 PM
Dinoseb	ND	7.90		µg/Kg-dry	1	7/23/2014 9:00:00 PM
MCPA	ND	790		µg/Kg-dry	1	7/23/2014 9:00:00 PM
MCPP	ND	790		µg/Kg-dry	1	7/23/2014 9:00:00 PM
Pentachlorophenol	ND	7.90		µg/Kg-dry	1	7/23/2014 9:00:00 PM
Surr: 2,4-DCAA	50.6	34.3-141		%REC	1	7/23/2014 9:00:00 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 9:54:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-020		
Client Sample ID:	TP18-S-4.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 10:00:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-021		
Client Sample ID:	TP18-S-7.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 10:20:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-022
Client Sample ID: TP19-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	320		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Bolstar	ND	25.6		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Chloropyrifos	ND	25.6		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Coumaphos	ND	128		µg/Kg-dry	1	7/24/2014 12:48:00 PM
DEF	ND	25.6		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Demeton-S	ND	63.9		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Diazinon	ND	63.9		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Dichlorovos	ND	25.6		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Dimethoate	ND	63.9		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Disulfoton	ND	25.6		µg/Kg-dry	1	7/24/2014 12:48:00 PM
EPN	ND	25.6		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Ethion	ND	25.6		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Ethoprop	ND	25.6		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Fensulfothion	ND	128		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Fenthion	ND	25.6		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Malathion	ND	25.6		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Methyl parathion	ND	128		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Mevinphos	ND	128		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Naled	ND	320		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Parathion	ND	63.9		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Phorate	ND	25.6		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Ronnel	ND	25.6		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Stirofos	ND	25.6		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Sulfotepp	ND	25.6		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Tokuthion	ND	25.6		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Trichloronate	ND	25.6		µg/Kg-dry	1	7/24/2014 12:48:00 PM
Surr: Tributylphosphate (Surr.)	108	50-150		%REC	1	7/24/2014 12:48:00 PM
Surr: Triphenylphosphate (Surr.)	65.0	50-150		%REC	1	7/24/2014 12:48:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
4,4´-DDE	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
4,4´-DDT	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
Aldrin	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
alpha-BHC	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
alpha-Chlordane	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
beta-BHC	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
Chlordane	ND	8.53		µg/Kg-dry	1	7/27/2014 9:22:00 PM
delta-BHC	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 10:20:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-022
Client Sample ID: TP19-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
Dieldrin	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
Endosulfan I	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
Endosulfan II	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
Endosulfan Sulfate	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
Endrin	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
Endrin aldehyde	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
Endrin ketone	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
gamma-BHC	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
gamma-Chlordane	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
Heptachlor	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
Heptachlor epoxide	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
Methoxychlor	ND	0.426		µg/Kg-dry	1	7/27/2014 9:22:00 PM
Toxaphene	ND	8.53		µg/Kg-dry	1	7/27/2014 9:22:00 PM
Surr: Decachlorobiphenyl	70.8	25.9-136		%REC	1	7/27/2014 9:22:00 PM
Surr: Tetrachloro-m-xylene	9.00	15-124	S	%REC	1	7/27/2014 9:22:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.426		µg/Kg-dry	1	7/25/2014 1:18:00 PM
Aroclor 1221	ND	0.426		µg/Kg-dry	1	7/25/2014 1:18:00 PM
Aroclor 1232	ND	0.426		µg/Kg-dry	1	7/25/2014 1:18:00 PM
Aroclor 1242	ND	0.426		µg/Kg-dry	1	7/25/2014 1:18:00 PM
Aroclor 1248	187	0.426		µg/Kg-dry	1	7/25/2014 1:18:00 PM
Aroclor 1254	ND	0.426		µg/Kg-dry	1	7/25/2014 1:18:00 PM
Aroclor 1260	ND	0.426		µg/Kg-dry	1	7/25/2014 1:18:00 PM
Aroclor 1262	ND	0.426		µg/Kg-dry	1	7/25/2014 1:18:00 PM
Aroclor 1268	ND	0.426		µg/Kg-dry	1	7/25/2014 1:18:00 PM
Surr: Decachlorobiphenyl	123	56.5-130		%REC	1	7/25/2014 1:18:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	8.53		µg/Kg-dry	1	7/23/2014 9:21:00 PM
2,4,5-TP (Silvex)	ND	8.53		µg/Kg-dry	1	7/23/2014 9:21:00 PM
2,4-D	ND	8.53		µg/Kg-dry	1	7/23/2014 9:21:00 PM
2,4-DB	ND	8.53		µg/Kg-dry	1	7/23/2014 9:21:00 PM
4-Nitrophenol	ND	8.53		µg/Kg-dry	1	7/23/2014 9:21:00 PM
Dicamba	ND	8.53		µg/Kg-dry	1	7/23/2014 9:21:00 PM
Dichlorprop	ND	8.53		µg/Kg-dry	1	7/23/2014 9:21:00 PM
Dinoseb	ND	8.53		µg/Kg-dry	1	7/23/2014 9:21:00 PM
MCPA	ND	853		µg/Kg-dry	1	7/23/2014 9:21:00 PM
MCPP	ND	853		µg/Kg-dry	1	7/23/2014 9:21:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 10:20:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-022		
Client Sample ID:	TP19-S-0.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
Pentachlorophenol	ND	8.53		µg/Kg-dry	1	7/23/2014 9:21:00 PM
Surr: 2,4-DCAA	54.4	34.3-141		%REC	1	7/23/2014 9:21:00 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 10:25:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-023		
Client Sample ID:	TP19-S-4.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 10:30:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-024		
Client Sample ID:	TP19-S-6.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 10:40:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-025
Client Sample ID: TP20-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	22.6	18.3	A1	mg/Kg-dry	1	7/18/2014 5:39:28 PM
Lube Oil	105	61.1	A2	mg/Kg-dry	1	7/18/2014 5:39:28 PM
Surr: o-Terphenyl	55.5	50-150		%REC	1	7/18/2014 5:39:28 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	2070	970		µg/Kg-dry	10	7/24/2014 6:17:00 PM
Chromium	12700	970		µg/Kg-dry	10	7/24/2014 6:17:00 PM
Copper	24300	485		µg/Kg-dry	10	7/24/2014 6:17:00 PM
Lead	6140	243		µg/Kg-dry	10	7/24/2014 6:17:00 PM
Nickel	19400	485		µg/Kg-dry	10	7/24/2014 6:17:00 PM
Zinc	348000	48500		µg/Kg-dry	50	7/25/2014 3:50:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	ND	0.0186		mg/Kg-dry	1	7/18/2014 11:31:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	306		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Bolstar	ND	24.5		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Chloropyrifos	ND	24.5		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Coumaphos	ND	122		µg/Kg-dry	1	7/24/2014 1:13:00 PM
DEF	ND	24.5		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Demeton-S	ND	61.1		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Diazinon	ND	61.1		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Dichlorovos	ND	24.5		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Dimethoate	ND	61.1		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Disulfoton	ND	24.5		µg/Kg-dry	1	7/24/2014 1:13:00 PM
EPN	ND	24.5		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Ethion	ND	24.5		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Ethoprop	ND	24.5		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Fensulfothion	ND	122		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Fenthion	ND	24.5		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Malathion	ND	24.5		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Methyl parathion	ND	122		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Mevinphos	ND	122		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Naled	ND	306		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Parathion	ND	61.1		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Phorate	ND	24.5		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Ronnel	ND	24.5		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Stirofos	ND	24.5		µg/Kg-dry	1	7/24/2014 1:13:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 10:40:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-025
Client Sample ID: TP20-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Sulfotepp	ND	24.5		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Tokuthion	ND	24.5		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Trichloronate	ND	24.5		µg/Kg-dry	1	7/24/2014 1:13:00 PM
Surr: Tributylphosphate (Surr.)	109	50-150		%REC	1	7/24/2014 1:13:00 PM
Surr: Triphenylphosphate (Surr.)	68.0	50-150		%REC	1	7/24/2014 1:13:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
4,4´-DDE	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
4,4´-DDT	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
Aldrin	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
alpha-BHC	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
alpha-Chlordane	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
beta-BHC	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
Chlordane	ND	8.15		µg/Kg-dry	1	7/27/2014 9:36:00 PM
delta-BHC	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
Dieldrin	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
Endosulfan I	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
Endosulfan II	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
Endosulfan Sulfate	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
Endrin	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
Endrin aldehyde	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
Endrin ketone	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
gamma-BHC	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
gamma-Chlordane	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
Heptachlor	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
Heptachlor epoxide	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
Methoxychlor	ND	0.408		µg/Kg-dry	1	7/27/2014 9:36:00 PM
Toxaphene	ND	8.15		µg/Kg-dry	1	7/27/2014 9:36:00 PM
Surr: Decachlorobiphenyl	104	25.9-136		%REC	1	7/27/2014 9:36:00 PM
Surr: Tetrachloro-m-xylene	7.84	15-124	S	%REC	1	7/27/2014 9:36:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.407		µg/Kg-dry	1	7/25/2014 1:35:00 PM
Aroclor 1221	ND	0.407		µg/Kg-dry	1	7/25/2014 1:35:00 PM
Aroclor 1232	ND	0.407		µg/Kg-dry	1	7/25/2014 1:35:00 PM
Aroclor 1242	ND	0.407		µg/Kg-dry	1	7/25/2014 1:35:00 PM
Aroclor 1248	803	4.07		µg/Kg-dry	10	7/26/2014 1:43:00 PM
Aroclor 1254	ND	0.407		µg/Kg-dry	1	7/25/2014 1:35:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 10:40:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-025
Client Sample ID: TP20-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1260	ND	0.407		µg/Kg-dry	1	7/25/2014 1:35:00 PM
Aroclor 1262	ND	0.407		µg/Kg-dry	1	7/25/2014 1:35:00 PM
Aroclor 1268	ND	0.407		µg/Kg-dry	1	7/25/2014 1:35:00 PM
Surr: Decachlorobiphenyl	112	56.5-130		%REC	1	7/25/2014 1:35:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	8.15		µg/Kg-dry	1	7/23/2014 9:42:00 PM
2,4,5-TP (Silvex)	ND	8.15		µg/Kg-dry	1	7/23/2014 9:42:00 PM
2,4-D	ND	8.15		µg/Kg-dry	1	7/23/2014 9:42:00 PM
2,4-DB	ND	8.15		µg/Kg-dry	1	7/23/2014 9:42:00 PM
4-Nitrophenol	ND	8.15		µg/Kg-dry	1	7/23/2014 9:42:00 PM
Dicamba	ND	8.15		µg/Kg-dry	1	7/23/2014 9:42:00 PM
Dichlorprop	ND	8.15		µg/Kg-dry	1	7/23/2014 9:42:00 PM
Dinoseb	ND	8.15		µg/Kg-dry	1	7/23/2014 9:42:00 PM
MCPA	ND	815		µg/Kg-dry	1	7/23/2014 9:42:00 PM
MCPP	ND	815		µg/Kg-dry	1	7/23/2014 9:42:00 PM
Pentachlorophenol	ND	8.15		µg/Kg-dry	1	7/23/2014 9:42:00 PM
Surr: 2,4-DCAA	72.6	34.3-141		%REC	1	7/23/2014 9:42:00 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 10:45:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-026		
Client Sample ID:	TP20-S-4.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 10:50:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-027		
Client Sample ID:	TP20-S-7.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 11:05:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-028
Client Sample ID: TP21-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	37.5	17.3	A1	mg/Kg-dry	1	7/18/2014 6:09:28 PM
Lube Oil	162	57.6	A2	mg/Kg-dry	1	7/18/2014 6:09:28 PM
Surr: o-Terphenyl	78.4	50-150		%REC	1	7/18/2014 6:09:28 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	4900	914		µg/Kg-dry	10	7/24/2014 6:24:00 PM
Chromium	15300	914		µg/Kg-dry	10	7/24/2014 6:24:00 PM
Copper	28800	457		µg/Kg-dry	10	7/24/2014 6:24:00 PM
Lead	18500	228		µg/Kg-dry	10	7/24/2014 6:24:00 PM
Nickel	13800	457		µg/Kg-dry	10	7/24/2014 6:24:00 PM
Zinc	2700000	457000		µg/Kg-dry	500	7/25/2014 3:58:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0304	0.0181		mg/Kg-dry	1	7/18/2014 11:34:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	288		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Bolstar	ND	23.0		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Chloropyrifos	ND	23.0		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Coumaphos	ND	115		µg/Kg-dry	1	7/24/2014 1:37:00 PM
DEF	ND	23.0		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Demeton-S	ND	57.6		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Diazinon	ND	57.6		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Dichlorovos	ND	23.0		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Dimethoate	ND	57.6		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Disulfoton	ND	23.0		µg/Kg-dry	1	7/24/2014 1:37:00 PM
EPN	ND	23.0		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Ethion	ND	23.0		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Ethoprop	ND	23.0		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Fensulfothion	ND	115		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Fenthion	ND	23.0		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Malathion	ND	23.0		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Methyl parathion	ND	115		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Mevinphos	ND	115		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Naled	ND	288		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Parathion	ND	57.6		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Phorate	ND	23.0		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Ronnel	ND	23.0		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Stirofos	ND	23.0		µg/Kg-dry	1	7/24/2014 1:37:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 11:05:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-028
Client Sample ID: TP21-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Sulfotepp	ND	23.0		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Tokuthion	ND	23.0		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Trichloronate	ND	23.0		µg/Kg-dry	1	7/24/2014 1:37:00 PM
Surr: Tributylphosphate (Surr.)	120	50-150		%REC	1	7/24/2014 1:37:00 PM
Surr: Triphenylphosphate (Surr.)	249	50-150	SMI	%REC	1	7/24/2014 1:37:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
4,4´-DDE	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
4,4´-DDT	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
Aldrin	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
alpha-BHC	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
alpha-Chlordane	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
beta-BHC	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
Chlordane	ND	7.68		µg/Kg-dry	1	7/27/2014 9:50:00 PM
delta-BHC	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
Dieldrin	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
Endosulfan I	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
Endosulfan II	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
Endosulfan Sulfate	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
Endrin	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
Endrin aldehyde	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
Endrin ketone	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
gamma-BHC	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
gamma-Chlordane	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
Heptachlor	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
Heptachlor epoxide	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
Methoxychlor	ND	0.384		µg/Kg-dry	1	7/27/2014 9:50:00 PM
Toxaphene	ND	7.68		µg/Kg-dry	1	7/27/2014 9:50:00 PM
Surr: Decachlorobiphenyl	66.3	25.9-136		%REC	1	7/27/2014 9:50:00 PM
Surr: Tetrachloro-m-xylene	2.41	15-124	S	%REC	1	7/27/2014 9:50:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.383		µg/Kg-dry	1	7/25/2014 1:51:00 PM
Aroclor 1221	ND	0.383		µg/Kg-dry	1	7/25/2014 1:51:00 PM
Aroclor 1232	ND	0.383		µg/Kg-dry	1	7/25/2014 1:51:00 PM
Aroclor 1242	ND	0.383		µg/Kg-dry	1	7/25/2014 1:51:00 PM
Aroclor 1248	13400	38.3		µg/Kg-dry	100	7/26/2014 2:00:00 PM
Aroclor 1254	ND	0.383		µg/Kg-dry	1	7/25/2014 1:51:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 11:05:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-028
Client Sample ID: TP21-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1260	ND	0.383		µg/Kg-dry	1	7/25/2014 1:51:00 PM
Aroclor 1262	ND	0.383		µg/Kg-dry	1	7/25/2014 1:51:00 PM
Aroclor 1268	ND	0.383		µg/Kg-dry	1	7/25/2014 1:51:00 PM
Surr: Decachlorobiphenyl	98.4	56.5-130		%REC	1	7/25/2014 1:51:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	7.68		µg/Kg-dry	1	7/24/2014 1:24:00 PM
2,4,5-TP (Silvex)	ND	7.68		µg/Kg-dry	1	7/24/2014 1:24:00 PM
2,4-D	ND	7.68		µg/Kg-dry	1	7/24/2014 1:24:00 PM
2,4-DB	ND	7.68		µg/Kg-dry	1	7/24/2014 1:24:00 PM
4-Nitrophenol	ND	7.68		µg/Kg-dry	1	7/24/2014 1:24:00 PM
Dicamba	ND	7.68		µg/Kg-dry	1	7/24/2014 1:24:00 PM
Dichlorprop	ND	7.68		µg/Kg-dry	1	7/24/2014 1:24:00 PM
Dinoseb	ND	7.68		µg/Kg-dry	1	7/24/2014 1:24:00 PM
MCPA	ND	768		µg/Kg-dry	1	7/24/2014 1:24:00 PM
MCPP	ND	768		µg/Kg-dry	1	7/24/2014 1:24:00 PM
Pentachlorophenol	ND	7.68		µg/Kg-dry	1	7/24/2014 1:24:00 PM
Surr: 2,4-DCAA	45.5	34.3-141		%REC	1	7/24/2014 1:24:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 11:10:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-029
Client Sample ID: TP21-S-5.0
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.375		µg/Kg-dry	1	7/29/2014 4:01:00 PM
Aroclor 1221	ND	0.375		µg/Kg-dry	1	7/29/2014 4:01:00 PM
Aroclor 1232	ND	0.375		µg/Kg-dry	1	7/29/2014 4:01:00 PM
Aroclor 1242	ND	0.375		µg/Kg-dry	1	7/29/2014 4:01:00 PM
Aroclor 1248	ND	0.375		µg/Kg-dry	1	7/29/2014 4:01:00 PM
Aroclor 1254	ND	0.375		µg/Kg-dry	1	7/29/2014 4:01:00 PM
Aroclor 1260	ND	0.375		µg/Kg-dry	1	7/29/2014 4:01:00 PM
Aroclor 1262	ND	0.375		µg/Kg-dry	1	7/29/2014 4:01:00 PM
Aroclor 1268	ND	0.375		µg/Kg-dry	1	7/29/2014 4:01:00 PM
Surr: Decachlorobiphenyl	76.8	56.5-130		%REC	1	7/29/2014 4:01:00 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 11:15:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-030		
Client Sample ID:	TP21-S-7.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 11:30:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-031
Client Sample ID: TP22-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	ND	19.5		mg/Kg-dry	1	7/18/2014 8:09:28 PM
Lube Oil	ND	65.1		mg/Kg-dry	1	7/18/2014 8:09:28 PM
Surr: o-Terphenyl	56.9	50-150		%REC	1	7/18/2014 8:09:28 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	2500	957		µg/Kg-dry	10	7/24/2014 6:32:00 PM
Chromium	9460	957		µg/Kg-dry	10	7/24/2014 6:32:00 PM
Copper	41600	479		µg/Kg-dry	10	7/24/2014 6:32:00 PM
Lead	7130	239		µg/Kg-dry	10	7/24/2014 6:32:00 PM
Nickel	10600	479		µg/Kg-dry	10	7/24/2014 6:32:00 PM
Zinc	168000	47900		µg/Kg-dry	50	7/25/2014 4:05:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	ND	0.0201		mg/Kg-dry	1	7/18/2014 11:37:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	326		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Bolstar	ND	26.0		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Chloropyrifos	ND	26.0		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Coumaphos	ND	130		µg/Kg-dry	1	7/24/2014 2:02:00 PM
DEF	ND	26.0		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Demeton-S	ND	65.1		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Diazinon	ND	65.1		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Dichlorovos	ND	26.0		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Dimethoate	ND	65.1		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Disulfoton	ND	26.0		µg/Kg-dry	1	7/24/2014 2:02:00 PM
EPN	ND	26.0		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Ethion	ND	26.0		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Ethoprop	ND	26.0		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Fensulfothion	ND	130		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Fenthion	ND	26.0		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Malathion	ND	26.0		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Methyl parathion	ND	130		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Mevinphos	ND	130		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Naled	ND	326		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Parathion	ND	65.1		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Phorate	ND	26.0		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Ronnel	ND	26.0		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Stirofos	ND	26.0		µg/Kg-dry	1	7/24/2014 2:02:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 11:30:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-031
Client Sample ID: TP22-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Sulfotepp	ND	26.0		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Tokuthion	ND	26.0		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Trichloronate	ND	26.0		µg/Kg-dry	1	7/24/2014 2:02:00 PM
Surr: Tributylphosphate (Surr.)	117	50-150		%REC	1	7/24/2014 2:02:00 PM
Surr: Triphenylphosphate (Surr.)	72.0	50-150		%REC	1	7/24/2014 2:02:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
4,4´-DDE	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
4,4´-DDT	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
Aldrin	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
alpha-BHC	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
alpha-Chlordane	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
beta-BHC	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
Chlordane	ND	8.68		µg/Kg-dry	1	7/27/2014 10:19:00 PM
delta-BHC	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
Dieldrin	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
Endosulfan I	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
Endosulfan II	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
Endosulfan Sulfate	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
Endrin	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
Endrin aldehyde	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
Endrin ketone	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
gamma-BHC	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
gamma-Chlordane	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
Heptachlor	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
Heptachlor epoxide	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
Methoxychlor	ND	0.434		µg/Kg-dry	1	7/27/2014 10:19:00 PM
Toxaphene	ND	8.68		µg/Kg-dry	1	7/27/2014 10:19:00 PM
Surr: Decachlorobiphenyl	77.6	25.9-136		%REC	1	7/27/2014 10:19:00 PM
Surr: Tetrachloro-m-xylene	1.58	15-124	S	%REC	1	7/27/2014 10:19:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.434		µg/Kg-dry	1	7/25/2014 2:08:00 PM
Aroclor 1221	ND	0.434		µg/Kg-dry	1	7/25/2014 2:08:00 PM
Aroclor 1232	ND	0.434		µg/Kg-dry	1	7/25/2014 2:08:00 PM
Aroclor 1242	ND	0.434		µg/Kg-dry	1	7/25/2014 2:08:00 PM
Aroclor 1248	635	0.434		µg/Kg-dry	1	7/25/2014 2:08:00 PM
Aroclor 1254	ND	0.434		µg/Kg-dry	1	7/25/2014 2:08:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 11:30:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-031
Client Sample ID: TP22-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1260	ND	0.434		µg/Kg-dry	1	7/25/2014 2:08:00 PM
Aroclor 1262	ND	0.434		µg/Kg-dry	1	7/25/2014 2:08:00 PM
Aroclor 1268	ND	0.434		µg/Kg-dry	1	7/25/2014 2:08:00 PM
Surr: Decachlorobiphenyl	63.3	56.5-130		%REC	1	7/25/2014 2:08:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	8.68		µg/Kg-dry	1	7/24/2014 2:06:00 PM
2,4,5-TP (Silvex)	ND	8.68		µg/Kg-dry	1	7/24/2014 2:06:00 PM
2,4-D	ND	8.68		µg/Kg-dry	1	7/24/2014 2:06:00 PM
2,4-DB	ND	8.68		µg/Kg-dry	1	7/24/2014 2:06:00 PM
4-Nitrophenol	ND	8.68		µg/Kg-dry	1	7/24/2014 2:06:00 PM
Dicamba	ND	8.68		µg/Kg-dry	1	7/24/2014 2:06:00 PM
Dichlorprop	ND	8.68		µg/Kg-dry	1	7/24/2014 2:06:00 PM
Dinoseb	ND	8.68		µg/Kg-dry	1	7/24/2014 2:06:00 PM
MCPA	ND	868		µg/Kg-dry	1	7/24/2014 2:06:00 PM
MCPP	ND	868		µg/Kg-dry	1	7/24/2014 2:06:00 PM
Pentachlorophenol	ND	8.68		µg/Kg-dry	1	7/24/2014 2:06:00 PM
Surr: 2,4-DCAA	78.6	34.3-141		%REC	1	7/24/2014 2:06:00 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 11:35:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-032		
Client Sample ID:	TP22-S-5.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 11:40:00 AM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-033		
Client Sample ID:	TP22-S-7.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 11:55:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-034
Client Sample ID: TP23-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	23.2	17.9	A1	mg/Kg-dry	1	7/18/2014 2:09:28 PM
Lube Oil	104	59.7	A2	mg/Kg-dry	1	7/18/2014 2:09:28 PM
Surr: o-Terphenyl	64.3	50-150		%REC	1	7/18/2014 2:09:28 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	2240	807		µg/Kg-dry	10	7/24/2014 6:39:00 PM
Chromium	10600	807		µg/Kg-dry	10	7/24/2014 6:39:00 PM
Copper	22800	403		µg/Kg-dry	10	7/24/2014 6:39:00 PM
Lead	13700	202		µg/Kg-dry	10	7/24/2014 6:39:00 PM
Nickel	10100	403		µg/Kg-dry	10	7/24/2014 6:39:00 PM
Zinc	608000	80700		µg/Kg-dry	100	7/25/2014 4:13:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0497	0.0175		mg/Kg-dry	1	7/18/2014 11:41:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	298		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Bolstar	ND	23.9		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Chloropyrifos	ND	23.9		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Coumaphos	ND	119		µg/Kg-dry	1	7/24/2014 2:27:00 PM
DEF	ND	23.9		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Demeton-S	ND	59.7		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Diazinon	ND	59.7		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Dichlorovos	ND	23.9		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Dimethoate	ND	59.7		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Disulfoton	ND	23.9		µg/Kg-dry	1	7/24/2014 2:27:00 PM
EPN	ND	23.9		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Ethion	ND	23.9		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Ethoprop	ND	23.9		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Fensulfothion	ND	119		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Fenthion	ND	23.9		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Malathion	ND	23.9		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Methyl parathion	ND	119		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Mevinphos	ND	119		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Naled	ND	298		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Parathion	ND	59.7		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Phorate	ND	23.9		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Ronnel	ND	23.9		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Stirofos	ND	23.9		µg/Kg-dry	1	7/24/2014 2:27:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 11:55:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-034
Client Sample ID: TP23-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Sulfotepp	ND	23.9		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Tokuthion	ND	23.9		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Trichloronate	ND	23.9		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Surr: Tributylphosphate (Surr.)	98.0	50-150		%REC	1	7/24/2014 2:27:00 PM
Surr: Triphenylphosphate (Surr.)	64.0	50-150		%REC	1	7/24/2014 2:27:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
4,4´-DDE	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
4,4´-DDT	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
Aldrin	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
alpha-BHC	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
alpha-Chlordane	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
beta-BHC	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
Chlordane	ND	7.96		µg/Kg-dry	1	7/27/2014 11:17:00 PM
delta-BHC	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
Dieldrin	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
Endosulfan I	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
Endosulfan II	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
Endosulfan Sulfate	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
Endrin	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
Endrin aldehyde	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
Endrin ketone	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
gamma-BHC	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
gamma-Chlordane	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
Heptachlor	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
Heptachlor epoxide	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
Methoxychlor	ND	0.398		µg/Kg-dry	1	7/27/2014 11:17:00 PM
Toxaphene	ND	7.96		µg/Kg-dry	1	7/27/2014 11:17:00 PM
Surr: Decachlorobiphenyl	95.6	25.9-136		%REC	1	7/27/2014 11:17:00 PM
Surr: Tetrachloro-m-xylene	14.3	15-124	S	%REC	1	7/27/2014 11:17:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.397		µg/Kg-dry	1	7/25/2014 2:25:00 PM
Aroclor 1221	ND	0.397		µg/Kg-dry	1	7/25/2014 2:25:00 PM
Aroclor 1232	ND	0.397		µg/Kg-dry	1	7/25/2014 2:25:00 PM
Aroclor 1242	ND	0.397		µg/Kg-dry	1	7/25/2014 2:25:00 PM
Aroclor 1248	17100	39.7		µg/Kg-dry	100	7/26/2014 2:17:00 PM
Aroclor 1254	ND	0.397		µg/Kg-dry	1	7/25/2014 2:25:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 11:55:00 AM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-034
Client Sample ID: TP23-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1260	ND	0.397		µg/Kg-dry	1	7/25/2014 2:25:00 PM
Aroclor 1262	ND	0.397		µg/Kg-dry	1	7/25/2014 2:25:00 PM
Aroclor 1268	ND	0.397		µg/Kg-dry	1	7/25/2014 2:25:00 PM
Surr: Decachlorobiphenyl	97.7	56.5-130		%REC	1	7/25/2014 2:25:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	7.96		µg/Kg-dry	1	7/24/2014 2:27:00 PM
2,4,5-TP (Silvex)	ND	7.96		µg/Kg-dry	1	7/24/2014 2:27:00 PM
2,4-D	ND	7.96		µg/Kg-dry	1	7/24/2014 2:27:00 PM
2,4-DB	ND	7.96		µg/Kg-dry	1	7/24/2014 2:27:00 PM
4-Nitrophenol	ND	7.96		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Dicamba	ND	7.96		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Dichlorprop	ND	7.96		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Dinoseb	ND	7.96		µg/Kg-dry	1	7/24/2014 2:27:00 PM
MCPA	ND	796		µg/Kg-dry	1	7/24/2014 2:27:00 PM
MCPP	ND	796		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Pentachlorophenol	ND	7.96		µg/Kg-dry	1	7/24/2014 2:27:00 PM
Surr: 2,4-DCAA	23.6	34.3-141	SMI	%REC	1	7/24/2014 2:27:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 12:00:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-035
Client Sample ID: TP23-S-4.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.363		µg/Kg-dry	1	7/29/2014 4:18:00 PM
Aroclor 1221	ND	0.363		µg/Kg-dry	1	7/29/2014 4:18:00 PM
Aroclor 1232	ND	0.363		µg/Kg-dry	1	7/29/2014 4:18:00 PM
Aroclor 1242	ND	0.363		µg/Kg-dry	1	7/29/2014 4:18:00 PM
Aroclor 1248	ND	0.363		µg/Kg-dry	1	7/29/2014 4:18:00 PM
Aroclor 1254	ND	0.363		µg/Kg-dry	1	7/29/2014 4:18:00 PM
Aroclor 1260	ND	0.363		µg/Kg-dry	1	7/29/2014 4:18:00 PM
Aroclor 1262	ND	0.363		µg/Kg-dry	1	7/29/2014 4:18:00 PM
Aroclor 1268	ND	0.363		µg/Kg-dry	1	7/29/2014 4:18:00 PM
Surr: Decachlorobiphenyl	96.2	56.5-130		%REC	1	7/29/2014 4:18:00 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 12:05:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-036		
Client Sample ID:	TP23-S-6.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 1:12:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-037
Client Sample ID: TP24-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	19.3	17.4		mg/Kg-dry	1	7/18/2014 9:09:28 PM
Lube Oil	104	57.9	A2	mg/Kg-dry	1	7/18/2014 9:09:28 PM
Surr: o-Terphenyl	95.5	50-150		%REC	1	7/18/2014 9:09:28 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	2180	609		µg/Kg-dry	10	7/24/2014 6:46:00 PM
Chromium	10100	609		µg/Kg-dry	10	7/24/2014 6:46:00 PM
Copper	27400	305		µg/Kg-dry	10	7/24/2014 6:46:00 PM
Lead	32200	152		µg/Kg-dry	10	7/24/2014 6:46:00 PM
Nickel	8700	305		µg/Kg-dry	10	7/24/2014 6:46:00 PM
Zinc	177000	30500		µg/Kg-dry	50	7/25/2014 4:20:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.114	0.0161		mg/Kg-dry	1	7/18/2014 11:43:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	289		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Bolstar	ND	23.2		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Chloropyrifos	ND	23.2		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Coumaphos	ND	116		µg/Kg-dry	1	7/24/2014 2:51:00 PM
DEF	ND	23.2		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Demeton-S	ND	57.9		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Diazinon	ND	57.9		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Dichlorovos	ND	23.2		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Dimethoate	ND	57.9		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Disulfoton	ND	23.2		µg/Kg-dry	1	7/24/2014 2:51:00 PM
EPN	ND	23.2		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Ethion	ND	23.2		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Ethoprop	ND	23.2		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Fensulfothion	ND	116		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Fenthion	ND	23.2		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Malathion	ND	23.2		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Methyl parathion	ND	116		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Mevinphos	ND	116		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Naled	ND	289		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Parathion	ND	57.9		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Phorate	ND	23.2		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Ronnel	ND	23.2		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Stirofos	ND	23.2		µg/Kg-dry	1	7/24/2014 2:51:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 1:12:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-037
Client Sample ID: TP24-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Sulfotepp	ND	23.2		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Tokuthion	ND	23.2		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Trichloronate	ND	23.2		µg/Kg-dry	1	7/24/2014 2:51:00 PM
Surr: Tributylphosphate (Surr.)	104	50-150		%REC	1	7/24/2014 2:51:00 PM
Surr: Triphenylphosphate (Surr.)	73.0	50-150		%REC	1	7/24/2014 2:51:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
4,4´-DDE	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
4,4´-DDT	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
Aldrin	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
alpha-BHC	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
alpha-Chlordane	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
beta-BHC	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
Chlordane	ND	7.72		µg/Kg-dry	1	7/27/2014 11:46:00 PM
delta-BHC	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
Dieldrin	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
Endosulfan I	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
Endosulfan II	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
Endosulfan Sulfate	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
Endrin	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
Endrin aldehyde	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
Endrin ketone	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
gamma-BHC	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
gamma-Chlordane	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
Heptachlor	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
Heptachlor epoxide	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
Methoxychlor	ND	0.386		µg/Kg-dry	1	7/27/2014 11:46:00 PM
Toxaphene	ND	7.72		µg/Kg-dry	1	7/27/2014 11:46:00 PM
Surr: Decachlorobiphenyl	166	25.9-136	SMI	%REC	1	7/27/2014 11:46:00 PM
Surr: Tetrachloro-m-xylene	3.76	15-124	S	%REC	1	7/27/2014 11:46:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.386		µg/Kg-dry	1	7/25/2014 2:42:00 PM
Aroclor 1221	ND	0.386		µg/Kg-dry	1	7/25/2014 2:42:00 PM
Aroclor 1232	ND	0.386		µg/Kg-dry	1	7/25/2014 2:42:00 PM
Aroclor 1242	ND	0.386		µg/Kg-dry	1	7/25/2014 2:42:00 PM
Aroclor 1248	514	0.386		µg/Kg-dry	1	7/25/2014 2:42:00 PM
Aroclor 1254	ND	0.386		µg/Kg-dry	1	7/25/2014 2:42:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 1:12:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-037
Client Sample ID: TP24-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1260	ND	0.386		µg/Kg-dry	1	7/25/2014 2:42:00 PM
Aroclor 1262	ND	0.386		µg/Kg-dry	1	7/25/2014 2:42:00 PM
Aroclor 1268	ND	0.386		µg/Kg-dry	1	7/25/2014 2:42:00 PM
Surr: Decachlorobiphenyl	243	56.5-130	SMI	%REC	1	7/25/2014 2:42:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	7.72		µg/Kg-dry	1	7/24/2014 2:48:00 PM
2,4,5-TP (Silvex)	ND	7.72		µg/Kg-dry	1	7/24/2014 2:48:00 PM
2,4-D	ND	7.72		µg/Kg-dry	1	7/24/2014 2:48:00 PM
2,4-DB	ND	7.72		µg/Kg-dry	1	7/24/2014 2:48:00 PM
4-Nitrophenol	ND	7.72		µg/Kg-dry	1	7/24/2014 2:48:00 PM
Dicamba	ND	7.72		µg/Kg-dry	1	7/24/2014 2:48:00 PM
Dichlorprop	ND	7.72		µg/Kg-dry	1	7/24/2014 2:48:00 PM
Dinoseb	ND	7.72		µg/Kg-dry	1	7/24/2014 2:48:00 PM
MCPA	ND	772		µg/Kg-dry	1	7/24/2014 2:48:00 PM
MCPP	ND	772		µg/Kg-dry	1	7/24/2014 2:48:00 PM
Pentachlorophenol	ND	7.72		µg/Kg-dry	1	7/24/2014 2:48:00 PM
Surr: 2,4-DCAA	50.5	34.3-141		%REC	1	7/24/2014 2:48:00 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 1:17:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-038		
Client Sample ID:	TP24-S-4.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 1:22:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-039		
Client Sample ID:	TP24-S-6.5	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 1:30:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-040
Client Sample ID: TP25-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	62.4	17.4	A1	mg/Kg-dry	1	7/18/2014 9:39:28 PM
Lube Oil	215	58.1	A2	mg/Kg-dry	1	7/18/2014 9:39:28 PM
Surr: o-Terphenyl	115	50-150		%REC	1	7/18/2014 9:39:28 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	3700	1000		µg/Kg-dry	10	7/24/2014 8:31:00 PM
Chromium	12600	1000		µg/Kg-dry	10	7/24/2014 8:31:00 PM
Copper	29200	501		µg/Kg-dry	10	7/24/2014 8:31:00 PM
Lead	23800	250		µg/Kg-dry	10	7/24/2014 8:31:00 PM
Nickel	10600	501		µg/Kg-dry	10	7/24/2014 8:31:00 PM
Zinc	314000	50100		µg/Kg-dry	50	7/25/2014 5:49:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0597	0.0167		mg/Kg-dry	1	7/18/2014 11:46:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	290		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Bolstar	ND	23.2		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Chloropyrifos	ND	23.2		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Coumaphos	ND	116		µg/Kg-dry	1	7/24/2014 3:16:00 PM
DEF	ND	23.2		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Demeton-S	ND	58.1		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Diazinon	ND	58.1		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Dichlorovos	ND	23.2		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Dimethoate	ND	58.1		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Disulfoton	ND	23.2		µg/Kg-dry	1	7/24/2014 3:16:00 PM
EPN	ND	23.2		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Ethion	ND	23.2		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Ethoprop	ND	23.2		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Fensulfothion	ND	116		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Fenthion	ND	23.2		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Malathion	ND	23.2		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Methyl parathion	ND	116		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Mevinphos	ND	116		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Naled	ND	290		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Parathion	ND	58.1		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Phorate	ND	23.2		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Ronnel	ND	23.2		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Stirofos	ND	23.2		µg/Kg-dry	1	7/24/2014 3:16:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 1:30:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-040
Client Sample ID: TP25-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Sulfotepp	ND	23.2		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Tokuthion	ND	23.2		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Trichloronate	ND	23.2		µg/Kg-dry	1	7/24/2014 3:16:00 PM
Surr: Tributylphosphate (Surr.)	113	50-150		%REC	1	7/24/2014 3:16:00 PM
Surr: Triphenylphosphate (Surr.)	124	50-150		%REC	1	7/24/2014 3:16:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.387		µg/Kg-dry	1	7/28/2014
4,4´-DDE	ND	0.387		µg/Kg-dry	1	7/28/2014
4,4´-DDT	ND	0.387		µg/Kg-dry	1	7/28/2014
Aldrin	ND	0.387		µg/Kg-dry	1	7/28/2014
alpha-BHC	ND	0.387		µg/Kg-dry	1	7/28/2014
alpha-Chlordane	ND	0.387		µg/Kg-dry	1	7/28/2014
beta-BHC	ND	0.387		µg/Kg-dry	1	7/28/2014
Chlordane	ND	7.74		µg/Kg-dry	1	7/28/2014
delta-BHC	ND	0.387		µg/Kg-dry	1	7/28/2014
Dieldrin	ND	0.387		µg/Kg-dry	1	7/28/2014
Endosulfan I	ND	0.387		µg/Kg-dry	1	7/28/2014
Endosulfan II	ND	0.387		µg/Kg-dry	1	7/28/2014
Endosulfan Sulfate	ND	0.387		µg/Kg-dry	1	7/28/2014
Endrin	ND	0.387		µg/Kg-dry	1	7/28/2014
Endrin aldehyde	ND	0.387		µg/Kg-dry	1	7/28/2014
Endrin ketone	ND	0.387		µg/Kg-dry	1	7/28/2014
gamma-BHC	ND	0.387		µg/Kg-dry	1	7/28/2014
gamma-Chlordane	ND	0.387		µg/Kg-dry	1	7/28/2014
Heptachlor	ND	0.387		µg/Kg-dry	1	7/28/2014
Heptachlor epoxide	ND	0.387		µg/Kg-dry	1	7/28/2014
Methoxychlor	ND	0.387		µg/Kg-dry	1	7/28/2014
Toxaphene	ND	7.74		µg/Kg-dry	1	7/28/2014
Surr: Decachlorobiphenyl	60.6	25.9-136		%REC	1	7/28/2014
Surr: Tetrachloro-m-xylene	3.50	15-124	S	%REC	1	7/28/2014
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.387		µg/Kg-dry	1	7/25/2014 2:59:00 PM
Aroclor 1221	ND	0.387		µg/Kg-dry	1	7/25/2014 2:59:00 PM
Aroclor 1232	ND	0.387		µg/Kg-dry	1	7/25/2014 2:59:00 PM
Aroclor 1242	ND	0.387		µg/Kg-dry	1	7/25/2014 2:59:00 PM
Aroclor 1248	26900	38.7		µg/Kg-dry	100	7/26/2014 2:34:00 PM
Aroclor 1254	ND	0.387		µg/Kg-dry	1	7/25/2014 2:59:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 1:30:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-040
Client Sample ID: TP25-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1260	ND	0.387		µg/Kg-dry	1	7/25/2014 2:59:00 PM
Aroclor 1262	ND	0.387		µg/Kg-dry	1	7/25/2014 2:59:00 PM
Aroclor 1268	ND	0.387		µg/Kg-dry	1	7/25/2014 2:59:00 PM
Surr: Decachlorobiphenyl	77.8	56.5-130		%REC	1	7/25/2014 2:59:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	7.74		µg/Kg-dry	1	7/24/2014 3:09:00 PM
2,4,5-TP (Silvex)	ND	7.74		µg/Kg-dry	1	7/24/2014 3:09:00 PM
2,4-D	ND	7.74		µg/Kg-dry	1	7/24/2014 3:09:00 PM
2,4-DB	ND	7.74		µg/Kg-dry	1	7/24/2014 3:09:00 PM
4-Nitrophenol	ND	7.74		µg/Kg-dry	1	7/24/2014 3:09:00 PM
Dicamba	ND	7.74		µg/Kg-dry	1	7/24/2014 3:09:00 PM
Dichlorprop	ND	7.74		µg/Kg-dry	1	7/24/2014 3:09:00 PM
Dinoseb	ND	7.74		µg/Kg-dry	1	7/24/2014 3:09:00 PM
MCPA	ND	774		µg/Kg-dry	1	7/24/2014 3:09:00 PM
MCPP	ND	774		µg/Kg-dry	1	7/24/2014 3:09:00 PM
Pentachlorophenol	ND	7.74		µg/Kg-dry	1	7/24/2014 3:09:00 PM
Surr: 2,4-DCAA	45.4	34.3-141		%REC	1	7/24/2014 3:09:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 1:35:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-041
Client Sample ID: TP25-S-4.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.370		µg/Kg-dry	1	7/29/2014 4:35:00 PM
Aroclor 1221	ND	0.370		µg/Kg-dry	1	7/29/2014 4:35:00 PM
Aroclor 1232	ND	0.370		µg/Kg-dry	1	7/29/2014 4:35:00 PM
Aroclor 1242	ND	0.370		µg/Kg-dry	1	7/29/2014 4:35:00 PM
Aroclor 1248	ND	0.370		µg/Kg-dry	1	7/29/2014 4:35:00 PM
Aroclor 1254	ND	0.370		µg/Kg-dry	1	7/29/2014 4:35:00 PM
Aroclor 1260	ND	0.370		µg/Kg-dry	1	7/29/2014 4:35:00 PM
Aroclor 1262	ND	0.370		µg/Kg-dry	1	7/29/2014 4:35:00 PM
Aroclor 1268	ND	0.370		µg/Kg-dry	1	7/29/2014 4:35:00 PM
Surr: Decachlorobiphenyl	82.6	56.5-130		%REC	1	7/29/2014 4:35:00 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 1:40:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-042		
Client Sample ID:	TP25-S-7.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 1:53:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-043
Client Sample ID: TP26-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	44.9	17.7		mg/Kg-dry	1	7/18/2014 1:23:57 PM
Lube Oil	133	59.0		mg/Kg-dry	1	7/18/2014 1:23:57 PM
Surr: o-Terphenyl	91.8	50-150		%REC	1	7/18/2014 1:23:57 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	4190	1130		µg/Kg-dry	10	7/24/2014 9:01:00 PM
Chromium	26200	1130		µg/Kg-dry	10	7/24/2014 9:01:00 PM
Copper	35500	567		µg/Kg-dry	10	7/24/2014 9:01:00 PM
Iron	31200000	5670000		µg/Kg-dry	500	7/28/2014 3:45:00 PM
Lead	95300	284		µg/Kg-dry	10	7/24/2014 9:01:00 PM
Manganese	538000	2840		µg/Kg-dry	50	7/25/2014 7:18:00 PM
Nickel	11300	567		µg/Kg-dry	10	7/24/2014 9:01:00 PM
Zinc	2380000	567000		µg/Kg-dry	500	7/25/2014 7:11:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0723	0.0183		mg/Kg-dry	1	7/18/2014 11:49:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	295		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Bolstar	ND	23.6		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Chloropyrifos	ND	23.6		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Coumaphos	ND	118		µg/Kg-dry	1	7/24/2014 3:40:00 PM
DEF	ND	23.6		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Demeton-S	ND	59.0		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Diazinon	ND	59.0		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Dichlorovos	ND	23.6		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Dimethoate	ND	59.0		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Disulfoton	ND	23.6		µg/Kg-dry	1	7/24/2014 3:40:00 PM
EPN	ND	23.6		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Ethion	ND	23.6		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Ethoprop	ND	23.6		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Fensulfothion	ND	118		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Fenthion	ND	23.6		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Malathion	ND	23.6		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Methyl parathion	ND	118		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Mevinphos	ND	118		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Naled	ND	295		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Parathion	ND	59.0		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Phorate	ND	23.6		µg/Kg-dry	1	7/24/2014 3:40:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 1:53:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-043
Client Sample ID: TP26-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Ronnel	ND	23.6		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Stirofos	ND	23.6		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Sulfotepp	ND	23.6		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Tokuthion	ND	23.6		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Trichloronate	ND	23.6		µg/Kg-dry	1	7/24/2014 3:40:00 PM
Surr: Tributylphosphate (Surr.)	118	50-150		%REC	1	7/24/2014 3:40:00 PM
Surr: Triphenylphosphate (Surr.)	244	50-150	SMI	%REC	1	7/24/2014 3:40:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
4,4´-DDE	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
4,4´-DDT	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
Aldrin	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
alpha-BHC	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
alpha-Chlordane	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
beta-BHC	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
Chlordane	ND	7.87		µg/Kg-dry	1	7/28/2014 12:29:00 AM
delta-BHC	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
Dieldrin	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
Endosulfan I	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
Endosulfan II	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
Endosulfan Sulfate	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
Endrin	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
Endrin aldehyde	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
Endrin ketone	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
gamma-BHC	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
gamma-Chlordane	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
Heptachlor	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
Heptachlor epoxide	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
Methoxychlor	ND	0.393		µg/Kg-dry	1	7/28/2014 12:29:00 AM
Toxaphene	ND	7.87		µg/Kg-dry	1	7/28/2014 12:29:00 AM
Surr: Decachlorobiphenyl	74.3	25.9-136		%REC	1	7/28/2014 12:29:00 AM
Surr: Tetrachloro-m-xylene	10.2	15-124	S	%REC	1	7/28/2014 12:29:00 AM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.393		µg/Kg-dry	1	7/25/2014 3:15:00 PM
Aroclor 1221	ND	0.393		µg/Kg-dry	1	7/25/2014 3:15:00 PM
Aroclor 1232	ND	0.393		µg/Kg-dry	1	7/25/2014 3:15:00 PM
Aroclor 1242	ND	0.393		µg/Kg-dry	1	7/25/2014 3:15:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 1:53:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-043
Client Sample ID: TP26-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1248	33200	78.6		µg/Kg-dry	200	7/26/2014 2:50:00 PM
Aroclor 1254	ND	0.393		µg/Kg-dry	1	7/25/2014 3:15:00 PM
Aroclor 1260	ND	0.393		µg/Kg-dry	1	7/25/2014 3:15:00 PM
Aroclor 1262	ND	0.393		µg/Kg-dry	1	7/25/2014 3:15:00 PM
Aroclor 1268	ND	0.393		µg/Kg-dry	1	7/25/2014 3:15:00 PM
Surr: Decachlorobiphenyl	247	56.5-130	SMI	%REC	1	7/25/2014 3:15:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	7.87		µg/Kg-dry	1	7/24/2014 3:30:00 PM
2,4,5-TP (Silvex)	ND	7.87		µg/Kg-dry	1	7/24/2014 3:30:00 PM
2,4-D	ND	7.87		µg/Kg-dry	1	7/24/2014 3:30:00 PM
2,4-DB	ND	7.87		µg/Kg-dry	1	7/24/2014 3:30:00 PM
4-Nitrophenol	ND	7.87		µg/Kg-dry	1	7/24/2014 3:30:00 PM
Dicamba	ND	7.87		µg/Kg-dry	1	7/24/2014 3:30:00 PM
Dichlorprop	ND	7.87		µg/Kg-dry	1	7/24/2014 3:30:00 PM
Dinoseb	ND	7.87		µg/Kg-dry	1	7/24/2014 3:30:00 PM
MCPA	ND	787		µg/Kg-dry	1	7/24/2014 3:30:00 PM
MCPP	ND	787		µg/Kg-dry	1	7/24/2014 3:30:00 PM
Pentachlorophenol	172	7.87		µg/Kg-dry	1	7/24/2014 3:30:00 PM
Surr: 2,4-DCAA	75.4	34.3-141		%REC	1	7/24/2014 3:30:00 PM
AMMONIA AS N		**E350.1**				Analyst: **EFH**
Nitrogen, Ammonia (As N)	ND	4.72		mg/Kg-dry	1	7/21/2014 12:33:32 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 2:00:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-044
Client Sample ID: TP26-S-5.0
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.360		µg/Kg-dry	1	7/29/2014 4:52:00 PM
Aroclor 1221	ND	0.360		µg/Kg-dry	1	7/29/2014 4:52:00 PM
Aroclor 1232	ND	0.360		µg/Kg-dry	1	7/29/2014 4:52:00 PM
Aroclor 1242	ND	0.360		µg/Kg-dry	1	7/29/2014 4:52:00 PM
Aroclor 1248	ND	0.360		µg/Kg-dry	1	7/29/2014 4:52:00 PM
Aroclor 1254	ND	0.360		µg/Kg-dry	1	7/29/2014 4:52:00 PM
Aroclor 1260	ND	0.360		µg/Kg-dry	1	7/29/2014 4:52:00 PM
Aroclor 1262	ND	0.360		µg/Kg-dry	1	7/29/2014 4:52:00 PM
Aroclor 1268	ND	0.360		µg/Kg-dry	1	7/29/2014 4:52:00 PM
Surr: Decachlorobiphenyl	73.0	56.5-130		%REC	1	7/29/2014 4:52:00 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 2:05:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-045		
Client Sample ID:	TP26-S-7.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 2:20:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-046
Client Sample ID: TP27-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	69.3	20.8		mg/Kg-dry	1	7/18/2014 2:23:57 PM
Lube Oil	162	69.2		mg/Kg-dry	1	7/18/2014 2:23:57 PM
Surr: o-Terphenyl	111	50-150		%REC	1	7/18/2014 2:23:57 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	14600	805		µg/Kg-dry	10	7/24/2014 9:08:00 PM
Chromium	17000	805		µg/Kg-dry	10	7/24/2014 9:08:00 PM
Copper	35500	403		µg/Kg-dry	10	7/24/2014 9:08:00 PM
Iron	27200000	1610000		µg/Kg-dry	200	7/28/2014 3:53:00 PM
Lead	96400	403		µg/Kg-dry	20	7/28/2014 4:38:00 PM
Manganese	333000	2010		µg/Kg-dry	50	7/25/2014 7:56:00 PM
Nickel	8970	403		µg/Kg-dry	10	7/24/2014 9:08:00 PM
Zinc	448000	161000		µg/Kg-dry	200	7/25/2014 7:48:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.110	0.0199		mg/Kg-dry	1	7/18/2014 11:52:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	346		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Bolstar	ND	27.7		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Chloropyrifos	ND	27.7		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Coumaphos	ND	138		µg/Kg-dry	1	7/24/2014 4:05:00 PM
DEF	ND	27.7		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Demeton-S	ND	69.2		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Diazinon	ND	69.2		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Dichlorovos	ND	27.7		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Dimethoate	ND	69.2		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Disulfoton	ND	27.7		µg/Kg-dry	1	7/24/2014 4:05:00 PM
EPN	ND	27.7		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Ethion	ND	27.7		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Ethoprop	ND	27.7		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Fensulfothion	ND	138		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Fenthion	ND	27.7		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Malathion	ND	27.7		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Methyl parathion	ND	138		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Mevinphos	ND	138		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Naled	ND	346		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Parathion	ND	69.2		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Phorate	ND	27.7		µg/Kg-dry	1	7/24/2014 4:05:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 2:20:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-046
Client Sample ID: TP27-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Ronnel	ND	27.7		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Stirofos	ND	27.7		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Sulfotepp	ND	27.7		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Tokuthion	ND	27.7		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Trichloronate	ND	27.7		µg/Kg-dry	1	7/24/2014 4:05:00 PM
Surr: Tributylphosphate (Surr.)	108	50-150		%REC	1	7/24/2014 4:05:00 PM
Surr: Triphenylphosphate (Surr.)	104	50-150		%REC	1	7/24/2014 4:05:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
4,4´-DDE	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
4,4´-DDT	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
Aldrin	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
alpha-BHC	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
alpha-Chlordane	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
beta-BHC	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
Chlordane	ND	9.23		µg/Kg-dry	1	7/28/2014 12:57:00 AM
delta-BHC	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
Dieldrin	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
Endosulfan I	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
Endosulfan II	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
Endosulfan Sulfate	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
Endrin	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
Endrin aldehyde	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
Endrin ketone	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
gamma-BHC	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
gamma-Chlordane	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
Heptachlor	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
Heptachlor epoxide	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
Methoxychlor	ND	0.462		µg/Kg-dry	1	7/28/2014 12:57:00 AM
Toxaphene	ND	9.23		µg/Kg-dry	1	7/28/2014 12:57:00 AM
Surr: Decachlorobiphenyl	69.8	25.9-136		%REC	1	7/28/2014 12:57:00 AM
Surr: Tetrachloro-m-xylene	3.73	15-124	S	%REC	1	7/28/2014 12:57:00 AM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.461		µg/Kg-dry	1	7/25/2014 3:32:00 PM
Aroclor 1221	ND	0.461		µg/Kg-dry	1	7/25/2014 3:32:00 PM
Aroclor 1232	ND	0.461		µg/Kg-dry	1	7/25/2014 3:32:00 PM
Aroclor 1242	ND	0.461		µg/Kg-dry	1	7/25/2014 3:32:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 2:20:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-046
Client Sample ID: TP27-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1248	63100	92.2		µg/Kg-dry	200	7/26/2014 3:07:00 PM
Aroclor 1254	ND	0.461		µg/Kg-dry	1	7/25/2014 3:32:00 PM
Aroclor 1260	ND	0.461		µg/Kg-dry	1	7/25/2014 3:32:00 PM
Aroclor 1262	ND	0.461		µg/Kg-dry	1	7/25/2014 3:32:00 PM
Aroclor 1268	ND	0.461		µg/Kg-dry	1	7/25/2014 3:32:00 PM
Surr: Decachlorobiphenyl	226	56.5-130	SMI	%REC	1	7/25/2014 3:32:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	9.23		µg/Kg-dry	1	7/24/2014 3:51:00 PM
2,4,5-TP (Silvex)	ND	9.23		µg/Kg-dry	1	7/24/2014 3:51:00 PM
2,4-D	ND	9.23		µg/Kg-dry	1	7/24/2014 3:51:00 PM
2,4-DB	ND	9.23		µg/Kg-dry	1	7/24/2014 3:51:00 PM
4-Nitrophenol	ND	9.23		µg/Kg-dry	1	7/24/2014 3:51:00 PM
Dicamba	ND	9.23		µg/Kg-dry	1	7/24/2014 3:51:00 PM
Dichlorprop	ND	9.23		µg/Kg-dry	1	7/24/2014 3:51:00 PM
Dinoseb	ND	9.23		µg/Kg-dry	1	7/24/2014 3:51:00 PM
MCPA	ND	923		µg/Kg-dry	1	7/24/2014 3:51:00 PM
MCPP	ND	923		µg/Kg-dry	1	7/24/2014 3:51:00 PM
Pentachlorophenol	ND	9.23		µg/Kg-dry	1	7/24/2014 3:51:00 PM
Surr: 2,4-DCAA	87.8	34.3-141		%REC	1	7/24/2014 3:51:00 PM
AMMONIA AS N		**E350.1**				Analyst: **EFH**
Nitrogen, Ammonia (As N)	ND	5.54		mg/Kg-dry	1	7/21/2014 12:39:32 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 2:26:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-047
Client Sample ID: TP27-S-5.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.412		µg/Kg-dry	1	7/29/2014 5:09:00 PM
Aroclor 1221	ND	0.412		µg/Kg-dry	1	7/29/2014 5:09:00 PM
Aroclor 1232	ND	0.412		µg/Kg-dry	1	7/29/2014 5:09:00 PM
Aroclor 1242	ND	0.412		µg/Kg-dry	1	7/29/2014 5:09:00 PM
Aroclor 1248	1560	8.24		µg/Kg-dry	20	7/30/2014 12:06:13 PM
Aroclor 1254	ND	0.412		µg/Kg-dry	1	7/29/2014 5:09:00 PM
Aroclor 1260	ND	0.412		µg/Kg-dry	1	7/29/2014 5:09:00 PM
Aroclor 1262	ND	0.412		µg/Kg-dry	1	7/29/2014 5:09:00 PM
Aroclor 1268	ND	0.412		µg/Kg-dry	1	7/29/2014 5:09:00 PM
Surr: Decachlorobiphenyl	69.1	56.5-130		%REC	1	7/29/2014 5:09:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 2:33:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-048
Client Sample ID: TP27-S-8.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.377	HT	µg/Kg-dry	1	8/6/2014 1:10:00 PM
Aroclor 1221	ND	0.377	HT	µg/Kg-dry	1	8/6/2014 1:10:00 PM
Aroclor 1232	ND	0.377	HT	µg/Kg-dry	1	8/6/2014 1:10:00 PM
Aroclor 1242	ND	0.377	HT	µg/Kg-dry	1	8/6/2014 1:10:00 PM
Aroclor 1248	392	3.77	HT	µg/Kg-dry	10	8/6/2014 2:36:00 PM
Aroclor 1254	ND	0.377	HT	µg/Kg-dry	1	8/6/2014 1:10:00 PM
Aroclor 1260	ND	0.377	HT	µg/Kg-dry	1	8/6/2014 1:10:00 PM
Aroclor 1262	ND	0.377	HT	µg/Kg-dry	1	8/6/2014 1:10:00 PM
Aroclor 1268	ND	0.377	HT	µg/Kg-dry	1	8/6/2014 1:10:00 PM
Surr: Decachlorobiphenyl	68.1	56.5-130	HT	%REC	1	8/6/2014 1:10:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 2:45:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-049
Client Sample ID: TP28-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Iron	47400000	1150000		µg/Kg-dry	100	7/29/2014 12:51:00 PM
Manganese	817000	5750		µg/Kg-dry	100	7/29/2014 12:51:00 PM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	293		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Bolstar	ND	23.5		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Chloropyrifos	ND	23.5		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Coumaphos	ND	117		µg/Kg-dry	1	7/24/2014 4:29:00 PM
DEF	ND	23.5		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Demeton-S	ND	58.7		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Diazinon	ND	58.7		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Dichlorovos	ND	23.5		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Dimethoate	ND	58.7		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Disulfoton	ND	23.5		µg/Kg-dry	1	7/24/2014 4:29:00 PM
EPN	ND	23.5		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Ethion	ND	23.5		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Ethoprop	ND	23.5		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Fensulfothion	ND	117		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Fenthion	ND	23.5		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Malathion	ND	23.5		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Methyl parathion	ND	117		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Mevinphos	ND	117		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Naled	ND	293		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Parathion	ND	58.7		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Phorate	ND	23.5		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Ronnel	ND	23.5		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Stirofos	ND	23.5		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Sulfotepp	ND	23.5		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Tokuthion	ND	23.5		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Trichloronate	ND	23.5		µg/Kg-dry	1	7/24/2014 4:29:00 PM
Surr: Tributylphosphate (Surr.)	131	50-150		%REC	1	7/24/2014 4:29:00 PM
Surr: Triphenylphosphate (Surr.)	103	50-150		%REC	1	7/24/2014 4:29:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
4,4´-DDE	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
4,4´-DDT	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
Aldrin	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
alpha-BHC	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 2:45:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-049
Client Sample ID: TP28-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
alpha-Chlordane	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
beta-BHC	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
Chlordane	ND	7.82		µg/Kg-dry	1	7/28/2014 1:26:00 AM
delta-BHC	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
Dieldrin	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
Endosulfan I	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
Endosulfan II	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
Endosulfan Sulfate	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
Endrin	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
Endrin aldehyde	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
Endrin ketone	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
gamma-BHC	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
gamma-Chlordane	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
Heptachlor	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
Heptachlor epoxide	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
Methoxychlor	ND	0.391		µg/Kg-dry	1	7/28/2014 1:26:00 AM
Toxaphene	ND	7.82		µg/Kg-dry	1	7/28/2014 1:26:00 AM
Surr: Decachlorobiphenyl	56.7	25.9-136		%REC	1	7/28/2014 1:26:00 AM
Surr: Tetrachloro-m-xylene	6.68	15-124	S	%REC	1	7/28/2014 1:26:00 AM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.391		µg/Kg-dry	1	7/25/2014 5:00:00 PM
Aroclor 1221	ND	0.391		µg/Kg-dry	1	7/25/2014 5:00:00 PM
Aroclor 1232	ND	0.391		µg/Kg-dry	1	7/25/2014 5:00:00 PM
Aroclor 1242	ND	0.391		µg/Kg-dry	1	7/25/2014 5:00:00 PM
Aroclor 1248	532	0.391		µg/Kg-dry	1	7/25/2014 5:00:00 PM
Aroclor 1254	ND	0.391		µg/Kg-dry	1	7/25/2014 5:00:00 PM
Aroclor 1260	ND	0.391		µg/Kg-dry	1	7/25/2014 5:00:00 PM
Aroclor 1262	ND	0.391		µg/Kg-dry	1	7/25/2014 5:00:00 PM
Aroclor 1268	ND	0.391		µg/Kg-dry	1	7/25/2014 5:00:00 PM
Surr: Decachlorobiphenyl	139	56.5-130	SMI	%REC	1	7/25/2014 5:00:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	7.82		µg/Kg-dry	1	7/24/2014 4:12:00 PM
2,4,5-TP (Silvex)	ND	7.82		µg/Kg-dry	1	7/24/2014 4:12:00 PM
2,4-D	ND	7.82		µg/Kg-dry	1	7/24/2014 4:12:00 PM
2,4-DB	ND	7.82		µg/Kg-dry	1	7/24/2014 4:12:00 PM
4-Nitrophenol	ND	7.82		µg/Kg-dry	1	7/24/2014 4:12:00 PM
Dicamba	ND	7.82		µg/Kg-dry	1	7/24/2014 4:12:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 2:45:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-049
Client Sample ID: TP28-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
Dichlorprop	ND	7.82		µg/Kg-dry	1	7/24/2014 4:12:00 PM
Dinoseb	ND	7.82		µg/Kg-dry	1	7/24/2014 4:12:00 PM
MCPA	ND	782		µg/Kg-dry	1	7/24/2014 4:12:00 PM
MCPP	ND	782		µg/Kg-dry	1	7/24/2014 4:12:00 PM
Pentachlorophenol	ND	7.82		µg/Kg-dry	1	7/24/2014 4:12:00 PM
Surr: 2,4-DCAA	53.0	34.3-141		%REC	1	7/24/2014 4:12:00 PM
AMMONIA AS N		**E350.1**				Analyst: **EFH**
Nitrogen, Ammonia (As N)	ND	4.69		mg/Kg-dry	1	7/21/2014 12:41:32 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 2:52:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-050		
Client Sample ID:	TP28-S-5.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 2:56:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-051		
Client Sample ID:	TP28-S-8.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 3:10:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-052
Client Sample ID: TP29-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	19.7	17.2		mg/Kg-dry	1	7/18/2014 2:53:57 PM
Lube Oil	104	57.4		mg/Kg-dry	1	7/18/2014 2:53:57 PM
Surr: o-Terphenyl	71.1	50-150		%REC	1	7/18/2014 2:53:57 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	3080	1060		µg/Kg-dry	10	8/26/2014 5:48:00 PM
Chromium	11900	1060		µg/Kg-dry	10	8/27/2014 4:15:00 PM
Copper	25700	531		µg/Kg-dry	10	8/26/2014 5:48:00 PM
Iron	36900000	1060000		µg/Kg-dry	100	8/27/2014 4:00:00 PM
Lead	15500	266		µg/Kg-dry	10	8/26/2014 5:48:00 PM
Manganese	429000	5310		µg/Kg-dry	100	8/27/2014 4:00:00 PM
Nickel	10500	531		µg/Kg-dry	10	8/27/2014 4:15:00 PM
Zinc	382000	106000		µg/Kg-dry	100	8/27/2014 4:00:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0444	0.0181		mg/Kg-dry	1	7/18/2014 11:55:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	287		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Bolstar	ND	23.0		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Chloropyrifos	ND	23.0		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Coumaphos	ND	115		µg/Kg-dry	1	7/24/2014 4:54:00 PM
DEF	ND	23.0		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Demeton-S	ND	57.4		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Diazinon	ND	57.4		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Dichlorovos	ND	23.0		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Dimethoate	ND	57.4		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Disulfoton	ND	23.0		µg/Kg-dry	1	7/24/2014 4:54:00 PM
EPN	ND	23.0		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Ethion	ND	23.0		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Ethoprop	ND	23.0		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Fensulfothion	ND	115		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Fenthion	ND	23.0		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Malathion	ND	23.0		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Methyl parathion	ND	115		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Mevinphos	ND	115		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Naled	ND	287		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Parathion	ND	57.4		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Phorate	ND	23.0		µg/Kg-dry	1	7/24/2014 4:54:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 3:10:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-052
Client Sample ID: TP29-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Ronnel	ND	23.0		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Stirofos	ND	23.0		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Sulfotepp	ND	23.0		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Tokuthion	ND	23.0		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Trichloronate	ND	23.0		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Surr: Tributylphosphate (Surr.)	118	50-150		%REC	1	7/24/2014 4:54:00 PM
Surr: Triphenylphosphate (Surr.)	115	50-150		%REC	1	7/24/2014 4:54:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
4,4´-DDE	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
4,4´-DDT	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
Aldrin	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
alpha-BHC	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
alpha-Chlordane	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
beta-BHC	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
Chlordane	ND	7.65		µg/Kg-dry	1	7/28/2014 1:40:00 AM
delta-BHC	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
Dieldrin	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
Endosulfan I	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
Endosulfan II	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
Endosulfan Sulfate	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
Endrin	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
Endrin aldehyde	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
Endrin ketone	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
gamma-BHC	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
gamma-Chlordane	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
Heptachlor	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
Heptachlor epoxide	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
Methoxychlor	ND	0.383		µg/Kg-dry	1	7/28/2014 1:40:00 AM
Toxaphene	ND	7.65		µg/Kg-dry	1	7/28/2014 1:40:00 AM
Surr: Decachlorobiphenyl	87.6	25.9-136		%REC	1	7/28/2014 1:40:00 AM
Surr: Tetrachloro-m-xylene	5.19	15-124	S	%REC	1	7/28/2014 1:40:00 AM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.382		µg/Kg-dry	1	7/25/2014 5:17:00 PM
Aroclor 1221	ND	0.382		µg/Kg-dry	1	7/25/2014 5:17:00 PM
Aroclor 1232	ND	0.382		µg/Kg-dry	1	7/25/2014 5:17:00 PM
Aroclor 1242	ND	0.382		µg/Kg-dry	1	7/25/2014 5:17:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 3:10:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-052
Client Sample ID: TP29-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1248	3980	19.1		µg/Kg-dry	50	7/26/2014 3:24:00 PM
Aroclor 1254	ND	0.382		µg/Kg-dry	1	7/25/2014 5:17:00 PM
Aroclor 1260	ND	0.382		µg/Kg-dry	1	7/25/2014 5:17:00 PM
Aroclor 1262	ND	0.382		µg/Kg-dry	1	7/25/2014 5:17:00 PM
Aroclor 1268	ND	0.382		µg/Kg-dry	1	7/25/2014 5:17:00 PM
Surr: Decachlorobiphenyl	149	56.5-130	S	%REC	1	7/25/2014 5:17:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	7.65		µg/Kg-dry	1	7/24/2014 4:33:00 PM
2,4,5-TP (Silvex)	ND	7.65		µg/Kg-dry	1	7/24/2014 4:33:00 PM
2,4-D	ND	7.65		µg/Kg-dry	1	7/24/2014 4:33:00 PM
2,4-DB	ND	7.65		µg/Kg-dry	1	7/24/2014 4:33:00 PM
4-Nitrophenol	ND	7.65		µg/Kg-dry	1	7/24/2014 4:33:00 PM
Dicamba	ND	7.65		µg/Kg-dry	1	7/24/2014 4:33:00 PM
Dichlorprop	ND	7.65		µg/Kg-dry	1	7/24/2014 4:33:00 PM
Dinoseb	ND	7.65		µg/Kg-dry	1	7/24/2014 4:33:00 PM
MCPA	ND	765		µg/Kg-dry	1	7/24/2014 4:33:00 PM
MCPP	ND	765		µg/Kg-dry	1	7/24/2014 4:33:00 PM
Pentachlorophenol	ND	7.65		µg/Kg-dry	1	7/24/2014 4:33:00 PM
Surr: 2,4-DCAA	35.1	34.3-141		%REC	1	7/24/2014 4:33:00 PM
AMMONIA AS N		**E350.1**				Analyst: **EFH**
Nitrogen, Ammonia (As N)	ND	4.59		mg/Kg-dry	1	7/21/2014 12:43:32 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 3:16:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-053
Client Sample ID: TP29-S-3.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.448		µg/Kg-dry	1	7/29/2014 5:26:00 PM
Aroclor 1221	ND	0.448		µg/Kg-dry	1	7/29/2014 5:26:00 PM
Aroclor 1232	ND	0.448		µg/Kg-dry	1	7/29/2014 5:26:00 PM
Aroclor 1242	ND	0.448		µg/Kg-dry	1	7/29/2014 5:26:00 PM
Aroclor 1248	4210	22.4		µg/Kg-dry	50	7/30/2014 12:23:13 PM
Aroclor 1254	ND	0.448		µg/Kg-dry	1	7/29/2014 5:26:00 PM
Aroclor 1260	ND	0.448		µg/Kg-dry	1	7/29/2014 5:26:00 PM
Aroclor 1262	ND	0.448		µg/Kg-dry	1	7/29/2014 5:26:00 PM
Aroclor 1268	ND	0.448		µg/Kg-dry	1	7/29/2014 5:26:00 PM
Surr: Decachlorobiphenyl	72.2	56.5-130		%REC	1	7/29/2014 5:26:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 3:22:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-054
Client Sample ID: TP29-S-7.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.358	HT	µg/Kg-dry	1	8/6/2014 1:27:00 PM
Aroclor 1221	ND	0.358	HT	µg/Kg-dry	1	8/6/2014 1:27:00 PM
Aroclor 1232	ND	0.358	HT	µg/Kg-dry	1	8/6/2014 1:27:00 PM
Aroclor 1242	ND	0.358	HT	µg/Kg-dry	1	8/6/2014 1:27:00 PM
Aroclor 1248	186	3.58	HT	µg/Kg-dry	10	8/6/2014 2:53:00 PM
Aroclor 1254	ND	0.358	HT	µg/Kg-dry	1	8/6/2014 1:27:00 PM
Aroclor 1260	ND	0.358	HT	µg/Kg-dry	1	8/6/2014 1:27:00 PM
Aroclor 1262	ND	0.358	HT	µg/Kg-dry	1	8/6/2014 1:27:00 PM
Aroclor 1268	ND	0.358	HT	µg/Kg-dry	1	8/6/2014 1:27:00 PM
Surr: Decachlorobiphenyl	89.8	56.5-130	HT	%REC	1	8/6/2014 1:27:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 3:36:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-055
Client Sample ID: TP30-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Iron	41700000	675000		µg/Kg-dry	100	7/29/2014 1:06:00 PM
Manganese	517000	3370		µg/Kg-dry	100	7/28/2014 5:00:00 PM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	287		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Bolstar	ND	22.9		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Chloropyrifos	ND	22.9		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Coumaphos	ND	115		µg/Kg-dry	1	7/24/2014 5:19:00 PM
DEF	ND	22.9		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Demeton-S	ND	57.3		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Diazinon	ND	57.3		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Dichlorovos	ND	22.9		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Dimethoate	ND	57.3		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Disulfoton	ND	22.9		µg/Kg-dry	1	7/24/2014 5:19:00 PM
EPN	ND	22.9		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Ethion	ND	22.9		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Ethoprop	ND	22.9		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Fensulfothion	ND	115		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Fenthion	ND	22.9		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Malathion	ND	22.9		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Methyl parathion	ND	115		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Mevinphos	ND	115		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Naled	ND	287		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Parathion	ND	57.3		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Phorate	ND	22.9		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Ronnel	ND	22.9		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Stirofos	ND	22.9		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Sulfotepp	ND	22.9		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Tokuthion	ND	22.9		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Trichloronate	ND	22.9		µg/Kg-dry	1	7/24/2014 5:19:00 PM
Surr: Tributylphosphate (Surr.)	109	50-150		%REC	1	7/24/2014 5:19:00 PM
Surr: Triphenylphosphate (Surr.)	104	50-150		%REC	1	7/24/2014 5:19:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
4,4´-DDE	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
4,4´-DDT	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
Aldrin	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
alpha-BHC	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 3:36:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-055
Client Sample ID: TP30-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
alpha-Chlordane	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
beta-BHC	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
Chlordane	ND	7.64		µg/Kg-dry	1	7/28/2014 1:55:00 AM
delta-BHC	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
Dieldrin	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
Endosulfan I	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
Endosulfan II	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
Endosulfan Sulfate	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
Endrin	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
Endrin aldehyde	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
Endrin ketone	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
gamma-BHC	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
gamma-Chlordane	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
Heptachlor	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
Heptachlor epoxide	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
Methoxychlor	ND	0.382		µg/Kg-dry	1	7/28/2014 1:55:00 AM
Toxaphene	ND	7.64		µg/Kg-dry	1	7/28/2014 1:55:00 AM
Surr: Decachlorobiphenyl	179	25.9-136	SMI	%REC	1	7/28/2014 1:55:00 AM
Surr: Tetrachloro-m-xylene	14.5	15-124	S	%REC	1	7/28/2014 1:55:00 AM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.382		µg/Kg-dry	1	7/25/2014 8:56:00 PM
Aroclor 1221	ND	0.382		µg/Kg-dry	1	7/25/2014 8:56:00 PM
Aroclor 1232	ND	0.382		µg/Kg-dry	1	7/25/2014 8:56:00 PM
Aroclor 1242	ND	0.382		µg/Kg-dry	1	7/25/2014 8:56:00 PM
Aroclor 1248	17300	38.2		µg/Kg-dry	100	7/26/2014 3:41:00 PM
Aroclor 1254	ND	0.382		µg/Kg-dry	1	7/25/2014 8:56:00 PM
Aroclor 1260	ND	0.382		µg/Kg-dry	1	7/25/2014 8:56:00 PM
Aroclor 1262	ND	0.382		µg/Kg-dry	1	7/25/2014 8:56:00 PM
Aroclor 1268	ND	0.382		µg/Kg-dry	1	7/25/2014 8:56:00 PM
Surr: Decachlorobiphenyl	376	56.5-130	SMI	%REC	1	7/25/2014 8:56:00 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	7.64		µg/Kg-dry	1	7/24/2014 4:54:00 PM
2,4,5-TP (Silvex)	ND	7.64		µg/Kg-dry	1	7/24/2014 4:54:00 PM
2,4-D	ND	7.64		µg/Kg-dry	1	7/24/2014 4:54:00 PM
2,4-DB	ND	7.64		µg/Kg-dry	1	7/24/2014 4:54:00 PM
4-Nitrophenol	ND	7.64		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Dicamba	ND	7.64		µg/Kg-dry	1	7/24/2014 4:54:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 3:36:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-055
Client Sample ID: TP30-S-0.5
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
Dichlorprop	ND	7.64		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Dinoseb	ND	7.64		µg/Kg-dry	1	7/24/2014 4:54:00 PM
MCPA	ND	764		µg/Kg-dry	1	7/24/2014 4:54:00 PM
MCPP	ND	764		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Pentachlorophenol	9.02	7.64		µg/Kg-dry	1	7/24/2014 4:54:00 PM
Surr: 2,4-DCAA	39.3	34.3-141		%REC	1	7/24/2014 4:54:00 PM
AMMONIA AS N		**E350.1**				Analyst: **EFH**
Nitrogen, Ammonia (As N)	ND	4.59		mg/Kg-dry	1	7/21/2014 12:45:32 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 3:41:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-056
Client Sample ID: TP30-S-4.0
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.362		µg/Kg-dry	1	7/29/2014 5:42:00 PM
Aroclor 1221	ND	0.362		µg/Kg-dry	1	7/29/2014 5:42:00 PM
Aroclor 1232	ND	0.362		µg/Kg-dry	1	7/29/2014 5:42:00 PM
Aroclor 1242	ND	0.362		µg/Kg-dry	1	7/29/2014 5:42:00 PM
Aroclor 1248	ND	0.362		µg/Kg-dry	1	7/29/2014 5:42:00 PM
Aroclor 1254	ND	0.362		µg/Kg-dry	1	7/29/2014 5:42:00 PM
Aroclor 1260	ND	0.362		µg/Kg-dry	1	7/29/2014 5:42:00 PM
Aroclor 1262	ND	0.362		µg/Kg-dry	1	7/29/2014 5:42:00 PM
Aroclor 1268	ND	0.362		µg/Kg-dry	1	7/29/2014 5:42:00 PM
Surr: Decachlorobiphenyl	74.7	56.5-130		%REC	1	7/29/2014 5:42:00 PM

Specialty Analytical

Date Reported: **28-Aug-14**

CLIENT:	Maul Foster & Alongi	**Collection Date:**	7/16/2014 3:44:00 PM
Project:	Fleischer / 9059.07.04		
Lab ID:	1407119-057		
Client Sample ID:	TP30-S-7.0	**Matrix:**	SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	8/5/2014

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 3:10:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-058
Client Sample ID: TP-S-0.5DUP
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **BS**
Diesel	23.1	17.4		mg/Kg-dry	1	7/18/2014 3:53:57 PM
Lube Oil	105	58.0		mg/Kg-dry	1	7/18/2014 3:53:57 PM
Surr: o-Terphenyl	63.5	50-150		%REC	1	7/18/2014 3:53:57 PM
ICP/MS METALS-TOTAL RECOVERABLE		**SW6020A**				Analyst: **VAS**
Arsenic	2880	1110		µg/Kg-dry	10	8/26/2014 5:55:00 PM
Chromium	15500	1110		µg/Kg-dry	10	8/27/2014 4:23:00 PM
Copper	24500	557		µg/Kg-dry	10	8/26/2014 5:55:00 PM
Iron	43300000	1110000		µg/Kg-dry	100	8/27/2014 4:08:00 PM
Lead	12600	279		µg/Kg-dry	10	8/26/2014 5:55:00 PM
Manganese	437000	5570		µg/Kg-dry	100	8/27/2014 4:08:00 PM
Nickel	15300	557		µg/Kg-dry	10	8/27/2014 4:23:00 PM
Zinc	390000	111000		µg/Kg-dry	100	8/27/2014 4:08:00 PM
TOTAL MERCURY		**SW 7471B**				Analyst: **BW**
Mercury	0.0405	0.0194		mg/Kg-dry	1	7/18/2014 11:58:04 AM
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Azinphos-methyl	ND	290		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Bolstar	ND	23.2		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Chloropyrifos	ND	23.2		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Coumaphos	ND	116		µg/Kg-dry	1	7/24/2014 5:43:00 PM
DEF	ND	23.2		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Demeton-S	ND	58.0		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Diazinon	ND	58.0		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Dichlorovos	ND	23.2		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Dimethoate	ND	58.0		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Disulfoton	ND	23.2		µg/Kg-dry	1	7/24/2014 5:43:00 PM
EPN	ND	23.2		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Ethion	ND	23.2		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Ethoprop	ND	23.2		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Fensulfothion	ND	116		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Fenthion	ND	23.2		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Malathion	ND	23.2		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Methyl parathion	ND	116		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Mevinphos	ND	116		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Naled	ND	290		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Parathion	ND	58.0		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Phorate	ND	23.2		µg/Kg-dry	1	7/24/2014 5:43:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 3:10:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-058
Client Sample ID: TP-S-0.5DUP
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
ORGANOPHOSPHORUS PESTICIDES		**SW8270D**				Analyst: **bda**
Ronnel	ND	23.2		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Stirofos	ND	23.2		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Sulfotepp	ND	23.2		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Tokuthion	ND	23.2		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Trichloronate	ND	23.2		µg/Kg-dry	1	7/24/2014 5:43:00 PM
Surr: Tributylphosphate (Surr.)	128	50-150		%REC	1	7/24/2014 5:43:00 PM
Surr: Triphenylphosphate (Surr.)	135	50-150		%REC	1	7/24/2014 5:43:00 PM
ORGANOCHLORINE PESTICIDES		**SW8081B**				Analyst: **ajr**
4,4´-DDD	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
4,4´-DDE	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
4,4´-DDT	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
Aldrin	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
alpha-BHC	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
alpha-Chlordane	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
beta-BHC	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
Chlordane	ND	7.73		µg/Kg-dry	1	7/28/2014 2:23:00 AM
delta-BHC	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
Dieldrin	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
Endosulfan I	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
Endosulfan II	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
Endosulfan Sulfate	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
Endrin	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
Endrin aldehyde	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
Endrin ketone	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
gamma-BHC	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
gamma-Chlordane	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
Heptachlor	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
Heptachlor epoxide	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
Methoxychlor	ND	0.386		µg/Kg-dry	1	7/28/2014 2:23:00 AM
Toxaphene	ND	7.73		µg/Kg-dry	1	7/28/2014 2:23:00 AM
Surr: Decachlorobiphenyl	85.2	25.9-136		%REC	1	7/28/2014 2:23:00 AM
Surr: Tetrachloro-m-xylene	15.2	15-124		%REC	1	7/28/2014 2:23:00 AM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1016	ND	0.386		µg/Kg-dry	1	7/25/2014 9:13:00 PM
Aroclor 1221	ND	0.386		µg/Kg-dry	1	7/25/2014 9:13:00 PM
Aroclor 1232	ND	0.386		µg/Kg-dry	1	7/25/2014 9:13:00 PM
Aroclor 1242	ND	0.386		µg/Kg-dry	1	7/25/2014 9:13:00 PM

Specialty Analytical

Date Reported: 28-Aug-14

CLIENT: Maul Foster & Alongi
Collection Date: 7/16/2014 3:10:00 PM
Project: Fleischer / 9059.07.04
Lab ID: 1407119-058
Client Sample ID: TP-S-0.5DUP
Matrix: SOIL

Analyses	Result	RL	Qual	Unit	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1254	ND	0.386		µg/Kg-dry	1	7/25/2014 9:13:00 PM
Aroclor 1260	ND	0.386		µg/Kg-dry	1	7/25/2014 9:13:00 PM
Aroclor 1262	ND	0.386		µg/Kg-dry	1	7/25/2014 9:13:00 PM
Aroclor 1268	ND	0.386		µg/Kg-dry	1	7/25/2014 9:13:00 PM
Surr: Decachlorobiphenyl	208	56.5-130	SMI	%REC	1	7/25/2014 9:13:00 PM
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **ajr**
Aroclor 1248	3640	19.3	HT	µg/Kg-dry	20	8/27/2014 2:43:24 PM
CHLORINATED HERBICIDES		**SW8151A**				Analyst: **ajr**
2,4,5-T	ND	7.73		µg/Kg-dry	1	7/24/2014 5:15:00 PM
2,4,5-TP (Silvex)	ND	7.73		µg/Kg-dry	1	7/24/2014 5:15:00 PM
2,4-D	ND	7.73		µg/Kg-dry	1	7/24/2014 5:15:00 PM
2,4-DB	ND	7.73		µg/Kg-dry	1	7/24/2014 5:15:00 PM
4-Nitrophenol	ND	7.73		µg/Kg-dry	1	7/24/2014 5:15:00 PM
Dicamba	ND	7.73		µg/Kg-dry	1	7/24/2014 5:15:00 PM
Dichlorprop	ND	7.73		µg/Kg-dry	1	7/24/2014 5:15:00 PM
Dinoseb	ND	7.73		µg/Kg-dry	1	7/24/2014 5:15:00 PM
MCPA	ND	773		µg/Kg-dry	1	7/24/2014 5:15:00 PM
MCPP	ND	773		µg/Kg-dry	1	7/24/2014 5:15:00 PM
Pentachlorophenol	ND	7.73		µg/Kg-dry	1	7/24/2014 5:15:00 PM
Surr: 2,4-DCAA	64.4	34.3-141		%REC	1	7/24/2014 5:15:00 PM
AMMONIA AS N		**E350.1**				Analyst: **EFH**
Nitrogen, Ammonia (As N)	ND	4.64		mg/Kg-dry	1	7/21/2014 12:47:32 PM

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **ICV** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/24/2014** SeqNo: **211203**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5050	100	5000	0	101	90	110				
Chromium	4990	100	5000	0	99.8	90	110				
Copper	5010	50.0	5000	0	100	90	110				
Lead	4710	25.0	5000	0	94.2	90	110				
Nickel	4990	50.0	5000	0	99.7	90	110				
Zinc	5200	1000	5000	0	104	90	110				

Sample ID: **LCS-7873** SampType: **LCS** TestCode: **6020_S** Units: **µg/Kg** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **LCSS** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/24/2014** SeqNo: **211205**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	27600	1000	25000	0	110	80	120				
Copper	57500	500	50000	0	115	80	120				
Nickel	27900	500	25000	0	112	80	120				
Zinc	55700	10000	50000	0	111	69	129				

Sample ID: **1407110-004AMS** SampType: **MS** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **ZZZZZZ** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/24/2014** SeqNo: **211208**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	96600	991	99060	2573	94.9	70	130				
Chromium	35300	991	24770	14840	82.6	70	130				
Copper	85200	495	49530	35660	100	70	130				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **1407110-004AMS** SampType: **MS** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **ZZZZZZ** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/24/2014** SeqNo: **211208**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	34500	495	24770	17330	69.1	70	130				S

Sample ID: **1407110-004AMSD** SampType: **MSD** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **ZZZZZZ** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/24/2014** SeqNo: **211209**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	97700	991	99060	2573	96.0	70	130	96570	1.18	20	
Chromium	32800	991	24770	14840	72.5	70	130	35300	7.36	20	
Copper	76800	495	49530	35660	83.1	70	130	85220	10.3	20	
Nickel	35400	495	24770	17330	73.0	70	130	34450	2.72	20	

Sample ID: **1407110-004ADUP** SampType: **DUP** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **ZZZZZZ** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/24/2014** SeqNo: **211235**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2130	923						2573	19.0	20	
Chromium	12900	923						14840	13.6	20	
Copper	31500	462						35660	12.3	20	
Lead	41100	231						38800	5.76	20	

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**

Client ID: **ICV** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/24/2014** SeqNo: **211270**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5050	100	5000	0	101	90	110				
Chromium	4990	100	5000	0	99.8	90	110				
Copper	5010	50.0	5000	0	100	90	110				
Iron	511000	10000	500000	0	102	90	110				
Lead	4710	25.0	5000	0	94.2	90	110				
Manganese	5030	50.0	5000	0	101	90	110				
Nickel	4990	50.0	5000	0	99.7	90	110				
Zinc	5200	1000	5000	0	104	90	110				

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**

Client ID: **CCV** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/24/2014** SeqNo: **211271**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5070	100	5000	0	101	90	110				
Chromium	5100	100	5000	0	102	90	110				
Copper	5210	50.0	5000	0	104	90	110				
Iron	479000	10000	500000	0	95.8	90	110				
Lead	4770	25.0	5000	0	95.3	90	110				
Manganese	4650	50.0	5000	0	93.0	90	110				
Nickel	5130	50.0	5000	0	103	90	110				
Zinc	5240	1000	5000	0	105	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **1407119-040ADUP** SampType: **DUP** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16101**
Client ID: **TP25-S-0.5** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/24/2014** SeqNo: **211276**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2780	1080						3700	28.5	20	R
Chromium	13200	1080						12560	5.21	20	
Copper	36700	538						29220	22.8	20	R
Lead	19600	269						23810	19.6	20	
Nickel	10900	538						10550	3.57	20	

Sample ID: **1407119-040AMS** SampType: **MS** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16101**
Client ID: **TP25-S-0.5** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/24/2014** SeqNo: **211277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	95700	984	98440	3700	93.4	70	130				
Chromium	38800	984	24610	12560	107	70	130				
Nickel	38700	492	24610	10550	115	70	130				

Sample ID: **1407119-040AMS** SampType: **MSD** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16101**
Client ID: **TP25-S-0.5** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/24/2014** SeqNo: **211278**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	80600	984	98440	3700	78.1	70	130	95660	17.1	20	
Chromium	28000	984	24610	12560	62.8	70	130	38840	32.4	20	SR
Nickel	27000	492	24610	10550	66.8	70	130	38730	35.7	20	SR

Qualifiers:
B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **CCV** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211633**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	5060	100	5000	0	101	90	110				
Nickel	5080	50.0	5000	0	102	90	110				
Zinc	5150	1000	5000	0	103	90	110				

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **ICV** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211640**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4990	100	5000	0	99.8	90	110				
Chromium	5080	100	5000	0	102	90	110				
Copper	4990	50.0	5000	0	99.9	90	110				
Lead	5070	25.0	5000	0	101	90	110				
Nickel	5110	50.0	5000	0	102	90	110				
Zinc	5100	1000	5000	0	102	90	110				

Sample ID: **MBLK-7827** SampType: **MBLK** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **PBS** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211641**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	100									
Chromium	ND	100									
Copper	ND	50.0									
Lead	ND	25.0									

Qualifiers:
B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **MBLK-7827** SampType: **MBLK** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **PBS** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211641**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	ND	50.0									
Zinc	ND	1000									

Sample ID: **LCS-7827** SampType: **LCS** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **LCSS** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211642**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	104000	2000	100000	0	104	73.4	120				
Lead	101000	500	100000	0	101	80	120				

Sample ID: **1407110-004ADUP** SampType: **DUP** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **ZZZZZZ** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211644**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	633000	92300						600800	5.19	20	

Sample ID: **1407110-004AMS** SampType: **MS** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **ZZZZZZ** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211645**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	137000	4950	99060	32260	106	70	130				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **1407110-004AMSD** SampType: **MSD** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **ZZZZZZ** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211646**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	123000	4950	99060	32260	91.2	70	130	137100	11.2	20	

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **CCV** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211647**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5020	100	5000	0	100	90	110				
Chromium	5150	100	5000	0	103	90	110				
Copper	5120	50.0	5000	0	102	90	110				
Lead	4970	25.0	5000	0	99.4	90	110				
Nickel	5260	50.0	5000	0	105	90	110				
Zinc	5140	1000	5000	0	103	90	110				

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**
Client ID: **ICV** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211675**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4990	100	5000	0	99.8	90	110				
Chromium	5080	100	5000	0	102	90	110				
Copper	4990	50.0	5000	0	99.9	90	110				
Iron	503000	10000	500000	0	101	90	110				
Lead	5070	25.0	5000	0	101	90	110				
Manganese	5310	50.0	5000	0	106	90	110				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**
Client ID: **ICV** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211675**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	5110	50.0	5000	0	102	90	110				
Zinc	5100	1000	5000	0	102	90	110				

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**
Client ID: **CCV** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211676**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5030	100	5000	0	101	90	110				
Chromium	5230	100	5000	0	105	90	110				
Copper	5130	50.0	5000	0	103	90	110				
Lead	5140	25.0	5000	0	103	90	110				
Manganese	4970	50.0	5000	0	99.4	90	110				
Nickel	5200	50.0	5000	0	104	90	110				
Zinc	5200	1000	5000	0	104	90	110				

Sample ID: **MBLK-7828** SampType: **MBLK** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**
Client ID: **PBS** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211677**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	100									
Chromium	ND	100									
Copper	ND	50.0									
Lead	ND	25.0									

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **MBLK-7828** SampType: **MBLK** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**
Client ID: **PBS** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211677**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	ND	50.0									
Nickel	ND	50.0									
Zinc	ND	1000									

Sample ID: **LCS-7828** SampType: **LCS** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**
Client ID: **LCSS** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211678**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	109000	2000	100000	0	109	73.4	120				
Lead	115000	500	100000	0	115	80	120				

Sample ID: **LCS-7828** SampType: **LCS** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**
Client ID: **LCSS** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211679**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	29700	1000	25000	0	119	80	120				
Copper	59100	500	50000	0	118	80	120				
Nickel	29600	500	25000	0	118	80	120				
Zinc	53700	10000	50000	0	107	69	129				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **1407119-040ADUP** SampType: **DUP** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16101**
Client ID: **TP25-S-0.5** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211684**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	626000	10800						646700	3.22	20	

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**
Client ID: **CCV** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211686**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4990	100	5000	0	99.9	90	110				
Chromium	5130	100	5000	0	103	90	110				
Copper	5100	50.0	5000	0	102	90	110				
Lead	5290	25.0	5000	0	106	90	110				
Manganese	5230	50.0	5000	0	105	90	110				
Nickel	5040	50.0	5000	0	101	90	110				
Zinc	5160	1000	5000	0	103	90	110				

Sample ID: **1407119-040ADUP** SampType: **DUP** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16101**
Client ID: **TP25-S-0.5** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211687**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	268000	53800						313700	15.5	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **1407119-040AMS** SampType: **MS** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16101**
Client ID: **TP25-S-0.5** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211690**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	558000	4920	4922	552700	114	70	130				
Zinc	352000	98400	49220	284400	137	70	130				SMC

Sample ID: **1407119-040AMSD** SampType: **MSD** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16101**
Client ID: **TP25-S-0.5** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211691**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	521000	5090	5094	552700	-630	70	130	558300	6.98	20	SMC
Zinc	339000	102000	50940	284400	108	70	130	351700	3.53	20	

Sample ID: **1407119-040AMS** SampType: **MS** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16101**
Client ID: **TP25-S-0.5** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211692**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	91300	984	49220	29820	125	70	130				
Lead	145000	492	98440	28490	119	70	130				

Sample ID: **1407119-040AMSD** SampType: **MSD** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16101**
Client ID: **TP25-S-0.5** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211693**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	78700	1020	50940	29820	96.0	70	130	91330	14.8	20	

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **1407119-040AMSD** SampType: **MSD** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16101**
Client ID: **TP25-S-0.5** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211693**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	134000	509	101900	28490	104	70	130	145400	8.11	20	

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**
Client ID: **CCV** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/25/2014** SeqNo: **211696**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4970	100	5000	0	99.4	90	110				
Copper	5120	50.0	5000	0	103	90	110				
Lead	5310	25.0	5000	0	106	90	110				
Manganese	5200	50.0	5000	0	104	90	110				
Zinc	5110	1000	5000	0	102	90	110				

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **ICV** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211767**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	5390	25.0	5000	0	108	90	110				
Nickel	5380	50.0	5000	0	108	90	110				
Zinc	5440	1000	5000	0	109	90	110				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **1407110-004ADUP** SampType: **DUP** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **ZZZZZZ** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211769**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	12200	462						16330	29.3	20	R

Sample ID: **1407110-004AMS** SampType: **MS** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **ZZZZZZ** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211770**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	136000	4950	99060	35430	101	70	130				
Zinc	912000	198000	49530	640500	548	70	130				SMC

Sample ID: **1407110-004AMSD** SampType: **MSD** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16095**
Client ID: **ZZZZZZ** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211771**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	122000	4950	99060	35430	87.5	70	130	135700	10.5	20	
Zinc	736000	198000	49530	640500	193	70	130	912000	21.3	20	SRMC

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16095**
Client ID: **CCV** Batch ID: **7873** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211831**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	5400	1000	5000	0	108	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**
Client ID: **ICV** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211833**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5360	100	5000	0	107	90	110				
Iron	519000	10000	500000	0	104	90	110				
Lead	5390	25.0	5000	0	108	90	110				
Manganese	5490	50.0	5000	0	110	90	110				

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**
Client ID: **CCV** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211834**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	462000	10000	500000	0	92.3	90	110				
Manganese	5090	50.0	5000	0	102	90	110				

Sample ID: **MBLK-7874** SampType: **MBLK** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**
Client ID: **PBS** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211835**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	100									
Chromium	ND	100									
Copper	ND	50.0									
Iron	ND	10000									
Lead	ND	25.0									
Manganese	ND	50.0									
Nickel	ND	50.0									

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **MBLK-7874** SampType: **MBLK** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**
Client ID: **PBS** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211835**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	ND	1000									

Sample ID: **LCS-7874** SampType: **LCS** TestCode: **6020_S** Units: **µg/Kg** Prep Date: **7/25/2014** RunNo: **16101**
Client ID: **LCSS** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211837**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	55500	50000	50000	0	111	80.3	122				
Manganese	5300	250	5000	0	106	80	120				

Sample ID: **1407119-040ADUP** SampType: **DUP** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16101**
Client ID: **TP25-S-0.5** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211839**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	38100000	1080000						41920000	9.50	20	

Sample ID: **1407119-040AMS** SampType: **MS** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16101**
Client ID: **TP25-S-0.5** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211840**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	40200000	984000	49220	41920000	-3580	70	130				SMC

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **1407119-040AMSD** SampType: **MSD** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **7/25/2014** RunNo: **16101**
Client ID: **TP25-S-0.5** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211841**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	41200000	1020000	50940	41920000	-1420	70	130	40150000	2.56	20	SMC

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**
Client ID: **CCV** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/28/2014** SeqNo: **211845**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5080	100	5000	0	102	90	110				
Iron	492000	10000	500000	0	98.4	90	110				
Lead	4870	25.0	5000	0	97.3	90	110				
Manganese	4910	50.0	5000	0	98.2	90	110				

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**
Client ID: **ICV** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/29/2014** SeqNo: **211985**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	506000	10000	500000	0	101	90	110				
Manganese	5120	50.0	5000	0	102	90	110				

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**
Client ID: **CCV** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/29/2014** SeqNo: **211990**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04 **TestCode:** **6020_S**

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16101**
Client ID: **CCV** Batch ID: **7874** TestNo: **SW6020A** **SW3050B** Analysis Date: **7/29/2014** SeqNo: **211990**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	533000	10000	500000	0	107	90	110				
Manganese	5320	50.0	5000	0	106	90	110				

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16565**
Client ID: **ICV** Batch ID: **8068** TestNo: **SW6020A** **SW3050B** Analysis Date: **8/26/2014** SeqNo: **218512**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5010	100	5000	0	100	90	110				
Chromium	5010	100	5000	0	100	90	110				
Copper	5060	50.0	5000	0	101	90	110				
Iron	523000	10000	500000	0	105	90	110				
Lead	5000	25.0	5000	0	100	90	110				
Manganese	4900	50.0	5000	0	97.9	90	110				
Nickel	5050	50.0	5000	0	101	90	110				
Zinc	4840	1000	5000	0	96.8	90	110				

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16565**
Client ID: **CCV** Batch ID: **8068** TestNo: **SW6020A** **SW3050B** Analysis Date: **8/26/2014** SeqNo: **218513**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5070	100	5000	0	101	90	110				
Chromium	4890	100	5000	0	97.9	90	110				
Copper	5080	50.0	5000	0	102	90	110				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16565**
Client ID: **CCV** Batch ID: **8068** TestNo: **SW6020A** **SW3050B** Analysis Date: **8/26/2014** SeqNo: **218513**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	502000	10000	500000	0	100	90	110				
Lead	5040	25.0	5000	0	101	90	110				
Manganese	4810	50.0	5000	0	96.3	90	110				
Nickel	4820	50.0	5000	0	96.4	90	110				
Zinc	4980	1000	5000	0	99.7	90	110				

Sample ID: **LCS-8068** SampType: **LCS** TestCode: **6020_S** Units: **µg/Kg** Prep Date: **8/25/2014** RunNo: **16565**
Client ID: **LCSS** Batch ID: **8068** TestNo: **SW6020A** **SW3050B** Analysis Date: **8/26/2014** SeqNo: **218515**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4860	100	5000	0	97.2	73.4	120				
Chromium	5400	100	5000	0	108	80	120				
Copper	5260	50.0	5000	0	105	80	120				
Iron	460000	10000	500000	0	92.0	80.3	122				
Lead	5190	25.0	5000	0	104	80	120				
Manganese	4940	50.0	5000	0	98.8	80	120				
Nickel	4990	50.0	5000	0	99.8	80	120				
Zinc	5570	1000	5000	0	111	69	129				

Sample ID: **1407247-001ADUP** SampType: **DUP** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **8/25/2014** RunNo: **16565**
Client ID: **ZZZZZZ** Batch ID: **8068** TestNo: **SW6020A** **SW3050B** Analysis Date: **8/26/2014** SeqNo: **218517**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **1407247-001ADUP** SampType: **DUP** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **8/25/2014** RunNo: **16565**
Client ID: **ZZZZZZ** Batch ID: **8068** TestNo: **SW6020A** **SW3050B** Analysis Date: **8/26/2014** SeqNo: **218517**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	9880						0	0	20	
Chromium	10400	9880						10420	0.127	20	
Copper	ND	4940						0	0	20	
Iron	5870000	988000						5367000	8.93	20	
Lead	31800	2470						30280	4.98	20	
Manganese	175000	4940						167000	4.60	20	
Nickel	ND	4940						0	0	20	
Zinc	388000	98800						359900	7.39	20	

Sample ID: **1407247-001AMS** SampType: **MS** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **8/25/2014** RunNo: **16565**
Client ID: **ZZZZZZ** Batch ID: **8068** TestNo: **SW6020A** **SW3050B** Analysis Date: **8/26/2014** SeqNo: **218518**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	65400	10300	51290	3124	121	70	130				
Chromium	73100	10300	51290	10420	122	70	130				
Copper	69900	5130	51290	630.7	135	70	130				S
Iron	11700000	1030000	5129000	5367000	123	70	130				
Lead	98200	2560	51290	30280	132	70	130				SMC
Manganese	256000	5130	51290	167000	173	70	130				SMC
Nickel	61600	5130	51290	748.0	119	70	130				
Zinc	500000	103000	51290	359900	273	70	130				SMC

Qualifiers:
B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16565**
Client ID: **CCV** Batch ID: **8068** TestNo: **SW6020A** **SW3050B** Analysis Date: **8/26/2014** SeqNo: **218519**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4910	100	5000	0	98.2	90	110				
Chromium	4840	100	5000	0	96.8	90	110				
Copper	4920	50.0	5000	0	98.4	90	110				
Iron	454000	10000	500000	0	90.7	90	110				
Lead	5000	25.0	5000	0	100	90	110				
Manganese	4750	50.0	5000	0	95.1	90	110				
Nickel	4680	50.0	5000	0	93.6	90	110				
Zinc	4790	1000	5000	0	95.8	90	110				

Sample ID: **1407247-001AMSD** SampType: **MSD** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **8/25/2014** RunNo: **16565**
Client ID: **ZZZZZZ** Batch ID: **8068** TestNo: **SW6020A** **SW3050B** Analysis Date: **8/26/2014** SeqNo: **218520**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	66700	10900	54370	3124	117	70	130	65350	2.08	20	
Chromium	78500	10900	54370	10420	125	70	130	73060	7.12	20	
Copper	69000	5440	54370	630.7	126	70	130	69950	1.36	20	
Iron	13100000	1090000	5437000	5367000	142	70	130	11680000	11.4	20	SMC
Lead	101000	2720	54370	30280	130	70	130	98230	2.63	20	
Manganese	260000	5440	54370	167000	172	70	130	255500	1.90	20	SMC
Zinc	493000	109000	54370	359900	245	70	130	500000	1.40	20	SMC

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16565**

Client ID: **ICV** Batch ID: **8068** TestNo: **SW6020A** **SW3050B** Analysis Date: **8/27/2014** SeqNo: **218755**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4890	100	5000	0	97.7	90	110				
Chromium	4890	100	5000	0	97.7	90	110				
Copper	4890	50.0	5000	0	97.8	90	110				
Iron	510000	10000	500000	0	102	90	110				
Lead	4740	25.0	5000	0	94.9	90	110				
Manganese	4730	50.0	5000	0	94.7	90	110				
Nickel	4930	50.0	5000	0	98.6	90	110				
Zinc	5340	1000	5000	0	107	90	110				

Sample ID: **MBLK-8068** SampType: **MBLK** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16565**

Client ID: **PBS** Batch ID: **8068** TestNo: **SW6020A** **SW3050B** Analysis Date: **8/27/2014** SeqNo: **218756**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	100									
Chromium	ND	100									
Copper	ND	50.0									
Iron	ND	10000									
Lead	ND	25.0									
Manganese	ND	50.0									
Nickel	ND	50.0									
Zinc	ND	1000									

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **6020_S**

Sample ID: **1407247-001AMSD** SampType: **MSD** TestCode: **6020_S** Units: **µg/Kg-dry** Prep Date: **8/25/2014** RunNo: **16565**
Client ID: **ZZZZZZ** Batch ID: **8068** TestNo: **SW6020A** **SW3050B** Analysis Date: **8/27/2014** SeqNo: **218761**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	59900	5440	54370	748.0	109	70	130	61610	2.76	20	

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16565**
Client ID: **CCV** Batch ID: **8068** TestNo: **SW6020A** **SW3050B** Analysis Date: **8/27/2014** SeqNo: **218762**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4740	100	5000	0	94.9	90	110				
Chromium	4740	100	5000	0	94.7	90	110				
Copper	4720	50.0	5000	0	94.4	90	110				
Iron	470000	10000	500000	0	94.1	90	110				
Lead	4640	25.0	5000	0	92.7	90	110				
Manganese	4610	50.0	5000	0	92.3	90	110				
Nickel	4840	50.0	5000	0	96.7	90	110				
Zinc	5120	1000	5000	0	103	90	110				

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **µg/Kg** Prep Date: RunNo: **16565**
Client ID: **CCV** Batch ID: **8068** TestNo: **SW6020A** **SW3050B** Analysis Date: **8/27/2014** SeqNo: **218828**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	4530	100	5000	0	90.6	90	110				
Nickel	4560	50.0	5000	0	91.2	90	110				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8081BLL_S**

Sample ID: **MB-7837**	SampType: **MBLK**	TestCode: **8081BLL_S**	Units: **µg/Kg**	Prep Date: **7/21/2014**	RunNo: **16231**
Client ID: **PBS**	Batch ID: **7837**	TestNo: **SW8081B**	**3545_PESTLL**	Analysis Date: **7/27/2014**	SeqNo: **213249**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDD	ND	0.333									
4,4´-DDE	ND	0.333									
4,4´-DDT	ND	0.333									
Aldrin	ND	0.333									
alpha-BHC	ND	0.333									
alpha-Chlordane	ND	0.333									
beta-BHC	ND	0.333									
Chlordane	ND	6.67									
delta-BHC	ND	0.333									
Dieldrin	ND	0.333									
Endosulfan I	ND	0.333									
Endosulfan II	ND	0.333									
Endosulfan Sulfate	ND	0.333									
Endrin	ND	0.333									
Endrin aldehyde	ND	0.333									
Endrin ketone	ND	0.333									
gamma-BHC	ND	0.333									
gamma-Chlordane	ND	0.333									
Heptachlor	ND	0.333									
Heptachlor epoxide	ND	0.333									
Methoxychlor	ND	0.333									
Toxaphene	ND	6.67									
Surr: Decachlorobiphenyl	6.56		6.700		97.9	53.2	136				
Surr: Tetrachloro-m-xylene	5.04		6.700		75.2	32.3	84.1				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8081BLL_S**

Sample ID: **LCS-7837** SampType: **LCS** TestCode: **8081BLL_S** Units: **µg/Kg** Prep Date: **7/21/2014** RunNo: **16231**
Client ID: **LCSS** Batch ID: **7837** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/27/2014** SeqNo: **213251**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDT	5.21	0.333	6.700	0	77.8	65.2	128				
Aldrin	3.61	0.333	6.700	0	53.9	52.9	129				
Dieldrin	4.26	0.333	6.700	0	63.5	52.8	136				
Endrin	5.04	0.333	6.700	0	75.2	53.9	150				
gamma-BHC	3.36	0.333	6.700	0	50.1	44	134				
Heptachlor	3.49	0.333	6.700	0	52.1	47.4	116				

Sample ID: **1407119-034AMS** SampType: **MS** TestCode: **8081BLL_S** Units: **µg/Kg-dry** Prep Date: **7/21/2014** RunNo: **16231**
Client ID: **TP23-S-0.5** Batch ID: **7837** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/27/2014** SeqNo: **213255**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDT	22.8	0.400	7.998	0	285	36.6	123				SMI
Aldrin	231	0.400	7.998	0	2890	41.9	100				SMI
Dieldrin	10.9	0.400	7.998	0	137	44.3	108				SMI
Endrin	8.39	0.400	7.998	0	105	32.1	103				SMI
gamma-BHC	8.76	0.400	7.998	0	110	42	102				SMI
Heptachlor	39.4	0.400	7.998	0	492	45.7	98.9				SMI

Sample ID: **1407119-034AMSD** SampType: **MSD** TestCode: **8081BLL_S** Units: **µg/Kg-dry** Prep Date: **7/21/2014** RunNo: **16231**
Client ID: **TP23-S-0.5** Batch ID: **7837** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/27/2014** SeqNo: **213256**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDT	70.3	0.398	7.998	0	879	36.6	123	22.78	102	20	SRMI

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8081BLL_S**

Sample ID: **1407119-034AMSD** SampType: **MSD** TestCode: **8081BLL_S** Units: **µg/Kg-dry** Prep Date: **7/21/2014** RunNo: **16231**
Client ID: **TP23-S-0.5** Batch ID: **7837** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/27/2014** SeqNo: **213256**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aldrin	261	0.398	7.998	0	3270	41.9	100	231.0	12.4	20	SMI
Dieldrin	15.0	0.398	7.998	0	188	44.3	108	10.93	31.6	20	SRMI
Endrin	20.5	0.398	7.998	0	257	32.1	103	8.392	83.9	20	SRMI
gamma-BHC	12.9	0.398	7.998	0	161	42	102	8.764	37.9	20	SRMI
Heptachlor	55.0	0.398	7.998	0	688	45.7	98.9	39.38	33.1	20	SRMI

Sample ID: **CCV 100** SampType: **CCV** TestCode: **8081BLL_S** Units: **µg/Kg** Prep Date: RunNo: **16231**
Client ID: **CCV** Batch ID: **7837** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/27/2014** SeqNo: **213342**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDD	98.2	0.333	100.0	0	98.2	80	120				
4,4´-DDE	106	0.333	100.0	0	106	80	120				
4,4´-DDT	101	0.333	100.0	0	101	80	120				
Aldrin	105	0.333	100.0	0	105	80	120				
alpha-BHC	110	0.333	100.0	0	110	80	120				
alpha-Chlordane	103	0.333	100.0	0	103	80	120				
beta-BHC	99.1	0.333	100.0	0	99.1	80	120				
delta-BHC	99.8	0.333	100.0	0	99.8	80	120				
Dieldrin	104	0.333	100.0	0	104	80	120				
Endosulfan I	102	0.333	100.0	0	102	80	120				
Endosulfan II	95.6	0.333	100.0	0	95.6	80	120				
Endosulfan Sulfate	90.4	0.333	100.0	0	90.4	80	120				
Endrin	97.4	0.333	100.0	0	97.4	80	120				
Endrin aldehyde	102	0.333	100.0	0	102	80	120				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8081BLL_S**

Sample ID: **CCV 100** SampType: **CCV** TestCode: **8081BLL_S** Units: **µg/Kg** Prep Date: RunNo: **16231**
Client ID: **CCV** Batch ID: **7837** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/27/2014** SeqNo: **213342**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Endrin ketone	96.7	0.333	100.0	0	96.7	80	120				
gamma-BHC	105	0.333	100.0	0	105	80	120				
gamma-Chlordane	102	0.333	100.0	0	102	80	120				
Heptachlor	105	0.333	100.0	0	105	80	120				
Heptachlor epoxide	101	0.333	100.0	0	101	80	120				
Methoxychlor	95.6	0.333	100.0	0	95.6	80	120				

Sample ID: **CCV 100** SampType: **CCV** TestCode: **8081BLL_S** Units: **µg/Kg** Prep Date: RunNo: **16233**
Client ID: **CCV** Batch ID: **7838** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/27/2014** SeqNo: **213343**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDD	6.58	0.333	6.700	0	98.2	80	120				
4,4´-DDE	7.07	0.333	6.700	0	106	80	120				
4,4´-DDT	6.80	0.333	6.700	0	101	80	120				
Aldrin	7.02	0.333	6.700	0	105	80	120				
alpha-BHC	7.36	0.333	6.700	0	110	80	120				
alpha-Chlordane	6.88	0.333	6.700	0	103	80	120				
beta-BHC	6.64	0.333	6.700	0	99.1	80	120				
delta-BHC	6.69	0.333	6.700	0	99.8	80	120				
Dieldrin	6.96	0.333	6.700	0	104	80	120				
Endosulfan I	6.82	0.333	6.700	0	102	80	120				
Endosulfan II	6.40	0.333	6.700	0	95.6	80	120				
Endosulfan Sulfate	6.06	0.333	6.700	0	90.4	80	120				
Endrin	6.53	0.333	6.700	0	97.4	80	120				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **8081BLL_S**

Sample ID: **CCV 100** SampType: **CCV** TestCode: **8081BLL_S** Units: **µg/Kg** Prep Date: RunNo: **16233**

Client ID: **CCV** Batch ID: **7838** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/27/2014** SeqNo: **213343**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Endrin aldehyde	6.86	0.333	6.700	0	102	80	120				
Endrin ketone	6.48	0.333	6.700	0	96.7	80	120				
gamma-BHC	7.01	0.333	6.700	0	105	80	120				
gamma-Chlordane	6.85	0.333	6.700	0	102	80	120				
Heptachlor	7.04	0.333	6.700	0	105	80	120				
Heptachlor epoxide	6.79	0.333	6.700	0	101	80	120				
Methoxychlor	6.41	0.333	6.700	0	95.6	80	120				

Sample ID: **CCV 100** SampType: **CCV** TestCode: **8081BLL_S** Units: **µg/Kg** Prep Date: RunNo: **16233**

Client ID: **CCV** Batch ID: **7838** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/28/2014** SeqNo: **213344**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDD	8.62	0.333	6.700	0	129	80	120				SC
4,4´-DDE	7.94	0.333	6.700	0	119	80	120				
4,4´-DDT	7.36	0.333	6.700	0	110	80	120				
Aldrin	8.03	0.333	6.700	0	120	80	120				
alpha-BHC	8.52	0.333	6.700	0	127	80	120				SC
alpha-Chlordane	7.82	0.333	6.700	0	117	80	120				
beta-BHC	7.62	0.333	6.700	0	114	80	120				
delta-BHC	7.94	0.333	6.700	0	118	80	120				
Dieldrin	8.02	0.333	6.700	0	120	80	120				
Endosulfan I	7.82	0.333	6.700	0	117	80	120				
Endosulfan II	7.56	0.333	6.700	0	113	80	120				
Endosulfan Sulfate	6.99	0.333	6.700	0	104	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8081BLL_S**

Sample ID: **CCV 100** SampType: **CCV** TestCode: **8081BLL_S** Units: **µg/Kg** Prep Date: RunNo: **16233**
Client ID: **CCV** Batch ID: **7838** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/28/2014** SeqNo: **213344**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Endrin	7.00	0.333	6.700	0	105	80	120				
Endrin aldehyde	8.14	0.333	6.700	0	122	80	120				SC
Endrin ketone	7.96	0.333	6.700	0	119	80	120				
gamma-BHC	8.28	0.333	6.700	0	124	80	120				SC
gamma-Chlordane	7.91	0.333	6.700	0	118	80	120				
Heptachlor	8.61	0.333	6.700	0	129	80	120				SC
Heptachlor epoxide	7.80	0.333	6.700	0	116	80	120				
Methoxychlor	7.59	0.333	6.700	0	113	80	120				

Sample ID: **MB-7838** SampType: **MBLK** TestCode: **8081BLL_S** Units: **µg/Kg** Prep Date: **7/21/2014** RunNo: **16233**
Client ID: **PBS** Batch ID: **7838** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/27/2014** SeqNo: **213346**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDD	ND	0.333									
4,4´-DDE	ND	0.333									
4,4´-DDT	ND	0.333									
Aldrin	ND	0.333									
alpha-BHC	ND	0.333									
alpha-Chlordane	ND	0.333									
beta-BHC	ND	0.333									
Chlordane	ND	6.67									
delta-BHC	ND	0.333									
Dieldrin	ND	0.333									
Endosulfan I	ND	0.333									

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8081BLL_S**

Sample ID: **MB-7838** SampType: **MBLK** TestCode: **8081BLL_S** Units: **µg/Kg** Prep Date: **7/21/2014** RunNo: **16233**
Client ID: **PBS** Batch ID: **7838** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/27/2014** SeqNo: **213346**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Endosulfan II	ND	0.333									
Endosulfan Sulfate	ND	0.333									
Endrin	ND	0.333									
Endrin aldehyde	ND	0.333									
Endrin ketone	ND	0.333									
gamma-BHC	ND	0.333									
gamma-Chlordane	ND	0.333									
Heptachlor	ND	0.333									
Heptachlor epoxide	ND	0.333									
Methoxychlor	ND	0.333									
Toxaphene	ND	6.67									
Surr: Decachlorobiphenyl	8.50		6.700		127	53.2	136				
Surr: Tetrachloro-m-xylene	3.90		6.700		58.2	32.3	84.1				

Sample ID: **1407119-012AMS** SampType: **MS** TestCode: **8081BLL_S** Units: **µg/Kg-dry** Prep Date: **7/21/2014** RunNo: **16233**
Client ID: **TP16-S-0.5** Batch ID: **7838** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/27/2014** SeqNo: **213349**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDT	5.00	0.428	8.605	0	58.1	36.6	123				
Aldrin	4.32	0.428	8.605	0	50.2	41.9	100				
Dieldrin	4.14	0.428	8.605	0	48.1	44.3	108				
Endrin	4.42	0.428	8.605	0	51.3	32.1	103				
gamma-BHC	3.88	0.428	8.605	0	45.0	42	102				
Heptachlor	3.98	0.428	8.605	0	46.3	45.7	98.9				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8081BLL_S**

Sample ID: **1407119-012AMS** SampType: **MS** TestCode: **8081BLL_S** Units: **µg/Kg-dry** Prep Date: **7/21/2014** RunNo: **16233**
Client ID: **TP16-S-0.5** Batch ID: **7838** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/27/2014** SeqNo: **213349**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **1407119-012AMSD** SampType: **MSD** TestCode: **8081BLL_S** Units: **µg/Kg-dry** Prep Date: **7/21/2014** RunNo: **16233**
Client ID: **TP16-S-0.5** Batch ID: **7838** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/27/2014** SeqNo: **213350**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDT	4.31	0.428	8.605	0	50.1	36.6	123	4.999	14.7	20	
Aldrin	4.05	0.428	8.605	0	47.1	41.9	100	4.324	6.47	20	
Dieldrin	4.02	0.428	8.605	0	46.7	44.3	108	4.141	3.06	20	
Endrin	3.82	0.428	8.605	0	44.4	32.1	103	4.416	14.5	20	
gamma-BHC	3.67	0.428	8.605	0	42.6	42	102	3.612	1.48	20	
Heptachlor	4.00	0.428	8.605	0	46.5	45.7	98.9	3.981	0.532	20	

Sample ID: **LCS-7838** SampType: **LCS** TestCode: **8081BLL_S** Units: **µg/Kg** Prep Date: **7/21/2014** RunNo: **16233**
Client ID: **LCSS** Batch ID: **7838** TestNo: **SW8081B** **3545_PESTLL** Analysis Date: **7/27/2014** SeqNo: **213392**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDT	4.78	0.333	6.700	0	71.4	65.2	128				
Aldrin	4.16	0.333	6.700	0	62.1	52.9	129				
Dieldrin	3.81	0.333	6.700	0	56.8	52.8	136				
Endrin	4.02	0.333	6.700	0	60.0	53.9	150				
gamma-BHC	3.28	0.333	6.700	0	49.0	44	134				
Heptachlor	3.35	0.333	6.700	0	50.1	47.4	116				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8082LL_S**

Sample ID: **1248 CCV**	SampType: **CCV**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16125**
Client ID: **CCV**	Batch ID: **7848**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **7/26/2014**	SeqNo: **211531**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	66.7	0.333	66.67	0	100	85	115				

Sample ID: **1248 CCV**	SampType: **CCV**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16125**
Client ID: **CCV**	Batch ID: **7848**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **7/26/2014**	SeqNo: **211532**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	66.1	0.333	66.67	0	99.2	85	115				

Sample ID: **MB-7848**	SampType: **MBLK**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date: **7/22/2014**	RunNo: **16125**
Client ID: **PBS**	Batch ID: **7848**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **7/25/2014**	SeqNo: **211533**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	8660		6667		130	56.5	130				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8082LL_S**

Sample ID: **LCS-7848**	SampType: **LCS**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date: **7/22/2014**	RunNo: **16125**
Client ID: **LCSS**	Batch ID: **7848**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **7/25/2014**	SeqNo: **211534**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	66.5	0.333	66.67	0	99.8	44.3	137				

Sample ID: **1248 CCV**	SampType: **CCV**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16125**
Client ID: **CCV**	Batch ID: **7848**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **7/25/2014**	SeqNo: **211570**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	66.7	0.333	66.67	0	100	85	115				

Sample ID: **MB-7851**	SampType: **MBLK**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date: **7/23/2014**	RunNo: **16126**
Client ID: **PBS**	Batch ID: **7851**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **7/25/2014**	SeqNo: **211572**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	8030		6667		120	56.5	130				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8082LL_S**

Sample ID: **LCS-7851** SampType: **LCS** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **7/23/2014** RunNo: **16126**
Client ID: **LCSS** Batch ID: **7851** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/25/2014** SeqNo: **211573**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	73.7	0.333	66.67	0	111	44.3	137				

Sample ID: **1407119-058AMS** SampType: **MS** TestCode: **8082LL_S** Units: **µg/Kg-dry** Prep Date: **7/23/2014** RunNo: **16126**
Client ID: **TP-S-0.5DUP** Batch ID: **7851** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/25/2014** SeqNo: **211584**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	183	0.386	77.30	0	237	56.6	123				SMI

Sample ID: **1407119-058AMSD** SampType: **MSD** TestCode: **8082LL_S** Units: **µg/Kg-dry** Prep Date: **7/23/2014** RunNo: **16126**
Client ID: **TP-S-0.5DUP** Batch ID: **7851** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/26/2014** SeqNo: **211585**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	397	0.386	77.30	0	513	56.6	123	183.0	73.7	20	SRMI

Sample ID: **1248 CCV** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **16126**
Client ID: **CCV** Batch ID: **7851** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/25/2014** SeqNo: **211587**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	66.7	0.333	66.67	0	100	85	115				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8082LL_S**

Sample ID: **1407119-037AMS** SampType: **MS** TestCode: **8082LL_S** Units: **µg/Kg-dry** Prep Date: **7/22/2014** RunNo: **16125**
Client ID: **TP24-S-0.5** Batch ID: **7848** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/25/2014** SeqNo: **211671**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	80.8	0.386	77.19	0	105	56.6	123				

Sample ID: **1407119-037AMSD** SampType: **MSD** TestCode: **8082LL_S** Units: **µg/Kg-dry** Prep Date: **7/22/2014** RunNo: **16125**
Client ID: **TP24-S-0.5** Batch ID: **7848** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/25/2014** SeqNo: **211674**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	97.6	0.386	77.19	0	126	56.6	123	80.81	18.9	20	S

Sample ID: **1248 CCV** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **16126**
Client ID: **CCV** Batch ID: **7851** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/26/2014** SeqNo: **211707**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	60.6	0.333	66.67	0	91.0	85	115				

Sample ID: **1248 CCV** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **16126**
Client ID: **CCV** Batch ID: **7851** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/26/2014** SeqNo: **211727**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	66.7	0.333	66.67	0	100	85	115				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8082LL_S**

Sample ID: **1016/1260 CCV** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **16125**
Client ID: **CCV** Batch ID: **7848** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/26/2014** SeqNo: **211728**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	64.4	0.333	66.67	0	96.6	85	115				

Sample ID: **MB-7887** SampType: **MBLK** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **7/28/2014** RunNo: **16161**
Client ID: **PBS** Batch ID: **7887** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/29/2014** SeqNo: **212134**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	6170		6667		92.5	56.5	130				

Sample ID: **LCS-7887** SampType: **LCS** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **7/28/2014** RunNo: **16161**
Client ID: **LCSS** Batch ID: **7887** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/29/2014** SeqNo: **212135**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	63.9	0.333	66.67	0	95.8	44.3	137				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8082LL_S**

Sample ID: **1254 CCV** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **16161**
Client ID: **CCV** Batch ID: **7887** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/29/2014** SeqNo: **212140**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	66.7	0.333	66.67	0	100	85	115				

Sample ID: **1407119-006AMS** SampType: **MS** TestCode: **8082LL_S** Units: **µg/Kg-dry** Prep Date: **7/28/2014** RunNo: **16161**
Client ID: **TP14-S-4.5** Batch ID: **7887** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/29/2014** SeqNo: **212198**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	69.7	0.370	74.02	0	94.2	56.6	123				

Sample ID: **1407119-006AMSD** SampType: **MSD** TestCode: **8082LL_S** Units: **µg/Kg-dry** Prep Date: **7/28/2014** RunNo: **16161**
Client ID: **TP14-S-4.5** Batch ID: **7887** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/29/2014** SeqNo: **212199**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	73.5	0.370	74.02	0	99.3	56.6	123	69.75	5.20	20	

Sample ID: **1248 CCV** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **16161**
Client ID: **CCV** Batch ID: **7887** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/29/2014** SeqNo: **212200**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	66.6	0.333	66.67	0	99.9	85	115				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8082LL_S**

Sample ID: **1248 CCV** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **16161**
Client ID: **CCV** Batch ID: **7887** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/29/2014** SeqNo: **212253**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	61.7	0.333	66.67	0	92.5	85	115				

Sample ID: **1248 CCV** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **16161**
Client ID: **CCV** Batch ID: **7887** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/30/2014** SeqNo: **212306**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	0.998	0.333	1.000	0	99.8	85	115				

Sample ID: **1248 CCV** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **16161**
Client ID: **CCV** Batch ID: **7887** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **7/30/2014** SeqNo: **212310**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	69.1	0.333	66.67	0	104	85	115				

Sample ID: **1016/1260 CCV** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **16276**
Client ID: **CCV** Batch ID: **7926** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **8/6/2014** SeqNo: **214235**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	70.2	0.333	66.67	0	105	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8082LL_S**

Sample ID: **MB-7926**	SampType: **MBLK**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date: **8/4/2014**	RunNo: **16276**
Client ID: **PBS**	Batch ID: **7926**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **8/6/2014**	SeqNo: **214236**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	4880		6667		73.3	56.5	130				

Sample ID: **LCS-7926**	SampType: **LCS**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date: **8/4/2014**	RunNo: **16276**
Client ID: **LCSS**	Batch ID: **7926**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **8/6/2014**	SeqNo: **214237**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	65.0	0.333	66.67	0	97.5	44.3	137				

Sample ID: **1016/1260 CCV**	SampType: **CCV**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16276**
Client ID: **CCV**	Batch ID: **7926**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **8/6/2014**	SeqNo: **214242**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	70.7	0.333	66.67	0	106	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8082LL_S**

Sample ID: **1248 CCV**	SampType: **CCV**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16276**
Client ID: **CCV**	Batch ID: **7926**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **8/6/2014**	SeqNo: **214243**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	66.7	0.333	66.67	0	100	85	115				

Sample ID: **1016/1260 CCV**	SampType: **CCV**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16333**
Client ID: **CCV**	Batch ID: **7926**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **8/12/2014**	SeqNo: **215362**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	1.11	0.333	1.000	0	111	85	115				

Sample ID: **MB-7926**	SampType: **MBLK**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date: **8/4/2014**	RunNo: **16333**
Client ID: **PBS**	Batch ID: **7926**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **8/12/2014**	SeqNo: **215367**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	3940		6667		59.1	56.5	130				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8082LL_S**

Sample ID: **LCS-7926** SampType: **LCS** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **8/4/2014** RunNo: **16333**
Client ID: **LCSS** Batch ID: **7926** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **8/12/2014** SeqNo: **215368**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	48.8	0.333	66.67	0	73.2	44.3	137				

Sample ID: **1408014-026AMS** SampType: **MS** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **8/4/2014** RunNo: **16333**
Client ID: **ZZZZZZ** Batch ID: **7926** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **8/12/2014** SeqNo: **215369**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	65.0	0.333	66.67	0	97.5	56.6	123				

Sample ID: **1408014-026AMSD** SampType: **MSD** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **8/4/2014** RunNo: **16333**
Client ID: **ZZZZZZ** Batch ID: **7926** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **8/12/2014** SeqNo: **215370**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	63.9	0.333	66.67	0	95.8	56.6	123	64.98	1.74	20	

Sample ID: **1016/1260 CCV** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **16333**
Client ID: **CCV** Batch ID: **7926** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **8/12/2014** SeqNo: **215371**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	64.0	0.333	66.67	0	96.0	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8082LL_S**

Sample ID: **1016/1260 CCV**	SampType: **CCV**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16577**
Client ID: **CCV**	Batch ID: **8077**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **8/27/2014**	SeqNo: **218680**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	59.0	0.333	66.67	0	88.5	85	115				
Aroclor 1262	ND	0.333									

Sample ID: **MB-8077**	SampType: **MBLK**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date: **8/26/2014**	RunNo: **16577**
Client ID: **PBS**	Batch ID: **8077**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **8/27/2014**	SeqNo: **218681**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	5170		6667		77.6	56.5	130				

Sample ID: **LCS-8077**	SampType: **LCS**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date: **8/26/2014**	RunNo: **16577**
Client ID: **LCSS**	Batch ID: **8077**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **8/27/2014**	SeqNo: **218682**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	51.4	0.333	66.67	0	77.0	44.3	137				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8082LL_S**

Sample ID: **LCS-8077**	SampType: **LCS**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date: **8/26/2014**	RunNo: **16577**
Client ID: **LCSS**	Batch ID: **8077**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **8/27/2014**	SeqNo: **218682**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **1408169-001AMS**	SampType: **MS**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date: **8/26/2014**	RunNo: **16577**
Client ID: **ZZZZZZ**	Batch ID: **8077**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **8/27/2014**	SeqNo: **218974**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	46.8	0.333	66.67	0	70.2	56.6	123				

Sample ID: **1408169-001AMSD**	SampType: **MSD**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date: **8/26/2014**	RunNo: **16577**
Client ID: **ZZZZZZ**	Batch ID: **8077**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **8/27/2014**	SeqNo: **218975**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	52.1	0.333	66.67	0	78.1	56.6	123	46.82	10.7	20	

Sample ID: **1248 CCV**	SampType: **CCV**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16577**
Client ID: **CCV**	Batch ID: **8077**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **8/27/2014**	SeqNo: **218977**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	73.4	0.333	66.67	0	110	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8151_S**

Sample ID: **MB-7830** SampType: **MBLK** TestCode: **8151_S** Units: **µg/Kg** Prep Date: **7/18/2014** RunNo: **16088**
Client ID: **PBS** Batch ID: **7830** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/23/2014** SeqNo: **210979**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	ND	6.67									
2,4,5-TP (Silvex)	ND	6.67									
2,4-D	ND	6.67									
2,4-DB	ND	6.67									
4-Nitrophenol	ND	6.67									
Dicamba	ND	6.67									
Dichlorprop	ND	6.67									
Dinoseb	ND	6.67									
MCPA	ND	667									
MCPP	ND	667									
Pentachlorophenol	ND	6.67									
Surr: 2,4-DCAA	4210		6665		63.2	34.3	141				

Sample ID: **LCS-7830** SampType: **LCS** TestCode: **8151_S** Units: **µg/Kg** Prep Date: **7/18/2014** RunNo: **16088**
Client ID: **LCSS** Batch ID: **7830** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/23/2014** SeqNo: **210980**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	32.9	6.67	66.65	0	49.4	46.8	115				
2,4,5-TP (Silvex)	39.1	6.67	66.65	0	58.6	38.7	137				
2,4-D	43.6	6.67	66.65	0	65.4	34.2	123				
Dichlorprop	57.5	6.67	66.65	0	86.2	56.8	140				
Pentachlorophenol	32.1	6.67	66.65	0	48.2	26.5	117				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8151_S**

Sample ID: **HERB CCV 5/0.5** SampType: **CCV** TestCode: **8151_S** Units: **µg/Kg** Prep Date: RunNo: **16088**
Client ID: **CCV** Batch ID: **7830** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/23/2014** SeqNo: **210999**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	60.5	6.67	66.65	0	90.8	85	115				
2,4,5-TP (Silvex)	62.7	6.67	66.65	0	94.0	85	115				
2,4-D	74.6	6.67	66.65	0	112	85	115				
2,4-DB	61.7	6.67	66.65	0	92.6	85	115				
4-Nitrophenol	75.2	6.67	66.65	0	113	85	115				
Dicamba	63.2	6.67	66.65	0	94.8	85	115				
Dichlorprop	57.5	6.67	66.65	0	86.2	85	115				
Dinoseb	62.4	6.67	66.65	0	93.6	85	115				
MCPA	7050	666	6665	0	106	85	115				
MCPP	7160	666	6665	0	108	85	115				
Pentachlorophenol	60.3	6.67	66.65	0	90.4	85	115				

Sample ID: **1407110-018AMS** SampType: **MS** TestCode: **8151_S** Units: **µg/Kg-dry** Prep Date: **7/18/2014** RunNo: **16088**
Client ID: **ZZZZZZ** Batch ID: **7830** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/23/2014** SeqNo: **211000**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	157	7.59	75.87	0	207	20	124				SMI
2,4,5-TP (Silvex)	151	7.59	75.87	0	199	16.4	131				SMI
2,4-D	47.2	7.59	75.87	0	62.2	20	123				
Dichlorprop	52.2	7.59	75.87	0	68.8	8.98	120				
Pentachlorophenol	53.7	7.59	75.87	14.42	51.8	18.4	137				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8151_S**

Sample ID: **1407110-018AMSD** SampType: **MSD** TestCode: **8151_S** Units: **µg/Kg-dry** Prep Date: **7/18/2014** RunNo: **16088**
Client ID: **ZZZZZZ** Batch ID: **7830** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/23/2014** SeqNo: **211001**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	180	7.59	75.87	0	237	20	124	157.2	13.2	20	SMI
2,4,5-TP (Silvex)	228	7.59	75.87	0	300	16.4	131	150.7	40.7	20	SRMI
2,4-D	43.7	7.59	75.87	0	57.6	20	123	47.20	7.68	20	
Dichlorprop	48.1	7.59	75.87	0	63.4	8.98	120	52.21	8.17	20	
Pentachlorophenol	49.0	7.59	75.87	14.42	45.6	18.4	137	53.73	9.16	20	

Sample ID: **HERB CCV 5/0.5** SampType: **CCV** TestCode: **8151_S** Units: **µg/Kg** Prep Date: RunNo: **16088**
Client ID: **CCV** Batch ID: **7830** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/23/2014** SeqNo: **211002**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	59.3	6.67	66.65	0	89.0	85	115				
2,4,5-TP (Silvex)	59.9	6.67	66.65	0	89.8	85	115				
2,4-D	68.1	6.67	66.65	0	102	85	115				
2,4-DB	61.9	6.67	66.65	0	92.8	85	115				
4-Nitrophenol	75.7	6.67	66.65	0	114	85	115				
Dicamba	59.6	6.67	66.65	0	89.4	85	115				
Dichlorprop	58.4	6.67	66.65	0	87.6	85	115				
Dinoseb	61.7	6.67	66.65	0	92.6	85	115				
MCPA	6670	666	6665	0	100	85	115				
MCPP	7360	666	6665	0	110	85	115				
Pentachlorophenol	58.7	6.67	66.65	0	88.0	85	115				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8151_S**

Sample ID: **HERB CCV 5/0.5** SampType: **CCV** TestCode: **8151_S** Units: **µg/Kg** Prep Date: RunNo: **16088**
Client ID: **CCV** Batch ID: **7830** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/24/2014** SeqNo: **211006**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	59.3	6.67	66.65	0	89.0	85	115				
2,4,5-TP (Silvex)	60.7	6.67	66.65	0	91.0	85	115				
2,4-D	68.1	6.67	66.65	0	102	85	115				
2,4-DB	63.5	6.67	66.65	0	95.2	85	115				
4-Nitrophenol	71.7	6.67	66.65	0	108	85	115				
Dicamba	60.8	6.67	66.65	0	91.2	85	115				
Dichlorprop	60.8	6.67	66.65	0	91.2	85	115				
Dinoseb	56.9	6.67	66.65	0	85.4	85	115				
MCPA	6830	666	6665	0	103	85	115				
MCPP	7030	666	6665	0	105	85	115				
Pentachlorophenol	58.4	6.67	66.65	0	87.6	85	115				

Sample ID: **HERB CCV 5/0.5** SampType: **CCV** TestCode: **8151_S** Units: **µg/Kg** Prep Date: RunNo: **16097**
Client ID: **CCV** Batch ID: **7835** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/24/2014** SeqNo: **211163**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	58.7	6.67	66.65	0	88.0	85	115				
2,4,5-TP (Silvex)	60.7	6.67	66.65	0	91.0	85	115				
2,4-D	72.0	6.67	66.65	0	108	85	115				
2,4-DB	61.1	6.67	66.65	0	91.6	85	115				
4-Nitrophenol	69.0	6.67	66.65	0	104	85	115				
Dicamba	60.3	6.67	66.65	0	90.4	85	115				
Dichlorprop	61.2	6.67	66.65	0	91.8	85	115				
Dinoseb	59.9	6.67	66.65	0	89.8	85	115				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8151_S**

Sample ID: **HERB CCV 5/0.5** SampType: **CCV** TestCode: **8151_S** Units: **µg/Kg** Prep Date: RunNo: **16097**
Client ID: **CCV** Batch ID: **7835** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/24/2014** SeqNo: **211163**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MCPA	6750	666	6665	0	101	85	115				
MCPP	6890	666	6665	0	103	85	115				
Pentachlorophenol	57.7	6.67	66.65	0	86.6	85	115				

Sample ID: **MB-7835** SampType: **MBLK** TestCode: **8151_S** Units: **µg/Kg** Prep Date: **7/21/2014** RunNo: **16097**
Client ID: **PBS** Batch ID: **7835** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/24/2014** SeqNo: **211164**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	ND	6.67									
2,4,5-TP (Silvex)	ND	6.67									
2,4-D	ND	6.67									
2,4-DB	ND	6.67									
4-Nitrophenol	ND	6.67									
Dicamba	ND	6.67									
Dichlorprop	ND	6.67									
Dinoseb	ND	6.67									
MCPA	ND	667									
MCPP	ND	667									
Pentachlorophenol	ND	6.67									
Surr: 2,4-DCAA	3110		6665		46.7	34.3	141				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8151_S**

Sample ID: **1407119-046AMS** SampType: **MS** TestCode: **8151_S** Units: **µg/Kg-dry** Prep Date: **7/21/2014** RunNo: **16097**
Client ID: **TP27-S-0.5** Batch ID: **7835** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/24/2014** SeqNo: **211177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	504	9.23	92.30	0	546	20	124				SMI
2,4,5-TP (Silvex)	521	9.23	92.30	0	564	16.4	131				SMI
2,4-D	36.4	9.23	92.30	0	39.4	20	123				
Dichlorprop	48.4	9.23	92.30	0	52.4	8.98	120				
Pentachlorophenol	21.8	9.23	92.30	0	23.6	18.4	137				

Sample ID: **1407119-046AMSD** SampType: **MSD** TestCode: **8151_S** Units: **µg/Kg-dry** Prep Date: **7/21/2014** RunNo: **16097**
Client ID: **TP27-S-0.5** Batch ID: **7835** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/24/2014** SeqNo: **211178**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	404	9.23	92.30	0	438	20	124	504.1	22.0	20	SRMI
2,4,5-TP (Silvex)	449	9.23	92.30	0	486	16.4	131	520.7	14.9	20	SMI
2,4-D	36.9	9.23	92.30	0	40.0	20	123	36.38	1.51	20	
Dichlorprop	46.3	9.23	92.30	0	50.2	8.98	120	48.38	4.29	20	
Pentachlorophenol	22.0	9.23	92.30	0	23.8	18.4	137	21.79	0.844	20	

Sample ID: **HERB CCV 5/0.5** SampType: **CCV** TestCode: **8151_S** Units: **µg/Kg** Prep Date: RunNo: **16097**
Client ID: **CCV** Batch ID: **7835** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/24/2014** SeqNo: **211179**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	62.1	6.67	66.65	0	93.2	85	115				
2,4,5-TP (Silvex)	64.9	6.67	66.65	0	97.4	85	115				
2,4-D	73.8	6.67	66.65	0	111	85	115				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **8151_S**

Sample ID: **HERB CCV 5/0.5** SampType: **CCV** TestCode: **8151_S** Units: **µg/Kg** Prep Date: RunNo: **16097**
Client ID: **CCV** Batch ID: **7835** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/24/2014** SeqNo: **211179**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-DB	64.1	6.67	66.65	0	96.2	85	115				
4-Nitrophenol	69.3	6.67	66.65	0	104	85	115				
Dicamba	64.1	6.67	66.65	0	96.2	85	115				
Dichlorprop	58.9	6.67	66.65	0	88.4	85	115				
Dinoseb	61.2	6.67	66.65	0	91.8	85	115				
MCPA	7090	666	6665	0	106	85	115				
MCPP	7290	666	6665	0	109	85	115				
Pentachlorophenol	61.9	6.67	66.65	0	92.8	85	115				

Sample ID: **LCS-7835** SampType: **LCS** TestCode: **8151_S** Units: **µg/Kg** Prep Date: **7/21/2014** RunNo: **16097**
Client ID: **LCSS** Batch ID: **7835** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/25/2014** SeqNo: **211297**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	43.5	6.67	66.65	0	65.2	46.8	115				
2,4,5-TP (Silvex)	43.1	6.67	66.65	0	64.6	38.7	137				
2,4-D	53.9	6.67	66.65	0	80.8	34.2	123				
Dichlorprop	56.8	6.67	66.65	0	85.2	56.8	140				
Pentachlorophenol	36.5	6.67	66.65	0	54.8	26.5	117				

Sample ID: **HERB CCV 5/0.5** SampType: **CCV** TestCode: **8151_S** Units: **µg/Kg** Prep Date: RunNo: **16097**
Client ID: **CCV** Batch ID: **7835** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/25/2014** SeqNo: **211308**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **8151_S**

Sample ID: **HERB CCV 5/0.5** SampType: **CCV** TestCode: **8151_S** Units: **µg/Kg** Prep Date: RunNo: **16097**

Client ID: **CCV** Batch ID: **7835** TestNo: **SW8151A** **3545_HERB** Analysis Date: **7/25/2014** SeqNo: **211308**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-T	59.6	6.67	66.65	0	89.4	85	115				
2,4,5-TP (Silvex)	60.7	6.67	66.65	0	91.0	85	115				
2,4-D	73.3	6.67	66.65	0	110	85	115				
2,4-DB	60.0	6.67	66.65	0	90.0	85	115				
4-Nitrophenol	69.0	6.67	66.65	0	104	85	115				
Dicamba	59.5	6.67	66.65	0	89.2	85	115				
Dichlorprop	58.0	6.67	66.65	0	87.0	85	115				
Dinoseb	59.6	6.67	66.65	0	89.4	85	115				
MCPA	6770	666	6665	0	102	85	115				
MCPP	6990	666	6665	0	105	85	115				
Pentachlorophenol	57.6	6.67	66.65	0	86.4	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **HG_CTS**

Sample ID: **MB-7826** SampType: **MBLK** TestCode: **HG_CTS** Units: **mg/Kg** Prep Date: **7/17/2014** RunNo: **16042**
Client ID: **PBS** Batch ID: **7826** TestNo: **SW 7471B** **SW 7471B** Analysis Date: **7/18/2014** SeqNo: **210342**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0167									

Sample ID: **LCS-7826** SampType: **LCS** TestCode: **HG_CTS** Units: **mg/Kg** Prep Date: **7/17/2014** RunNo: **16042**
Client ID: **LCSS** Batch ID: **7826** TestNo: **SW 7471B** **SW 7471B** Analysis Date: **7/18/2014** SeqNo: **210343**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.373	0.0167	0.4000	0	93.3	80	120				

Sample ID: **1407083-001BDUP** SampType: **DUP** TestCode: **HG_CTS** Units: **mg/Kg** Prep Date: **7/17/2014** RunNo: **16042**
Client ID: **ZZZZZZ** Batch ID: **7826** TestNo: **SW 7471B** **SW 7471B** Analysis Date: **7/18/2014** SeqNo: **210345**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0144						0	0	20	

Sample ID: **1407083-001BMS** SampType: **MS** TestCode: **HG_CTS** Units: **mg/Kg** Prep Date: **7/17/2014** RunNo: **16042**
Client ID: **ZZZZZZ** Batch ID: **7826** TestNo: **SW 7471B** **SW 7471B** Analysis Date: **7/18/2014** SeqNo: **210346**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.298	0.0158	0.3774	0.004071	77.8	75	125				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **HG_CTS**

Sample ID: **1407083-001BMSD** SampType: **MSD** TestCode: **HG_CTS** Units: **mg/Kg** Prep Date: **7/17/2014** RunNo: **16042**
Client ID: **ZZZZZZ** Batch ID: **7826** TestNo: **SW 7471B** **SW 7471B** Analysis Date: **7/18/2014** SeqNo: **210347**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.262	0.0146	0.3509	0.004071	73.4	75	125	0.2976	12.9	20	S

Sample ID: **1407119-058ADUP** SampType: **DUP** TestCode: **HG_CTS** Units: **mg/Kg-dry** Prep Date: **7/17/2014** RunNo: **16042**
Client ID: **TP-S-0.5DUP** Batch ID: **7826A** TestNo: **SW 7471B** Analysis Date: **7/18/2014** SeqNo: **210372**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0377	0.0167						0.04049	7.10	20	

Sample ID: **1407119-058AMS** SampType: **MS** TestCode: **HG_CTS** Units: **mg/Kg-dry** Prep Date: **7/17/2014** RunNo: **16042**
Client ID: **TP-S-0.5DUP** Batch ID: **7826A** TestNo: **SW 7471B** Analysis Date: **7/18/2014** SeqNo: **210373**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.551	0.0183	0.4375	0.04049	117	75	125				

Sample ID: **1407119-058AMSD** SampType: **MSD** TestCode: **HG_CTS** Units: **mg/Kg-dry** Prep Date: **7/17/2014** RunNo: **16042**
Client ID: **TP-S-0.5DUP** Batch ID: **7826A** TestNo: **SW 7471B** Analysis Date: **7/18/2014** SeqNo: **210374**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.556	0.0176	0.4216	0.04049	122	75	125	0.5511	0.817	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **HG_CTS**

Sample ID: **CCV**	SampType: **CCV**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date:	RunNo: **16042**
Client ID: **CCV**	Batch ID: **7826**	TestNo: **SW 7471B**	**SW 7471B**	Analysis Date: **7/18/2014**	SeqNo: **210375**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.374	0.0167	0.4000	0	93.6	90	110				

Sample ID: **CCV**	SampType: **CCV**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date:	RunNo: **16042**
Client ID: **CCV**	Batch ID: **7826**	TestNo: **SW 7471B**	**SW 7471B**	Analysis Date: **7/18/2014**	SeqNo: **210376**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.410	0.0167	0.4000	0	103	90	110				

Sample ID: **CCV**	SampType: **CCV**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date:	RunNo: **16042**
Client ID: **CCV**	Batch ID: **7826A**	TestNo: **SW 7471B**		Analysis Date: **7/18/2014**	SeqNo: **210377**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.409	0.0167	0.4000	0	102	90	110				

Sample ID: **MB-7826A**	SampType: **MBLK**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date:	RunNo: **16042**
Client ID: **PBS**	Batch ID: **7826A**	TestNo: **SW 7471B**		Analysis Date: **7/18/2014**	SeqNo: **210378**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0167									

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **HG_CTS**

Sample ID: **LCS-7826A** SampType: **LCS** TestCode: **HG_CTS** Units: **mg/Kg** Prep Date: RunNo: **16042**
Client ID: **LCSS** Batch ID: **7826A** TestNo: **SW 7471B** Analysis Date: **7/18/2014** SeqNo: **210379**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.410	0.0167	0.4000	0	103	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **NH3_S**

Sample ID: **LCS-R16063** SampType: **LCS** TestCode: **NH3_S** Units: **mg/Kg** Prep Date: RunNo: **16063**
Client ID: **LCSS** Batch ID: **R16063** TestNo: **E350.1** Analysis Date: **7/21/2014** SeqNo: **210579**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	28.5	4.00	30.00	0	94.9	90	110				

Sample ID: **MB-R16063** SampType: **MBLK** TestCode: **NH3_S** Units: **mg/Kg** Prep Date: RunNo: **16063**
Client ID: **PBS** Batch ID: **R16063** TestNo: **E350.1** Analysis Date: **7/21/2014** SeqNo: **210580**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	ND	4.00									

Sample ID: **1407119-043AMS** SampType: **MS** TestCode: **NH3_S** Units: **mg/Kg-dry** Prep Date: RunNo: **16063**
Client ID: **TP26-S-0.5** Batch ID: **R16063** TestNo: **E350.1** Analysis Date: **7/21/2014** SeqNo: **210582**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	18.8	4.72	17.70	1.222	99.2	80	120				

Sample ID: **1407119-043AMSD** SampType: **MSD** TestCode: **NH3_S** Units: **mg/Kg-dry** Prep Date: RunNo: **16063**
Client ID: **TP26-S-0.5** Batch ID: **R16063** TestNo: **E350.1** Analysis Date: **7/21/2014** SeqNo: **210583**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	18.9	4.72	17.70	1.222	100	80	120	18.79	0.676	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **NH3_S**

Sample ID: **R16063CCV** SampType: **CCV** TestCode: **NH3_S** Units: **mg/Kg** Prep Date: RunNo: **16063**

Client ID: **CCV** Batch ID: **R16063** TestNo: **E350.1** Analysis Date: **7/21/2014** SeqNo: **210589**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia (As N)	33.7	4.00	35.00	0	96.2	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **NWTPHDX_S**

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **16046**
Client ID: **CCV** Batch ID: **7822** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/18/2014** SeqNo: **210387**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	972	15.0	999.0	0	97.3	85	115				
Lube Oil	527	50.0	499.5	0	105	85	115				

Sample ID: **MB-7822** SampType: **MBLK** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **7/17/2014** RunNo: **16046**
Client ID: **PBS** Batch ID: **7822** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/18/2014** SeqNo: **210388**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	27.1		33.33		81.2	50	150				

Sample ID: **LCS-7822** SampType: **LCS** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **7/17/2014** RunNo: **16046**
Client ID: **LCSS** Batch ID: **7822** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/18/2014** SeqNo: **210389**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	138	15.0	166.7	0	82.7	76.3	125				
Lube Oil	160	50.0	166.7	0	96.1	69.9	127				

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **16046**
Client ID: **CCV** Batch ID: **7822** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/18/2014** SeqNo: **210397**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **NWTPHDX_S**

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **16046**
Client ID: **CCV** Batch ID: **7822** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/18/2014** SeqNo: **210397**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1170	15.0	1332	0	88.2	85	115				
Lube Oil	704	50.0	666.0	0	106	85	115				

Sample ID: **CCB** SampType: **CCB** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **16046**
Client ID: **CCB** Batch ID: **7822** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/18/2014** SeqNo: **210398**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	29.5		33.30		88.5	50	150				

Sample ID: **1407119-043ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **7/17/2014** RunNo: **16046**
Client ID: **TP26-S-0.5** Batch ID: **7822** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/18/2014** SeqNo: **210400**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	56.4	17.7						44.92	22.6	20	R
Lube Oil	182	59.0						132.9	31.2	20	R

Sample ID: **1407119-052ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **7/17/2014** RunNo: **16046**
Client ID: **TP29-S-0.5** Batch ID: **7822** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/18/2014** SeqNo: **210403**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **NWTPHDX_S**

Sample ID: **1407119-052ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **7/17/2014** RunNo: **16046**
Client ID: **TP29-S-0.5** Batch ID: **7822** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/18/2014** SeqNo: **210403**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	17.2						19.68	200	20	RF
Lube Oil	77.1	57.4						104.4	30.0	20	R

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **16046**
Client ID: **CCV** Batch ID: **7822** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/18/2014** SeqNo: **210405**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1320	15.0	1332	0	99.2	85	115				
Lube Oil	618	50.0	666.0	0	92.8	85	115				

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **16057**
Client ID: **CCV** Batch ID: **7819** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/18/2014** SeqNo: **210502**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1170	15.0	1332	0	88.2	85	115				
Lube Oil	704	50.0	666.0	0	106	85	115				

Sample ID: **MB-7819** SampType: **MBLK** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **7/17/2014** RunNo: **16057**
Client ID: **PBS** Batch ID: **7819** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/18/2014** SeqNo: **210503**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **NWTPHDX_S**

Sample ID: **MB-7819**	SampType: **MBLK**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date: **7/17/2014**	RunNo: **16057**
Client ID: **PBS**	Batch ID: **7819**	TestNo: **NWTPH-Dx**	**SW3545A**	Analysis Date: **7/18/2014**	SeqNo: **210503**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lube Oil	ND	50.0									
Surr: o-Terphenyl	22.3		33.33		67.0	50	150				

Sample ID: **LCS-7819**	SampType: **LCS**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date: **7/17/2014**	RunNo: **16057**
Client ID: **LCSS**	Batch ID: **7819**	TestNo: **NWTPH-Dx**	**SW3545A**	Analysis Date: **7/18/2014**	SeqNo: **210504**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	128	15.0	166.7	0	76.6	76.3	125				
Lube Oil	121	50.0	166.7	0	72.4	69.9	127				

Sample ID: **CCV**	SampType: **CCV**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date:	RunNo: **16057**
Client ID: **CCV**	Batch ID: **7819**	TestNo: **NWTPH-Dx**	**SW3545A**	Analysis Date: **7/18/2014**	SeqNo: **210516**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1000	15.0	999.0	0	100	85	115				
Lube Oil	531	50.0	499.5	0	106	85	115				

Sample ID: **CCB**	SampType: **CCB**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date:	RunNo: **16057**
Client ID: **CCB**	Batch ID: **7819**	TestNo: **NWTPH-Dx**	**SW3545A**	Analysis Date: **7/18/2014**	SeqNo: **210517**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **NWTPHDX_S**

Sample ID: **CCB** SampType: **CCB** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **16057**
Client ID: **CCB** Batch ID: **7819** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/18/2014** SeqNo: **210517**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lube Oil	ND	50.0									
Surr: o-Terphenyl	24.8		33.30		74.5	50	150				

Sample ID: **1407119-040ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: RunNo: **16057**
Client ID: **TP25-S-0.5** Batch ID: **7819** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/18/2014** SeqNo: **210522**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	17.4						62.36	200	20	RF
Lube Oil	100	58.1						215.4	72.9	20	R,A2

Sample ID: **1407110-026ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **7/17/2014** RunNo: **16057**
Client ID: **ZZZZZZ** Batch ID: **7819** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/19/2014** SeqNo: **210528**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	42.1	17.1						52.34	21.6	20	RF,A1
Lube Oil	323	57.0						404.7	22.6	20	RA2

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **16057**
Client ID: **CCV** Batch ID: **7819** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **7/19/2014** SeqNo: **210530**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1050	15.0	999.0	0	105	85	115				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **NWTPHDX_S**

Sample ID:	**CCV**	SampType:	**CCV**	TestCode:	**NWTPHDX_S**	Units:	**mg/Kg**	Prep Date:				RunNo:	**16057**
Client ID:	**CCV**	Batch ID:	**7819**	TestNo:	**NWTPH-Dx**	**SW3545A**		Analysis Date:	**7/19/2014**			SeqNo:	**210530**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lube Oil	569	50.0	499.5	0	114	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID: **CCV-7842**	SampType: **CCV**	TestCode: **OPEST_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16086**
Client ID: **CCV**	Batch ID: **7842**	TestNo: **SW8270D**	**SW 3545A**	Analysis Date: **7/23/2014**	SeqNo: **210928**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	361	20.0	333.4	0	108	80	120				
Bolstar	327	20.0	333.4	0	98.2	80	120				
Chloropyrifos	324	20.0	333.4	0	97.2	80	120				
Coumaphos	321	20.0	333.4	0	96.4	80	120				
DEF	359	20.0	333.4	0	108	80	120				
Demeton-S	295	20.0	333.4	0	88.4	80	120				
Diazinon	328	20.0	333.4	0	98.4	80	120				
Dichlorovos	319	20.0	333.4	0	95.8	80	120				
Dimethoate	315	20.0	333.4	0	94.6	80	120				
Disulfoton	305	20.0	333.4	0	91.4	80	120				
EPN	322	20.0	333.4	0	96.6	80	120				
Ethion	325	20.0	333.4	0	97.6	80	120				
Ethoprop	304	20.0	333.4	0	91.2	80	120				
Fensulfothion	334	20.0	333.4	0	100	80	120				
Fenthion	320	20.0	333.4	0	96.0	80	120				
Malathion	326	20.0	333.4	0	97.8	80	120				
Methyl parathion	305	20.0	333.4	0	91.6	80	120				
Mevinphos	315	20.0	333.4	0	94.4	80	120				
Naled	337	20.0	333.4	0	101	80	120				
Parathion	312	20.0	333.4	0	93.6	80	120				
Phorate	322	20.0	333.4	0	96.6	80	120				
Ronnel	319	20.0	333.4	0	95.6	80	120				
Stirofos	315	20.0	333.4	0	94.6	80	120				
Sulfotepp	303	20.0	333.4	0	90.8	80	120				
Tokuthion	329	20.0	333.4	0	98.8	80	120				
Trichloronate	321	20.0	333.4	0	96.2	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID: **CCV-7842**	SampType: **CCV**	TestCode: **OPEST_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16086**
Client ID: **CCV**	Batch ID: **7842**	TestNo: **SW8270D**	**SW 3545A**	Analysis Date: **7/23/2014**	SeqNo: **210928**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **LCS-7842**	SampType: **LCS**	TestCode: **OPEST_S**	Units: **µg/Kg**	Prep Date: **7/21/2014**	RunNo: **16086**
Client ID: **LCSS**	Batch ID: **7842**	TestNo: **SW8270D**	**SW 3545A**	Analysis Date: **7/23/2014**	SeqNo: **210929**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	37.3	10.0	66.67	0	56.0	37	150				
Chloropyrifos	44.0	10.0	66.67	0	66.0	48	150				
DEF	45.3	10.0	66.67	0	68.0	42	150				
Dimethoate	15.3	10.0	66.67	0	23.0	22	150				
Disulfoton	22.7	10.0	66.67	0	34.0	33	150				
Fensulfothion	48.0	10.0	66.67	0	72.0	65	150				
Malathion	35.3	10.0	66.67	0	53.0	50	150				
Methyl parathion	34.0	10.0	66.67	0	51.0	50	150				
Parathion	35.3	10.0	66.67	0	53.0	50	150				
Phorate	34.7	10.0	66.67	0	52.0	43	150				

Sample ID: **MB-7842**	SampType: **MBLK**	TestCode: **OPEST_S**	Units: **µg/Kg**	Prep Date: **7/21/2014**	RunNo: **16086**
Client ID: **PBS**	Batch ID: **7842**	TestNo: **SW8270D**	**SW 3545A**	Analysis Date: **7/23/2014**	SeqNo: **210930**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	ND	250									
Bolstar	ND	20.0									
Chloropyrifos	ND	20.0									

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID:	**MB-7842**	SampType:	**MBLK**	TestCode:	**OPEST_S**	Units:	**µg/Kg**	Prep Date:	**7/21/2014**	RunNo:	**16086**		
Client ID:	**PBS**	Batch ID:	**7842**	TestNo:	**SW8270D**		**SW 3545A**	Analysis Date:	**7/23/2014**	SeqNo:	**210930**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Coumaphos	ND	100									
DEF	ND	20.0									
Demeton-S	ND	50.0									
Diazinon	ND	50.0									
Dichlorovos	ND	20.0									
Dimethoate	ND	50.0									
Disulfoton	ND	20.0									
EPN	ND	20.0									
Ethion	ND	20.0									
Ethoprop	ND	20.0									
Fensulfothion	ND	100									
Fenthion	ND	20.0									
Malathion	ND	20.0									
Methyl parathion	ND	100									
Mevinphos	ND	100									
Naled	ND	250									
Parathion	ND	50.0									
Phorate	ND	20.0									
Ronnel	ND	20.0									
Stirofos	ND	20.0									
Sulfotepp	ND	20.0									
Tokuthion	ND	20.0									
Trichloronate	ND	20.0									
Surr: Tributylphosphate (Surr.)	34.0		66.67		51.0	50	150				
Surr: Triphenylphosphate (Surr.)	46.7		66.67		70.0	50	150				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID: **1407110-029AMS** SampType: **MS** TestCode: **OPEST_S** Units: **µg/Kg-dry** Prep Date: **7/21/2014** RunNo: **16086**
Client ID: **ZZZZZZ** Batch ID: **7842** TestNo: **SW8270D** **SW 3545A** Analysis Date: **7/23/2014** SeqNo: **210943**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	98.2	25.8	86.10	0	114	37	150				
Chloropyrifos	62.9	25.8	86.10	0	73.0	48	150				
DEF	50.8	25.8	86.10	0	59.0	42	150				
Dimethoate	42.2	25.8	86.10	0	49.0	22	150				
Disulfoton	47.4	25.8	86.10	0	55.0	33	150				
Fensulfothion	113	25.8	86.10	0	131	55	150				
Malathion	46.5	25.8	86.10	7.749	45.0	50	150				
Methyl parathion	43.0	25.8	86.10	0	50.0	50	150				
Parathion	48.2	25.8	86.10	0	56.0	50	150				
Phorate	50.8	25.8	86.10	0	59.0	43	150				

Sample ID: **1407110-029AMSD** SampType: **MSD** TestCode: **OPEST_S** Units: **µg/Kg-dry** Prep Date: **7/21/2014** RunNo: **16086**
Client ID: **ZZZZZZ** Batch ID: **7842** TestNo: **SW8270D** **SW 3545A** Analysis Date: **7/23/2014** SeqNo: **210944**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	92.1	25.8	86.10	0	107	37	150	98.15	6.33	20	
Chloropyrifos	62.9	25.8	86.10	0	73.0	48	150	62.85	0	20	
DEF	71.5	25.8	86.10	0	83.0	42	150	50.80	33.8	20	R
Dimethoate	36.2	25.8	86.10	0	42.0	22	150	42.19	15.4	20	
Disulfoton	47.4	25.8	86.10	0	55.0	33	150	47.35	0	20	
Fensulfothion	101	25.8	86.10	0	117	55	150	112.8	11.3	20	
Malathion	49.1	25.8	86.10	7.749	48.0	50	150	46.49	5.41	20	S
Methyl parathion	47.4	25.8	86.10	0	55.0	50	150	43.05	9.52	20	
Parathion	45.6	25.8	86.10	0	53.0	50	150	48.22	5.50	20	

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID: **1407110-029AMSD** SampType: **MSD** TestCode: **OPEST_S** Units: **µg/Kg-dry** Prep Date: **7/21/2014** RunNo: **16086**
Client ID: **ZZZZZZ** Batch ID: **7842** TestNo: **SW8270D** **SW 3545A** Analysis Date: **7/23/2014** SeqNo: **210944**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phorate	49.1	25.8	86.10	0	57.0	43	150	50.80	3.45	20	

Sample ID: **CCV-7843** SampType: **CCV** TestCode: **OPEST_S** Units: **µg/Kg** Prep Date: RunNo: **16091**
Client ID: **CCV** Batch ID: **7843** TestNo: **SW8270D** **SW 3545A** Analysis Date: **7/24/2014** SeqNo: **211035**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	390	20.0	333.4	0	117	80	120				
Bolstar	319	20.0	333.4	0	95.6	80	120				
Chloropyrifos	285	20.0	333.4	0	85.4	80	120				
Coumaphos	339	20.0	333.4	0	102	80	120				
DEF	299	20.0	333.4	0	89.8	80	120				
Demeton-S	375	20.0	333.4	0	113	80	120				
Diazinon	277	20.0	333.4	0	83.2	80	120				
Dichlorovos	337	20.0	333.4	0	101	80	120				
Dimethoate	353	20.0	333.4	0	106	80	120				
Disulfoton	337	20.0	333.4	0	101	80	120				
EPN	347	20.0	333.4	0	104	80	120				
Ethion	319	20.0	333.4	0	95.6	80	120				
Ethoprop	299	20.0	333.4	0	89.6	80	120				
Fensulfothion	397	20.0	333.4	0	119	80	120				
Fenthion	289	20.0	333.4	0	86.6	80	120				
Malathion	311	20.0	333.4	0	93.4	80	120				
Methyl parathion	314	20.0	333.4	0	94.2	80	120				
Mevinphos	355	20.0	333.4	0	106	80	120				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID: **CCV-7843** SampType: **CCV** TestCode: **OPEST_S** Units: **µg/Kg** Prep Date: RunNo: **16091**

Client ID: **CCV** Batch ID: **7843** TestNo: **SW8270D** **SW 3545A** Analysis Date: **7/24/2014** SeqNo: **211035**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naled	399	20.0	333.4	0	120	80	120				
Parathion	308	20.0	333.4	0	92.4	80	120				
Phorate	286	20.0	333.4	0	85.8	80	120				
Ronnel	287	20.0	333.4	0	86.0	80	120				
Stirofos	330	20.0	333.4	0	99.0	80	120				
Sulfotepp	301	20.0	333.4	0	90.2	80	120				
Tokuthion	309	20.0	333.4	0	92.8	80	120				
Trichloronate	283	20.0	333.4	0	85.0	80	120				

Sample ID: **LCS-7843** SampType: **LCS** TestCode: **OPEST_S** Units: **µg/Kg** Prep Date: **7/22/2014** RunNo: **16091**

Client ID: **LCSS** Batch ID: **7843** TestNo: **SW8270D** **SW 3545A** Analysis Date: **7/24/2014** SeqNo: **211036**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	64.7	10.0	66.67	0	97.0	37	150				
Chloropyrifos	39.3	10.0	66.67	0	59.0	48	150				
DEF	49.3	10.0	66.67	0	74.0	42	150				
Dimethoate	24.7	10.0	66.67	0	37.0	22	150				
Disulfoton	29.3	10.0	66.67	0	44.0	33	150				
Fensulfothion	72.7	10.0	66.67	0	109	65	150				
Malathion	44.7	10.0	66.67	0	67.0	50	150				
Methyl parathion	37.3	10.0	66.67	0	56.0	50	150				
Parathion	38.7	10.0	66.67	0	58.0	50	150				
Phorate	38.0	10.0	66.67	0	57.0	43	150				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID: **MB-7843**	SampType: **MBLK**	TestCode: **OPEST_S**	Units: **µg/Kg**	Prep Date: **7/22/2014**	RunNo: **16091**
Client ID: **PBS**	Batch ID: **7843**	TestNo: **SW8270D**	**SW 3545A**	Analysis Date: **7/24/2014**	SeqNo: **211037**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	ND	250									
Bolstar	ND	20.0									
Chloropyrifos	ND	20.0									
Coumaphos	ND	100									
DEF	ND	20.0									
Demeton-S	ND	50.0									
Diazinon	ND	50.0									
Dichlorovos	ND	20.0									
Dimethoate	ND	50.0									
Disulfoton	ND	20.0									
EPN	ND	20.0									
Ethion	ND	20.0									
Ethoprop	ND	20.0									
Fensulfothion	ND	100									
Fenthion	ND	20.0									
Malathion	ND	20.0									
Methyl parathion	ND	100									
Mevinphos	ND	100									
Naled	ND	250									
Parathion	ND	50.0									
Phorate	ND	20.0									
Ronnel	ND	20.0									
Stirofos	ND	20.0									
Sulfotepp	ND	20.0									
Tokuthion	ND	20.0									
Trichloronate	ND	20.0									

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID: **MB-7843**	SampType: **MBLK**	TestCode: **OPEST_S**	Units: **µg/Kg**	Prep Date: **7/22/2014**	RunNo: **16091**
Client ID: **PBS**	Batch ID: **7843**	TestNo: **SW8270D**	**SW 3545A**	Analysis Date: **7/24/2014**	SeqNo: **211037**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Tributylphosphate (Surr.)	36.0		66.67		54.0	50	150				
Surr: Triphenylphosphate (Surr.)	42.7		66.67		64.0	50	150				

Sample ID: **1407119-031AMS**	SampType: **MS**	TestCode: **OPEST_S**	Units: **µg/Kg-dry**	Prep Date: **7/22/2014**	RunNo: **16091**
Client ID: **TP22-S-0.5**	Batch ID: **7843**	TestNo: **SW8270D**	**SW 3545A**	Analysis Date: **7/24/2014**	SeqNo: **211052**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	115	13.0	86.81	0	132	37	150				
Chloropyrifos	60.8	13.0	86.81	0	70.0	48	150				
DEF	73.8	13.0	86.81	0	85.0	42	150				
Dimethoate	59.0	13.0	86.81	0	68.0	22	150				
Disulfoton	42.5	13.0	86.81	0	49.0	33	150				
Fensulfothion	132	13.0	86.81	6.944	144	55	150				
Malathion	65.1	13.0	86.81	0	75.0	50	150				
Methyl parathion	57.3	13.0	86.81	0	66.0	50	150				
Parathion	52.1	13.0	86.81	0	60.0	50	150				
Phorate	53.0	13.0	86.81	0	61.0	43	150				

Sample ID: **1407119-031AMSD**	SampType: **MSD**	TestCode: **OPEST_S**	Units: **µg/Kg-dry**	Prep Date: **7/22/2014**	RunNo: **16091**
Client ID: **TP22-S-0.5**	Batch ID: **7843**	TestNo: **SW8270D**	**SW 3545A**	Analysis Date: **7/24/2014**	SeqNo: **211053**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	111	13.0	86.81	0	128	37	150	114.6	3.08	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID: **1407119-031AMSD** SampType: **MSD** TestCode: **OPEST_S** Units: **µg/Kg-dry** Prep Date: **7/22/2014** RunNo: **16091**
Client ID: **TP22-S-0.5** Batch ID: **7843** TestNo: **SW8270D** **SW 3545A** Analysis Date: **7/24/2014** SeqNo: **211053**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloropyrifos	45.1	13.0	86.81	0	52.0	48	150	60.76	29.5	20	R
DEF	70.3	13.0	86.81	0	81.0	42	150	73.78	4.82	20	
Dimethoate	53.8	13.0	86.81	0	62.0	22	150	59.03	9.23	20	
Disulfoton	44.3	13.0	86.81	0	51.0	33	150	42.53	4.00	20	
Fensulfothion	126	13.0	86.81	6.944	137	55	150	131.9	4.71	20	
Malathion	59.9	13.0	86.81	0	69.0	50	150	65.10	8.33	20	
Methyl parathion	51.2	13.0	86.81	0	59.0	50	150	57.29	11.2	20	
Parathion	46.0	13.0	86.81	0	53.0	50	150	52.08	12.4	20	
Phorate	47.7	13.0	86.81	0	55.0	43	150	52.95	10.3	20	

Sample ID: **CCV-7842** SampType: **CCV** TestCode: **OPEST_S** Units: **µg/Kg** Prep Date: RunNo: **16086**
Client ID: **CCV** Batch ID: **7842** TestNo: **SW8270D** **SW 3545A** Analysis Date: **7/24/2014** SeqNo: **211054**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	390	250	333.4	0	117	80	120				
Bolstar	319	20.0	333.4	0	95.6	80	120				
Chloropyrifos	285	20.0	333.4	0	85.4	80	120				
Coumaphos	339	100	333.4	0	102	80	120				
DEF	299	20.0	333.4	0	89.8	80	120				
Demeton-S	375	50.0	333.4	0	113	80	120				
Diazinon	277	50.0	333.4	0	83.2	80	120				
Dichlorovos	337	20.0	333.4	0	101	80	120				
Dimethoate	353	50.0	333.4	0	106	80	120				
Disulfoton	337	20.0	333.4	0	101	80	120				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi
Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID: **CCV-7842** SampType: **CCV** TestCode: **OPEST_S** Units: **µg/Kg** Prep Date: RunNo: **16086**
Client ID: **CCV** Batch ID: **7842** TestNo: **SW8270D** **SW 3545A** Analysis Date: **7/24/2014** SeqNo: **211054**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
EPN	347	20.0	333.4	0	104	80	120				
Ethion	319	20.0	333.4	0	95.6	80	120				
Ethoprop	299	20.0	333.4	0	89.6	80	120				
Fensulfothion	397	100	333.4	0	119	80	120				
Fenthion	289	20.0	333.4	0	86.6	80	120				
Malathion	311	20.0	333.4	0	93.4	80	120				
Methyl parathion	314	100	333.4	0	94.2	80	120				
Mevinphos	355	100	333.4	0	106	80	120				
Naled	399	250	333.4	0	120	80	120				
Parathion	308	50.0	333.4	0	92.4	80	120				
Phorate	286	20.0	333.4	0	85.8	80	120				
Ronnel	287	20.0	333.4	0	86.0	80	120				
Stirofos	330	20.0	333.4	0	99.0	80	120				
Sulfotepp	301	20.0	333.4	0	90.2	80	120				
Tokuthion	309	20.0	333.4	0	92.8	80	120				
Trichloronate	283	20.0	333.4	0	85.0	80	120				

Sample ID: **CCB-7842** SampType: **CCB** TestCode: **OPEST_S** Units: **µg/Kg** Prep Date: RunNo: **16086**
Client ID: **CCB** Batch ID: **7842** TestNo: **SW8270D** **SW 3545A** Analysis Date: **7/24/2014** SeqNo: **211055**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Azinphos-methyl	ND	250									
Bolstar	ND	20.0									
Chloropyrifos	ND	20.0									

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1407119**

Specialty Analytical

28-Aug-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04

TestCode: **OPEST_S**

Sample ID: **CCB-7842**	SampType: **CCB**	TestCode: **OPEST_S**	Units: **µg/Kg**	Prep Date:	RunNo: **16086**
Client ID: **CCB**	Batch ID: **7842**	TestNo: **SW8270D**	**SW 3545A**	Analysis Date: **7/24/2014**	SeqNo: **211055**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Coumaphos	ND	100									
DEF	ND	20.0									
Demeton-S	ND	50.0									
Diazinon	ND	50.0									
Dichlorovos	ND	20.0									
Dimethoate	ND	50.0									
Disulfoton	ND	20.0									
EPN	ND	20.0									
Ethion	ND	20.0									
Ethoprop	ND	20.0									
Fensulfothion	ND	100									
Fenthion	ND	20.0									
Malathion	ND	20.0									
Methyl parathion	ND	100									
Mevinphos	ND	100									
Naled	ND	250									
Parathion	ND	50.0									
Phorate	ND	20.0									
Ronnel	ND	20.0									
Stirofos	ND	20.0									
Sulfotepp	ND	20.0									
Tokuthion	ND	20.0									
Trichloronate	ND	20.0									
Surr: Tributylphosphate (Surr.)	36.0		66.67		54.0	50	150				
Surr: Triphenylphosphate (Surr.)	42.7		66.67		64.0	50	150				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

KEY TO FLAGS

Rev. May 12, 2010

A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards

A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.

A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.

A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.

A4 The product appears to be aged or degraded diesel.

B The blank exhibited a positive result great than the reporting limit for this compound.

CN See Case Narrative.

D Result is based from a dilution.

E Result exceeds the calibration range for this compound. The result should be considered as estimate.

F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.

G Result may be biased high due to biogenic interferences. Clean up is recommended.

H Sample was analyzed outside recommended holding time.

HT At clients request, samples was analyzed outside of recommended holding time.

J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.

K Diesel result is biased high due to amount of Oil contained in the sample.

L Diesel result is biased high due to amount of Gasoline contained in the sample.

M Oil result is biased high due to amount of Diesel contained in the sample.

MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.

MI Result is outside control limits due to matrix interference.

MSA Value determined by Method of Standard Addition.

O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.

Q Detection levels elevated due to sample matrix.

R RPD control limits were exceeded.

RF Duplicate failed due to result being at or near the method-reporting limit.

RP Matrix spike values exceed established QC limits; post digestion spike is in control.

S Recovery is outside control limits.

SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.

* The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: Seth Otto
Company: MFA
Address: 400 E Mill Plain Blvd #400
Vancouver, WA 98660
Phone: 360.694.2691 Fax:
Project No. 9059.07.04 Project Name: Fleischer
Project Site Location OR: WA: X Other:
Invoice To: MFA P.O. No.:

Collected By:
Signature: Emily N. Hess
Printed: Emily N. Hess
Signature: [illegible]
Printed: Kyle Rostlund

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. 1407119
Shipped Via:
Air Bill No.:
Temperature On Receipt _____ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	PCBs EPA 8082	NW TPH-Dx Ext	As, Cr, Cu, Pb, Ni, Zn	Hg EPA 7471	Herbicides EPA 8151	Org. Cl. Pest 8081B	Org. P. Pest 8270D				Comments	Lab I.D.
07/16/14	0707	TP13-S-0.5	S	3	X	X	X	X	X	X	X					1
	0715	TP13-S-1.5			X	X	X	X								2
	0720	TP13-S-5.5			X											3
	0724	TP13-S-7.5														4
	0743	TP14-S-0.5			X				X	X	X					5
	0748	TP14-S-4.5			X											6
	0752	TP14-S-7.5														7
	0810	TP15-S-0.5			X											8
	0812	TP15-S-1.75			X	X	X	X	X	X	X					9
	0817	TP15-S-6.0			X											10
	0822	TP15-S-8.0														11
	0840	TP16-S-0.5			X	X	X	X	X	X	X					12

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
Company: MFA	7/17/14	0945	Company:	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By:	Date	Time
Cindy Hellyard	7/17/14	1050

Copies: White-Original Yellow-Project File Pink-Customer Copy

CHAIN OF CUSTODY RECORD

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: -Same-
Company: MFA
Address:
Phone: Fax:
Project No.: Project Name:
Project Site Location OR: WA: Other:
Invoice To: P.O. No.:

Collected By:
Signature: Emily N. Hess
Printed: Emily N. Hess
Signature: [illegible]
Printed: Kyle Rosland

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. K07119
Shipped Via:
Air Bill No.:
Temperature On Receipt ____ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	PCBs EPA 8082	AWTPH-Dx Ext.	As, Cr, Cu, Pb, Ni, Zn	Hg EPA 7471	Herbicides EPA 8151	Org. Cl. Pest. 8081B	Org. P. Pest. 8270D				Comments	Lab I.D.
07/16/14	0845	TP16-S-4.0	S	3												13
	0855	TP16-S-6.5														14
	0912	TP17-S-0.5			X											15
	0917	TP17-S-1.25			X	X	X	X	X	X	X					16
	0922	TP17-S-4.5			X											17
	0927	TP17-S-7.0														18
	0945	TP18-S-0.5			X	X	X	X	X	X	X					19
	0954	TP18-S-4.0														20
	1000	TP18-S-7.0														21
	1020	TP19-S-0.5			X				X	X	X					22
	1025	TP19-S-4.5														23
	1030	TP19-S-6.5														24

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
[illegible]	7/17/14	0940				
Company: MFA			Company:	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Cindy Hellgard — Date: 7/17/14 — Time: 1050

Copies: White-Original Yellow-Project File Pink-Customer Copy

CHAIN OF CUSTODY RECORD

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: -Same-
Company: MFA
Address:
Phone: 360.694.2691 Fax:
Project No. Project Name
Project Site Location OR WA Other
Invoice To P.O. No.

Collected By: Emily N. Hess
Signature: Emily N. Hess
Printed: EMILY N HESS
Signature: [illegible]
Printed: Kyle Rosland

Turn Around Time
☐ Normal 5-7 Business Days
☐ Rush _____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. K07119
Shipped Via
Air Bill No.
Temperature On Receipt ____ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	PCBs EPA 8082	NW TPH-Dx Ext.	As, Cr, Cu, Pb, Ni, Zn	Hg EPA 7471	Herbicides EPA 515	Org. Cl. Pest. 8081B	Org. P. Pest. 8270D				Comments	Lab I.D.
07/16/14	1040	TP20-S-0.5	S	3	X	X	X	X	X	X	X					25
	1045	TP20-S-4.5														26
	1050	TP20-S-7.0														27
	1105	TP21-S-0.5			X	X	X	X	X	X	X					28
	1110	TP21-S-5.0			X											29
	1115	TP21-S-7.0														30
	1130	TP22-S-0.5			X	X	X	X	X	X	X					31
	1135	TP22-S-5.0														32
	1140	TP22-S-7.0														33
	1155	TP23-S-0.5			X	X	X	X	X	X	X					34
	1200	TP23-S-4.5			X											35
	1205	TP23-S-6.5														36

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
Company: MFA	7/17/14	0740	Company:	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Cindy Ellward — Date 7/17/14 — Time 10:50

Copies: White-Original Yellow-Project File Pink-Customer Copy

CHAIN OF CUSTODY RECORD

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: -Same-
Company: MFA
Address:
Phone: Fax:
Project No.: Project Name:
Project Site Location OR: WA: Other:
Invoice To: P.O. No.:

Collected By: Emily N. Hess
Signature: Emily N. Hess
Printed: Emily N. Hess
Signature:
Printed: Kyle Roslund

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. 407119
Shipped Via:
Air Bill No.:
Temperature On Receipt ____ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	PCBs EPA 8082	NWTPH-Dx Ext.	As, Cr, Cu, Pb, Ni, Zn	Hg EPA 7471	Fe, Mn	Ammonia	Herbicides EPA 8151	Org. Cl. Pest. 8081B	Org. P. Pest. 8270D		Comments	Lab I.D.
07/16/14	1312	TP24-S-0.5	S	3	X	X	X	X			X	X	X			37
	1317	TP24-S-4.5														38
	1322	TP24-S-6.5														39
	1330	TP25-S-0.5			X	X	X	X			X	X	X			40
	1335	TP25-S-4.5			X											41
	1340	TP25-S-7.0														42
	1353	TP26-S-0.5			X	X	X	X	X	X	X	X	X			43
	1400	TP26-S-5.0			X											44
	1405	TP26-S-7.0														45
	1420	TP27-S-0.5			X	X	X	X	X	X	X	X	X			46
	1426	TP27-S-5.5			X											47
	1433	TP27-S-8.5			X											48

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
Company: MFA	7/17/14	0948	Company:	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Cindy Hillegard — Date: 7/17/14 — Time: 10:50

Copies: White-Original Yellow-Project File Pink-Customer Copy

CHAIN OF CUSTODY RECORD

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: -same-
Company: MFA
Address:
Phone: Fax:
Project No.: Project Name:
Project Site Location OR: WA: Other:
Invoice To: P.O. No.:

Collected By:
Signature: Emily N. Hess
Printed: EMILY N. HESS
Signature:
Printed: Kyle Rustund

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____
Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. K07119
Shipped Via:
Air Bill No.:
Temperature On Receipt: °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	PCBs EPA 8082	NWTPH-Dx Ext.	As, Cr, Cu, Pb, Ni, Zn	Hg EPA 7471	Fe, Mn	Ammonia	Herbicides EPA 8151	Org. Cl. Pest. 8081B	Chlorp. Pest. 8270D		Comments	Lab I.D.
07/16/14	1445	TP28-S-0.5	S	3	X				X	X	X	X	X			49
	1452	TP28-S-5.0														50
	1456	TP28-S-8.0														51
	1510	TP29-S-0.5			X	X	X	X	X	X	X	X	X			52
	1516	TP29-S-3.5			X											53
	1522	TP29-S-7.5			X											54
	1536	TP30-S-0.5			X				X	X	X	X	X			55
	1541	TP30-S-4.0			X											56
	1544	TP30-S-7.0														57
	1510	TP-S-0.5DUP			X	X	X	X	X	X	X	X	X			58
																~~59~~
																~~60~~

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
Company: MFA	7/17/14	0940	Company:	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Cindy Hillgard — Date: 7/17/14 — Time: 10:50

Copies: White-Original Yellow-Project File Pink-Customer Copy

Specialty Analytical

11711 SE Capps Road, Ste B
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

October 20, 2014

Kyle Roslund
Maul Foster & Alongi
400 E. Mill Plain Blvd.
Suite 400
Vancouver, WA 98660

TEL: (360) 694-2691
FAX (360) 906-1958

RE: Fleischer / 9059.07.04-01-G

Dear Kyle Roslund: Order No.: 1410008

Specialty Analytical received 37 sample(s) on 10/2/2014 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Marty French
Lab Director

Specialty Analytical

Date Reported: 20-Oct-14

CLIENT: Maul Foster & Alongi
Project: Fleischer / 9059.07.04-01-G

Lab Order: 1410008

Lab ID: 1410008-001 **Collection Date:** 10/1/2014 1:10:00 PM
Client Sample ID: TP47-S-0.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	10/14/2014

Lab ID: 1410008-002 **Collection Date:** 10/1/2014 11:38:00 AM
Client Sample ID: TP53-S-0.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	10/14/2014

Lab ID: 1410008-003 **Collection Date:** 10/1/2014 12:21:00 PM
Client Sample ID: TP50-S-0.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	10/14/2014

Lab ID: 1410008-004 **Collection Date:** 10/1/2014 1:00:00 PM
Client Sample ID: TP46-S-0.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.385		µg/Kg-dry	1	10/16/2014 8:28:00 PM
Aroclor 1221	ND	0.385		µg/Kg-dry	1	10/16/2014 8:28:00 PM
Aroclor 1232	ND	0.385		µg/Kg-dry	1	10/16/2014 8:28:00 PM
Aroclor 1242	ND	0.385		µg/Kg-dry	1	10/16/2014 8:28:00 PM
Aroclor 1248	ND	0.385		µg/Kg-dry	1	10/16/2014 8:28:00 PM
Aroclor 1254	ND	0.385		µg/Kg-dry	1	10/16/2014 8:28:00 PM
Aroclor 1260	ND	0.385		µg/Kg-dry	1	10/16/2014 8:28:00 PM
Aroclor 1262	ND	0.385		µg/Kg-dry	1	10/16/2014 8:28:00 PM
Aroclor 1268	ND	0.385		µg/Kg-dry	1	10/16/2014 8:28:00 PM
Surr: Decachlorobiphenyl	88.0	56.5-130		%REC	1	10/16/2014 8:28:00 PM

Specialty Analytical

Date Reported: 20-Oct-14

CLIENT: Maul Foster & Alongi
Project: Fleischer / 9059.07.04-01-G

Lab Order: 1410008

Lab ID: 1410008-005 **Collection Date:** 10/1/2014 1:39:00 PM
Client Sample ID: TP44-S-0.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	10/14/2014

Lab ID: 1410008-006 **Collection Date:** 10/1/2014 2:10:00 PM
Client Sample ID: TP41-S-0.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	10/14/2014

Lab ID: 1410008-007 **Collection Date:** 10/1/2014 2:40:00 PM
Client Sample ID: TP38-S-0.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.383		µg/Kg-dry	1	10/7/2014 3:26:00 PM
Aroclor 1221	ND	0.383		µg/Kg-dry	1	10/7/2014 3:26:00 PM
Aroclor 1232	ND	0.383		µg/Kg-dry	1	10/7/2014 3:26:00 PM
Aroclor 1242	ND	0.383		µg/Kg-dry	1	10/7/2014 3:26:00 PM
Aroclor 1248	ND	0.383		µg/Kg-dry	1	10/7/2014 3:26:00 PM
Aroclor 1254	ND	0.383		µg/Kg-dry	1	10/7/2014 3:26:00 PM
Aroclor 1260	ND	0.383		µg/Kg-dry	1	10/7/2014 3:26:00 PM
Aroclor 1262	ND	0.383		µg/Kg-dry	1	10/7/2014 3:26:00 PM
Aroclor 1268	ND	0.383		µg/Kg-dry	1	10/7/2014 3:26:00 PM
Surr: Decachlorobiphenyl	73.7	56.5-130		%REC	1	10/7/2014 3:26:00 PM

Specialty Analytical

Date Reported: 20-Oct-14

CLIENT: Maul Foster & Alongi
Project: Fleischer / 9059.07.04-01-G

Lab Order: 1410008

Lab ID: 1410008-008 **Collection Date:** 10/1/2014 11:17:00 AM
Client Sample ID: TP52-S-0.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.358		µg/Kg-dry	1	10/16/2014 8:45:00 PM
Aroclor 1221	ND	0.358		µg/Kg-dry	1	10/16/2014 8:45:00 PM
Aroclor 1232	ND	0.358		µg/Kg-dry	1	10/16/2014 8:45:00 PM
Aroclor 1242	ND	0.358		µg/Kg-dry	1	10/16/2014 8:45:00 PM
Aroclor 1248	ND	0.358		µg/Kg-dry	1	10/16/2014 8:45:00 PM
Aroclor 1254	ND	0.358		µg/Kg-dry	1	10/16/2014 8:45:00 PM
Aroclor 1260	31.9	0.358		µg/Kg-dry	1	10/16/2014 8:45:00 PM
Aroclor 1262	ND	0.358		µg/Kg-dry	1	10/16/2014 8:45:00 PM
Aroclor 1268	ND	0.358		µg/Kg-dry	1	10/16/2014 8:45:00 PM
Surr: Decachlorobiphenyl	72.0	56.5-130		%REC	1	10/16/2014 8:45:00 PM

Lab ID: 1410008-009 **Collection Date:** 10/1/2014 12:06:00 PM
Client Sample ID: TP49-S-0.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	10/14/2014

Lab ID: 1410008-010 **Collection Date:** 10/1/2014 12:46:00 PM
Client Sample ID: TP-S-DUP **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.382		µg/Kg-dry	1	10/7/2014 3:43:00 PM
Aroclor 1221	ND	0.382		µg/Kg-dry	1	10/7/2014 3:43:00 PM
Aroclor 1232	ND	0.382		µg/Kg-dry	1	10/7/2014 3:43:00 PM
Aroclor 1242	ND	0.382		µg/Kg-dry	1	10/7/2014 3:43:00 PM
Aroclor 1248	9840	38.2		µg/Kg-dry	100	10/9/2014 2:22:00 PM
Aroclor 1254	ND	0.382		µg/Kg-dry	1	10/7/2014 3:43:00 PM
Aroclor 1260	ND	0.382		µg/Kg-dry	1	10/7/2014 3:43:00 PM
Aroclor 1262	ND	0.382		µg/Kg-dry	1	10/7/2014 3:43:00 PM
Aroclor 1268	ND	0.382		µg/Kg-dry	1	10/7/2014 3:43:00 PM
Surr: Decachlorobiphenyl	88.2	56.5-130		%REC	1	10/7/2014 3:43:00 PM

Specialty Analytical

Date Reported: 20-Oct-14

CLIENT: Maul Foster & Alongi
Project: Fleischer / 9059.07.04-01-G

Lab Order: 1410008

Lab ID: 1410008-011 **Collection Date:** 10/1/2014 1:36:00 PM
Client Sample ID: TP43-S-0.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.365		µg/Kg-dry	1	10/16/2014 9:02:00 PM
Aroclor 1221	ND	0.365		µg/Kg-dry	1	10/16/2014 9:02:00 PM
Aroclor 1232	ND	0.365		µg/Kg-dry	1	10/16/2014 9:02:00 PM
Aroclor 1242	ND	0.365		µg/Kg-dry	1	10/16/2014 9:02:00 PM
Aroclor 1248	605	3.65		µg/Kg-dry	10	10/17/2014 2:21:00 AM
Aroclor 1254	ND	0.365		µg/Kg-dry	1	10/16/2014 9:02:00 PM
Aroclor 1260	ND	0.365		µg/Kg-dry	1	10/16/2014 9:02:00 PM
Aroclor 1262	ND	0.365		µg/Kg-dry	1	10/16/2014 9:02:00 PM
Aroclor 1268	ND	0.365		µg/Kg-dry	1	10/16/2014 9:02:00 PM
Surr: Decachlorobiphenyl	125	56.5-130		%REC	1	10/16/2014 9:02:00 PM

Lab ID: 1410008-012 **Collection Date:** 10/1/2014 2:00:00 PM
Client Sample ID: TP40-S-0.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.359		µg/Kg-dry	1	10/16/2014 9:18:00 PM
Aroclor 1221	ND	0.359		µg/Kg-dry	1	10/16/2014 9:18:00 PM
Aroclor 1232	ND	0.359		µg/Kg-dry	1	10/16/2014 9:18:00 PM
Aroclor 1242	ND	0.359		µg/Kg-dry	1	10/16/2014 9:18:00 PM
Aroclor 1248	ND	0.359		µg/Kg-dry	1	10/16/2014 9:18:00 PM
Aroclor 1254	ND	0.359		µg/Kg-dry	1	10/16/2014 9:18:00 PM
Aroclor 1260	ND	0.359		µg/Kg-dry	1	10/16/2014 9:18:00 PM
Aroclor 1262	ND	0.359		µg/Kg-dry	1	10/16/2014 9:18:00 PM
Aroclor 1268	ND	0.359		µg/Kg-dry	1	10/16/2014 9:18:00 PM
Surr: Decachlorobiphenyl	61.1	56.5-130		%REC	1	10/16/2014 9:18:00 PM

Specialty Analytical

Date Reported: 20-Oct-14

CLIENT: Maul Foster & Alongi
Project: Fleischer / 9059.07.04-01-G

Lab Order: 1410008

Lab ID: 1410008-013
Client Sample ID: TP37-S-0.5
Collection Date: 10/1/2014 2:30:00 PM
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.362		µg/Kg-dry	1	10/7/2014 3:59:00 PM
Aroclor 1221	ND	0.362		µg/Kg-dry	1	10/7/2014 3:59:00 PM
Aroclor 1232	ND	0.362		µg/Kg-dry	1	10/7/2014 3:59:00 PM
Aroclor 1242	ND	0.362		µg/Kg-dry	1	10/7/2014 3:59:00 PM
Aroclor 1248	ND	0.362		µg/Kg-dry	1	10/7/2014 3:59:00 PM
Aroclor 1254	ND	0.362		µg/Kg-dry	1	10/7/2014 3:59:00 PM
Aroclor 1260	ND	0.362		µg/Kg-dry	1	10/7/2014 3:59:00 PM
Aroclor 1262	ND	0.362		µg/Kg-dry	1	10/7/2014 3:59:00 PM
Aroclor 1268	ND	0.362		µg/Kg-dry	1	10/7/2014 3:59:00 PM
Surr: Decachlorobiphenyl	81.2	56.5-130		%REC	1	10/7/2014 3:59:00 PM

Lab ID: 1410008-014
Client Sample ID: TP51-S-0.5
Collection Date: 10/1/2014 10:55:00 AM
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.368		µg/Kg-dry	1	10/7/2014 4:16:00 PM
Aroclor 1221	ND	0.368		µg/Kg-dry	1	10/7/2014 4:16:00 PM
Aroclor 1232	ND	0.368		µg/Kg-dry	1	10/7/2014 4:16:00 PM
Aroclor 1242	ND	0.368		µg/Kg-dry	1	10/7/2014 4:16:00 PM
Aroclor 1248	40300	73.6		µg/Kg-dry	200	10/9/2014 2:39:00 PM
Aroclor 1254	ND	0.368		µg/Kg-dry	1	10/7/2014 4:16:00 PM
Aroclor 1260	ND	0.368		µg/Kg-dry	1	10/7/2014 4:16:00 PM
Aroclor 1262	ND	0.368		µg/Kg-dry	1	10/7/2014 4:16:00 PM
Aroclor 1268	ND	0.368		µg/Kg-dry	1	10/7/2014 4:16:00 PM
Surr: Decachlorobiphenyl	79.7	56.5-130		%REC	1	10/7/2014 4:16:00 PM

Specialty Analytical

Date Reported: 20-Oct-14

CLIENT: Maul Foster & Alongi
Project: Fleischer / 9059.07.04-01-G

Lab Order: 1410008

Lab ID: 1410008-015
Client Sample ID: TP48-S-0.5
Collection Date: 10/1/2014 11:52:00 AM
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.356		µg/Kg-dry	1	10/7/2014 4:33:00 PM
Aroclor 1221	ND	0.356		µg/Kg-dry	1	10/7/2014 4:33:00 PM
Aroclor 1232	ND	0.356		µg/Kg-dry	1	10/7/2014 4:33:00 PM
Aroclor 1242	ND	0.356		µg/Kg-dry	1	10/7/2014 4:33:00 PM
Aroclor 1248	ND	0.356		µg/Kg-dry	1	10/7/2014 4:33:00 PM
Aroclor 1254	11.9	0.356		µg/Kg-dry	1	10/9/2014 11:00:00 AM
Aroclor 1260	ND	0.356		µg/Kg-dry	1	10/7/2014 4:33:00 PM
Aroclor 1262	ND	0.356		µg/Kg-dry	1	10/7/2014 4:33:00 PM
Aroclor 1268	ND	0.356		µg/Kg-dry	1	10/7/2014 4:33:00 PM
Surr: Decachlorobiphenyl	80.8	56.5-130		%REC	1	10/7/2014 4:33:00 PM

Lab ID: 1410008-016
Client Sample ID: TP45-S-0.5
Collection Date: 10/1/2014 12:46:00 PM
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.376		µg/Kg-dry	1	10/7/2014 4:50:00 PM
Aroclor 1221	ND	0.376		µg/Kg-dry	1	10/7/2014 4:50:00 PM
Aroclor 1232	ND	0.376		µg/Kg-dry	1	10/7/2014 4:50:00 PM
Aroclor 1242	ND	0.376		µg/Kg-dry	1	10/7/2014 4:50:00 PM
Aroclor 1248	10800	37.6		µg/Kg-dry	100	10/9/2014 2:56:00 PM
Aroclor 1254	ND	0.376		µg/Kg-dry	1	10/7/2014 4:50:00 PM
Aroclor 1260	ND	0.376		µg/Kg-dry	1	10/7/2014 4:50:00 PM
Aroclor 1262	ND	0.376		µg/Kg-dry	1	10/7/2014 4:50:00 PM
Aroclor 1268	ND	0.376		µg/Kg-dry	1	10/7/2014 4:50:00 PM
Surr: Decachlorobiphenyl	107	56.5-130		%REC	1	10/7/2014 4:50:00 PM

Specialty Analytical

Date Reported: 20-Oct-14

CLIENT: Maul Foster & Alongi
Project: Fleischer / 9059.07.04-01-G

Lab Order: 1410008

Lab ID: 1410008-017
Client Sample ID: TP42-S-0.5
Collection Date: 10/1/2014 1:28:00 PM
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.378		µg/Kg-dry	1	10/7/2014 5:07:00 PM
Aroclor 1221	ND	0.378		µg/Kg-dry	1	10/7/2014 5:07:00 PM
Aroclor 1232	ND	0.378		µg/Kg-dry	1	10/7/2014 5:07:00 PM
Aroclor 1242	ND	0.378		µg/Kg-dry	1	10/7/2014 5:07:00 PM
Aroclor 1248	118000	189		µg/Kg-dry	500	10/9/2014 3:12:00 PM
Aroclor 1254	ND	0.378		µg/Kg-dry	1	10/7/2014 5:07:00 PM
Aroclor 1260	ND	0.378		µg/Kg-dry	1	10/7/2014 5:07:00 PM
Aroclor 1262	ND	0.378		µg/Kg-dry	1	10/7/2014 5:07:00 PM
Aroclor 1268	ND	0.378		µg/Kg-dry	1	10/7/2014 5:07:00 PM
Surr: Decachlorobiphenyl	119	56.5-130		%REC	1	10/7/2014 5:07:00 PM

Lab ID: 1410008-018
Client Sample ID: TP39-S-0.5
Collection Date: 10/1/2014 1:54:00 PM
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.385		µg/Kg-dry	1	10/7/2014 5:23:00 PM
Aroclor 1221	ND	0.385		µg/Kg-dry	1	10/7/2014 5:23:00 PM
Aroclor 1232	ND	0.385		µg/Kg-dry	1	10/7/2014 5:23:00 PM
Aroclor 1242	ND	0.385		µg/Kg-dry	1	10/7/2014 5:23:00 PM
Aroclor 1248	19600	96.2		µg/Kg-dry	250	10/9/2014 3:29:00 PM
Aroclor 1254	ND	0.385		µg/Kg-dry	1	10/7/2014 5:23:00 PM
Aroclor 1260	ND	0.385		µg/Kg-dry	1	10/7/2014 5:23:00 PM
Aroclor 1262	ND	0.385		µg/Kg-dry	1	10/7/2014 5:23:00 PM
Aroclor 1268	ND	0.385		µg/Kg-dry	1	10/7/2014 5:23:00 PM
Surr: Decachlorobiphenyl	230	56.5-130	SMI	%REC	1	10/7/2014 5:23:00 PM

Specialty Analytical

Date Reported: 20-Oct-14

CLIENT: Maul Foster & Alongi
Project: Fleischer / 9059.07.04-01-G

Lab Order: 1410008

Lab ID: 1410008-019 **Collection Date:** 10/1/2014 2:20:00 PM
Client Sample ID: TP36-S-0.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.362		µg/Kg-dry	1	10/7/2014 5:40:00 PM
Aroclor 1221	ND	0.362		µg/Kg-dry	1	10/7/2014 5:40:00 PM
Aroclor 1232	ND	0.362		µg/Kg-dry	1	10/7/2014 5:40:00 PM
Aroclor 1242	ND	0.362		µg/Kg-dry	1	10/7/2014 5:40:00 PM
Aroclor 1248	4.04	0.362		µg/Kg-dry	1	10/9/2014 12:58:00 PM
Aroclor 1254	ND	0.362		µg/Kg-dry	1	10/7/2014 5:40:00 PM
Aroclor 1260	ND	0.362		µg/Kg-dry	1	10/7/2014 5:40:00 PM
Aroclor 1262	ND	0.362		µg/Kg-dry	1	10/7/2014 5:40:00 PM
Aroclor 1268	ND	0.362		µg/Kg-dry	1	10/7/2014 5:40:00 PM
Surr: Decachlorobiphenyl	87.2	56.5-130		%REC	1	10/7/2014 5:40:00 PM

Lab ID: 1410008-020 **Collection Date:** 10/1/2014 12:30:00 PM
Client Sample ID: TP49-S-1.0 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	10/14/2014

Lab ID: 1410008-021 **Collection Date:** 10/1/2014 12:10:00 PM
Client Sample ID: TP53-S-2.0 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	10/14/2014

Specialty Analytical

Date Reported: 20-Oct-14

CLIENT: Maul Foster & Alongi
Project: Fleischer / 9059.07.04-01-G

Lab Order: 1410008

Lab ID: 1410008-022 **Collection Date:** 10/1/2014 1:34:00 PM
Client Sample ID: TP42-S-2.0 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.360		µg/Kg-dry	1	10/16/2014 9:35:00 PM
Aroclor 1221	ND	0.360		µg/Kg-dry	1	10/16/2014 9:35:00 PM
Aroclor 1232	ND	0.360		µg/Kg-dry	1	10/16/2014 9:35:00 PM
Aroclor 1242	ND	0.360		µg/Kg-dry	1	10/16/2014 9:35:00 PM
Aroclor 1248	3930	7.20		µg/Kg-dry	20	10/17/2014 2:38:00 AM
Aroclor 1254	ND	0.360		µg/Kg-dry	1	10/16/2014 9:35:00 PM
Aroclor 1260	ND	0.360		µg/Kg-dry	1	10/16/2014 9:35:00 PM
Aroclor 1262	ND	0.360		µg/Kg-dry	1	10/16/2014 9:35:00 PM
Aroclor 1268	ND	0.360		µg/Kg-dry	1	10/16/2014 9:35:00 PM
Surr: Decachlorobiphenyl	77.4	56.5-130		%REC	1	10/16/2014 9:35:00 PM

Lab ID: 1410008-023 **Collection Date:** 10/1/2014 1:44:00 PM
Client Sample ID: TP43-S-2.0 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	10/14/2014

Lab ID: 1410008-024 **Collection Date:** 10/1/2014 1:49:00 PM
Client Sample ID: TP44-S-2.0 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	10/14/2014

Lab ID: 1410008-025 **Collection Date:** 10/1/2014 1:13:00 PM
Client Sample ID: TP46-S-2.0 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	10/14/2014

Specialty Analytical

Date Reported: 20-Oct-14

CLIENT: Maul Foster & Alongi
Project: Fleischer / 9059.07.04-01-G

Lab Order: 1410008

Lab ID: 1410008-026 **Collection Date:** 10/1/2014 12:21:00 PM
Client Sample ID: TP48-S-2.0 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	10/14/2014

Lab ID: 1410008-027 **Collection Date:** 10/1/2014 12:41:00 PM
Client Sample ID: TP50-S-2.0 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	10/14/2014

Lab ID: 1410008-028 **Collection Date:** 10/1/2014 2:03:00 PM
Client Sample ID: TP39-S-2.0 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.379		µg/Kg-dry	1	10/16/2014 9:52:00 PM
Aroclor 1221	ND	0.379		µg/Kg-dry	1	10/16/2014 9:52:00 PM
Aroclor 1232	ND	0.379		µg/Kg-dry	1	10/16/2014 9:52:00 PM
Aroclor 1242	ND	0.379		µg/Kg-dry	1	10/16/2014 9:52:00 PM
Aroclor 1248	434	3.79		µg/Kg-dry	10	10/17/2014 2:54:00 AM
Aroclor 1254	ND	0.379		µg/Kg-dry	1	10/16/2014 9:52:00 PM
Aroclor 1260	ND	0.379		µg/Kg-dry	1	10/16/2014 9:52:00 PM
Aroclor 1262	ND	0.379		µg/Kg-dry	1	10/16/2014 9:52:00 PM
Aroclor 1268	ND	0.379		µg/Kg-dry	1	10/16/2014 9:52:00 PM
Surr: Decachlorobiphenyl	68.6	56.5-130		%REC	1	10/16/2014 9:52:00 PM

Lab ID: 1410008-029 **Collection Date:** 10/1/2014 1:20:00 PM
Client Sample ID: TP47-S-2.0 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	10/14/2014

Specialty Analytical

Date Reported: 20-Oct-14

CLIENT: Maul Foster & Alongi
Project: Fleischer / 9059.07.04-01-G

Lab Order: 1410008

Lab ID: 1410008-030
Client Sample ID: TP45-S-2.5
Collection Date: 10/1/2014 1:03:00 PM
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.365		µg/Kg-dry	1	10/16/2014 10:09:00 PM
Aroclor 1221	ND	0.365		µg/Kg-dry	1	10/16/2014 10:09:00 PM
Aroclor 1232	ND	0.365		µg/Kg-dry	1	10/16/2014 10:09:00 PM
Aroclor 1242	ND	0.365		µg/Kg-dry	1	10/16/2014 10:09:00 PM
Aroclor 1248	818	3.65		µg/Kg-dry	10	10/17/2014 3:11:00 AM
Aroclor 1254	ND	0.365		µg/Kg-dry	1	10/16/2014 10:09:00 PM
Aroclor 1260	ND	0.365		µg/Kg-dry	1	10/16/2014 10:09:00 PM
Aroclor 1262	ND	0.365		µg/Kg-dry	1	10/16/2014 10:09:00 PM
Aroclor 1268	ND	0.365		µg/Kg-dry	1	10/16/2014 10:09:00 PM
Surr: Decachlorobiphenyl	96.3	56.5-130		%REC	1	10/16/2014 10:09:00 PM

Lab ID: 1410008-031
Client Sample ID: TP51-S-2.0
Collection Date: 10/1/2014 12:00:00 PM
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.369		µg/Kg-dry	1	10/16/2014 10:26:00 PM
Aroclor 1221	ND	0.369		µg/Kg-dry	1	10/16/2014 10:26:00 PM
Aroclor 1232	ND	0.369		µg/Kg-dry	1	10/16/2014 10:26:00 PM
Aroclor 1242	ND	0.369		µg/Kg-dry	1	10/16/2014 10:26:00 PM
Aroclor 1248	2840	3.69		µg/Kg-dry	10	10/17/2014 3:28:00 AM
Aroclor 1254	ND	0.369		µg/Kg-dry	1	10/16/2014 10:26:00 PM
Aroclor 1260	ND	0.369		µg/Kg-dry	1	10/16/2014 10:26:00 PM
Aroclor 1262	ND	0.369		µg/Kg-dry	1	10/16/2014 10:26:00 PM
Aroclor 1268	ND	0.369		µg/Kg-dry	1	10/16/2014 10:26:00 PM
Surr: Decachlorobiphenyl	65.5	56.5-130		%REC	1	10/16/2014 10:26:00 PM

Specialty Analytical

Date Reported: 20-Oct-14

CLIENT: Maul Foster & Alongi
Project: Fleischer / 9059.07.04-01-G

Lab Order: 1410008

Lab ID: 1410008-032 **Collection Date:** 10/1/2014 2:52:00 PM
Client Sample ID: TP31-S-0.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.363		µg/Kg-dry	1	10/7/2014 5:57:00 PM
Aroclor 1221	ND	0.363		µg/Kg-dry	1	10/7/2014 5:57:00 PM
Aroclor 1232	ND	0.363		µg/Kg-dry	1	10/7/2014 5:57:00 PM
Aroclor 1242	ND	0.363		µg/Kg-dry	1	10/7/2014 5:57:00 PM
Aroclor 1248	69.4	0.363		µg/Kg-dry	1	10/9/2014 1:15:00 PM
Aroclor 1254	ND	0.363		µg/Kg-dry	1	10/7/2014 5:57:00 PM
Aroclor 1260	ND	0.363		µg/Kg-dry	1	10/7/2014 5:57:00 PM
Aroclor 1262	ND	0.363		µg/Kg-dry	1	10/7/2014 5:57:00 PM
Aroclor 1268	ND	0.363		µg/Kg-dry	1	10/7/2014 5:57:00 PM
Surr: Decachlorobiphenyl	76.0	56.5-130		%REC	1	10/7/2014 5:57:00 PM

Lab ID: 1410008-033 **Collection Date:** 10/1/2014 2:13:00 PM
Client Sample ID: TP40-S-2.0 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		**PER CLIENT**				Analyst: **clh**
Hold	Hold	0			1	10/14/2014

Lab ID: 1410008-034 **Collection Date:** 10/1/2014 2:35:00 PM
Client Sample ID: TP35-S-0.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.349		µg/Kg-dry	1	10/7/2014 6:14:00 PM
Aroclor 1221	ND	0.349		µg/Kg-dry	1	10/7/2014 6:14:00 PM
Aroclor 1232	ND	0.349		µg/Kg-dry	1	10/7/2014 6:14:00 PM
Aroclor 1242	ND	0.349		µg/Kg-dry	1	10/7/2014 6:14:00 PM
Aroclor 1248	43.1	0.349		µg/Kg-dry	1	10/9/2014 1:32:00 PM
Aroclor 1254	ND	0.349		µg/Kg-dry	1	10/7/2014 6:14:00 PM
Aroclor 1260	ND	0.349		µg/Kg-dry	1	10/7/2014 6:14:00 PM
Aroclor 1262	ND	0.349		µg/Kg-dry	1	10/7/2014 6:14:00 PM
Aroclor 1268	ND	0.349		µg/Kg-dry	1	10/7/2014 6:14:00 PM
Surr: Decachlorobiphenyl	93.5	56.5-130		%REC	1	10/7/2014 6:14:00 PM

Specialty Analytical

Date Reported: 20-Oct-14

CLIENT: Maul Foster & Alongi
Project: Fleischer / 9059.07.04-01-G

Lab Order: 1410008

Lab ID: 1410008-035 **Collection Date:** 10/1/2014 2:44:00 PM
Client Sample ID: TP33-S-0.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.337		µg/Kg-dry	1	10/7/2014 6:31:00 PM
Aroclor 1221	ND	0.337		µg/Kg-dry	1	10/7/2014 6:31:00 PM
Aroclor 1232	ND	0.337		µg/Kg-dry	1	10/7/2014 6:31:00 PM
Aroclor 1242	ND	0.337		µg/Kg-dry	1	10/7/2014 6:31:00 PM
Aroclor 1248	ND	0.337		µg/Kg-dry	1	10/7/2014 6:31:00 PM
Aroclor 1254	ND	0.337		µg/Kg-dry	1	10/7/2014 6:31:00 PM
Aroclor 1260	ND	0.337		µg/Kg-dry	1	10/7/2014 6:31:00 PM
Aroclor 1262	ND	0.337		µg/Kg-dry	1	10/7/2014 6:31:00 PM
Aroclor 1268	ND	0.337		µg/Kg-dry	1	10/7/2014 6:31:00 PM
Surr: Decachlorobiphenyl	70.2	56.5-130		%REC	1	10/7/2014 6:31:00 PM

Lab ID: 1410008-036 **Collection Date:** 10/1/2014 2:40:00 PM
Client Sample ID: TP34-S-0.5 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.347		µg/Kg-dry	1	10/7/2014 6:48:00 PM
Aroclor 1221	ND	0.347		µg/Kg-dry	1	10/7/2014 6:48:00 PM
Aroclor 1232	ND	0.347		µg/Kg-dry	1	10/7/2014 6:48:00 PM
Aroclor 1242	ND	0.347		µg/Kg-dry	1	10/7/2014 6:48:00 PM
Aroclor 1248	ND	0.347		µg/Kg-dry	1	10/7/2014 6:48:00 PM
Aroclor 1254	9.55	0.347		µg/Kg-dry	1	10/9/2014 1:48:00 PM
Aroclor 1260	ND	0.347		µg/Kg-dry	1	10/7/2014 6:48:00 PM
Aroclor 1262	ND	0.347		µg/Kg-dry	1	10/7/2014 6:48:00 PM
Aroclor 1268	ND	0.347		µg/Kg-dry	1	10/7/2014 6:48:00 PM
Surr: Decachlorobiphenyl	80.5	56.5-130		%REC	1	10/7/2014 6:48:00 PM

Specialty Analytical

Date Reported: 20-Oct-14

CLIENT: Maul Foster & Alongi
Project: Fleischer / 9059.07.04-01-G

Lab Order: 1410008

Lab ID: 1410008-037
Client Sample ID: TP32-S-0.5

Collection Date: 10/1/2014 2:47:00 PM
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PCB'S IN SOLIDS		**SW 8082A**				Analyst: **JRC**
Aroclor 1016	ND	0.401		µg/Kg-dry	1	10/7/2014 7:04:00 PM
Aroclor 1221	ND	0.401		µg/Kg-dry	1	10/7/2014 7:04:00 PM
Aroclor 1232	ND	0.401		µg/Kg-dry	1	10/7/2014 7:04:00 PM
Aroclor 1242	ND	0.401		µg/Kg-dry	1	10/7/2014 7:04:00 PM
Aroclor 1248	18.7	0.401		µg/Kg-dry	1	10/9/2014 2:05:00 PM
Aroclor 1254	ND	0.401		µg/Kg-dry	1	10/7/2014 7:04:00 PM
Aroclor 1260	ND	0.401		µg/Kg-dry	1	10/7/2014 7:04:00 PM
Aroclor 1262	ND	0.401		µg/Kg-dry	1	10/7/2014 7:04:00 PM
Aroclor 1268	ND	0.401		µg/Kg-dry	1	10/7/2014 7:04:00 PM
Surr: Decachlorobiphenyl	74.3	56.5-130		%REC	1	10/7/2014 7:04:00 PM

QC SUMMARY REPORT

WO#: **1410008**

Specialty Analytical

20-Oct-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04-01-G

TestCode: **8082LL_S**

Sample ID: **CCV** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **17205**

Client ID: **CCV** Batch ID: **8294** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **10/7/2014** SeqNo: **225759**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	76.0	0.333	66.67	0	114	85	115				

Sample ID: **MB-8294** SampType: **MBLK** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **10/6/2014** RunNo: **17205**

Client ID: **PBS** Batch ID: **8294** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **10/7/2014** SeqNo: **225760**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	5980		6667		89.7	56.5	130				

Sample ID: **LCS-8294** SampType: **LCS** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **10/6/2014** RunNo: **17205**

Client ID: **LCSS** Batch ID: **8294** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **10/7/2014** SeqNo: **225761**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	66.4	0.333	66.67	0	99.6	44.3	137				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1410008**

Specialty Analytical

20-Oct-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04-01-G

TestCode: **8082LL_S**

Sample ID: **LCSD-8294** SampType: **LCSD** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **10/6/2014** RunNo: **17205**

Client ID: **LCSS02** Batch ID: **8294** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **10/7/2014** SeqNo: **225762**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	67.3	0.333	66.67	0	101	44.3	137	66.40	1.41	20	

Sample ID: **1410008-007AMS** SampType: **MS** TestCode: **8082LL_S** Units: **µg/Kg-dry** Prep Date: **10/6/2014** RunNo: **17205**

Client ID: **TP38-S-0.5** Batch ID: **8294** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **10/7/2014** SeqNo: **225763**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	80.2	0.383	76.61	0	105	56.6	123				

Sample ID: **1410008-007AMSD** SampType: **MSD** TestCode: **8082LL_S** Units: **µg/Kg-dry** Prep Date: **10/6/2014** RunNo: **17205**

Client ID: **TP38-S-0.5** Batch ID: **8294** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **10/7/2014** SeqNo: **225764**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	75.0	0.383	76.61	0	98.0	56.6	123	80.18	6.61	20	

Sample ID: **CCV 1254@1** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **17205**

Client ID: **CCV** Batch ID: **8294** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **10/9/2014** SeqNo: **225937**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	66.7	0.333	66.67	0	100	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1410008**

Specialty Analytical

20-Oct-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04-01-G

TestCode: **8082LL_S**

Sample ID: **CCB**	SampType: **CCB**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date:	RunNo: **17205**
Client ID: **CCB**	Batch ID: **8294**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **10/9/2014**	SeqNo: **225938**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									

Sample ID: **CCV 1254@1**	SampType: **CCV**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date:	RunNo: **17205**
Client ID: **CCV**	Batch ID: **8294**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **10/9/2014**	SeqNo: **225952**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	59.1	0.333	66.67	0	88.6	85	115				

Sample ID: **CCV 1016/1260@1**	SampType: **CCV**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date:	RunNo: **17321**
Client ID: **CCV**	Batch ID: **8331**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **10/16/2014**	SeqNo: **227380**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	68.6	0.333	66.67	0	103	85	115				
Aroclor 1248	66.7	0.333	66.67	0	100	85	115				

Sample ID: **MB-8331**	SampType: **MBLK**	TestCode: **8082LL_S**	Units: **µg/Kg**	Prep Date: **10/15/2014**	RunNo: **17321**
Client ID: **PBS**	Batch ID: **8331**	TestNo: **SW 8082A**	**3545_8082LL**	Analysis Date: **10/16/2014**	SeqNo: **227381**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.333									
Aroclor 1221	ND	0.333									

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1410008**

Specialty Analytical

20-Oct-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04-01-G

TestCode: **8082LL_S**

Sample ID: **MB-8331** SampType: **MBLK** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **10/15/2014** RunNo: **17321**

Client ID: **PBS** Batch ID: **8331** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **10/16/2014** SeqNo: **227381**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1232	ND	0.333									
Aroclor 1242	ND	0.333									
Aroclor 1248	ND	0.333									
Aroclor 1254	ND	0.333									
Aroclor 1260	ND	0.333									
Aroclor 1262	ND	0.333									
Aroclor 1268	ND	0.333									
Surr: Decachlorobiphenyl	4950		6667		74.2	56.5	130				

Sample ID: **LCS-8331** SampType: **LCS** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **10/15/2014** RunNo: **17321**

Client ID: **LCSS** Batch ID: **8331** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **10/16/2014** SeqNo: **227382**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	62.2	0.333	66.67	0	93.3	44.3	137				

Sample ID: **CCV 1248@1** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **17321**

Client ID: **CCV** Batch ID: **8331** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **10/17/2014** SeqNo: **227400**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	65.9	0.333	66.67	0	98.9	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: **1410008**

Specialty Analytical

20-Oct-14

Client: Maul Foster & Alongi

Project: Fleischer / 9059.07.04-01-G

TestCode: **8082LL_S**

Sample ID: **CCV 1248@1** SampType: **CCV** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: RunNo: **17321**

Client ID: **CCV** Batch ID: **8331** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **10/17/2014** SeqNo: **227406**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1248	64.0	0.333	66.67	0	96.0	85	115				

Sample ID: **1410091-002AMS** SampType: **MS** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **10/15/2014** RunNo: **17321**

Client ID: **ZZZZZZ** Batch ID: **8331** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **10/16/2014** SeqNo: **227434**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	164	0.333	66.67	0	246	56.6	123				SMI

Sample ID: **1410091-002AMSD** SampType: **MSD** TestCode: **8082LL_S** Units: **µg/Kg** Prep Date: **10/15/2014** RunNo: **17321**

Client ID: **ZZZZZZ** Batch ID: **8331** TestNo: **SW 8082A** **3545_8082LL** Analysis Date: **10/16/2014** SeqNo: **227435**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	91.1	0.333	66.67	0	137	56.6	123	164.2	57.3	20	SRMI

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recov

KEY TO FLAGS

Rev. May 12, 2010

A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards

A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.

A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.

A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.

A4 The product appears to be aged or degraded diesel.

B The blank exhibited a positive result great than the reporting limit for this compound.

CN See Case Narrative.

D Result is based from a dilution.

E Result exceeds the calibration range for this compound. The result should be considered as estimate.

F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.

G Result may be biased high due to biogenic interferences. Clean up is recommended.

H Sample was analyzed outside recommended holding time.

HT At clients request, samples was analyzed outside of recommended holding time.

J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.

K Diesel result is biased high due to amount of Oil contained in the sample.

L Diesel result is biased high due to amount of Gasoline contained in the sample.

M Oil result is biased high due to amount of Diesel contained in the sample.

MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.

MI Result is outside control limits due to matrix interference.

MSA Value determined by Method of Standard Addition.

O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.

Q Detection levels elevated due to sample matrix.

R RPD control limits were exceeded.

RF Duplicate failed due to result being at or near the method-reporting limit.

RP Matrix spike values exceed established QC limits; post digestion spike is in control.

S Recovery is outside control limits.

SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.

* The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: Kyle Rosland krosland@maulfoster.com
Company: Maul Foster Alongi, Inc
Address: 400 E. Mill Plain Blvd, Vancouver, WA
Phone: 503-341-8112 Fax:
Project No. 9059.07.04-016 Project Name: Fleischer
Project Site Location OR ___ WA X Other
Invoice To: MFA P.O. No.

Collected By: Kyle Rosland
Signature: [signature]
Printed:
Signature: [signature]
Printed:

Turn Around Time
☑ Normal 5-7 Business Days
☐ Rush _____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. 1410008
Shipped Via: Specialty
Air Bill No.
Temperature On Receipt 4 °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses: Metals by EPA 8082									Comments	Lab I.D.
10/1/2014	1310	TP47-S-0.5	S	1										hold	1
	1138	TP53-S-0.5		1										hold	2
	1221	TP50-S-0.5		1										hold	3
	1300	TP46-S-0.5		1	X									hold	4
	1339	TP44-S-0.5		1										hold	5
	1410	TP41-S-0.5		1										hold	6
	1440	TP38-S-0.5		1	X										7
	1117	TP52-S-0.5		1	X									hold	8
	1206	TP49-S-0.5		1										hold	9
	1246	TP-S-DUP		1	X										10
	1336	TP43-S-0.5		1	X									hold	11
	1400	TP40-S-0.5		1	X									hold	12

Relinquished By	Date	Time	Received By	Relinquished By	Date	Time
Company: MFA	10/1/14	1630	Company:	Company:	10/2/14	1450

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Nikki Bippes Date 10/2/14 Time 1450

Copies: White-Original Yellow-Project File Pink-Customer Copy

CHAIN OF CUSTODY RECORD

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: SAME
Company:
Address:
Phone: Fax:
Project No.: Project Name:
Project Site Location OR: WA: Other:
Invoice To: P.O. No.:

Collected By: Kyle Rustand
Signature:
Printed:
Signature:
Printed: SHARLENE HARVEY

Turn Around Time
☐ Normal 5-7 Business Days
☐ Rush _____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. H10008
Shipped Via: Specialty
Air Bill No.: —
Temperature On Receipt: 4 °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	PCBs by EPA 8082	Comments	Lab I.D.
10/1/2014	1430	TP37-S-0.5	S	1	X		13
	1055	TP51-S-0.5			X		14
	1152	TP48-S-0.5			X		15
	1246	TP45-S-0.5			X		16
	1328	TP42-S-0.5			X		17
	1354	TP39-S-0.5			X		18
	1420	TP36-S-0.5			X		19
	1230	TP49-S-1.0				Hold	20
	1210	TP53-S-2.0				Hold	21
	1334	TP42-S-2.0			X	Hold	22
	1344	TP43-S-2.0				Hold	23
	1349	TP44-S-2.0				Hold	24

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
Company: MFA	10/1/14	1630	Company:	Company:	10/2/14	1450

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Nikki Rappes — Date: 10/2/14 — Time: 1450

Copies: White-Original Yellow-Project File Pink-Customer Copy

CHAIN OF CUSTODY RECORD

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: SAME
Company:
Address:
Phone: Fax:
Project No.: Project Name:
Project Site Location OR: WA: Other:
Invoice To: P.O. No.:

Collected By: Kyle Rooslund
Signature:
Printed:
Signature:
Printed: SHARLENE HARVESTER

Turn Around Time
☐ Normal 5-7 Business Days
☐ Rush _____
Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. 1410008
Shipped Via: Specialty
Air Bill No.:
Temperature On Receipt 4 °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	PCBs by EPA 8082	Comments	Lab I.D.
10/1/2014	1313	TP46-S-2.0	S	1		hold	25
	1221	TP42-S-2.0				hold	26
	1241	TP50-S-2.0				hold	27
	1403	TP39-S-2.0			⊗	hold	28
	1320	TP47-S-2.0				hold	29
	1303	TP45-S-2.5			⊗	hold	30
	1200	TP51-S-2.0			⊗	hold	31
	1452	TP31-S-0.5			X		32
	1418	TP40-S-2.0				hold	33
	1435	TP35-S-0.5			X		34
	1444	TP33-S-0.5			X		35
	1440	TP34-S-0.5			X		36

Relinquished By	Date	Time	Received By	Relinquished By	Date	Time
Company: MFA	10/1/14	1630	Company:	Company:	10/2/14	1450

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Nikki Bupper — Date: 10/2/14 — Time: 1450

Copies: White-Original Yellow-Project File Pink-Customer Copy

CHAIN OF CUSTODY RECORD

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: SAME
Company:
Address:
Phone: Fax:
Project No.: Project Name:
Project Site Location OR: WA: X Other:
Invoice To: P.O. No.:

Collected By: Kyle Rosland
Signature:
Printed:
Signature:
Printed: SMARTLEAVE HARVESTER

Turn Around Time
☐ Normal 5-7 Business Days
☐ Rush _____
Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. A10008
Shipped Via: Specialty
Air Bill No.:
Temperature On Receipt: 4 °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses: X PCBs by EPA 8082	Comments	Lab I.D.
10/1/14	1447	TP32-5-0.5	S	1	X		37

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
Company: MPA	10/1/14	1630	Company:	Company:	10/2/14	1450

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Nikki Pappas — Date: 10/2/14 — Time: 1450

Copies: White-Original Yellow-Project File Pink-Customer Copy

APPENDIX C

DATA VALIDATION MEMORANDUM

DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NUMBER 9059.07.04 | OCTOBER 21, 2014 | FLEISCHER PROPERTIES

This report reviews the analytical results for soil samples collected by the Maul Foster & Alongi, Inc. (MFA) project team on the properties located at 9109 and 9115 Northeast 94th Avenue, Vancouver, Washington. The samples were collected in July and October, 2014.

Specialty Analytical Inc. (SA) performed the analyses. SA report numbers 1407110, 1407119rev1, and 1410008 were reviewed. The analyses performed are listed below. Some analyses may not have been performed on all samples. Data validation tracking sheets associated with the analyses, documenting data review, are attached.

Analysis	Reference
Ammonia as Nitrogen	USEPA 350.1
Chlorinated Herbicides	USEPA 8151A
Diesel- and Lube-Oil-Range Organic Hydrocarbons	NWTPH-Dx
Organochlorine Pesticides	USEPA 8081B
Organophosphorus Pesticides	USEPA 8270D
PCBs	USEPA 8082A
Total Mercury	USEPA 7471B
Total Metals	USEPA 6020A

NWTPH = Northwest Total Petroleum Hydrocarbons.
PCB = polychlorinated biphenyl.
USEPA = U.S. Environmental Protection Agency.

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of USEPA procedures (USEPA, 2008, 2010) and appropriate laboratory and method-specific guidelines (SA, 2014; USEPA, 1986).

Data validation procedures were modified, as appropriate, to accommodate quality-control requirements for methods not specifically addressed by the USEPA procedures (e.g., NWTPH-Dx analysis).

In reports 1407110 and 1407119rev1, some NWTPH-Dx diesel- and lube-oil-range results were identified by the laboratory as containing compounds not identified as specific hydrocarbon products. In report 1407110, sample TP02-S-0.5 was identified by the laboratory as biased high because of high concentrations of lube-oil-range hydrocarbons. These results were quantified using the appropriate calibration standards. Results were qualified with "J" as estimated.

Report	Sample	Component	Original Result (mg/kg)	Qualified Result (mg/kg)
1407110	TP02-S-0.5	Diesel Range	138	138 J
1407110	TP03-S-0.5	Lube Oil Range	67.0	67.0 J
1407110	TP04-S-0.25	Diesel Range	85.7	85.7 J
1407110	TP04-S-0.25	Lube Oil Range	659	659 J
1407110	TP06-S-0.5	Diesel Range	111	111 J
1407110	TP06-S-0.5	Lube Oil Range	386	386 J
1407110	TP07-S-0.25	Diesel Range	149	149 J
1407110	TP07-S-0.25	Lube Oil Range	825	825 J
1407110	TP10-S-0.5	Diesel Range	98.8	98.8 J
1407110	TP10-S-0.5	Lube Oil Range	359	359 J
1407110	TP-S-0.5DUP	Diesel Range	78.2	78.2 J
1407110	TP-S-0.5DUP	Lube Oil Range	232	232 J
1407110	TP12-S-0.5	Lube Oil Range	85.2	85.2 J
1407119rev1	TP13-S-1.5	Diesel Range	25.8	25.8 J
1407119rev1	TP13-S-1.5	Lube Oil Range	91.7	91.7 J
1407119rev1	TP15-S-1.75	Diesel Range	65.7	65.7 J
1407119rev1	TP15-S-1.75	Lube Oil Range	201	201 J
1407119rev1	TP16-S-0.5	Lube Oil Range	82.2	82.2 J
1407119rev1	TP17-S-1.25	Diesel Range	59.7	59.7 J
1407119rev1	TP17-S-1.25	Lube Oil Range	165	165 J
1407119rev1	TP18-S-0.5	Lube Oil Range	79.4	79.4 J
1407119rev1	TP20-S-0.5	Diesel Range	22.6	22.6 J
1407119rev1	TP20-S-0.5	Lube Oil Range	105	105 J
1407119rev1	TP21-S-0.5	Diesel Range	37.5	37.5 J
1407119rev1	TP21-S-0.5	Lube Oil Range	162	162 J
1407119rev1	TP23-S-0.5	Diesel Range	23.2	23.2 J
1407119rev1	TP23-S-0.5	Lube Oil Range	104	104 J
1407119rev1	TP24-S-0.5	Lube Oil Range	104	104 J
1407119rev1	TP25-S-0.5	Diesel Range	62.4	62.4 J
1407119rev1	TP25-S-0.5	Lube Oil Range	215	215 J

mg/kg = milligrams per kilogram.

The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

In report 1407119rev1, USEPA Method 8082A extraction of samples TP27-S-8.5, TP29-S-7.5, and TP-S-0.5DUP was performed after the recommended 14-day holding time. The target analytes, PCB Aroclors, are relatively stable; thus, no results are qualified.

All remaining extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

The samples were preserved and stored appropriately.

BLANKS

Method Blanks

Laboratory method blank analyses were performed at the required frequencies. For purposes of data qualification, the method blanks were associated with all samples prepared in the analytical batch. All laboratory method blanks were non-detect to method reporting limits (MRLs).

Continuing Calibration Blanks

Continuing calibration blanks (CCBs) were provided for some analyses. All CCBs were non-detect to MRLs.

Trip Blanks

Trip blanks were not required for this sampling event because samples were not analyzed for volatile organic compounds.

SURROGATE RECOVERY RESULTS

The samples were spiked with surrogate compounds to evaluate laboratory performance on individual samples. The laboratory appropriately documented and qualified surrogate outliers. For samples with surrogate outliers, associated batch quality assurance and quality control (QC) were within acceptance limits.

In reports 1407110 and 1407119rev1, USEPA Method 8081B surrogate tetrachloro-m-xylene results were low and below lower percent recovery acceptance limits for most samples. The remaining surrogate, decachlorobiphenyl, had acceptable percent recoveries for most samples. The laboratory stated in the case narrative that the low surrogate recoveries were due to cleanup processes necessary to reduce interferences caused by PCB compounds. The laboratory also stated that laboratory control sample (LCS) and other QC results demonstrated that the data are acceptable. All USEPA Method 8081B results are non-detect and have been accepted by the reviewer, based on the laboratory statement of usability. All samples were associated with low tetrachloro-m-xylene surrogate results (less than 30 percent); the samples are indicated in the table below, and all associated results have been qualified "UJ" as estimated.

Report	Sample	Report	Sample
1407110	TP01-S-0.5	1407119rev1	TP13-S-0.5
1407110	TP02-S-0.5	1407119rev1	TP14-S-0.5

Report	Sample	Report	Sample
1407110	TP03-S-0.5	1407119rev1	TP15-S-1.75
1407110	TP04-S-1.0	1407119rev1	TP16-S-0.5
1407110	TP05-S-0.5	1407119rev1	TP17-S-1.25
1407110	TP06-S-0.5	1407119rev1	TP18-S-0.5
1407110	TP07-S-1.0	1407119rev1	TP19-S-0.5
1407110	TP08-S-0.5	1407119rev1	TP20-S-0.5
1407110	TP09-S-0.5	1407119rev1	TP21-S-0.5
1407110	TP10-S-1.5	1407119rev1	TP22-S-0.5
1407110	TP11-S-0.5	1407119rev1	TP23-S-0.5
1407110	TP12-S-0.5	1407119rev1	TP24-S-0.5
-	-	1407119rev1	TP25-S-0.5
-	-	1407119rev1	TP26-S-0.5
-	-	1407119rev1	TP27-S-0.5
-	-	1407119rev1	TP28-S-0.5
-	-	1407119rev1	TP29-S-0.5
-	-	1407119rev1	TP30-S-0.5
-	-	1407119rev1	TP-S-0.5DUP

In report 1407119rev1, USEPA Method 8081B surrogate decachlorobiphenyl exceeded upper percent recovery limits because of matrix interference; results were not additionally qualified by the reviewer.

In reports 1407110, 1407119rev1, and 1410008, USEPA Method 8082A surrogate decachlorobiphenyl exceeded the upper percent recovery acceptance limits for some samples. Some of the exceedances were due to matrix interference. Associated detected results were qualified with "J" as estimated.

Report	Sample	Component	Original Result (ug/kg)	Qualified Result (ug/kg)
1407110	TP05-S-0.5	Aroclor 1248	38000	38000 J
1407110	TP07-S-0.25	Aroclor 1248	1260	1260 J
1407119rev1	TP13-S-1.5	Aroclor 1248	11200	11200 J
1407119rev1	TP14-S-0.5	Aroclor 1248	13900	13900 J
1407119rev1	TP15-S-1.75	Aroclor 1248	39200	39200 J
1407119rev1	TP17-S-1.25	Aroclor 1248	86600	86600 J
1407119rev1	TP24-S-0.5	Aroclor 1248	514	514 J
1407119rev1	TP26-S-0.5	Aroclor 1248	33200	33200 J
1407119rev1	TP27-S-0.5	Aroclor 1248	63100	63100 J
1407119rev1	TP28-S-0.5	Aroclor 1248	532	532 J
1407119rev1	TP29-S-0.5	Aroclor 1248	3980	3980 J
1407119rev1	TP30-S-0.5	Aroclor 1248	17300	17300 J
1407119rev1	TP-S-0.5DUP	Aroclor 1248	3640	3640 J
1410008	TP39-S-0.5	Aroclor 1248	19600	19600 J

ug/kg = micrograms per kilogram.

In report 1407119rev1, the USEPA Method 8151A surrogate 2,4-DCAA percent recovery for sample TP23-S-0.5 was below the lower acceptance limit because of matrix interference. The sample results were non-detect and were qualified with "UJ" as estimated by the reviewer.

Report	Sample	Component	Original Result (ug/kg)	Qualified Result (ug/kg)
1407119rev1	TP23-S-0.5	2,4,5-T	7.96 U	7.96 UJ
1407119rev1	TP23-S-0.5	2,4,5-TP	7.96 U	7.96 UJ
1407119rev1	TP23-S-0.5	2,4-D	7.96 U	7.96 UJ
1407119rev1	TP23-S-0.5	2,4-DB	7.96 U	7.96 UJ
1407119rev1	TP23-S-0.5	4-Nitrophenol	7.96 U	7.96 UJ
1407119rev1	TP23-S-0.5	Dicamba	7.96 U	7.96 UJ
1407119rev1	TP23-S-0.5	Dichlorprop	7.96 U	7.96 UJ
1407119rev1	TP23-S-0.5	Dinoseb	7.96 U	7.96 UJ
1407119rev1	TP23-S-0.5	MCPA	796 U	796 UJ
1407119rev1	TP23-S-0.5	MCPP	796 U	796 UJ
1407119rev1	TP23-S-0.5	Pentachlorophenol	7.96 U	7.96 UJ

All remaining surrogate recoveries were within acceptance limits.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Matrix spike/matrix spike duplicate (MS/MSD) results are used to evaluate laboratory precision and accuracy. All MS/MSD samples were extracted and analyzed at the required frequency. Minor MS/MSD percent recovery exceedances and exceedances due to high concentrations of target analyte in the sample were not qualified by the reviewer.

In report 1407110, the USEPA Method 8082A batch 7820 MS/MSD exceeded upper percent recovery and relative percent difference (RPD) acceptance limits. The remaining batch QC met acceptance criteria. The result from the sample used to prepare the MS/MSD, TP01-S-0.5, was qualified with "J," as estimated, for all detected results. Batch 7851 MS/MSD also exceeded acceptance criteria; the sample used to prepare the MS/MSD was according to the laboratory from an unrelated project, so no results were qualified.

Report	Sample	Component	Original Result (ug/kg)	Qualified Result (ug/kg)
1407110	TP01-S-0.5	Aroclor 1248	389	389 J

In report 1407119rev1, the USEPA Method 8270D batch 7842 MS/MSD results for malathion were below lower percent recovery acceptance limits. The MS/MSD RPD for DEF (merphos oxide) also exceeded the acceptance limit. The MS/MSD was prepared with a sample from an unrelated project; the MS/MSD sample matrix likely does not represent the soil matrices in sample delivery group 1407119rev1. The remaining batch QC met acceptance criteria; thus, no results were qualified. The USEPA Method 8270D batch 7843

MS/MSD exceeded the RPD acceptance limit for chloropyrifos. The associated sample results were non-detect; thus, no results were qualified.

In report 1407119rev1, the USEPA Method 8082 batch 7851 MS/MSD exceeded the upper percent recovery acceptance and RPD limits for Aroclor 1016/1260 because of matrix interference. Remaining batch QC met acceptance criteria, and the sample used to prepare the MS/MSD was already qualified with "J" as estimated, as discussed in the surrogate section above. No additional data qualification was required.

In reports 1407110 and 1407119rev1, the USEPA Method 8151 batch 7830 and 7835 MS/MSDs exceeded some upper percent recovery and RPD acceptance limits because of matrix interference. The remaining batch QC met acceptance criteria. The samples used to prepare the MS/MSDs were non-detect for all target analytes; no results were qualified.

In report 1407119rev1, the USEPA Method 6020A batch 7874 MSD exceeded lower percent recovery acceptance limits for chromium and nickel. The MS results were within acceptance limits. The MS/MSD also exceeded RPD acceptance limits for chromium and nickel at 32.4 percent and 35.7 percent, respectively. USEPA National Functional Guidelines for inorganic data review allow RPD control limits of 35 percent for soil matrix due to sample heterogeneity. The results from the sample used to prepare the MS/MSD was qualified with "J," as estimated, for nickel.

Report	Sample	Component	Original Result (ug/kg)	Qualified Result (ug/kg)
1407119rev1	TP25-S-0.5	Nickel	10600	10600 J

In report 1410008, the USEPA Method 8082 batch 8331 MS/MSD exceeded the upper percent recovery acceptance and RPD limits for Aroclor 1016/1260 because of matrix interference. Remaining batch QC met acceptance criteria. The MS/MSD was prepared with a sample from an unrelated project; the MS/MSD sample matrix likely does not represent the soil matrices in sample delivery group 1410008. No data qualification was required.

All remaining MS/MSD results were within acceptance limits for percent recovery and RPD.

LABORATORY DUPLICATE RESULTS

Duplicate results are used to evaluate laboratory precision. All laboratory duplicate samples were extracted and analyzed at the required frequency. Laboratory duplicate RPD exceedances associated with results near the reporting limit were not qualified by the reviewer.

In reports 1407110 and 1407119rev1, the NWTPH-Dx batch 7819 laboratory duplicates prepared with samples TP25-S-0.5 and TP08-S-0.5 exceeded the lube oil RPD acceptance limits. Sample TP25-S-0.5 results were qualified, as discussed in the data qualifications section above; no additional qualification was required. The remaining sample, TP08-S-0.5, was qualified with "J," as estimated, for lube oil.

Report	Sample	Component	Original Result (mg/kg)	Qualified Result (mg/kg)
1407110	TP08-S-0.5	Lube Oil Range	405	405 J

In report 1407119rev1, USEPA Method 6020A batch 7873 and 7874 laboratory duplicates exceeded some RPD acceptance limits. The exceedances were minor, as all RPDs were less than 35 percent; thus, no results were qualified.

All remaining laboratory duplicate RPDs were within acceptance limits.

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RESULTS

An LCS/laboratory control sample duplicate (LCSD) is spiked with target analytes to provide information on laboratory precision and accuracy. The LCS/LCSD samples were extracted and analyzed at the required frequency. All LCS/LCSD analyte results were within acceptance limits for percent recovery and RPD.

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. Three field duplicates were submitted for analysis; one of them was discussed in report 1407110 (TP10-S-0.5/TP-S-0.5DUP), one was discussed in report 1407119rev1 (TP29-S-0.5/TP-S-0.5DUP), and one was discussed in report 1410008 (TP-S-0.5/TP45-S-0.5). MFA uses acceptance criteria of 100 percent RPD for results that are less than five times the MRL, or 50 percent RPD for results that are greater than five times the MRL. Non-detect data are not used in the evaluation of field duplicate results. All field duplicate analytes met the acceptance criteria.

CONTINUING CALIBRATION VERIFICATION (CCV) AND INITIAL CALIBRATION VERIFICATION (ICV) RESULTS

CCV and ICV results are used to demonstrate instrument precision and accuracy through the end of the sample batch.

In reports 1407110 and 1407119rev1, some USEPA Method 8081B CCVs exceeded upper percent recovery acceptance limits for some target analytes. All associated sample results were non-detect; thus, no results were qualified.

All remaining CCVs and ICVs were within acceptance limits for percent recovery.

REPORTING LIMITS

SA used routine reporting limits for non-detect results, except when samples required dilutions because of high analyte concentrations and/or matrix interferences.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies. None were found.

SA. 2014. Quality assurance manual. Specialty Analytical, Inc., Clackamas, Oregon.

USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 6, February 2007).

USEPA. 2008. USEPA contract laboratory program, national functional guidelines for organics data review. EPA 540/R-08/01. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response. June.

USEPA. 2010. USEPA contract laboratory program national functional guidelines for inorganic superfund data review. EPA 540/R-10/011. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. January.

DATA VALIDATION TRACKING

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1407110, 1407119rev1
Analysis	Organophosphorus Pesticides
Method	USEPA 8270D
Batch	7842, 7843

Reviewer	MEB
Date	8/19/2014

	Validation Area	Acceptable Yes/No/NA	Comments	Q
Sample	Temperature	Yes		
	Holding Time	Yes		
	Trip Blank	NA		
	Field/Eq. Blank	NA		
	Field Dup RPD	Yes		
Calibr.	CCB	NA		
	ICV	NA		
	CCV	Yes		
Batch	Method Blank	Yes		
	LCS/LCSD %	Yes		
	LCS/LCSD RPD	NA		
	Lab Dup RPD	NA		
	MS/MSD %	No	MS/MSD malathion low.	
	MS/MSD RPD	No	See comments below.	
General	Dilution	Yes		
	Reporting Limit	Yes		
	MDL	NA		
	Surrogates	No	Some TPP surr. Recoveries high, samples ND, no qual.	

Samples reviewed (report 1707119):			
TP13-S-0.5	TP18-S-0.5	TP23-S-0.5	TP28-S-0.5
TP14-S-0.5	TP19-S-0.5	TP24-S-0.5	TP29-S-0.5
TP15-S-1.75	TP20-S-0.5	TP25-S-0.5	TP30-S-0.5
TP16-S-0.5	TP21-S-0.5	TP26-S-0.5	TP-S-0.5DUP
TP17-S-1.25	TP22-S-0.5	TP27-S-0.5	-
Samples reviewed (report 1707110):			
TP01-S-0.5	TP04-S-1.0	TP07-S-1.0	TP10-S-1.5
TP02-S-0.5	TP05-S-0.5	TP08-S-0.5	TP11-S-0.5
TP03-S-0.5	TP06-S-0.5	TP09-S-0.5	TP12-S-0.5

Comments:

Batch 7842 MS/MSD malathion 45% and 78%, DEF (merphos oxide) RPD is 33.8%. MS/MSD prepared with sample from unrelated project and the remaining batch QC is acceptable; thus no qualification is necessary.
Batch 7843 MS/MSD chloropyrifos RPD is 29.5%. All samples are ND; thus, no qualification is necessary.

Calibr = Calibration. Eq. = equipment.	MDL = method detection limit. NA = not applicable. NR = not reported	Q = qualifier. Qual = qualification. TPP = triphenylphosphate.

DATA VALIDATION TRACKING

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1407110, 1407119rev1
Analysis	Organochlorine Pesticides
Method	USEPA 8081B
Batch	7837 (1407119rev1), 7838 (1407110)

Reviewer	MEB
Date	8/19/2014

	Validation Area	Acceptable Yes/No/NA	Comments	Q
Sample	Temperature	Yes		
	Holding Time	Yes		
	Trip Blank	NA		
	Field/Eq. Blank	NA		
	Field Dup RPD	Yes		
Calibr.	CCB	NA		
	ICV	NA		
	CCV	No	CCV analyzed 7/28; see comments below.	
Batch	Method Blank	Yes		
	LCS/LCSD %	Yes		
	LCS/LCSD RPD	NA		
	Lab Dup RPD	NA		
	MS/MSD %	No	Batch 7837: MS/MSD matrix interference. Qualify all TP23-S-0.5.	UJ
	MS/MSD RPD	No	Batch 7837 interference. Batch 7838 MS/MSD is OK.	UJ
General	Dilution	Yes		
	Reporting Limit	Yes		
	MDL	NA		
	Surrogates	No	Low tetrachlor-m-xylene: most samples. See comments below.	UJ

Samples reviewed (1407119rev1):			
TP13-S-0.5	TP18-S-0.5	TP23-S-0.5	TP28-S-0.5
TP14-S-0.5	TP19-S-0.5	TP24-S-0.5	TP29-S-0.5
TP15-S-1.75	TP20-S-0.5	TP25-S-0.5	TP30-S-0.5
TP16-S-0.5	TP21-S-0.5	TP26-S-0.5	TP-S-0.5DUP
TP17-S-1.25	TP22-S-0.5	TP27-S-0.5	-
Samples reviewed (1407110):			
TP01-S-0.5	TP04-S-1.0	TP07-S-1.0	TP10-S-1.5
TP02-S-0.5	TP05-S-0.5	TP08-S-0.5	TP11-S-0.5
TP03-S-0.5	TP06-S-0.5	TP09-S-0.5	TP12-S-0.5

Comments:

1407110, 1407119rev1: Surrogate tetrachloro-m-xylene is significantly low for most samples because of extract cleanup by lab to minimize interferences caused by PCB compounds. Lab states LCS and other surrogate show that cleanup performed well and data is useable. Results accepted and qualified UJ. All results non-detect.

1407119rev1, TP24-S-0.5 DCB surrogate high because of matrix interference. Sample non-detect; no qualification.

CCV high for some analytes. Samples are all non-detect; no qualification.

DATA VALIDATION TRACKING

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1407119rev1
Analysis	PCBs
Method	USEPA 8082A
Batch	7848, 7851, 7887, 7926, 8077

Reviewer	MEB
Date	8/27/2014

	Validation Area	Acceptable Yes/No/NA	Comments	Q
Sample	Temperature	Yes		
	Holding Time	No	TP27-S-8.5 prepared on 8/4/14, 2 days after 14 day hold time.	
	Trip Blank	NA		
	Field/Eq. Blank	NA		
	Field Dup RPD	Yes	TP-S-0.5 (TP29 DUP) reanalyzed with acceptable RPD.	
Calibr.	CCB	NA		
	ICV	NA		
	CCV	Yes		
Batch	Method Blank	Yes		
	LCS/LCSD %	Yes		
	LCS/LCSD RPD	NA		
	Lab Dup RPD	NA		
	MS/MSD %	No	Batch 7851 MS/MSD high, matrix interference. Flag TP-S-0.5DUP.	J
	MS/MSD RPD	No	Batch 7851 RPD exceedance due to matrix interference.	J
General	Dilution	Yes		
	Reporting Limit	Yes		
	MDL	NA		
	Surrogates	No	Matrix interference.	J

Samples reviewed:				
TP13-S-0.5	TP15-S-6.0	TP20-S-0.5	TP25-S-0.5	TP28-S-0.5
TP13-S-1.5	TP16-S-0.5	TP21-S-0.5	TP25-S-4.5	TP29-S-0.5
TP13-S-5.5	TP17-S-0.5	TP21-S-5.0	TP26-S-0.5	TP29-S-3.5
TP14-S-0.5	TP17-S-1.25	TP22-S-0.5	TP26-S-5.0	TP29-S-7.5
TP14-S-4.5	TP17-S-4.5	TP23-S-0.5	TP27-S-0.5	TP30-S-0.5
TP15-S-0.5	TP18-S-0.5	TP23-S-4.5	TP27-S-5.5	TP30-S-4.0
TP15-S-1.75	TP19-S-0.5	TP24-S-0.5	TP27-S-8.5	TP-S-0.5DUP

Comments:
High surrogate recovery due to matrix interference, samples TP13-S-1.5, TP14-S-0.5, TP15-S-1.75, TP17-S-1.25, TP24-S-0.5, TP26-S-0.5, TP27-S-0.5, TP28-S-0.5, TP30-S-0.5, TP-S-0.5DUP. High surrogate recovery for TP29-S-0.5. Flag detected results with "J."
Prep HT exceeded for TP27-S-8.5 and TP29-S-7.5 by two days. Compounds are relatively stable; no results qualified.
MSD batch 7848 high. MS is acceptable. Minor exceedance; no qualification is necessary.

DATA VALIDATION TRACKING

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1407110, 1407119rev1
Analysis	Chlorinated Herbicides
Method	USEPA 8151
Batch	7830, 7835

Reviewer	MEB
Date	8/19/2014

	Validation Area	Acceptable Yes/No/NA	Comments	Q
Sample	Temperature	Yes		
	Holding Time	Yes		
	Trip Blank	NA		
	Field/Eq. Blank	NA		
	Field Dup RPD	Yes		
Calibr.	CCB	NA		
	ICV	NA		
	CCV	Yes		
Batch	Method Blank	Yes		
	LCS/LCSD %	Yes		
	LCS/LCSD RPD	NA		
	Lab Dup RPD	NA		
	MS/MSD %	No	Batch 7830, 7835 MS/MSD high (see comments below.	
	MS/MSD RPD	No	Batch 7830, 7835 MS/MSD—some RPD exceedances.	
General	Dilution	Yes		
	Reporting Limit	Yes		
	MDL	NA		
	Surrogates	No	TP23-S-0.5 surrogate low because of matrix interference.	UJ

Samples reviewed (1407119rev1):				
TP13-S-0.5	TP17-S-1.25	TP21-S-0.5	TP25-S-0.5	TP29-S-0.5
TP14-S-0.5	TP18-S-0.5	TP22-S-0.5	TP26-S-0.5	TP30-S-0.5
TP15-S-1.75	TP19-S-0.5	TP23-S-0.5	TP27-S-0.5	TP-S-0.5DUP
TP16-S-0.5	TP20-S-0.5	TP24-S-0.5	TP28-S-0.5	-
Samples reviewed (1407110):				
TP01-S-0.5	TP04-S-1.0	TP07-S-1.0	TP10-S-1.5	-
TP02-S-0.5	TP05-S-0.5	TP08-S-0.5	TP11-S-0.5	-
TP03-S-0.5	TP06-S-0.5	TP09-S-0.5	TP12-S-0.5	-

Comments:

Batch 7830 MS/MSD upper limit and RPD exceedances due to matrix interference. LCS is acceptable. MS/MSD sample TP06-S-0.5 qualified.
Batch 7835 MS/MSD upper limit and RPD exceedances due to matrix interference. LCS is acceptable. MS/MSD prepped with TP27-S-0.5, which is non-detect; no results qualified.

DATA VALIDATION TRACKING

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1407110, 1407119rev1
Analysis	Diesel- and Lube-Oil-Range Hydrocarbons
Method	NWTPH-Dx
Batch	7822, 7819

Reviewer	MEB
Date	8/19/2014

	Validation Area	Acceptable Yes/No/NA	Comments	Q
Sample	Temperature	Yes		
	Holding Time	Yes		
	Trip Blank	NA		
	Field/Eq. Blank	NA		
	Field Dup RPD	Yes		
Calibr.	CCB	Yes		
	ICV	NA		
	CCV	Yes		
Batch	Method Blank	Yes		
	LCS/LCSD %	Yes		
	LCS/LCSD RPD	NA		
	Lab Dup RPD	No	See comments below.	J
	MS/MSD %	NA		
	MS/MSD RPD	NA		
General	Dilution	Yes		
	Reporting Limit	Yes		
	MDL	NA		
	Surrogates	Yes		

Samples reviewed (1407119rev1):				
TP13-S-1.5	TP17-S-1.25	TP21-S-0.5	TP24-S-0.5	TP27-S-0.5
TP15-S-1.75	TP18-S-0.5	TP22-S-0.5	TP25-S-0.5	TP29-S-0.5
TP16-S-0.5	TP20-S-0.5	TP23-S-0.5	TP26-S-0.5	TP-S-0.5DUP
Samples reviewed (1407110):				
TP02-S-0.5	TP04-S-0.25	TP07-S-0.25	TP10-S-0.5	TP12-S-0.5
TP03-S-0.5	TP06-S-0.5	TP08-S-0.5	TP-S-0.5DUP	-

Comments:

1407119rev1: Most diesel and lube oil results flagged by lab as having chromatograms that don't match those of diesel and lube oil standards. Qualify with J.

1407110: TP02-S-0.5 diesel biased high because of high amounts of oil (J flag diesel). All detections except TP02-S-0.5 and TP08-S-0.5 have non-standard chromatograms (J flag results).

Batch 7822 lab duplicates prepped with samples TP26-S-0.5 and TP29-S-0.5 have minor RPD exceedances for diesel and lube oil, at 22.6 to 31.2%. Exceedances are minor for soils, and lab dup detections are low; no results qualified.

Batch 7819 lab dups prepped with TP25-S-0.5 and TP08-S-0.5 have RPD exceedances for lube oil. Diesel results are low; no qualification. Qualify lube oil with "J" for samples TP08-S-0.5 and TP25-S-0.5.

DATA VALIDATION TRACKING

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1407110, 1407119rev1
Analysis	Total Metals
Method	USEPA 6020A
Batch	7873, 7874, 8068

Reviewer	MEB
Date	8/27/2014

	Validation Area	Acceptable Yes/No/NA	Comments	Q
Sample	Temperature	Yes		
	Holding Time	Yes		
	Trip Blank	NA		
	Field/Eq. Blank	NA		
	Field Dup RPD	Yes	TP29 and TP-S-0.5 (TP29DUP) reanalyzed with acceptable RPD.	
Calibr.	CCB	NA		
	ICV	Yes		
	CCV	Yes		
Batch	Method Blank	Yes		
	LCS/LCSD %	Yes		
	LCS/LCSD RPD	NA		
	Lab Dup RPD	No	Batch 7873, 7874 minor RPD exceedances; no qualifications.	
	MS/MSD %	No	Batch 7873 MS nickel, see comments below.	
	MS/MSD RPD	No	Batch 7874 See comments below.	J
General	Dilution	Yes		
	Reporting Limit	Yes		
	MDL	NA		
	Surrogates	NA		

Samples reviewed (1407110):				
TP02-S-0.5	TP04-S-0.25	TP07-S-0.25	TP10-S-0.5	TP12-S-0.5
TP03-S-0.5	TP06-S-0.5	TP08-S-0.5	TP-S-0.5DUP	-
Samples reviewed (1407119rev1):				
TP13-S-1.5	TP18-S-0.5	TP23-S-0.5	TP27-S-0.5	TP-S-0.5DUP
TP15-S-1.75	TP20-S-0.5	TP24-S-0.5	TP28-S-0.5	-
TP16-S-0.5	TP21-S-0.5	TP25-S-0.5	TP29-S-0.5	-
TP17-S-1.25	TP22-S-0.5	TP26-S-0.5	TP30-S-0.5	-

Comments:

Batch 7873, 7874: Laboratory duplicate has minor RPD exceedances (less than 30 %). Results not qualified.

Batch 7873 and 8068: MS exceedances for nickel (Ni) (69.1%) and copper (135%) are minor exceedance, not qualified. Remaining MS/MSD exceedances due to high concentrations in sample. Results not qualified.

Batch 7874: MSD low for Chromium (Cr) and Ni. Exceedances are minor so are not qualified. MS/MSD RPD exceedance for Cr is minor. RPD for Ni is 35.7%; qualify sample used to prepare MS/MSD (TP25-S-0.5) with "J" for Ni.

Batch 7874: MS/MSD, Mn, Fe, Zn percent recovery exceedances due to high concentrations; no qualification.

DATA VALIDATION TRACKING

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1407119rev1
Analysis	Mercury
Method	USEPA 7471B
Batch	7826, 7826A

Reviewer	MEB
Date	8/19/2014

	Validation Area	Acceptable Yes/No/NA	Comments	Q
Sample	Temperature	Yes		
	Holding Time	Yes		
	Trip Blank	NA		
	Field/Eq. Blank	NA		
	Field Dup RPD	Yes		
Calibr.	CCB	NA		
	ICV	Yes		
	CCV	Yes		
Batch	Method Blank	Yes		
	LCS/LCSD %	Yes		
	LCS/LCSD RPD	NA		
	Lab Dup RPD	Yes		
	MS/MSD %	No	MSD = 73.4%. MS is OK. Exceedance is minor; no qualification.	
	MS/MSD RPD	Yes		
General	Dilution	Yes		
	Reporting Limit	Yes		
	MDL	NA		
	Surrogates	NA		

Samples reviewed (1407119rev1):				
TP13-S-1.5	TP18-S-0.5	TP23-S-0.5	TP27-S-0.5	-
TP15-S-1.75	TP20-S-0.5	TP24-S-0.5	TP29-S-0.5	-
TP16-S-0.5	TP21-S-0.5	TP25-S-0.5	TP-S-0.5DUP	-
TP17-S-1.25	TP22-S-0.5	TP26-S-0.5	-	-
Samples reviewed (1407110):				
TP02-S-0.5	TP04-S-0.25	TP07-S-0.25	TP10-S-0.5	TP12-S-0.5
TP03-S-0.5	TP06-S-0.5	TP08-S-0.5	TP-S-0.5DUP	-

Comments:

DATA VALIDATION TRACKING

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1407119rev1
Analysis	Ammonia as Nitrogen
Method	USEPA 350.1
Batch	R16063

Reviewer	MEB
Date	8/18/2014

	Validation Area	Acceptable Yes/No/NA	Comments	Q
Sample	Temperature	Yes		
	Holding Time	Yes		
	Trip Blank	NA		
	Field/Eq. Blank	NA		
	Field Dup RPD	Yes		
Calibr.	CCB	NA		
	ICV	NA		
	CCV	Yes		
Batch	Method Blank	Yes		
	LCS/LCSD %	Yes		
	LCS/LCSD RPD	NA		
	Lab Dup RPD	NA		
	MS/MSD %	Yes		
	MS/MSD RPD	Yes		
General	Dilution	Yes		
	Reporting Limit	Yes		
	MDL	NA		
	Surrogates	NA		

Samples reviewed:				
TP26-S-0.5	TP30-S-0.5	-	-	-
TP27-S-0.5	TP-S-0.5DUP	-	-	-
TP28-S-0.5	-	-	-	-
TP29-S-0.5	-	-	-	-

Comments:

DATA VALIDATION TRACKING

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1407110
Analysis/Method	PCBs/ USEPA 8082A
Batch Number(s)	7820, 7851

Reviewer	MEB
Date	8/19/2014

	Validation Area	Acceptable Yes/No/NA	Comments	Q
Sample	Temperature	Yes		
	Holding Time	Yes		
	Trip Blank	NA		
	Field/Eq. Blank	NA		
	Field Dup RPD	Yes		
Calibr.	CCB	NA		
	ICV	NA		
	CCV	Yes		
Batch	Method Blank	Yes		
	LCS/LCSD %	Yes		
	LCS/LCSD RPD	NA		
	Lab Dup RPD	NA		
	MS/MSD %	No	See comments below.	J
	MS/MSD RPD	No	See comments below.	J
General	Dilution	Yes		
	Reporting Limit	Yes		
	MDL	NA		
	Surrogates	No	High surrogate TP05-S-0.5, TP07-S-0.25, qualify detected results.	J

Samples reviewed:				
TP-S-0.5DUP	TP04-S-1.0	TP07-S-0.25	TP10-S-0.5	TP12-S-0.5
TP02-S-0.5	TP05-S-0.5	TP07-S-1.0	TP10-S-1.5	-
TP02-S-2.0	TP05-S-1.5	TP08-S-0.5	TP-S-0.5DUP	-
TP03-S-0.5	TP06-S-0.5	TP09-S-0.5	TP11-S-0.5	-
TP04-S-0.25	TP06-S-2.0	TP09-S-4.5	TP11-S-4.5	-

Comments:

Batch 7820—Qualify MS/MSD sample TP01-S-0.5 because pf high percent recovery and RPD.
Batch 7851—MS/MSD sample from unrelated project; no qualification.

DATA VALIDATION TRACKING

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	1410008
Analysis/Method	PCBs/ USEPA 8082A
Batch Number(s)	8294, 8331

Reviewer	MEB
Date	

	Validation Area	Acceptable Yes/No/NA	Comments	Q
Sample	Temperature	Yes		
	Holding Time	Yes		
	Trip Blank	NA		
	Field/Eq. Blank	NA		
	Field Dup RPD	Yes	TP-S-DUP/TP45-S-0.5	
Calibr.	CCB	Yes		
	ICV	NA		
	CCV	Yes		
Batch	Method Blank	Yes		
	LCS/LCSD %	Yes	No LCSD for batch 8331. Acceptable per method 8082A.	
	LCS/LCSD RPD	Yes		
	Lab Dup RPD	NA		
	MS/MSD %	No	See comments below.	
	MS/MSD RPD	No	See comments below.	
General	Dilution	Yes		
	Reporting Limit	Yes		
	MDL	NA		
	Surrogates	No	See comments below.	J

Samples reviewed:				
TP46-S-0.5	TP40-S-0.5	TP42-S-0.5	TP45-S-2.5	TP34-S-0.5
TP38-S-0.5	TP37-S-0.5	TP39-S-0.5	TP51-S-2.0	TP32-S-0.5
TP52-S-0.5	TP51-S-0.5	TP36-S-0.5	TP31-S-0.5	-
TP-S-DUP	TP48-S-0.5	TP42-S-2.0	TP35-S-0.5	-
TP43-S-0.5	TP45-S-0.5	TP39-S-2.0	TP33-S-0.5	-

Comments:

TP39-S-0.5 surrogate decachlorobiphenyl = 230% due to matrix interference. Qualify all detections for sample TP39-S-0.5 as estimated with "J".

Batch 8294 MS/MSD have acceptable percent recoveries and RPD.

Batch 8331 MS/MSD percent recoveries are 246% and 137%, respectively, and RPD is 57.3, due to matrix interference. The MS/MSD were prepared with a sample from unrelated project. Batch 8331 LCS has acceptable recovery and associated samples have acceptable surrogate percent recoveries, so results are not qualified by reviewer.

APPENDIX E

CONCEPTUAL REDEVELOPMENT SITE LAYOUT OPTIONS

Leichner Property Conceptual Planning Option 1

INDUSTRIAL SUBDIVISION - 90TH STREET ACCESS

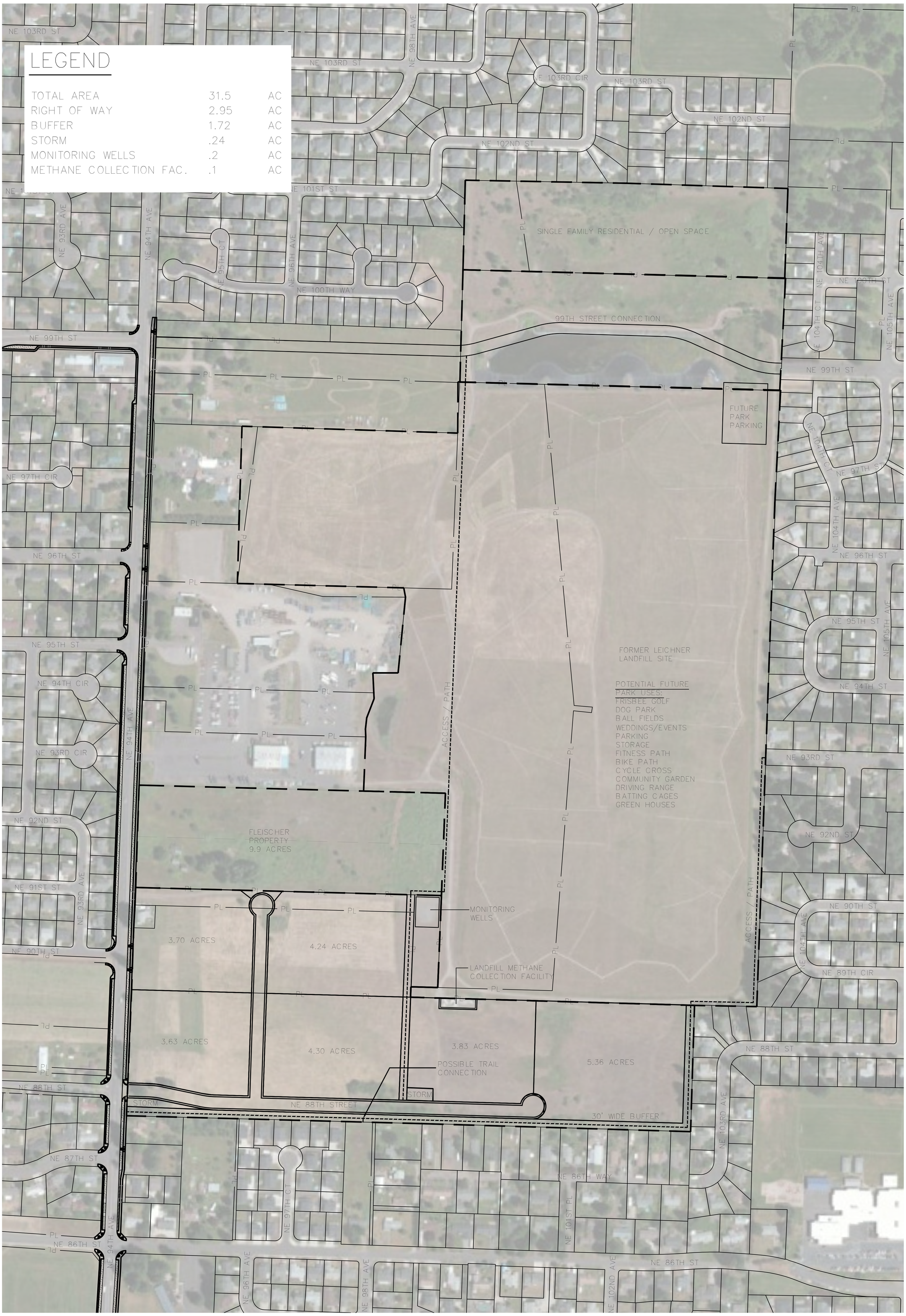
1" = 150'

150 0 150 300

scale feet

OCTOBER 2, 2014

BergerABAM



Leichner Property Conceptual Planning Option 2

INDUSTRIAL SUBDIVISION - 88TH STREET ACCESS

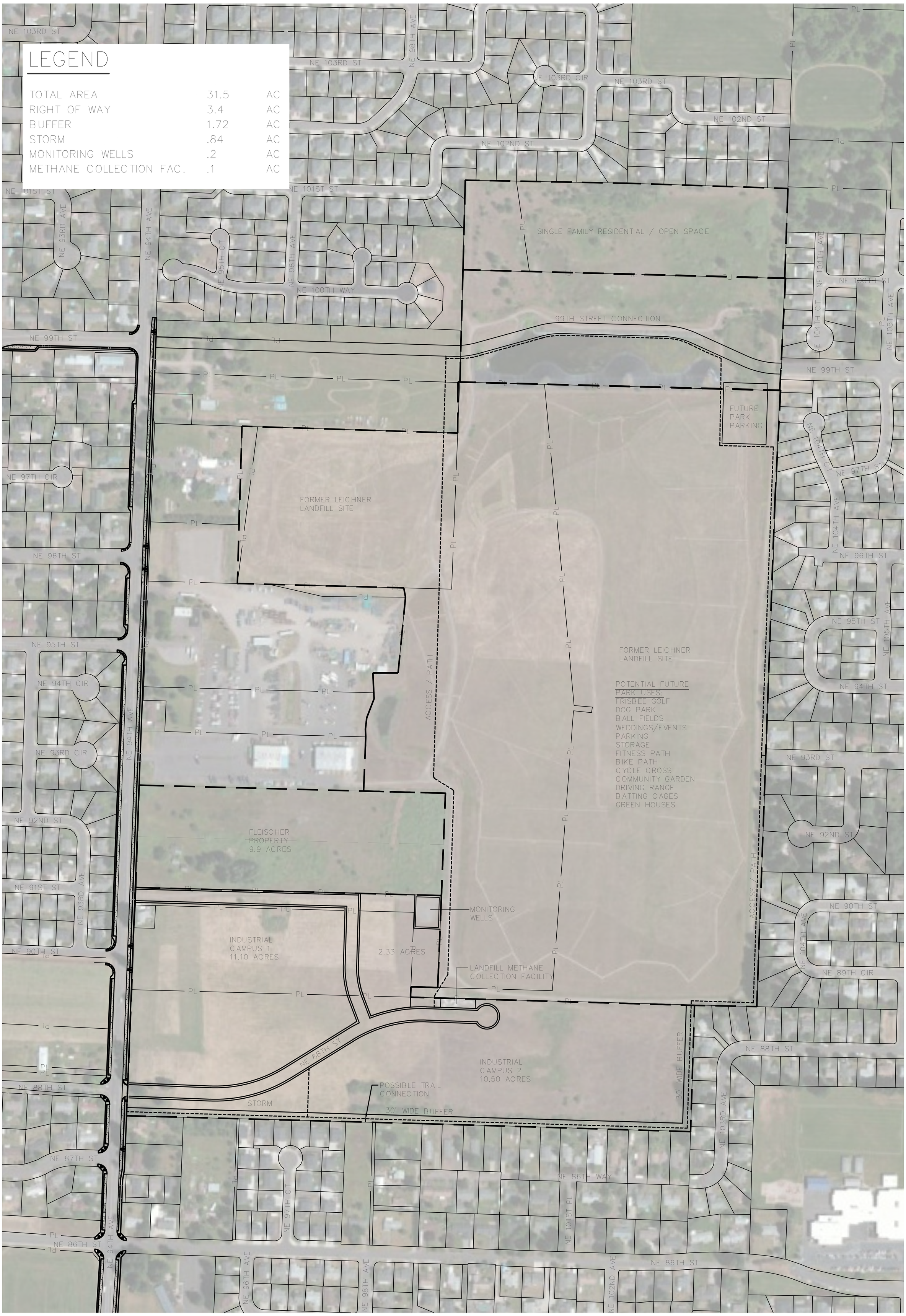
1" = 150'

150 0 150 300

scale feet

OCTOBER 2, 2014

BergerABAM



Leichner Property Conceptual Planning Option 3

INDUSTRIAL CAMPUS SITES

OCTOBER 2, 2014

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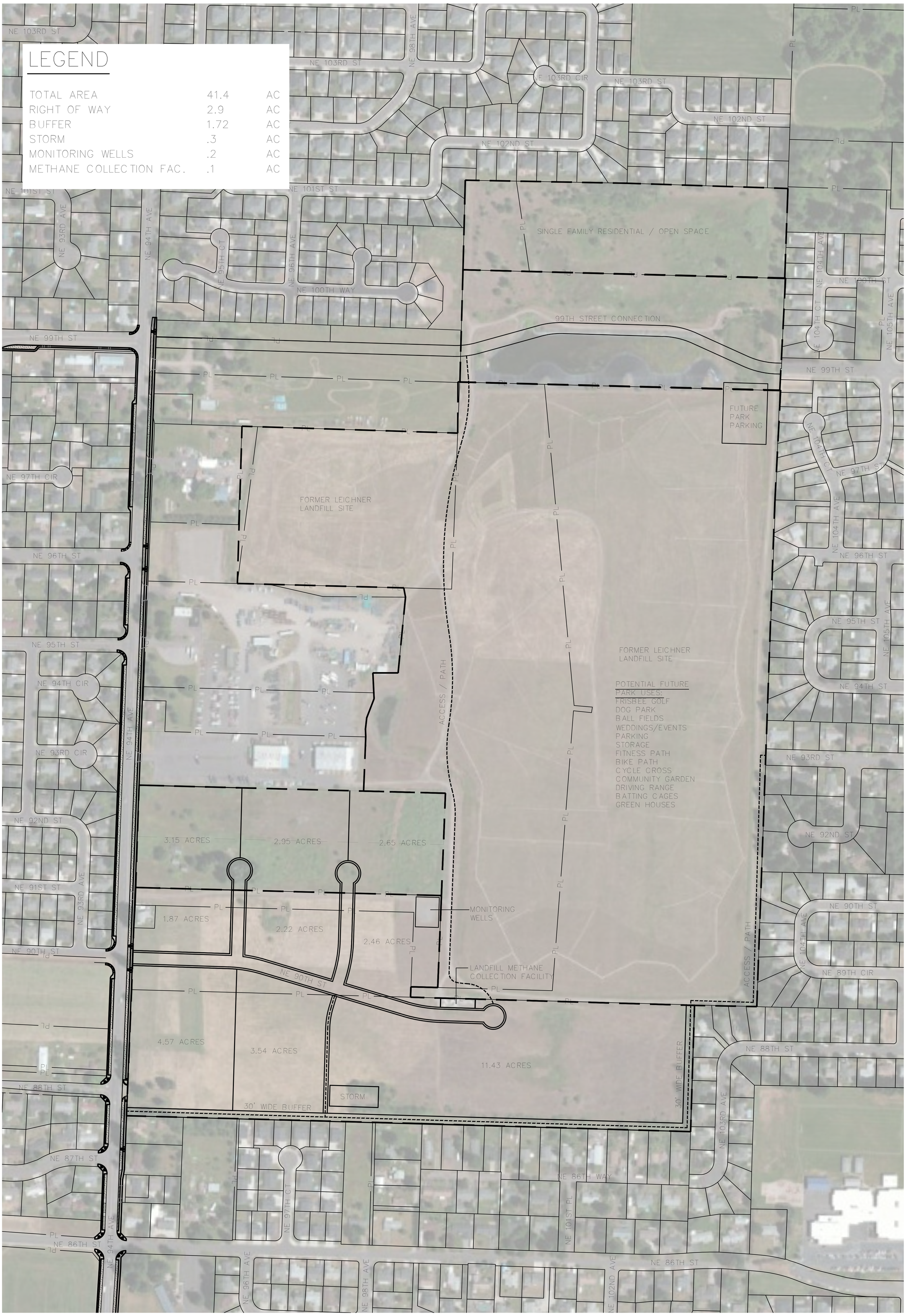


Leichner Property Conceptual Planning Option 4

INDUSTRIAL SUBDIVISION - 90TH STREET ACCESS - WITH FLEISCHER PROPERTY

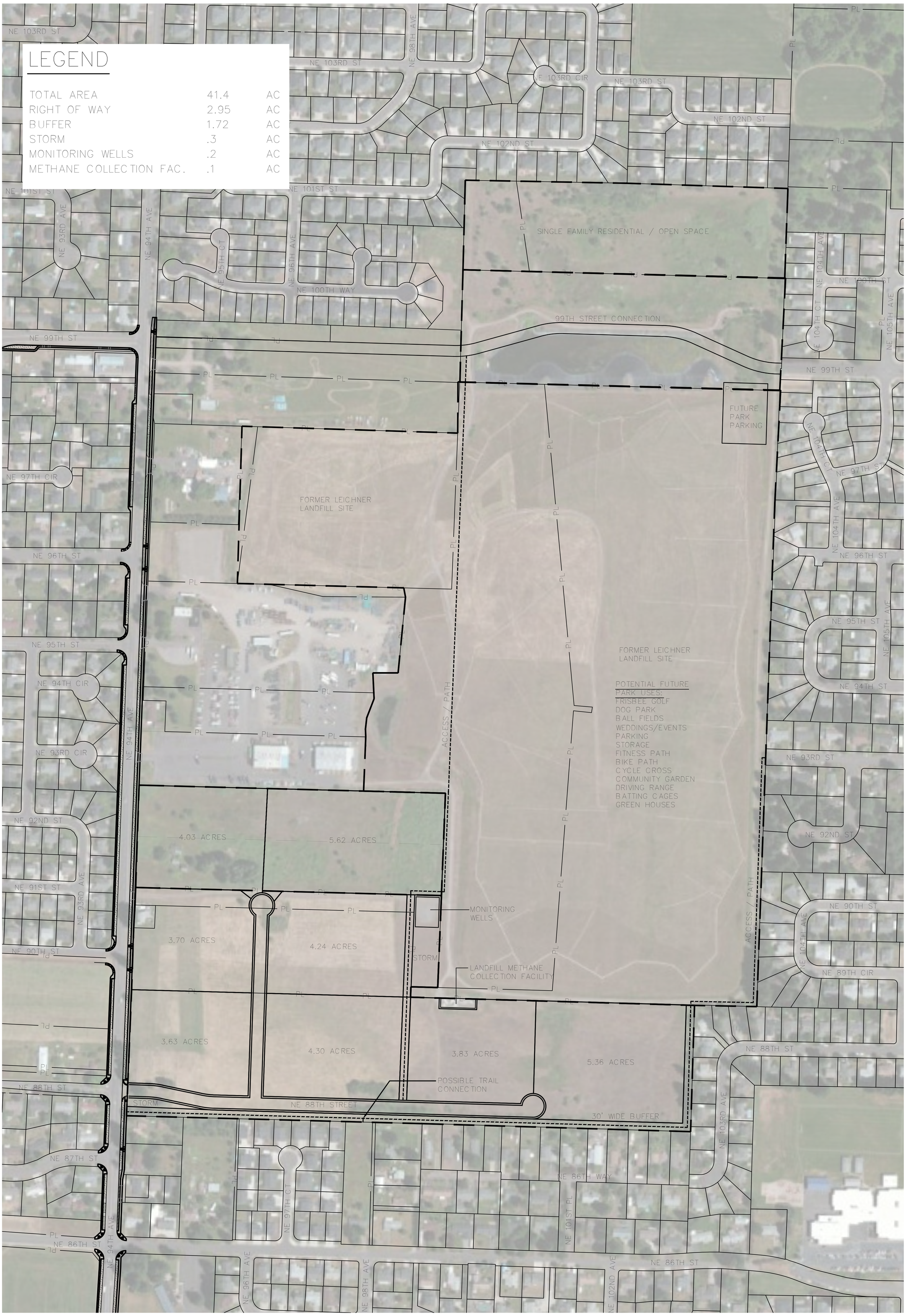
1" = 150'

150 0 150 300

scale feet

OCTOBER 2, 2014

BergerABAM



Leichner Property Conceptual Planning Option 5

INDUSTRIAL SUBDIVISION - 88TH STREET ACCESS - WITH FLEISCHER PROPERTY

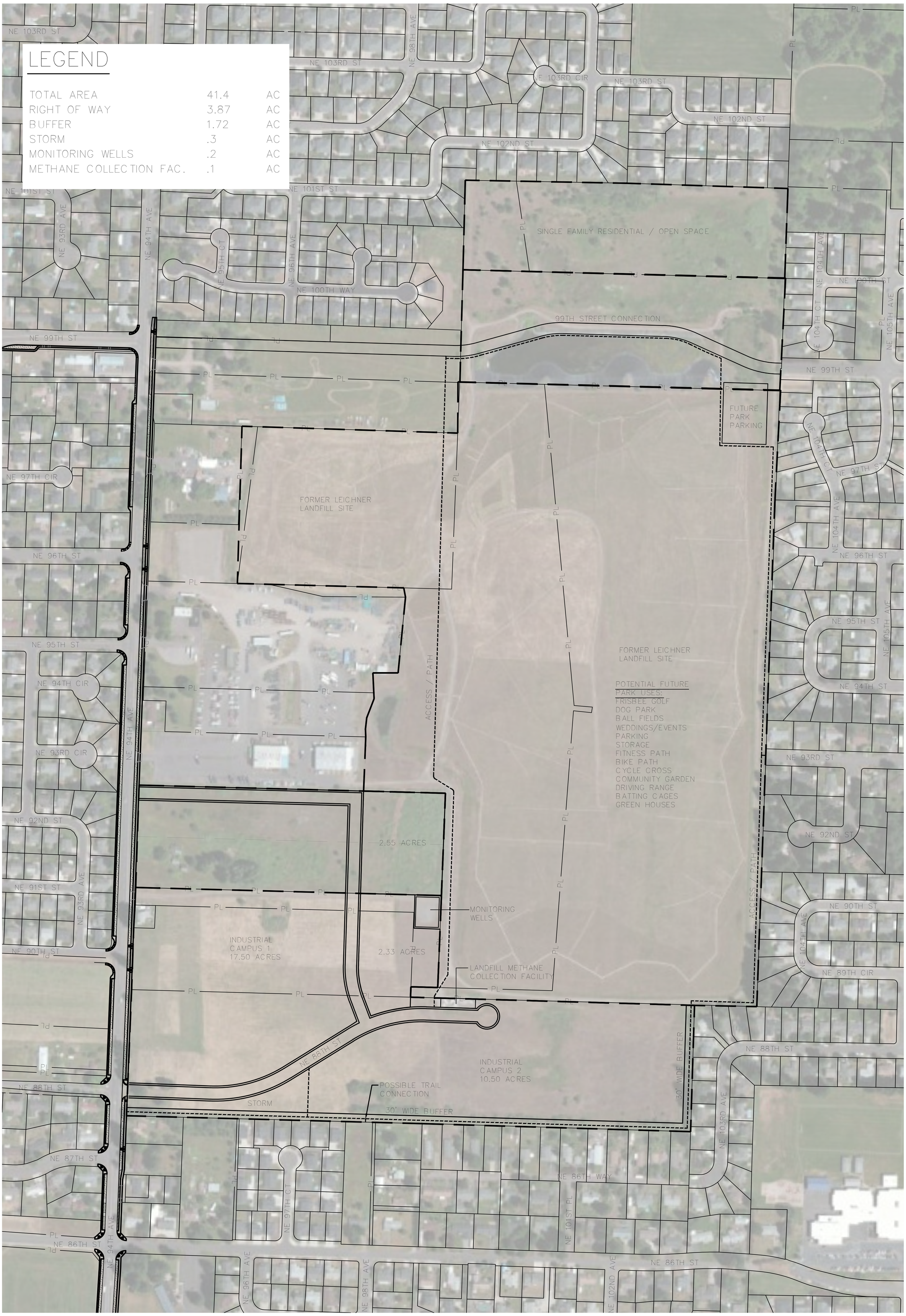
1" = 150'

150 0 150 300

scale feet

OCTOBER 2, 2014

BergerABAM



Leichner Property Conceptual Planning Option 6

INDUSTRIAL CAMPUS SITES - WITH FLEISCHER PROPERTY

OCTOBER 2, 2014

BergerABAM

APPENDIX F

PROPERTY APPRAISAL

WSDOT NARRATIVE APPRAISAL REPORT

Parcel No.: 199851-000, 199854-000, 199861-000
Owner: Fleischer

Washington State
Department of Transportation

Federal Aid No.: N/A
Project: N/A
R/W Plan Title: N/A
Plan Sheet N/A
Plan Approval Date: N/A
Date of Last Map Revision: N/A

CERTIFICATE OF APPRAISER

I certify that, to the best of my knowledge and belief:

- the statements of fact contained in this appraisal are true and correct;
- the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conclusions, and are my personal, unbiased professional analyses, opinions, and conclusions;
- I have performed no (or the specified) services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
- I have no present or prospective interest in the property that is the subject of this appraisal, and I have no personal interest or bias with respect to the parties involved;
- my compensation is not contingent upon the reporting of a predetermined value or direction that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event;
- my analyses, opinions, and conclusions were developed, and this appraisal has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice and the Uniform Appraisal Standards for Federal Land Acquisitions;
- I have made a personal inspection of the property that is the subject of this report. I have made a personal inspection of the comparable sales contained in the report addenda;
- I have afforded the owner or a designated representative of the property that is the subject of this appraisal the opportunity to accompany me on the inspection of the property.
- I last appraised a portion of the subject parcel for the right of way acquisition for the NE 94th Ave. Improvement Project on 9-14-14.
- no one provided significant professional assistance to the person signing this report. (If there are exceptions, the name of each individual providing significant professional assistance must be stated);
- I have disregarded any increase in Fair Market Value caused by the proposed public improvement or its likelihood prior to the date of valuation. I have disregarded any decrease in Fair Market Value caused by the proposed public improvement or its likelihood prior to the date of valuation, except physical deterioration within the reasonable control of the owner;
- this appraisal has been made in conformity with the appropriate State and Federal laws and requirements, and complies with the contract between the agency and the appraiser;

The property has been appraised for its fair market value as though owned in fee simple, or as encumbered only by the existing easements as described in the title report dated 7-1-13 . I made a personal inspection of the property that is the subject of this report on 4-22-15.

The **Date of Value** for the property that is the subject of this appraisal is 4-22-15

Per the FAIR MARKET VALUE definition herein, the value conclusions for the property that is the subject of this appraisal are on a cash basis and are:

Value of Subject "Before" Acquisition	**$1,590,000**
Value of Subject "After" Acquisition	**-0-**
Difference Between "Before" and "After" Values	**$1,590,000**

Name: Richard F. Duncan, MAI

Date Signed: 5-3-2015 Signature: Richard F Duncan

Washington State-certified general real estate appraiser certification number: 1100496

DO NOT WRITE BELOW THIS LINE

Headquarters Service Center Date Stamp Region Date Stamp

Assignment Scope of Work

The client of this report is Clark County. Clark County requires that, in addition to compliance with USPAP this report must also meet the WSDOT Standards as set forth in the WSDOT R/W Manual Chapter 4, the WSDOT Appraisal Report Guide, and Federal Regulations as defined in 49 CFR part 24.

In the event of conflict or dispute in determining correct appraisal procedures that are not addressed in the standards noted above the Uniform Appraisal Standards for Federal Land Acquisitions (Yellow Book) will be the determining authority.

Under 49 CFR, WSDOT is required to take an active role in developing the scope of work. However it is the ultimate responsibility of the appraiser to develop a complete Scope of Work and produce a credible appraisal report. The appraisers SCOPE of WORK is included in Section 5 of the report. The report must adhere to the WSDOT and Federal Standards as described above and the specific task assignment for this parcel. The task assignment for this report must be included in the report or addendum.

Eminent Domain Appraisal Information and Definitions

The intended use of this appraisal is to provide information to the client, Clark County , as a basis for acquiring the entire subject parcel.

Unless stated otherwise in the report, the property rights appraised constitute the fee simple interest.

"Fair Market Value" is defined as; the amount in cash which a well-informed buyer, willing but not obliged to buy the property, would pay, and which a well-informed seller, willing but not obligated to sell it would accept, taking into consideration all uses to which the property is adapted and might in reason be applied (Washington Pattern Instruction 150.08).

The intended user of this report is primarily Clark County. Additionally, its funding partners may review the appraisal as part of their oversight activities. A copy of this report may be provided to the property owner as a courtesy and part of the good faith bargaining process. However, this does not imply that the property owner has standing as an intended user and is not authorized to publish or use the report for any other purpose.

Public Law 91-646 (Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970) and Washington State RCW 8.26.180 both require that the owner or owner's representative be given an opportunity to accompany the appraiser during the inspection of the property. "If the appraiser is advised that the property owner is represented by legal counsel, all owner contact and property inspections must be arranged through the owner's attorney, unless the attorney specifically authorizes the appraiser to make direct contact with the owner".

In condemnation, the larger parcel is the portion of a property that has unity of ownership, contiguity, and unity of use, the three conditions that establish the larger parcel for consideration of severance damages. This is also known as the "parent parcel"

Extraordinary assumptions or hypothetical conditions include but may not be limited to the following:

> State and Federal standards require the appraiser to disregard any decrease or increase in the fair market value of the subject caused by the project. The appraiser may cite the Jurisdictional Exception Rule to comply with this requirement which is found in RCW 8.26.180. and WAC 468-100-102 (2).
>
> The after value is based on the assumption that the project has been constructed as proposed on the Right of Way plans as of the date of value.
>
> The subject has been appraised as cleaned. However, apparent environmental hazards or contamination observed or discovered during the appraisal process must be noted in the report.

APPRAISAL ASSUMPTIONS AND LIMITING CONDITIONS

1. The property description supplied to the appraiser is assumed to be correct;
2. No survey of the property has been made or reviewed by the appraiser, and no responsibility is assumed in connection with such matters. Illustrative material, including maps and plot plans, utilized in this report are included only to assist the reader in visualizing the property. Property dimensions and sizes are considered to be approximate;
3. No responsibility is assumed for matters of a legal nature affecting title to the property, nor is any opinion of title rendered. Property titles are assumed to be good and merchantable unless otherwise stated;
4. Information furnished by others is believed to be true, correct, and reliable. However, no responsibility for its accuracy is assumed by the appraiser;
5. All mortgages, liens, encumbrances, leases, and servitudes have been disregarded unless so specified within the report. The property is assumed to under responsible, financially sound ownership and competent management;
6. It is assumed that there are no hidden or unapparent conditions of the property, subsoil, or structures which would render the property more or less valuable. No responsibility is assumed for such conditions or for arranging for engineering studies which may be required to discover them;
7. Unless otherwise stated in this report, the existence of hazardous material, which may or may not be present on the property, was not observed by the appraiser. However, the appraiser is not qualified to detect such substances. The presence of substances such as asbestos, urea-formaldehyde foam insulation, or other potentially hazardous materials may affect the value of the property. The value conclusions in this report are predicated on the assumption that there are no such materials on or in the property that would cause a loss of value. No responsibility is assumed for any such conditions, or for the expertise required to discover them. The client is urged to retain an expert in this field if desired. The analysis and value conclusions in this report are null and void should any hazardous material be discovered;
8. Unless otherwise stated in this report, no environmental impact studies were either requested or made in conjunction with this report. The appraiser reserves the right to alter, amend, revise, or rescind any opinions of value based upon any subsequent environmental impact studies, research, or investigation;
9. It is assumed that there is full compliance with all applicable federal, state, and local environmental regulations and laws unless noncompliance is specified, defined, and considered in this report;
10. It is assumed that all applicable zoning and use regulations and restrictions have been complied with, unless non-conformity has been specified, defined and considered in this report;
11. It is assumed that all required licenses, certificates of occupancy, consents, or other legislative or administrative authority from any local, state, or federal governmental or private entity or organization have been or can be obtained or renewed for any use on which the value estimate is based;
12. The appraiser will not be required to give testimony or appear in court because of having made this report, unless arrangements have previously been made;
13. Possession of this report, or a copy thereof, does not carry with it the right of publication. It may not be used for any purpose by any person other than the client without the written consent of the appraiser, and in any event, only with properly written qualification and only in its entirety;
14. Neither all nor any part of the contents of this report, or copy thereof, shall be conveyed to the public through advertising, public relations, news, sales, or any other media without written consent and approval of the appraiser. Nor shall the appraiser, client, firm, or professional organization of which the appraiser is a member be identified without the written consent of the appraiser;
15. The liability of the appraiser, employees, and subcontractors is limited to the client only. There is no accountability, obligation. or liability to any third party. If this report is placed in the hands of anyone other than the client, the client shall make such party aware of all limiting conditions and assumptions of the assignment and related discussions. The appraiser is in no way responsible for any costs incurred to discover or correct any deficiencies of the property;
16. It is assumed that the public project which is the object of this report will be constructed in the manner proposed on the most recent right of way plan prior to the appraisal date and in the foreseeable future;
17. Acceptance and/or use of this report constitutes acceptance of the foregoing assumptions and limiting conditions.

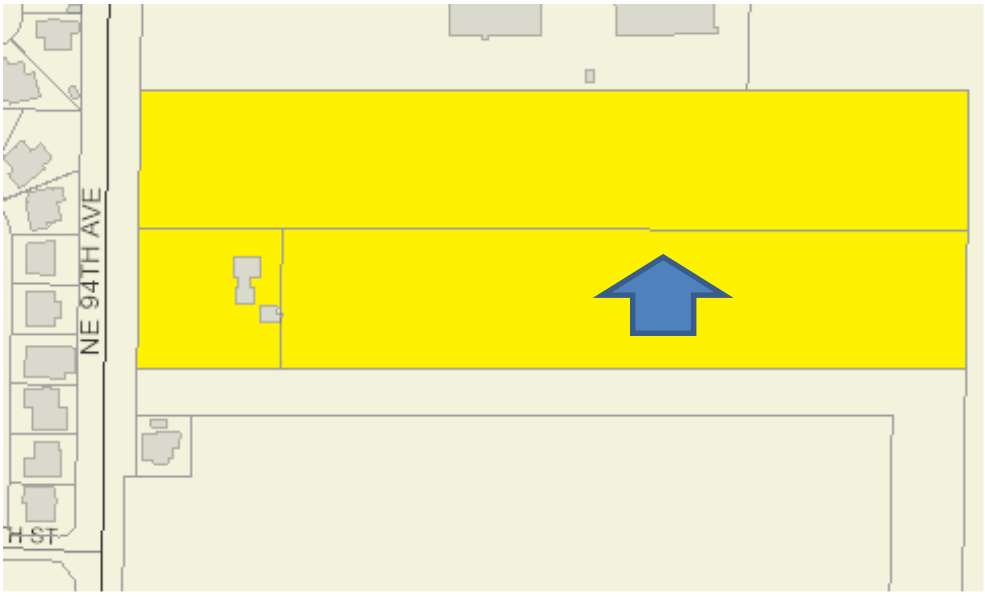
Extraordinary Assumption: I have based this appraisal on a size of 9.12 acres as indicated on the Clark County GIS. I reserve the right to revise this appraisal if a survey shows a significantly different size.

Hypothetical Condition: The subject reportedly has significant soil contamination which would likely be very costly to remediate. At the client's request I have appraised the parcel "as clean" assuming no contamination.

SUBJECT PLOT PLAN

Shown are subject whole property site dimensions, access frontages, improvement locations and dimensions, acquisition area and dimensions, "North arrow", camera location and direction for each attached subject photo.

Before Area: 9.12 acres	**After Area: -0-**	**Fee Acquisition: 9.12 acres**
Permanent Easement Acquisition: N/A	**Temporary Easement Acquisition: N/A**	
Limited Access/Access Notes: N/A		



SUBJECT PHOTOGRAPHS

Date of Photos: 4-22-2015	Photographer: Richard F. Duncan

Facing NE at Subject From NE 94th Avenue

Facing Northerly Up NE 94th Avenue

SUBJECT PHOTOGRAPHS

Date of Photos: 4-22-15	Photographer: Richard F. Duncan

Facing NE at Subject From Near its Westerly Boundary

Facing West Along South Boundary of Subject

SUBJECT PHOTOGRAPHS

Date of Photos: 4-22-15	Photographer: Richard F. Duncan

Interior of Site

Facing NW at Subject From Near SE Corner of Site

SUBJECT PHOTOGRAPHS

Date of Photos: 4-22-15	Photographer: Richard F. Duncan

Easterly Portion of Site

Facing Westerly From Near Easterly Boundary

Aerial Photo

NARRATIVE APPRAISAL REPORT

1. OWNER: Felix F. and Bonnie P. Fleischer, husband and wife.

2. LOCATION OF SUBJECT: 9109 and 9915 NE 94th Avenue, Vancouver, WA, which is the east side of NE 94th Avenue, approximately 250 feet north of NE 90th Street, within unincorporated Clark County.

3. SUBJECT LEGAL DESCRIPTION: .

4. DELINEATION OF TITLE (5 years): No sales in past five years. The owners recently sold some right of way for the proposed NE 94th Avenue Improvement Project to Clark County Public Works.

5. THE APPRAISAL PROBLEM AND APPRAISER'S SCOPE OF WORK:

Larger Parcel Discussion

The subject owners have three continuous tax parcels, The "Larger Parcel Theory" for eminent domain appraisal purposes defines the larger parcel as that portion of a property which has unity or control of title, unity of use, and contiguity, with the unity of use test referring to unity of highest and best use, not simply existing use. The "larger parcel" for the purpose of this analysis is the entire three parcel ownership which consists of approximately 9.12 acres.

6. PROPERTY RIGHTS TO BE ACQUIRED AND EFFECTS OF ACQUISITION/PROJECT (include description of area being acquired in fee, in easement and access if applicable):

The agency proposes a total acquisition of the entire 9.12 acre subject ownership.

7. DESCRIPTION OF SUBJECT PROPERTY including but not limited to:

Neighborhood Description:

The neighborhood is located within Vancouver's Urban Growth Area within unincorporated Clark County, approximately ten miles to the north of downtown Vancouver. This neighborhood includes a mix of commercial, light industrial and residential development. The neighborhood's approximate boundaries are identified below:

Neighborhood Boundaries	
North:	NE 119th Street.
South:	NE 76th Street
East:	SR-503.
West:	NE 72nd Avenue.

Physical Profile:

Neighborhood Cycle: The neighborhood is generally in a period of slow growth with some new commercial and multiple family developments which have recently been completed.

Property Maintenance: Maintenance levels are generally average.

Infrastructure: All streets within the subject neighborhood are asphalt paved with sidewalks, curbs and gutters on the frontages of the newer development, and with gravel shoulders and ditches along frontages of the older development.

There are traffic signals at major intersections within the neighborhood.

The neighborhood is served by C-Tran, the local public bus, which has regular stops within the neighborhood.

Linkage/Access: The major north-south route within the neighborhood is provided by SR-503(NE 117th Avenue) which is a four and five lane state highway providing linkage to NE Fourth Plain Boulevard and SR-500 on the south with the town of Battle Ground and beyond a few miles to the north. Major east-west routes include: the Padden Parkway a newer limited access facility linking the residential neighborhoods on to the east of the neighborhood with the SR-503 and eventually Interstate 205, approximately one mile to the west of the neighborhood; and NE 119th Street which also links SR-503 and the residential area to the east with Interstate 205 to the west of the neighborhood. Clark County Public Works is presently working on the right of way acquisition phase of the NE 94th Avenue improvement project. Which will widen NE 94th Avenue between The Padden Expressway and NE 102nd Street. As part of this project NE 94th Avenue will have a center turning lane with sidewalks, curbs and gutters along both sides of the new facility.

Governmental Profile:

Zoning & Land Use Policy: The neighborhood includes a mix of commercial, light industrial, single family and multiple family zoning classifications.

Protective Services: The neighborhood is served by police and fire protection, as well as public transportation.

Utility Services: The neighborhood has all public utilities available including power, telephone, natural gas, water, sewer, and cable television. Some of the neighborhood requires extension of the public sewer.

Environmental Concerns: None noted.

External Obsolescence: None Noted.

Residential Development Trends:

Single family homes ranges mainly in price from $150,000 to $300,000. There are several newer multiple family projects in the neighborhood including the 244 unit Prairie Park Apartments which recently sold in the subject neighborhood in October of 2011 at a price of $21,000,000 ($86,000 per unit). Single Family sites are presently ranging mainly in price from approximately $80,000 to $110,000 depending upon size and location.

Commercial Development Trends:

The subject neighborhood has a variety of commercial development including business parks, retail, offices and service commercial applications. A newer prominent development includes the Bowyer Marketplace project anchored by a 94,000-square-foot WinCo Foods, which recently opened near the northwest corner of NE 119th Street and SR-503. The Bowyer Marketplace will eventually include a wide variety of retail and restaurants and a Chase branch bank.

Recent sales of commercial sites support a value for commercially zoned parcels within this neighborhood in the range of $8.00 to $25 per square foot depending upon size, and exposure.

Light industrial land sales have ranged mainly from $2.00 to $8.00 per square foot, County wide, depending upon size, location and available utilities.

Summary:

The subject neighborhood includes a mix of single family, multi-family, and commercial development and like much of Clark County, is currently in a period of little growth. The neighborhood is conveniently located with respect to most services and major transportation linkages.

A. Present use: The subject has an old single family residence in poor condition. The residence is not habitable and has no contributory value.

B. Accessibility and Road Frontages: The subject has approximately 360 ± feet of frontage along NE 94th Avenue. The subject achieves access from NE 94th Avenue.

C. Land Contour and Elevations: The subject is effectively level to slightly rolling in topography.

D. Land Area: According to Clark County Assessor's records, the subject consists of approximately 9.12 acres.

E. Land Shape: The subject is rectangular in shape with approximately 360 ± feet of frontage along NE 94th Avenue, and approximately 1,100 ±feet of east-west depth.

F. Utilities: The subject has electricity, telephone, internet, sewer and public water available.

G. Present Zoning: The subject parcel is zoned IL, which allows a variety of light industrial applications. According to the Clark County zoning ordinance, the light industrial district is intended to provide for those less-intensive industrial uses which produce little noise, odor and pollution. It also provides for resource-based uses and service uses that are deemed compatible with light industrial uses.

Uses allowed within the IL zone include warehouses, business parks, mini-storage, wholesale trade, building materials and trade, fabrication and a variety of other light industrial uses.

H. Highest and Best Use If Vacant:

The Appraisal of Real Estate, 14th Edition, a publication of the Appraisal Institute, defines highest and best use for a property as:

"The reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value."

Summarizing the Above:

- The use must be within a realm of *probability*, i.e., it must be likely, not speculative or conjectural.
- The use must be *legal*.
- The use must be *physically possible*.
- The use must be *financially feasible.*
- The use must be such as to return to land the highest net return *(maximally productive).*

Data collected concerning the surrounding neighborhood and the subject property is analyzed to provide the evidence upon which the highest and best use conclusion is based. The highest and best use analysis allows an appraiser to gradually narrow the field of possible uses by testing it with the

criteria above. The highest and best use of a property is the foundation for the selection and analysis of market data, and is the basis upon which a property is valued.

Legally Permissible
Legal considerations which impact the subject include governmental restrictions such as zoning and comprehensive plan classifications.

The parcel is zoned IL, a light industrial classification and legal considerations support a light industrial application the parcel.

Physically Possible
The subject's location and its physical characteristics are analyzed in this section.

Location
The subjects are in the urban growth area of Vancouver. Uses in the general surrounding area include a mix of residential, commercial and light industrial applications. The subject has convenient proximity to major transportation linkages. In summary the location supports a light industrial development of the subject.

Physical Characteristics
Size, shape, soils, and topography affect the uses to which a site may be developed. The utility of a parcel may depend on its frontage and depth. Irregularly shaped parcels may cost more to develop and, when developed, may have less utility than a rectangular parcel.

The parcel's shape, topography and available utilities are conducive to most types of development and would support a light industrial application.

Summary
In my opinion, the subject's physical and locational characteristics support a light industrial application.

Financially Feasible
The next analysis involves consideration to those uses that have been determined to be legally permissible and physically possible to determine which are financially feasible. The analysis to this point has supported a light industrial application.

Clark County's real estate market is presently recovering from its worst downturn in several decades, and land values are still depressed compared to a few years ago. However, the past couple of years have seen improvement and there have been several sales of light industrial type parcels at increasing prices. In my opinion, a light industrial development the subject parcel is financially feasible as of the date of appraisal.

Maximally Productive
I have considered from among the uses outlined above, those uses that would return the highest net present value to the land over the long term. Based upon the preceding analysis and observation of the surrounding development within the subject's immediate area, the maximally productive and therefore highest and best use of the subject site as vacant is for light industrial development.

I. Improvements: The subject is improved with a wood frame single family residence which is not

habitable and has no contributory value.

J. Specialty Items: None.

K. Real Estate Taxes: The subject parcels are assessed for real estate taxes as follows:

The Clark County Assessor's Office carries the properties at -0 value, presumably due to the extensive environmental clean-up required to develop the property.

L. Assessments Current and Pending: None.

M. Existing Lease or Rental Data: Not applicable.

N. Highest and Best Use of the Whole Property as Improved:

The highest and best use of the parcels is to remove the existing residence in favor of light industrial re-development.

8. APPROACHES TO VALUE:

The cost approach and the income approach are not typically used in valuing land and are therefore not applied within this appraisal. The sales comparison approach is applied in valuing the subject land.

9. VALUATION-BEFORE:

A. Site Valuation:

(1) Sales Comparison Approach:

(a) Scope of Data Search:

In searching for comparable sales data, I confined the search to land sales which have occurred within the subject's surrounding area from 1-01-10 up to the date of this appraisal. Sales sources utilized included LoopNet, The Regional Multiple Listing Service, and Clark County Public Records. The table included below summarizes the comparable sales which were analyzed in estimating the fair market value of the subject land. Individual market data sheets on each sale, along with property sketches and photographs are included in the addenda of this report. Confirmation of each sale has been obtained from buyer, seller, broker, or other parties believed to be knowledgeable about the details of the transaction, whenever possible. When direct verification was not possible, we have relied upon public records or similar data sources.

Unit of Comparison

The comparable sales will be analyzed on a price per square foot basis as this is the most prevalent indicator of value employed by market participants.

Adjustments

Lack of uniformity within the available comparable sales data prevents the direct extraction of adjustments. General analysis reflecting market behavior is used to determine which comparables are superior or inferior to the subject. This analysis establishes value parameters for the subject, allowing for a final conclusion of value.

TABLE OF COMPARABLE SALES

Sale	Location	Zoning	Date	Price	Size (SF)	$/SF	Comments
L-1	SE 1st Street/Olympia Drive, Vancouver, WA	IL	10-13	$1,855,450	227,383	$8.16	This site was acquired by The Educational Service District No. 112 for the development of a 60,000 SF office building and 25,000 SF warehouse building for their own use.. According to the buyer's survey the useable area of the site is 5.22 acres.
L-2	3703 NW Gateway Vancouver, WA	IH	6-11	$5,082,500	871,200	$5.83	This parcel was sold to Reliable Steel by the Port of Vancouver. The parcel is zoned high intensity industrial. The parcel was developed with a 21,000 SF distribution facility after sale.
L-3	East side of NE 47th Avenue, opposite NE 68th Dr. Vancouver, WA	IL	12-13	$1,245,816	226,512	$5.50	This comparable includes two adjacent sites in the Parkside Commerce Center Development. These sites combine to form a trapezoidal shape. All public utilities are available to this site. This site was acquired for the future development of a light manufacturing warehouse.
L-4	6209 NE 121st Avenue Vancouver, WA	IL	2-14	$425,000	81,000	$5.25	This sale includes two adjacent tax parcels which combine to form an "L" shaped parcel of approximately 1.86 acres. The parcel is located at the southeast corner of NE 4th Plain Blvd. and NE 121st Avenue, a signalized corner. The parcels include some residential buildings which are allocated no contributory value The parcel was originally listed for sale at $500,000.
L-5	9501 NE 72nd Avenue Vancouver, WA	IL	Listing	$1,637,900	327,570	$5.00	This is a listing on NE 72nd Avenue in Vancouver. The parcel is rectangular in shape and mostly level in topography with all public utilities available.
L-6	9600 NE 130th Avenue Vancouver, WA	IL	4-13	$675,000	209,959	$3.21	This is a rectangular shape site which is zoned IL. The parcel was listed for sale and acquired by The City of Vancouver for the development of a future water storage location. The site was not acquired under the threat of eminent domain and can therefore be considered within this appraisal.

TABLE OF COMPARABLE SALES

Sale	Location	Zoning	Date	Price	Size (SF)	$/SF	Comments
L-7	10311 NE 72nd Avenue, Vancouver, WA	IL	12-12	$746,000 (extracted)	211,200	$3.53	This parcel is on the east side of NE 72nd Avenue, approximately 0.25 mile south of NE 119th Street. The parcel is rectangular in shape with water, power and telephone available but no public sewer. This parcel has an old house which will eventually be removed with the buyers develop this site with their new construction warehouse and office.

Comparative Analyses:

All of the comparable sales are considered to be roughly equal to the subject for property rights conveyed, conditions of sale, and highest and best use. The following comparative analysis compares the comparable sales to the subject parcels based on other value influencing characteristics such as size, location, market conditions at the time of sale, topography, and other value influencing factors.

Sale L-1 is equal for highest and best use but superior for location and its much smaller size. This comparable is a high indicator for the subject at $8.16 per square foot.

Sale L-2 is superior to the subject for location and its more intensive zoning. This comparable is inferior for its much larger size and the market conditions under which it sold. Overall, this comparable is considered to be a high indicator for the subject at $5.85 per square foot.

Sale L-3 is superior to the subject for its location within a business park and for its much smaller size. Overall, this comparable is considered to be a high indicator for the subject at $5.50 per square foot.

Sale L-4 is superior to the subject for location and its much smaller size. This comparable is inferior to the subject for its "L" shape. Overall, this comparable is considered to be high value indicator for the subject at $5.25 per square foot.

Sale L-5 is slightly superior to the subject for its smaller size and superior for its location. This comparable represents an asking price as opposed to a completed transaction and is considered be an upper limit value indicator for the subject at $5.00 per square foot.

Sale L-6 is inferior to the subject for location and superior to the subject for its smaller size. Overall, this comparable is considered to be a low value indicator for the subject at $3.21 per square foot.

Sale L-7 is considered to be superior to the subject for location but inferior for its 2012 date of sale in what has been a generally appreciating market and for its wetland encumbrance which will make development somewhat challenging. Overall, this comparable is considered to be a low value indicator for the subject at $3.53 per square foot.

Correlation and Final Conclusion of Land Value

The comparable sales support a value range for the subject of approximately $3.21 to $8.16 per square foot. Sale L-6 supports the extreme low end of the range and is a low value indicator for the subject at $3.21 per square foot due mainly to its inferior location and 2013 date of sale. Sale L-1 supports the high end of the range and is a high value indicator for the subject at $8.16 per square foot due to its superior location and smaller size. The remaining comparables support a somewhat tighter range of $3.53 to $5.85 per square foot and I believe the market would place the subject within this range.

Within the refined value range I believe Sale L-7 is a low indicator at $3.53 per square foot due mainly to its 2012 date of sale. Sale L-5 is actually a listing at $5.00 per square foot and this comparable is a high value indicator for the subject. In my opinion, the market would tend to place the subject toward the low end of the refined value range due to its location and its relatively large size. In my opinion, a value for the subject of approximately $4.00 per square foot is reasonable as of the date of appraisal. Based on the subject's size of approximately 9.12 acres, the value of the subject is approximately $1,589,068 which I have rounded to approximately **$1,590,000®.**

10. Recapitulation:

A.	Value of property "before" acquisition	$1,590,000
B.	Value of property "after" acquisition	-0-
C.	Difference between "before" and "after" values	$1,590,000

11. EXPLANATION, MEASUREMENT, SUPPORTING DATA AND ALLOCATION OF DAMAGES, COSTS TO CURE, AND SPECIAL BENEFITS:

Total acquisition.

12. SUMMARY OF APPRAISAL CONCLUSIONS-Parcel A

(Accounting tabulation - NOT indicative of appraisal method employed)

Indicated Subject Value Before Project		
Highest and Best Use Before: Lt. Industrial		
Land value before		
Units 397,267 SF @ $4.00 per unit of comparison	$1,590,000	
	$	
Total Units Before 397,267 SF	Total land value before	$1,590,000
Improvement value before		
House-0-		
	$	
	$	
	Total improvement value	-0-
TOTAL SUBJECT VALUE BEFORE PROJECT		**$1,590,000**
Indicated Subject Value After Project		
Highest and Best Use After: Lt. Industrial		
Land Value after - Total Acquisition		
Units	-0-	
	$	
	$	
Total Units After	Total land value after	-0-
Improvements After Project		$
Building -0-	$	
Site Improvements	$	
	$	
	Total improvement value	-0-
Less Cost to Cure, if any		n/a
TOTAL SUBJECT VALUE AFTER PROJECT		**-0-**
Estimated value allocation of rights acquired		
Land:		
Fee purchase –397,267/SF x $4.00/SF	$1,590,000	
Temporary Easement-N/A	-0-	
Permanent Easement-N/A	-0-	
Total Land		**$1,590,000**
Improvements:		
Buildings	$	
Site Improvements-	$	
Total Improvements		**-0-**
Total Acquisition		**$1,590,000**
Plus Damages and Cost to Cure:		
Cost to Cure	$	
Loss in value after	$	
Total Damages and Cost to Cure		**$**
Less Special Benefits, if any	$	**-0-**
Total Estimated Owner Compensation		**$1,590,000**

Note: totals should be rounded to nearest significant market number. Total Subject value before less Total Subject value after must equal Estimated Owner Compensation.

13. REPORT OF CONTACT WITH OWNER:

Person(s) Contacted: Ms. Gilliland-Daughter of owner
Address: 12415 NE 83RD ST
VANCOUVER WA , 98682
Date of Contact:
Relationship to Owner:- Daughter of Owner
Date of Joint Inspection: N/A
Phone:

Identify all participants in the inspection: None.
Comments: I spoke with Ms. Gilliland, the owner's daughter via telephone. She was cordial and cooperative. Ms. Gilliland gave me permission to enter the subject and declined a joint inspection.

14. Personality Realty Report: State and Federal standards require the appraiser to identify the Ownership of real property improvements and personal property. Insert form RES 217 for Residential or RES 218 for Commercial or Industrial.

Section 15 Addenda

Item	Owner	Tenant	Realty	Personalty	Salvage Value
Land	x		x		
Building	n/a				
HVAC	n/a				
Stove	n/a				
Refrigerator	n/a				
Hot Water Heater	n/a				
Other Heat Source:	n/a				
	N/A				
Window Coverings					
Drapes					
Blinds					
Floor Coverings					
Carpeting					
Vinyl					
Other (List)					
Fencing	x		x		
Landscaping	x		x		

Map of Comparable Sales

MARKET DATA
Comparable No. L-1

(1) ADDRESS or LOCATION: SE 1st Street/Olympia Drive, Vancouver, WA
(2) SALE SKETCH AND PHOTO ARE ON FOLLOWING PAGE;

(3)
a. Access: SE 1st St.
b. Use at Sale: vacant
c. H & B Use: Commercial
d. Zoning: ML
e. Dimensions: see plat map
f. Area: 5.22 acres
g. Sale Date: 10-13
h. Price: $1,855,450
I. Instrument Type: WD
j. Terms: cash equiv.
k. Ex. Tax # or AF#: E. 701035
l. Seller: Steven Oliva
m. Buyer: Educational Service District 112
n. Confirmed With: Patty Petting-Education Service District 112

(4) LEGAL DESCRIPTION or TAX PARCEL NUMBER: Tax Parcel No. 110537-694 at several others

(5) PHYSICAL CHARACTERISTICS (confirmation information, property description at sale, changes since sale, etc.): This site was acquired for by The Educational Service District No. 112 for the development of a 60,000 SF office building and 25,000 SF warehouse building for their own use. According to the buyer's survey the useable area of the site is approximately 5.22 acres.

(6) ALLOCATION:

ITEM		CONTRIBUTION VALUE		MARKET UNIT
Land: 5.22 acres	$	1,855,450	$	8.16/SF
Buildings:	$		$	
	$		$	
	$		$	
Other (Site, Yard, etc.):	$		$	
	$		$	
TOTAL SALE PRICE	**$**	**1,855,450**	**$**	

MARKET DATA

Comparable No. L-2

(1) ADDRESS or LOCATION: 3703 NW Gateway Avenue, Vancouver, WA

(2) SALE SKETCH AND PHOTO ARE ON FOLLOWING PAGE;

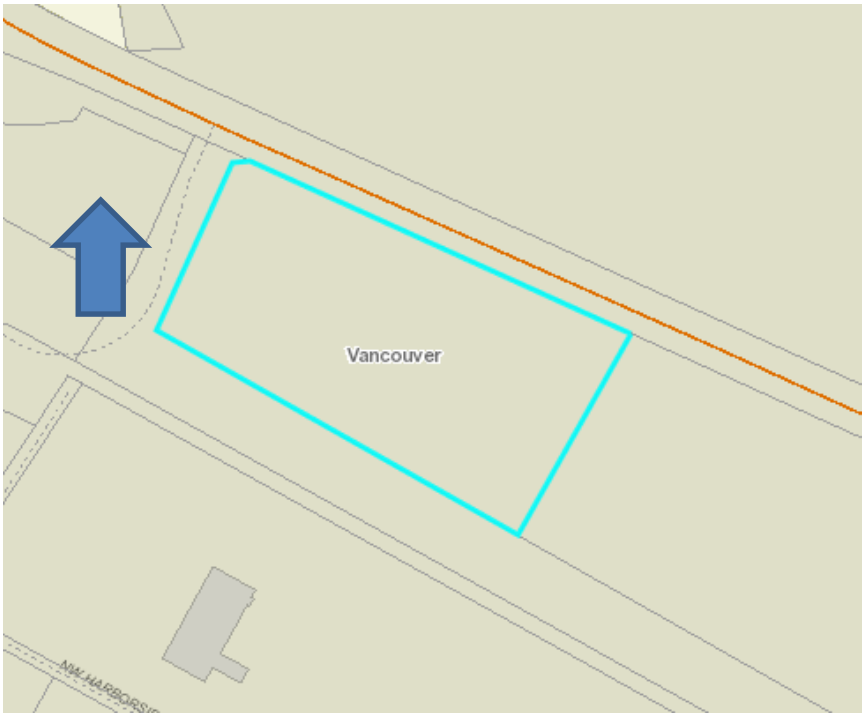
(3)
a. Access: NW Gateway Avenue
b. Use at Sale: vacant
c. H & B Use: Industrial
d. Zoning: IH
e. Dimensions: see plat map
f. Area: 20.00 acres
g. Sale Date: 6-11
h. Price: $5,082,500
I. Instrument Type: WD
j. Terms: cash equiv.
k. Ex. Tax # or AF#: AF No. 4768671
l. Seller: Port of Vancouver
m. Buyer: Reliable Steel Corp
n. Confirmed With: Clark County GIS and Costar

(4) LEGAL DESCRIPTION or TAX PARCEL NUMBER: Tax Parcel No. 152167-000

(5) PHYSICAL CHARACTERISTICS (confirmation information, property description at sale, changes since sale, etc.): This parcel was sold to Reliable Steel by the Port of Vancouver. The parcel is zoned high intensity industrial. The parcel was developed with a 21,000 SF distribution facility after sale. The parcel is mostly level and rectangular in shape. Located in the Port of Vancouver industrial area.

(6) ALLOCATION:

ITEM		CONTRIBUTION VALUE		MARKET UNIT
Land: 20.00 acres	$	$5,082,500	$	$5.83/SF
Buildings:	$		$	
	$		$	
	$		$	
Other (Site, Yard, etc.):	$		$	
	$		$	
TOTAL SALE PRICE	**$**	$5,082,500	**$**	


Vancouver

MARKET DATA

Comparable No. L-3

(1) ADDRESS or LOCATION: East side of NE 47th Avenue, opposite NE 68th Dr. Vancouver, WA
(2) SALE SKETCH AND PHOTO ARE ON FOLLOWING PAGE;

(3)
a. Access:. NE 68th Drive
b. Use at Sale: vacant
c. H & B Use: Light Industrial
d. Zoning: IL
e. Dimensions: see plat map
f. Area: 5.20 acres
g. Sale Date: 12-13
h. Price: $1,245,816
I. Instrument Type: WD
j. Terms: cash equiv.
k. Ex. Tax # or AF#: E. 703910
l. Seller: Parkside Commerce Center LP
m. Buyer: Valente Real Estate, LLC
n. Confirmed With: Jordan Farley of Parkside Commerce Center, LP

(4) LEGAL DESCRIPTION or TAX PARCEL NUMBER: Tax Parcel No. 156432000, 156512000

(5) PHYSICAL CHARACTERISTICS (confirmation information, property description at sale, changes since sale, etc.): This comparable includes two adjacent sites in the Parkside Commerce Center Development. These sites combine to form a trapezoidal shape. All public utilities are available to this site. The sites are mostly level in topography.

(6) ALLOCATION:

ITEM		CONTRIBUTION VALUE		MARKET UNIT
Land: 5.20 acres	$	$1,245,816	$	$5.50/SF
Buildings:	$		$	
	$		$	
	$		$	
Other (Site, Yard, etc.):	$		$	
	$		$	
TOTAL SALE PRICE	**$**	$1,245,816	**$**	

MARKET DATA
Comparable No. L-4

(1) ADDRESS or LOCATION: 6209 NE 121st Avenue, Vancouver, WA

(2) SALE SKETCH AND PHOTO ARE ON FOLLOWING PAGE;

(3)
a. Access: NE 121st Avenue
b. Use at Sale: Old house no value
c. H & B Use: Light Industrial
d. Zoning: IL
e. Dimensions: see plat map
f. Area: 1.86 acres
g. Sale Date: 2-14
h. Price: $425,000
I. Instrument Type: WD
j. Terms: cash equiv.
k. Ex. Tax # or AF#: E. 705711
l. Seller: Emmett Sharp
m. Buyer: RK Holdings, LLC
n. Confirmed With: Gordon Lewis- Listing Broker

(4) LEGAL DESCRIPTION or TAX PARCEL NUMBER: Tax Parcel No. 158392000 and 158364000

(5) PHYSICAL CHARACTERISTICS (confirmation information, property description at sale, changes since sale, etc.): This sale includes two adjacent tax parcels which combine to form an "L" shaped parcel of approximately 1.86 acres. The parcel is located at the southeast corner of NE 4th Plain Blvd. and NE 121st Avenue, a signalized corner. The parcels include some residential buildings which are allocated no contributory value. The parcel was originally listed for sale at $500,000.

(6) ALLOCATION:

ITEM		CONTRIBUTION VALUE		MARKET UNIT
Land 1.86 acres	$	$425,000	$	$5.25/SF
Buildings: Res. – no value	$	-0-	$	-0-
	$		$	
	$		$	
Other (Site, Yard, etc.):	$		$	
	$		$	
TOTAL SALE PRICE	**$**	**425,000**	**$**	

Subject
Property

MARKET DATA
Comparable No. L-5

(1) ADDRESS or LOCATION: 9501 NE 72nd Avenue, Vancouver, WA

(2) SALE SKETCH AND PHOTO ARE ON FOLLOWING PAGE;

(3)
a. Access: NE 72nd Ave.
b. Use at Sale: Old residence-no value
c. H & B Use: Light Industrial
d. Zoning: IL
e. Dimensions: see plat map
f. Area: 7.52 acres
g. Sale Date: Listing
h. Price: $1,637,900
I. Instrument Type: WD
j. Terms: cash equiv.
k. Ex. Tax # or AF#: N/A
l. Seller: Gabriel son
m. Buyer: N/A
n. Confirmed With: Eric Fuller, of Eric Fuller and Associates, Inc.-- Listing Broker

(4) LEGAL DESCRIPTION or TAX PARCEL NUMBER: Tax Parcel No. 155753000

(5) PHYSICAL CHARACTERISTICS (confirmation information, property description at sale, changes since sale, etc.): This is a listing on NE 72nd Avenue in Vancouver. The parcel is rectangular in shape and mostly level in topography with all public utilities available. The parcel has some older residential improvements which are allocated no value.

(6) ALLOCATION:

ITEM		CONTRIBUTION VALUE		MARKET UNIT
Land 7.52 acres	$	$1,637,900	$	$5.00/SF
Buildings: Res. – no value	$	-0-	$	-0-
	$		$	
	$		$	
Other (Site, Yard, etc.):	$		$	
	$		$	
TOTAL SALE PRICE	**$**	$1,637,900	**$**	

SITE
7.52 Acres
72nd Ave

MARKET DATA
Comparable No. L-6

(1) ADDRESS or LOCATION: 9600 NE 130th Avenue, Vancouver, WA
(2) SALE SKETCH AND PHOTO ARE ON FOLLOWING PAGE;

(3)
a. Access: NE 130th Avenue
b. Use at Sale: vacant
c. H & B Use: Light Industrial
d. Zoning: IL
e. Dimensions: see plat map
f. Area: 4.82 acres
g. Sale Date: 4-13
h. Price: $675,000
I. Instrument Type: WD
j. Terms: cash equiv.
k. Ex. Tax # or AF#: E. 692419
l. Seller: TFG Investments Col., LLC
m. Buyer: City of Vancouver
n. Confirmed With: Kelly Shea-Coldwell Banker RE-Listing Broker

(4) LEGAL DESCRIPTION or TAX PARCEL NUMBER: Tax Parcel No. 119536000

(5) PHYSICAL CHARACTERISTICS (confirmation information, property description at sale, changes since sale, etc.): This is a rectangular shape site which is zoned IL. The parcel was listed for sale and acquired by The City of Vancouver for the development of a future water storage location. The site was not acquired under the threat of eminent domain and can therefore be considered within this appraisal. The surrounding uses include mostly business park applications.

(6) ALLOCATION:

ITEM		CONTRIBUTION VALUE		MARKET UNIT
4.82 acres	$	675,000	$	3.21/SF
	$		$	
	$		$	
Other (Site, Yard, etc.):	$		$	
	$		$	
TOTAL SALE PRICE	**$**	**675,000**	**$**	

MARKET DATA
Comparable No. L-7

(1) ADDRESS or LOCATION: 10311 NE 72nd Avenue, Vancouver, WA
(2) SALE SKETCH AND PHOTO ARE ON FOLLOWING PAGE;

(3)
a. Access: NE 72nd Avenue
b. Use at Sale: vacant
c. H & B Use: Light Industrial
d. Zoning: IL
e. Dimensions: see plat map
f. Area: 7.55 acres
g. Sale Date: 12-12
h. Price: $800,000
I. Instrument Type: WD
j. Terms: cash equiv.
k. Ex. Tax # or AF#: E. 686838
l. Seller: Van Matson
m. Buyer: DeWitt Construction, Inc.
n. Confirmed With: Wayne Dewitt

(4) LEGAL DESCRIPTION or TAX PARCEL NUMBER: Tax Parcel No. 119536000

(5) PHYSICAL CHARACTERISTICS (confirmation information, property description at sale, changes since sale, etc.): This parcel is on the east side of NE 72nd Avenue, approximately 0.25 mile south of NE 119th Street. The parcel is rectangular in shape with water, power and telephone available but no public sewer. This parcel has approximately 2.70 acres of wetlands. Allocating a nominal value of approximately $20,000 per acre to the wetlands ($54,000®) indicates a value to the non-wetlands of approximately $746,000 or approximately $3.53 per SF. This parcel has an old house which will eventually be removed with the buyers develop this site with their new construction warehouse and office.

(6) ALLOCATION:

ITEM		CONTRIBUTION VALUE		MARKET UNIT
Land	$		$	
2.70 acre-wetlands		$54,000		$20,000/acre
4.85 acre-developable		$746,000		$3.53/SF
Buildings: house-no value	$	-0-	$	-0-
	$		$	
	$		$	
Other (Site, Yard, etc.):	$		$	
	$		$	
TOTAL SALE PRICE	**$**	**800,000**	**$**	

Sale
Property

Clark County Title
1400 Washington St., Suite 100
P.O. Box 1308 • Vancouver, WA 98660
Telephone (360) 694-4722 • Fax (360) 694-4734 • www.clarkcountytitle.com

Agent for
Old Republic National Title Insurance Company

ALTA COMMITMENT
Schedule A

Title Order No.: **00143995**

Escrow Officer: **Title Only**
Title Officer: **Dennis Noone**

Closing Agent:
Real Property Services
1300 Franklin St 4th Floor
Vancouver, WA 98666

1. Effective Date: **July 1, 2013** at **8:00 AM**

Re: **Fleischer**

2. Policy or policies to be issued:

   a. **Owner's Standard Coverage** — Amount $TO COME
      Proposed Insured:
      To Come

   b. **None** — Amount $
      Proposed Insured:

   c. **None** — Amount $
      Proposed Insured:

PREMIUM INFORMATION:

A.	**General Rate – to come**	$	Tax: $	Total: $
B.		$	Tax: $	Total: $
C.		$	Tax: $	Total: $

(Agent portion of the total Premiums is: $to come)
(Underwriter portion of the total Premiums is: $to come)

3. The estate or interest in the land described herein and which is covered by this commitment is:
   Fee Simple

4. The estate or interest referred to herein is at Date of Commitment vested in:
   Felix F. Fleischer and Bonnie R. Fleischer, husband and wife

5. The land referred to in this Commitment is situated in the County of **Clark**, State of Washington and is more fully described in the attached Exhibit A.

Clark County Title Company

By Dennis Noone
Dennis Noone, Authorized Signature
dennis@clarkcountytitle.com

EXHIBIT "A"

The following described property, situated in the County of Clark, State of Washington:

BEGINNING at a point 5.705 chains North of the Southwest corner of James and Delia McCallister Donation Land Claim in Section 4, Township 2 North, Range 2 East of the Willamette Meridian; thence East parallel with the South line of said Donation Land Claim 17.522 chains to the West line of the tract conveyed to Northern Pacific Railway by Deed recorded in Book "71" at page 255, records of said County; thence North along said line 5.705 chains; thence West parallel with the South line of said Donation Land Claim 17.522 chains to the West line of said Donation Land Claim; thence South 5.705 chains to the Point of Beginning.

EXCEPT County Roads.

ALSO EXCEPT that portion conveyed to Clark County, Washington under Auditor's File No. 9607160163.

Schedule B - continued

Commitment No. **00143995**

THE ASSESSED VALUE of the property herein described is as follows:
$566,463.00 Land
$ 0.00 Structure
$566,463.00 Total

4. REAL PROPERTY TAXES - TOTAL DUE MAY INCLUDE FIRE PATROL ASSESSMENT, R.I.D. ASSESSMENT AND/OR CLEAN WATER PROJECT ASSESSMENT, IF ANY, not including interest and penalty after delinquency:

Year	Amount	Paid	Owing
2013	$5,101.70	$0.00	$5,101.70

Tax Account No: 199854-000 School District Code No: 114037

Real property taxes are a lien January 1st, payable February 15th, first half delinquent May 1st and second half delinquent November 1st.

Jurisdiction: Clark County

THE ASSESSED VALUE of the property herein described is as follows:
$335,451.00 Land
$ 0.00 Structure
$335,451.00 Total

NOTE: Tax payments can be mailed to the following address:

Clark County Treasurer
PO Box 5000
Vancouver, WA 98660
Phone: 360-397-2252

5. Any unpaid assessments or charges, and liability for further assessments or charges by Clark Regional Wastewater District.

6. MATTERS SET FORTH BY SURVEY:
Recorded: October 9, 1984
Book / Page Of Surveys: 18 / 9

NOTE: THE FOLLOWING IS A 24 MONTH CHAIN OF TITLE

This is for informational purposes only. The following Deed(s) affecting said land were recorded within 24 months of the date of this report:

There are no conveyances affecting said premises recorded within the last 24 months.

End of Schedule B

Schedule B - continued

Commitment No. **00143995**

THE ASSESSED VALUE of the property herein described is as follows:
$566,463.00 Land
$ 0.00 Structure
$566,463.00 Total

4. REAL PROPERTY TAXES - TOTAL DUE MAY INCLUDE FIRE PATROL ASSESSMENT, R.I.D. ASSESSMENT AND/OR CLEAN WATER PROJECT ASSESSMENT, IF ANY, not including interest and penalty after delinquency:

Year	Amount	Paid	Owing
2013	$5,101.70	$0.00	$5,101.70

Tax Account No: 199854-000 School District Code No: 114037

Real property taxes are a lien January 1st, payable February 15th, first half delinquent May 1st and second half delinquent November 1st.

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$ 0.00 Structure
$335,451.00 Total

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Recorded: October 9, 1984
Book / Page Of Surveys: 18 / 9

NOTE: THE FOLLOWING IS A 24 MONTH CHAIN OF TITLE

This is for informational purposes only. The following Deed(s) affecting said land were recorded within 24 months of the date of this report:

There are no conveyances affecting said premises recorded within the last 24 months.

End of Schedule B

ALTA COMMITMENT

Schedule C

Title Order No.: **00143995**

The following matters will not be listed as Special Exceptions in Schedule "B" of the Policy to be issued pursuant to this Commitment.

NOTES TO CLOSER:

1. Requirements: Instruments creating the estate or interest to be insured must be approved and filed of record.

2. Requirements: Payment of cancellation fee in accordance with our filed rate Schedule, to be imposed if this transaction is canceled for any reason.

3. This Commitment shall not obligate the Company to issue any Endorsement. All Endorsements to be issued must be agreed to by the Company and appropriate for the estate insured.

4. Any sketch or map enclosed as an attachment herewith is furnished for information purposes only to assist in property location with reference to streets and other parcels. No representation is made as to accuracy and the Company assumes no liability for any loss occurring by reason of reliance thereon.

5. Title will be vested in parties yet undisclosed. When title is vested, their title will be subject to matters of record against their names.

6. The address of the subject property is as follows:
   9114 & 9115 NE 94th Avenue
   Vancouver, WA 98662

7. The abbreviated legal description of the subject property is as follows:
   SE NW Section 4, Township 2N, Range 2EWM

8. The legal description contained herein was taken from the record and presumed intention of the parties to the transaction. Closing instructions must indicate that the legal description has been reviewed and approved by all parties.

9. **SKAMANIA RECORDINGS:**
   NOTE: Please allow an extra day for Skamania recordings to be sent to the courthouse, as we do not have a same day courier service. Skamania County Offices are closed on Fridays so anything received Thursday or Friday will not be recorded until the following Monday.

End of Schedule C

DN/lr

ALTA COMMITMENT

Schedule B

Title Order No.: **00143995**

Schedule B of the policy or policies to be issued will contain exceptions to the following matters unless the same are disposed of to the satisfaction of the Company.

GENERAL EXCEPTIONS:

A. Defects, liens encumbrances, adverse claims or other matters, if any, created, first appearing in the public records or attaching subsequent to the effective date hereof but prior to the date the proposed insured acquires for value of record the estate or interest or mortgage thereon covered by this Commitment.

B. Any policy issued pursuant hereto will contain the Exclusion from Coverage, and under Schedule B, the standard exceptions as set forth and identified as to the type of policy on the attached Schedules of Exclusions & Exceptions.

SPECIAL EXCEPTIONS:

1. LIEN OF EXCISE TAX, if unpaid.

   Excise tax rates in Clark County are 1.78% of the sales price, except for Yacolt School District Code Nos. 119050 and 119051, which is 1.53% of the sales price.

   Skamania County properties, the excise tax rate is 1.53% of the sales price.

2. REAL PROPERTY TAXES - TOTAL DUE MAY INCLUDE FIRE PATROL ASSESSMENT, R.I.D. ASSESSMENT AND/OR CLEAN WATER PROJECT ASSESSMENT, IF ANY, not including interest and penalty after delinquency:

Year	Amount	Paid	Owing
2013	$2,433.31	$0.00	$2,433.31
Tax Account No: 199861-000		School District Code No: 114037	

   Real property taxes are a lien January 1st, payable February 15th, first half delinquent May 1st and second half delinquent November 1st.

   Jurisdiction: Clark County

   THE ASSESSED VALUE of the property herein described is as follows:

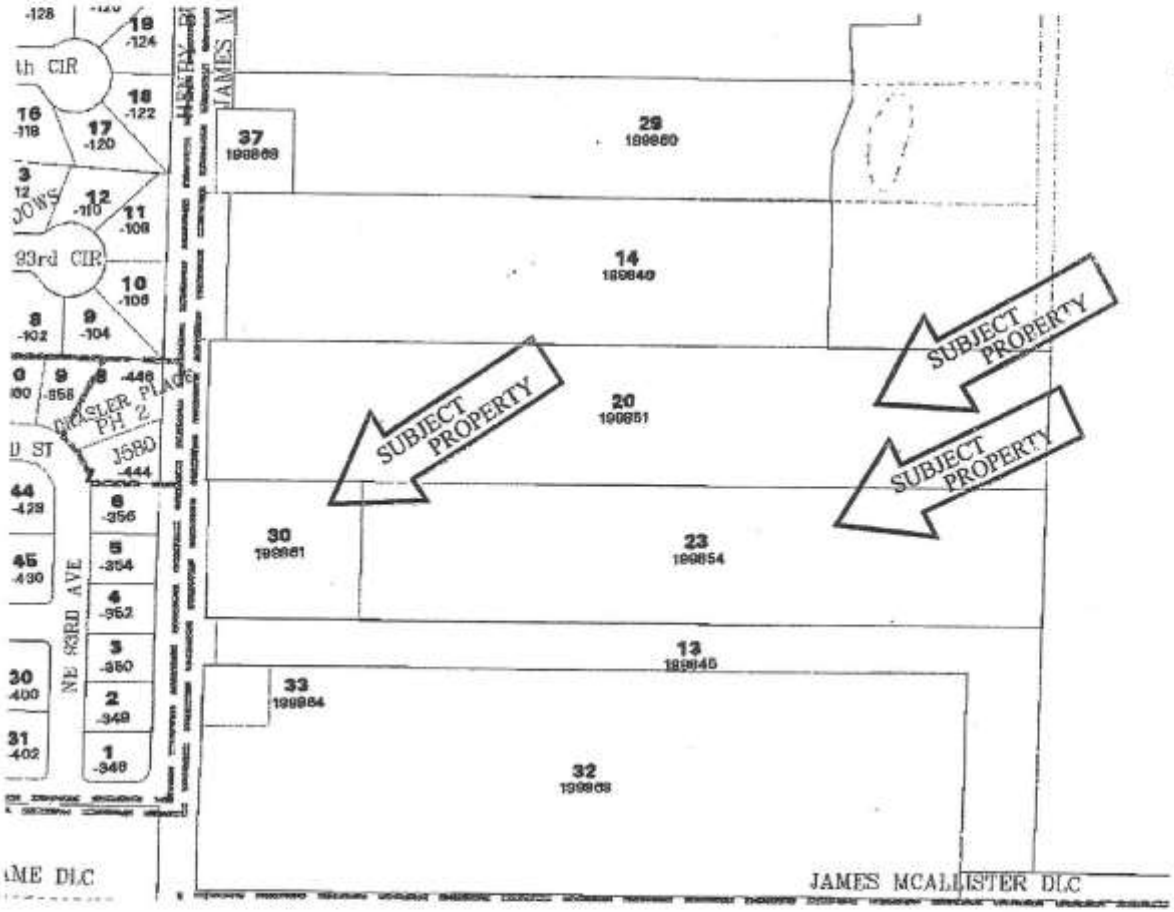
$160,425.00	Land
$ 0.00	Structure
$160,425.00	Total

3. REAL PROPERTY TAXES - TOTAL DUE MAY INCLUDE FIRE PATROL ASSESSMENT, R.I.D. ASSESSMENT AND/OR CLEAN WATER PROJECT ASSESSMENT, IF ANY, not including interest and penalty after delinquency:

Year	Amount	Paid	Owing
2013	$8,599.97	$0.00	$8,599.97
Tax Account No: 199851-000		School District Code No: 114037	

   Real property taxes are a lien January 1st, payable February 15th, first half delinquent May 1st and second half delinquent November 1st.

   Jurisdiction: Clark County

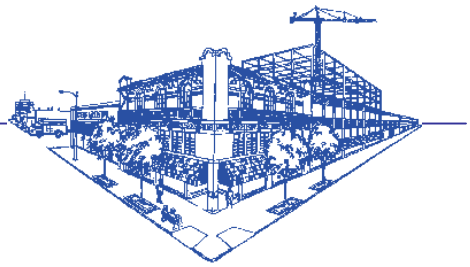


Wednesday, Jul 03, 2013 11:23 AM

APPENDIX G

MARKET ANALYSIS OF SITE REUSE CONCEPTS

E. D. Hovee
& Company, LLC
Economic and Development Services



MEMORANDUM

To:	Seth Otto – Maul Foster & Alongi, Inc. (MFA)
From:	Eric Hovee
Subject:	Phase 2 Market Analysis of Leichner Site Reuse Concepts
Date:	February 6, 2015

By memorandum dated March 12, 2014, E. D. Hovee & Company, LLC provided a Phase 1 overview market assessment for reuse of properties associated with the Leichner Landfill Master Plan process. Purposes of the Phase 1 overview assessment were to Identify and briefly evaluate a wide range of potential industrial, residential, recreation and open space uses, and possible mixed use development options. For each use considered, the report also provided an assessment of pertinent market trends, site advantages and disadvantages, potential economic returns, key issues to be addressed, and implementation requirements for each use considered.

While this analysis has addressed reuse opportunities for the entire 128-acre master plan area, the primary focus has been on development potentials for the 31.5-acre county-owned (Koski) property at the southern portion of the overall site assemblage. As a result of a recently awarded Integrated Planning Grant (IPG), the site area evaluated has been expanded to include an adjoining privately owned 9.9-acre site (Fleischer), bringing the total area considered for business park or industrial development to approximately 41.4 acres.

The overview market assessment was reviewed with the MFA project team and Clark County together with a design charrette meeting involving a real estate expert panel. Based on the input received, the project team has prepared six conceptual planning options for further consideration as part of this more refined Phase 2 assessment.

For each of the six planning concepts, the purposes of this subsequent and refined Phase 2 market analysis are to:

- Refine site-specific market support (in terms of land needs and time required for land absorption), and supportable land pricing (net of environmental remediation).
- Also evaluate potential resulting economic benefits (including jobs plus direct tax revenues to Clark County).

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(360) 696-9870 • (503) 230-1414 • Fax (360) 696-8453
E-mail: edhovee@edhovee.com

CONCEPT PLANNING OPTIONS EVALUATED

As depicted by the map on the following page, the approximately 128-acre Leichner Landfill Master Plan Area is located on the east side of NE 94th Avenue, with the southern boundary of the site situated approximately 0.3 miles north of Padden Parkway. The northern boundary of the site extends just beyond what is planned as the future extension of NE 99th Street.

With input from the full MFA project team, BergerABAM has identified six property development conceptual planning options for further market feasibility and economic impact analysis. The first three planning options are depicted for the 31.5-acre Koski property alone. The next three options assume potential opportunity for county purchase and/or joint development of the Koski plus adjoining 9.9-acre Fleischer properties on a combined basis:

Koski Property Only (31.5 acres):

- **Conceptual Planning Option 1**
  Industrial Subdivision – 90th Street Access (Six parcels of 1.87 - 11.43 acres in size)
- **Conceptual Planning Option 2**
  Industrial Subdivision – 88th Street Access (Six parcels of 3.63 - 5.36 acres)
- **Conceptual Planning Option 3**
  Industrial Campus Sites (Three parcels of 2.33 - 11.10 acres)

Koski + Fleischer Properties (41.4 acres combined):

- **Conceptual Planning Option 4**
  Industrial Subdivision – 90th Street Access (Nine parcels of 1.87 - 11.43 acres)
- **Conceptual Planning Option 5**
  Industrial Subdivision – 88th Street Access (Eight parcels of 3.63 - 5.62 acres)
- **Conceptual Planning Option 6**
  Industrial Campus Sites (Four parcels of 2.33 - 17.50 acres)

The map is followed by one-page summary descriptions of key development assumptions and methodology used for evaluating each of the six conceptual planning options considered. The final section of this report provides a side-by-side financial and economic evaluation of the six conceptual options, including summary implications for marketing and development.

Concept diagrams provided on the following pages focus only on the Koski and Fleisher portions of the Leichner Master Plan Area anticipated for re-development. Developable acreages are adjusted to assure consistency with total site area across all six conceptual options.

Options 4-6 include the Fleischer property, assuming that Clark County would be responsible for 50% of Fleischer site high-end remediation costs. Implications of other lower cost remediation alternatives are discussed later in this report. Purchase price of the Fleisher site has yet to be determined, so no specific cost allocation is made with this report.

Location of Leichner Master Plan Properties

Source: Maul Foster Alongi.

Option 1 – Industrial Subdivision w/90th Street Access (Koski Only)

This conceptual plan involves creation of an industrial subdivision of six parcels – ranging in size from about 1.9 - 11+ acres in size. Access from NE 94th Avenue would be from construction of a new street (NE 90th) extending west-east into the Koski property – together with two internal streets stubbed to the northern property line (between the Koski and Fleischer sites).

Acreage. Six parcels with 26.5 acres developable on the 31.5-acre site; remaining site area reserved for rights of way, buffer area, storm sewer, monitoring wells and methane collection facilities.

Conceptual Planning Option 1

Source: BergerABAM

Buildings. Estimated at 457,630 square feet of building development for overall FAR/site coverage of 0.40 (with predominantly 1-story development).

Uses. Single and multi-tenant commercial office and retail fronting on 94th Avenue, with single or multi-tenant industrial/service businesses on mid-parcels and space for large manufacturing or distribution use on the eastern 11+ acres.

Land Pricing. *Shovel-ready* pricing ranging from $4.00 per square foot for 11+ acre parcel at the eastern end of the property to $7.50 on 94th Avenue frontage. With deduction for infrastructure and accounting for parcel sales over a multi-year period, the net present value (NPV) of proceeds to Clark County is estimated at $3.09 per square foot over the full 31.5 acres.

Site Development. Conceptual planning includes development of approximately 2,000 lineal feet of interior roadway (least of any alternative) and water/sewer infrastructure at cost of $1.2 million. Net proceeds to Clark County, which includes the *sticker price* for land *minus* developer incurred infrastructure and transaction costs, is estimated at $4.9 million (in 2014 dollars).

Phasing. Likely starting at western street frontage on NE 94th Avenue, extending eastward as warranted by market demand. Option to develop eastern large site earlier with commitment from qualified credit user. Assumes land sales over 8 years with build-out by Years 9-10.

Economic Benefits. Including on-site plus economic multiplier benefits, reflects potential impact of 1,245 jobs at full development with wages averaging $53,550 per year. One-time development-related revenues estimated at $3.8 million with subsequent ongoing tax revenues at $1.5 million annually to Clark County plus other state/local jurisdictions.

Option 2 – Industrial Subdivision w/88th Street Access (Koski Only)

This second conceptual plan option involves creation of an industrial subdivision of six relatively uniformly sized parcels – ranging in size from about 3.6 - 5.6 acres in size. Access from NE 94th Avenue would be from construction of a new street at the southern edge of the property (NE 88th) extending west-east into the Koski property – together with one internal street stubbed to the northern property line (between the Koski and Fleischer sites).

Acreage. Six parcels with 26.1 acres developable on 31.5-acre site; remaining site area reserved for rights of way, buffer area, storm sewer, monitoring wells and methane collection facilities.

Buildings. Estimated at 432,310 square feet of building development for overall FAR/site coverage of 0.38 (with predominantly 1-story development).

Conceptual Planning Option 2

Source: BergerABAM

Uses. Single and multi-tenant commercial office and retail fronting on 94th Avenue, with industrial/service businesses on interior parcels.

Land Pricing. *Shovel-ready* pricing ranging from $5.00 per square foot for the most interior parcels at cul-de-sac ends to $7.50 for a SW frontage parcel. With deduction for infrastructure and accounting for parcel sales over a multi-year period, the net present value (NPV) of proceeds to Clark County is estimated at $3.26 per square foot (highest NPV of the options considered).

Site Development. Conceptual planning includes development of approximately 2,290 lineal feet of interior roadway and water/sewer infrastructure at cost of $1.3 million. Net proceeds to Clark County, which include *sticker price* for land *minus* developer incurred infrastructure and transaction costs, is estimated at $5.2 million in 2014 dollars (most yield of Koski-only options).

Phasing. Starting at western street frontage on NE 94th Avenue, extending east and north as warranted by market demand. Assumes land sales over 8 years with 9-10 year site build-out.

Economic Benefits. Including on-site plus economic multiplier benefits, reflects potential impact of 1,265 jobs at full development with wages averaging $52,810 per year. One-time development-related revenues estimated at $3.6 million with subsequent ongoing tax revenues at $1.5 million annually to Clark County and other state/local jurisdictions.

Option 3 – Industrial Campus Sites (Koski Only)

This concept involves just three parcels – ranging up to 11+ acres for industrial and business park development. 94th Avenue access would be from two new streets extending west-east into the Koski property – joined together for an industrial cul-de-sac at the eastern parcel.

Conceptual Planning Option 3

Source: BergerABAM

Acreage. Three parcels with 25.0 acres developable (least efficient of six concepts); rest of site for rights of way, buffer, storm sewer, monitoring wells, and methane collection.

Buildings. Estimated at 461,560 square feet of building development for overall 0.42 FAR.

Uses. The large parcel fronting NE 94th Avenue is likely developed as a multi-tenant business park with a mix of retail, service, office and smaller distribution uses. The smaller 2.3-acre parcel (mid-site) could be developed by a single industrial or office user. The eastern 10.5 acres could develop as a second phase business park or for a single industrial user.

Land Pricing. *Shovel-ready* pricing ranging from $4.00 per square foot for eastern 10+ acre parcel to $6.00 for frontage and small interior site. With deduction for infrastructure and accounting for parcel sales over a multi-year period, the net present value (NPV) of proceeds to Clark County is estimated at $2.46 per square foot of land area over the full 31.5-acre site.

Site Development. Conceptual planning includes development of approximately 2,680 lineal feet of interior roadway (most of the Koski alternatives) and water/sewer infrastructure at cost of $1.5 million. Net proceeds to Clark County, including *sticker price* for land *minus* developer incurred infrastructure and transaction costs, is estimated at $3.8 million (in 2014 dollars).

Phasing. Starting with one or both accesses from NE 94th Avenue, then closing the loop and extending eastward as warranted by market demand. By appealing to business park plus end user demand, land sales could occur in as little as five years with build-out by about Year 8.

Economic Benefits. Including on-site plus economic multiplier benefits, reflects potential impact of 1,360 jobs at full development with wages averaging $50,960 per year. One-time development-related revenues estimated at $4.1 million with subsequent ongoing tax revenues at $1.9 million annually to Clark County and other state/local jurisdictions.

Option 4 – Industrial Subdivision w/90th Street Access (Koski+Fleischer)

This conceptual plan involves creation of an industrial subdivision of nine parcels (the most of any concept) – ranging in size from about 1.9 - 11+ acres in size. As with Option 1, access from NE 94th Avenue would be from construction of a new street (NE 90th) extending west-east into the Koski property – together with two internal streets stubbed north to the Fleischer property.

Acreage. Nine parcels with 36.0 acres developable on 41.4-acre combined site; remaining site area reserved for rights of way, buffer area, storm sewer, monitoring wells and methane collection facilities.

Buildings. Estimated at 611,610 square feet of building development for overall FAR/site coverage of 0.39 (with predominantly 1-story development).

Conceptual Planning Option 4

Source: BergerABAM

Uses. Single or multi-tenant commercial office and retail situated at the 94th Avenue/90th Street intersection, with single or multi-tenant industrial/service businesses on mid-parcels and space for a large manufacturing or distribution use on the eastern 11+ acres.

Land Pricing. *Shovel-ready* pricing ranging from $4.00 per square foot for the 11+ acre parcel at the eastern end of the property to $7.50 on two 94th Avenue frontage parcels. Deducting for infrastructure and an assumed 50% county share of (high-end) Fleischer remediation costs, the NPV of proceeds to Clark County is estimated at $2.31 per square foot over the full 41.4-acre site. As noted, options 4-6 do not include an allocation for purchase price of the Fleischer site.

Site Development. Includes development of 2,240 lineal feet of interior roadway with water/sewer at a cost of $1.3 million, plus the county share of Fleischer site remediation at $1.675 million. Net proceeds to Clark County are estimated at $5.3 million (in 2014 dollars).

Phasing. Starting at western street frontage on NE 94th Avenue, extending east and north as warranted by market demand. Assumes land sales over 11 years with build-out by Year 12.

Economic Benefits. Including on-site plus economic multiplier benefits, reflects potential impact of 1,710 jobs at full development with wages averaging $53,290 per year. One-time development-related revenues estimated at $5.1 million with subsequent ongoing tax revenues at $2.0 million annually to Clark County and other state/local jurisdictions.

Option 5 – Industrial Subdivision w/88th Street Access (Koski+Fleischer)

This conceptual plan involves creation of an industrial subdivision of eight relatively uniformly sized parcels – ranging in size from about 3.6 - 5.6 acres in size. As with Option 2, access from NE 94th Avenue would be from construction of a new street at the southern edge of the property (NE 88th) extending west-east into the Koski property – together with one internal street stubbed to the northern property line (at the boundary of the Koski and Fleischer sites).

Acreage. Eight parcels with 35.9 acres developable on 41.4-acre combined site; remaining site area reserved for rights of way, buffer area, storm sewer, monitoring wells and methane collection facilities.

Buildings. Estimated at 579,780 square feet of building development for overall FAR/site coverage of 0.37 (with predominantly 1-story development).

Conceptual Planning Option 5

Source: BergerABAM

Uses. Single or multi-tenant commercial retail/service situated in proximity to the 94th Avenue/88th Street intersection, with opportunity for single or multi-tenant industrial/service businesses on interior parcels.

Land Pricing. *Shovel-ready* pricing ranges from $4.00 per square foot for the eastern parcel to $7.50 for the SW corner parcel. With deductions for infrastructure and a 50% county share of Fleischer (high-end) remediation costs, the NPV of proceeds to Clark County comes in at $2.37 per square foot averaged over the 41.4-acre site (excluding cost of Fleischer site purchase).

Site Development. Includes 2,290 lineal feet of interior roadway and water/sewer infrastructure at a cost of $1.3 million, plus the county share of Fleischer site remediation at $1.675 million. Net proceeds to Clark County are estimated at $5.4 million (in 2014 dollars).

Phasing. Likely starting at western street frontage on NE 94th Avenue, extending eastward as warranted by market demand. Option to develop eastern large site earlier with commitment from qualified credit user. Assumes land sales over 11 years with build-out in 12 years.

Economic Benefits. Including on-site plus economic multiplier benefits, reflects potential impact of 1,785 jobs at full development with wages averaging $52,340 per year. One-time development-related revenues estimated at $5.0 million with subsequent ongoing tax revenues at $2.1 million annually to Clark County and other state/local jurisdictions.

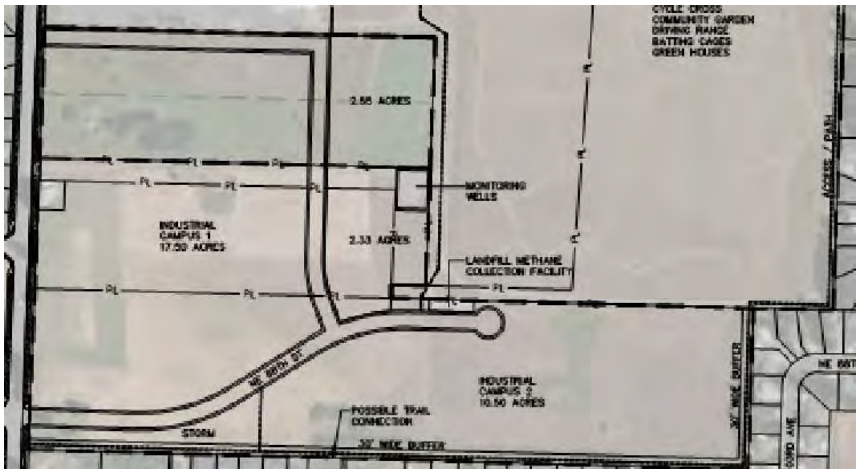
Option 6 – Industrial Campus Sites (Koski+Fleischer)

Option 6 comprises four parcels – ranging from about 2.3 to 17+ acres for business park development. Access from NE 94th Avenue would be from two new streets extending west-east into the Koski and Fleischer properties – with an industrial cul-de-sac at the eastern parcel.

Acreage. Four parcels at 34.8 acres developable on 41.4-acre site; rest of site area reserved for rights of way, buffer area, storm sewer, monitoring wells and methane collection facilities.

Buildings. Estimated at 636,930 square feet of building area (highest of any option), FAR of 0.42.

Conceptual Planning Option 6



Source: BergerABAM

Uses. The 17.5-acre parcel fronting NE 94th Avenue is likely developed as a multi-tenant business park with a mix of retail, service, office and smaller distribution uses, possibly in multiple phases. The two mid-parcels (of 2-3 acres each) could be sold for single industrial or office users – with the eastern 10.5 acres developed as a final phase business park or for a single large industrial user.

Land Pricing. *Shovel-ready* pricing from $4.00 per square foot for the 10.5-acre parcel at the eastern end of the property to $5.75 for the large frontage parcel and $6.00 for the smaller interior sites. With deductions for infrastructure and (high-end) Fleischer remediation costs, the NPV of proceeds to Clark County is estimated at $1.68 per square foot over the full 41.4-acre site (lowest of the site concepts considered and excluding costs of Fleischer site purchase).

Site Development. Includes 3,050 lineal feet of interior roadway (highest of any alternative) and water/sewer infrastructure at cost of $1.7 million, plus 50% county share of Fleischer site remediation at $1.675 million. Net proceeds to Clark County at $3.8 million (in 2014 dollars).

Phasing. Likely starting at western street frontage on NE 94th Avenue, extending eastward as warranted by market demand. Option to develop eastern large site earlier with commitment from qualified credit user. Assumes land sales over 11 years with build-out by about Year 13.

Economic Benefits. With on-site plus economic multiplier benefits, up to 1,975 jobs at built-out with wages averaging $50,320 per year. One-time revenues estimated at $5.8 million with subsequent ongoing tax revenues at $2.8 million annually to Clark County and other state/local jurisdictions. At build-out, jobs and tax revenues are the highest of the six concepts considered.

DEVELOPMENT ASSUMPTIONS & METHODOLOGY

This section of the report provides added explanatory detail regarding development assumptions and the methodology associated with the site specific profiles just provided. This discussion covers factors affecting site valuation and economic benefits of land use, mix of uses anticipated, site development costs, common infrastructure and environmental remediation costs, land pricing, absorption, and financial considerations.

Land Use

Land use can be considered from both regulatory and best practice industry perspectives. An important question for this analysis is the extent to which the site is developed in a primarily light industrial (IL) versus multi-tenant business park (BP) configuration. IL and BP uses are defined in a different, albeit related, manner for purposes of zoning regulation.

Current IL Zoning. All of the Koski and Fleischer acreages are currently designated for light industrial (IL) use. As described in the earlier overview market assessment, the IL light industrial designation allows for a wide range (of all but the heaviest) agricultural, utility, construction, manufacturing, wholesale trade, transportation and warehousing uses on an outright permitted basis. Also allowed as permitted uses are a number of office and service related activities, though it is noted that some educational and major health care uses are either excluded or allowed on a conditional use basis with limitations.

Retail, including food service, uses except for auto/motor vehicle dealers and general merchandise stores are generally allowed – though some retail uses are limited to a maximum of 10% of gross floor area of all buildings on the development site. Gasoline stations are a conditional use.

Alternative BP Zoning. As an alternative to the current IL designation, Clark County has requested consideration of the implications of re-designating part or all of the Koski/Fleischer property to a business park (BP) designation. The BP business park district is intended to provide for uses including limited light manufacturing and wholesale trade, light warehousing, business and professional services, research, business and corporate offices, and other similar uses not oriented to the general public.

There is no substantive difference between IL and BP designations for many industrial and related uses. The limitation of 10% of development site floor area for retail uses that is applied to IL is also mirrored by the BP designation. Uses permitted in IL but not in BP include:

- Outdoor storage – as for building materials and contractors' equipment
- Chemical, plastics, clay/glass, much of metals, transportation, furniture manufacturing
- Retail sales of construction and industrial equipment, building materials and fuel dealers
- Rental and leasing services and personal property storage

However, the BP designation provides greater flexibility to accommodate a number of service related uses on either an outright or conditional use basis – including business/computer/ management training schools, educational support services, hospitals, nursing and residential care facilities, social assistance, lodging, funeral homes, and religious/non-profit/professional organizations.

Site development standards for BP and IL districts are similar, except that BP has a minimum lot area of 5 acres (unless consistent with a site plan approval), requires 20 foot side and rear setbacks (when abutting residential property), and requires minimum landscaping of 15% rather than 10% for IL zoning.

BP properties are also subject to additional development standards related to uses in setbacks, fencing, site landscaping and building design, and pedestrian access. The BP designation also allows retail uses to exceed the 10% minimum with an added 2.5% each for inclusion of structured parking, half-mile access to a transit stop, provision of child care facilities on-site, and provision of pedestrian spaces and amenities. Structured parking is not anticipated to be financially feasible with this site.

IL/BP Comparison. Major advantages of continuing with the IL designation appear to include a greater range of industrial uses allowed and greater building site coverages possible to maximize land utilization.

In comparison, BP offers the advantage of avoiding uses and site proximity, which may be viewed as detrimental to adjoining residential use – especially for the large site area furthest from the 94th Avenue frontage. The BP designation also widens the range of service uses and retail space that is possible – with potential improvements to land values in proximity to 94th Avenue.

BP designation may lead to lower overall site utilization; however this may be offset by increased per square foot land valuation. A proposal that involves greater orientation to service, including office-related business, than manufacturing or distribution space might benefit more readily from a BP redesignation.

Parking & Loading Requirements. By Clark County code, parking requirements are applied similarly across all zoning designations, depending on the use under consideration. The code also stipulates that where a building may be used for more than one purpose without limiting permitted used, parking spaces are to be provided based on the possible uses that require the most spaces. In these cases, a developer of multi-tenant space is typically inclined to err on the side of providing ample, rather than too little, parking:

- For industrial uses, parking is required at a rate of 1 space per 1,500 square feet of distribution space, 1 space per 600 square feet of lab and research space, and 1 space per 500 square feet of other permitted uses. For this analysis, an average ratio of 1 space per 600 square feet of floor area is assumed.

- For commercial uses, parking requirements range from 1 space per 200 square feet of building area with medical/dental offices to 1 space per 750 square feet of floor area for service or repair shops – with most office uses at 1 space per 400 square feet and dining at 1 space per 250 square feet. For this analysis, an average ratio of 1 space per 250 square feet of floor area is assumed with IL zoning/use mix and 1 space per 300 square feet with more office-oriented BP mix.

For both industrial and commercial uses, one truck loading berth is required for buildings of 30,000 - 100,000 square feet in size, with an additional berth required for larger buildings.

Consideration of parking and loading requirements has influenced planning assumptions made with regard to anticipated site coverages and floor area ratios (FARs) utilized for varied uses with this Phase 2 market analysis – as detailed by a subsequent section to this report.

Zoning Assumption. For purposes of this market and economic analysis, it is assumed that the existing IL zoning remains in place for the Koski and Fleischer properties. At this preliminary stage, our analysis would also indicate that there is not likely to be an appreciable difference in property value realized with BP than IL designation.

However, as market conditions change and as specific purchasers emerge, it is possible that some development plans might be more suited to BP than IL designation. Flexibility to consider proposals for partial or complete site redesignation to BP use is recommended as a means to better facilitate property marketing and pricing.

Business Use Mix & Cost

Conceptual planning options as illustrated have been categorized as:

- Single use light industrial (IL) or campus-oriented, multi-tenant business park (BP)
- Industrial (light manufacturing, distribution) or commercial (retail, office, service) use

Site Parameters. Each combination of IL/BP configuration and industrial/commercial use is associated with varied site parameters covering such items as:

- Number of floors – assumed as single level for IL site configuration, with perhaps a 10%-20% proportion of 2-story development in BP configuration.
- Parking ratios – greater for commercial than industrial use.
- Landscaping allocation – set at a minimum of 10% of site area for IL And 15% for BP related development.

Added detail regarding these and related site parameters are provided by the appendix to this report.

Parcel-Specific Development Costs. As is also detailed by the appendix, hard cost estimates cover:

- Building construction – with higher costs indicated for commercial than industrial use.
- Site preparation – allocated on a per square foot of land area basis.
- Parking – associated with land area needed for on-site parking and loading.

Infrastructure & Environmental Remediation Costs

In addition to parcel specific costs, there are two categories of site cost that are distributed across all parcels. These are costs of infrastructure and environmental remediation.

Infrastructure. As was detailed by the Phase I market overview, the Leichner area appears to be served with street and utility that would be adequate to support industrial reuse of the Koski and Fleischer properties. Widening of NE 94th Avenue planned for 2015 will be of particular importance to improve site accessibility and relative attractiveness of this property for both freight-related industrial users, as well as for retail-service activities with street frontage orientation. One issue that likely will need to be addressed with manufacturing use is improvement of natural gas capacity.

For prospective purchaser(s), the need for construction and the associated cost of on-site infrastructure will be the primary added question affecting development feasibility. Specifically assumed with this analysis is the need for:

- Internal commercial/industrial street network – likely as a privately developed 42-foot-wide roadway together with inclusion of sidewalks, curbs and gutters.
- Associated storm drainage, sanitary sewer, and water main.
- Roadside bio-filtration and a separate treatment pond.

As detailed by the appendix to this report, MFA has prepared infrastructure cost estimates for each of the six site development concepts. The range of cost is from just under $1.2 million to $1.7 million. This range is influenced by the lineal feet of roadway and by whether the development includes the Fleischer, as well as Koski, property.

It is likely that infrastructure construction will be phased to match, rather than occur too far in advance of, demand from specific users or tenants (as noted with the option-by-option descriptions). This avoids the risk of making infrastructure investments without an immediate source of repayment. With this analysis, it is also assumed that 100% of the cost of providing the above noted infrastructure will be the responsibility of the site purchaser(s).

Environmental. The Washington State Model Toxics Control Act (MTCA) creates “strict, joint, and several liability” for contaminated sites. The term “strict liability” means that responsibility is imposed without fault and parties cannot argue lack of due diligence or ignorance.

"Joint and several liability" means that all potentially responsible parties are responsible for all costs of the cleanup, regardless of the existence of other potentially liable parties. This rigorous framework provides certainty in regards to liability and obligation for cleanup and ongoing obligations.

MTCA establishes administrative pathways that provide a framework for how cleanup projects are processed through Ecology's Toxics Cleanup Program and what liability protections are available. In the case of the Leichner Landfill and all associated properties, the mechanism in place is a Consent Decree, which is a legal settlement of liability with the state.

Judicial approval of the consent decree provides the affected party with both a covenant not to sue from the state and contribution protection, which precludes claims by other parties. In this regard, the Consent Decree protection provides the greatest liability protection, but also requires the greatest level of state oversight and highest transaction costs.

The entire 120 acres of the industrially designated Leichner (including Koski) property is included as part of the Consent Decree under the jurisdiction of the Washington State Department of Ecology (WADOE). For the Koski property, provisions of the Consent Decree during and after development will include needed access to landfill monitoring facilities.

Potential developers of the site will not be responsible for any costs associated with implementation of the Leichner Landfill Consent Decree. Clark County is wholly responsible for implementation of the requirements of the Consent Decree. Maintenance and monitoring of the landfill site is funded through rate payer funds collected prior to the landfill closure. In the event these funds are exhausted, the County is obligated to fund on-going obligations by increasing rates charged at the County solid waste transfer system.

Mitigation efforts since the landfill closed in 1992 have reduced environmental impacts to adjacent properties to the point where development can occur. No cleanup actions are anticipated in the future. However in the event of a release from the landfill, potential developers would be indemnified under a $40 million pollution liability policy maintained in by the County.

The adjoining Fleischer property is subject to a separate preliminary remedial investigation and feasibility study. At this time, there appear to be no other significant non-contamination related environmental issues (such as floodplain or wetland designation) that would serve to substantially constrain development of the Koski and/or Fleischer properties.

As noted by the Phase 1 market assessment and previous property appraisal, several environmental factors have been identified that could affect property marketability and pricing as extraordinary cost factors. Based on the background information described above from discussions with MFA and Clark County, the following assumptions have been made for purposes of this Phase 2 market evaluation:

- Cost of a geotech study – assumed to be conducted, if required, by Clark County. This does not include parcel-specific development plans, which may involve additional evaluation as a property purchaser responsibility.
- Legal fees in conjunction with a proposed release and/or amendment of the WADOE Consent Decree – assumed to be the responsibility of Clark County rather than prospective purchaser(s).
- Extraordinary site preparation to replace overburden removed for the landfill cap – no longer assumed to be required other than normal site grading with the possible exception of one portion of the site (at relatively nominal expense).
- Capital and ongoing costs of site monitoring – currently not viewed as a major cost factor for private development of the Koski site. While there may be a need for added monitoring devices, this is assumed to be a Clark County responsibility, including possible relocation of some monitoring devices (gas probes or groundwater monitoring wells) to the perimeter of the site as part of the property not sold for private reuse. It is possible that DOE may also require installation of additional monitoring devices near the perimeter of the landfill; this installation also should not affect property redevelopment.
- Time discount covering the period to achieving relief from the Consent Decree – currently viewed as not applicable since the NPV discounting taken with this analysis covers the period of site marketing beginning with Clark County determination to market the Koski and possibly Fleischer sites as site-ready for development.

  Discounting of property pricing due to timing uncertainty or delay would be expected only if environmental approvals were required subsequent to a land transaction that resulted in time delays to development beyond what is typical for a clean greenfield site. However, it is currently assumed that needed environmental approvals would occur prior to sale of the property.
- Added developer profit margin that may be associated with higher perceived risk of redeveloping a brownfield property – not applicable to the extent that Clark County assumes full risk for any future contamination from the landfill or that DOE approvals of site use are not required. The County and DOE are in the early phases of discussing the release of the Koski site or amending the point of compliance. However, it is possible that some form of restrictive covenant will remain in place allowing DOE to comment on the type of development allowed.

  Any liability or discounting required by a purchaser would be due to conditions that might be perceived as limiting property development, site utilization or approval of specific site uses. While no price discounting is currently assumed with this analysis, it is possible that reconsideration might be required depending on the outcome of discussions between the County and DOE.

For the 9.9-acre Fleischer property, MFA has identified a range of clean-up costs as might be associated with three site remediation alternatives:

Alternative 1 – Excavation and off-site disposal of impacted soil $3,349,900

Alternative 2 – Capping of impacted soil	$1,039,500
Alternative 3 – Targeted excavation of impacted soil supporting redevelopment with capping of remaining impacted soil	$1,842,300

Due to the preliminary nature of the remedial investigation and feasibility study results to date, this Phase 2 market analysis has assumed a *worst case* cost outcome – as is associated with Alternative 1. Also assumed is that a substantial portion of the cost of remediation could be secured via WADOE or federal funding, with the Clark County cost share preliminarily estimated at approximately 50% for purposes of this Phase 2 analysis. Market and financial implications of the two lower cost options of Alternatives 2 and 3 are considered later in this report.

Land Pricing

With the Phase 1 market assessment, a preliminary review of readily available land value information was made from two perspectives:[1]

- Current tax assessed values for industrially designated properties adjoining the Leichner landfill, but which are not subject to the Consent Decree. Assessed values of these sites generally appear to range between about $2.50 - $3.00 per square foot.
- Twelve industrial land sales transactions on parcels of 5-20 acres in Clark County between 2011-14. Market transaction values ranged from less than $1.50 to nearly $6.00 per square foot, averaging about $3.00 across a wide range of property sizes and site conditions. Market valuation appeared to average somewhat above the tax assessed land value of these properties at about $2.25 per square foot.

The initial review indicated a reasonable correspondence between the assessed values of Leichner area industrial sites and recent market transactions countywide. However, site by site review also indicates the need for adjustments to reflect infrastructure, as well as extraordinary, costs that might be needed to make specific properties *shovel ready* without undue site or cost constraints.

Augmented Analysis. More in-depth review of sales values has been conducted with this Phase 2 analysis. This has involved:

- Compilation of assessor's data on taxable assessed valuations and sales transaction prices for 45 ownerships of vacant industrial parcels of more than one acre over the 2004-14 period.[2]

[1] Clark County tax assessed valuations are as of 2013. Land transaction data is based on a compilation by CoStar.

[2] The number of sales transactions reviewed is considerably greater than the number of ownerships because many of the ownerships involve multiple adjoining parcels that were included within the overall purchase price. Adjoining properties were combined as assemblages for purposes of this analysis.

- Inclusion of data regarding recent major industrial vacant land transactions on the Oregon side of the metro region – focused on parcels of 5+ acres.
- Review of a prior 2007 appraisal for the subject Koski site on behalf of Clark County.

Pricing Methodology. A two-step methodology is used for land pricing for parcels associated with the Koski, and possibly Fleischer, properties:

- A *shovel-ready price* (or sticker price) – indicating market value assuming that the site is 100% shovel-ready with infrastructure in place and no constraints or added costs for environmental remediation.
- An *adjusted price* (or net proceeds to Clark County) – after deducting for costs of on-site infrastructure, environmental remediation and transaction costs.

Shovel-Ready Pricing. With this first step, assumptions used for pricing of property parcels with this analysis are as detailed by the following chart, differentiated by:

- Parcel size – with smaller sites typically commanding higher values on a per square foot of land value basis.
- 94th Avenue Frontage – with sites having direct traffic access and visibility expected to command higher per square foot sales values than interior parcels.

Shovel-Ready Land Pricing (2014 $)

Parcel Size	Price per SF		% of Top Price	
	Frontage	Interior	Frontage	Interior
< 5 acres	$7.50	$6.00	100%	80%
5-10 acres	$6.75	$5.00	90%	67%
10-15 acres	$6.00	$4.00	80%	53%
15+ acres	$5.25	$3.00	70%	40%

Note: All prices assume that site is 100% shovel-ready with infrastructure in place and no constraints or added costs for environmental remediation.

Source: E. D. Hovee & Company, LLC.

For each conceptual pricing alternative, parcel pricing was applied consistent with this matrix approach. Top of market pricing is expected for smaller parcels of less than 5 acres that offer direct access from 94th Avenue. As additional curb cuts are not expected on 94th, this pricing is only with frontage parcels for which there is direct access via 94th on an internal street (e.g., 88th or 90th). Fronting parcels without immediate access are discounted to the next lower price tier. For example, an Option 2 or 5 parcel with direct access to 88th Street would be valued higher than another 94th Avenue frontage site without ingress /egress directly from 88th Street.

Because none of the conceptual planning options involves an interior parcel of more than 15 acres, the lowest per square foot pricing applied with this analysis is $4.00 per square foot, applied to interior sites of 10-15 acres.

Adjustments from Shovel-Ready Conditions. To be competitive for development, market pricing of the Koski property will need to be adjusted for costs that would be required to bring a site to shovel-ready status (and valuation). In some cases, the adjustments will occur on the side of the developer; in others, the adjustment will occur as a Clark County cost responsibility. In either case, net proceeds to Clark County can be defined as the *shovel-ready* (or sticker) price of the land *minus:*

- Cost of internal infrastructure – assumed as a developer responsibility.
- Cost of environmental remediation – assumed for this analysis to be a Clark County responsibility (and estimated only for the Fleischer property).
- Transaction costs – assumed at 5% including real estate brokerage fee plus closing costs (with the bulk of this expense typically a seller responsibility).

While some costs may be subject to negotiations shifting between buyer and seller, they typically have little effect on net proceeds to Clark County (at least in nominal 2014 dollars). Also noted is that transaction costs might be reduced, for example, by an owner sale without a broker commission. However, the absorption assumptions (provided below) assume the broadest possible marketing exposure with broker involvement. Reduced marketing exposure could be expected to slow sales, extending the time frame and/or risking below market pricing lower than what is assumed with this analysis.

Not included with this analysis is any estimate of the possible cost of county acquisition of the Fleischer property. A no- or low-cost acquisition may be considered due to the potential cost of environmental site remediation – which in the worst case exceeds shovel-ready land value. In any event, the cost of Fleischer site purchase, once determined, would need to serve as an added deduction to the calculation of net proceeds to Clark County.

Resulting Pricing Observations. As is detailed with tabular data in a subsequent section of this report, average sticker pricing assuming shovel-ready status ranges from just under $5.00 to close to $6.00 per square foot – depending on the conceptual planning option considered. Net proceeds to Clark County (in net present value terms adjusted for sales timing) ranges between $2.46 to $3.26 per square foot assuming development of the Koski property only. If the Fleischer property is added with deduction for environmental remediation, the NPV drops to $1.68 to $2.37 per square foot of site area with 50% non-County funding – or to as little as $0.83 to $1.47 per square foot of site area if the County were to pay 100% of remediation costs (for both properties but excluding costs of purchasing the Fleischer site).

Absorption

Unless sold in a single transaction to one developer, the site is expected to be subdivided and sold over a multi-year period parcel-by-parcel. Supportable absorption potentials for the Leichner property are considered from three perspectives:

- Historical pattern of industrial land sales in Clark County.

- Trend of industrial plus flex space absorption in Clark County.
- Experience of a potentially comparable business park development.

Industrial Land Sales Trend. From 2004-14, the Clark County land sales reviewed indicates industrial site transaction activity (for sites of 1+ acres) averaging 155 acres per year. Much of this occurred as speculative activity prior to the Great Recession. Also noted is that not all transactions result in on-site development; many sites are only partially developed.

Over the 2008-14 period including much of the recessionary effect, industrial land sales have averaged a more modest 60 acres per year. This is the baseline land absorption figure assumed for this analysis.

Industrial + Flex Space Absorption. CoStar data indicates that Clark County has experienced net industrial plus flex building space absorption averaging about 215,000 square feet per year since 2005. This 10-year period has covered seven years of positive net space absorption together with three years from 2008-10 of significant negative space absorption (over which time vacancies outpaced new leases). From 2011 to present, absorption has averaged over 250,000 square feet per year.

Space absorption data covers both single user and multi-tenant space. In Clark County, the pattern of absorption appears to be more stable year-to-year for multi-tenant than single user space. Closure or relocation of a major industrial firm can have a significant effect on single user demand. In some areas, older or obsolete user space may also be removed from the inventory or converted to other uses over time.

The 10-year average absorption figure of 215,000 square feet per year can be considered as a base case expectation over a full economic cycle with countywide industrial and flex space demand looking forward. To the extent that the Great Recession is viewed as an anomaly not likely to be again repeated in its severity, this absorption target could be viewed as a conservative representation of annual space demand in Clark County – as noted with demand currently on a higher growth trajectory than indicated with this base case figure.

Comparable Business Park Development. Two of the six conceptual options considered for the Leichner site involve development of an industrial or business park campus. A useful case study comparable for this analysis is provided by the Eastridge Business Park situated on SR 503 at 99th Street.

Developed over 27 years from 1979-2006 with 1.1 million square feet of building space on about 90 acres, lease space currently under business park management is identified by CoStar as comprising close to 628,000 square feet in 28 buildings.[3] While located somewhat closer to the urban core, Eastridge also serves a similar market area as the Leichner property – in addition to drawing from a similar labor force and accessed by the I-205 freeway system.

[3] Portions of the site have been sold to individual owner-user firms and are not under Eastridge management.

The business park's 130 tenants average about 3,400 square feet of occupied building area – ranging from as little as 400 to about 24,000 square feet in size. As of the 2006 build-out of the property, the mix of space was about 50% flex/industrial, 38% office, and 12% retail.

Currently, the largest tenant is a non-profit running youth programs. Other tenants range from technology and sales/distribution firms to contractors to religious organizations to financial, insurance, real estate, fitness, medical/dental, and dining businesses. Over time, business park management has aimed to increase the retail component (especially for buildings fronting SR 503) as well as converting flex space to office use as means to increase rental income.

While experiencing overall occupancy of 87% in 2006, vacancies increased with the recession. Even with subsequent economic recovery, CoStar estimates Eastridge business park vacancy to be at 28-29% as of October 2014. This vacancy likely would need to be reduced prior to significant development of the Leichner site for similar business park use.

While development has come in waves depending on the economic cycle, the 628,000 square feet of building space currently managed by Eastridge equates to the addition of about 23,250 square feet per year averaged over an unusually long 27-year time period.

Implications for Koski/Leichner Site Absorption. This analysis relies primarily on the 2008 to present absorption experience of 60 acres per year of 1+ acre industrial transactions in Clark County. Assuming that the Leichner submarket area captures its current 13% share of the countywide industrial space inventory and that redevelopment of the industrial portions of the former landfill capture one-half of net new subarea demand, the subject site would be expected to experience annual absorption of just under four acres per year.

At this pace, redevelopment of the 31.5-acre Koski site could occur over about a 9-year period. If combined with the Fleischer property for a 41.4-acre assemblage, time to completed sales would be in the range of 11 years (with development build-out in up to 13 years). If multi-tenant business park development were part of the site use mix at a pace similar to that experienced by Eastridge, this could account for 40-50% of total land demand through the absorption periods noted – whether for Koski or the larger Koski plus Fleischer assemblage

Depending on parcel configuration and suitability for campus style business park use, this rate of absorption may vary as illustrated with the six conceptual planning options evaluated. Adaptability for multi-tenant business park usage would also appear to broaden the base of businesses for whom the site is suitable and provide a more stable flow of demand than would occur with sole reliance on single user industrial firms.

Financial Variables

With development projects that play out over a multi-year period, financial variables become important to account for changes in costs and returns that will not materialize all at once.

Net Present Valuation (NPV) Analysis. Recognizing that the value of a dollar received in five years is worth less today than a dollar received now, NPV evaluation is a mechanism used to bring cash flows occurring at different times to a consolidated *present value* estimated in today's dollars. Future cash expenditures and receipts are discounted back to an NPV figure using a discount rate – reflecting returns available with alternative uses of funds together with an assessment of associated risk. Because cost of borrowing is generally less expensive for public agencies (with tax exempt debt) than private debt and equity financing, discount rates are generally less for public than private sector related investment.

Financial Parameter Assumptions. The following financial variables are of importance to this evaluation:

- Rate of inflation – to escalate construction costs for projects not occurring immediately (based on Rider Levett Bucknall data).
- Value gains – reflecting land value appreciation prior to construction (based on a review of per square foot pricing changes for large lot vacant industrial sites from 2004-14).
- Discount rate – applied to the NPV analysis (and estimated as a composite of federally approved rates for cost-benefit analysis).
- Property limitation – a 1% property tax limit as approved by Washington voters.

Rates applied to the financial model used for this evaluation are summarized as follows.

Escalation Rates Used with Market Feasibility Analysis

	Inflation	Value Gain	Discount	Prop Limit
Annual % Change	2.00%	1.00%	5.00%	1.00%

Sources: E. D. Hovee & Company, LLC based on public agency and industry sources as noted above.

Economic & Fiscal Benefits

A final portion of this analysis addresses anticipated economic and fiscal benefits associated with each of the conceptual planning options – as of project build-out.

Economic Benefits. Measurable estimates of economic benefit are made for:

- Employment
- Total payroll
- Average wage per employee

Each of these benefits can be further distinguished between direct impacts from on-site business activity and economic multiplier effects from added employment countywide stimulated by on-site business spending and household incomes. Economic multipliers are

based on the nationally recognized IMPLAN economic model and regional economic multipliers as prepared for the State of Washington Department of Ecology in 2009.

Regional multipliers for Southwest Washington cover the counties of Clark, Cowlitz, Lewis, Pacific, Skamania and Wahkiakum Counties. The predominant portion of the impact from Leichner site development is expected to occur in Clark County. A detailed listing of business and economic impact factors applied to this analysis is provided by the Appendix to this report.

Fiscal Benefits. In addition to the community economic outputs noted above, comparative estimates have also been made of anticipated tax revenue benefits to Clark County and other affected state/local taxing jurisdictions covering:

- One-time tax benefits from initial development – both sales and real estate excise tax.
- Ongoing tax benefits recurring annually from completed development – including property and sales tax.

Applicable tax rates uses are also provided with the appendix to this report.

FINANCIAL & ECONOMIC EVALUATION OF CONCEPTUAL OPTIONS

Consistent with the analysis and assumptions as described, this report proceeds to provide comparative results of economic modeling for each of the six conceptual planning options considered. Covered by this discussion are results of the development and financial analysis, followed by economic and tax revenue benefits, and then an overall summary comparison.

Development & Financial Analysis

The chart on the following page provides summary results for the six conceptual options from the perspectives of site and development program, value and cost factors, developer incurred costs, county proceeds, and valuation of land at full property build-out. A summary review of evaluation results follows.

Site & Development Program. As noted, the first three concepts involve gross site area of approximately 31.5 acres (for the Koski property only). Site Options 4-6 involve development on 41.4 acres (as the sum of the Koski and adjoining Fleischer properties):

- The portion of the site area available for development ranges from 79% to 87% of gross site acreage. Undeveloped area includes portions of the site reserved for street/utility rights of way, buffer, storm sewer, monitoring well and methane collection facilities. Site use efficiency is greater for the single use rather than campus concepts and more for the combination of the Koski plus Fleischer properties than for the Koski property alone.
- Building square footage ranges from about 37% to 42% of developable site area – with greater intensity of development anticipated for the campus concepts (Options 3 and 6).

Financial Results – Six Conceptual Planning Options Compared

Summary Results For Clark County & Purchaser(s)	Conceptual Planning Option					
	Koski Property Only			Koski + Fleischer Properties		
	1 - Ind/90th	2-Ind/88th	3-Campus	4- Ind/90th	5-Ind/88th	6-Campus
Site & Development Program						
Total Site Area (Acres)	31.5	31.5	31.5	41.4	41.4	41.4
Developable Land (Acres)	26.5	26.1	25.0	36.0	35.9	34.8
Building SF	457,630	432,310	461,560	611,610	579,780	636,930
Building FAR	0.40	0.38	0.42	0.39	0.37	0.42
Years to Sell All Parcels	8	8	5	11	11	11
Value & Cost Factors (2014 $)						
Valuation (per SF land area):						
Shovel Ready Land	$5.49	$5.95	$5.12	$5.53	$5.62	$4.96
Common Area Infrastructure & Extraordinary Site Cost (per SF land area):						
Road + Treatment Pond	$1.03	$1.16	$1.40	$0.84	$0.85	$1.14
Fleischer Remediation	--	--	--	$0.93	$0.93	$0.93
Transaction Cost (%)	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Developer Incurred Costs (x $1,000 - 2014 Values)						
Purchase Price (adjusted)	$5,158	$5,436	$4,047	$7,356	$7,469	$5,806
Road + Treatment Pond	$1,185	$1,318	$1,524	$1,313	$1,332	$1,725
Fleischer Remediation	--	--	--	--	--	--
Total Shovel Ready	$6,343	$6,754	$5,571	$8,669	$8,801	$7,531
County Proceeds (x $1,000 - 2014 Values)						
Purchase Price (adjusted)	$5,158	$5,436	$4,047	$7,356	$7,469	$5,806
less:	--	--	--		--	--
Road + Treatment Pond	--	--	--	--	--	--
Fleischer Remediation	--	--	--	$ (1,675)	$ (1,675)	$ (1,675)
Transaction Cost	$ (258)	$ (272)	$ (203)	$ (369)	$ (374)	$ (290)
Net Proceeds to County	$4,900	$5,164	$3,844	$5,312	$5,420	$3,841
Net Present Value (NPV) of Proceeds to County						
Total NPV (x $1,000)	$4,235	$4,480	$3,374	$4,168	$4,272	$3,033
NPV Per SF of Land Area	$3.09	$3.26	$2.46	$2.31	$2.37	$1.68
Valuation of Development @ Build-Out						
Valuation (in 2014$)	$43,577	$42,218	$47,418	$58,831	$57,598	$67,247
NPV Valuation (w/phasing)	$36,609	$36,035	$39,829	$47,988	$47,285	$52,285

Source: E. D. Hovee & Company, LLC. Options 4-6 do not include purchase price of the Fleischer property TBD and assume Alternative 1 high-end remediation costs; implications of Alternatives 2-3 are evaluated later in this report.

- Time period to complete sale of all parcels ranges about 5 years (Koski site only with campus development) to 11 years (for all of the Koski plus Fleischer options).

Value & Cost Factors. Key observations are noted as follows:

- With per square foot sales pricing (assuming shovel-ready development status) varying by parcel size and anticipated use, the range of overall sticker pricing ranges from just

under $5.00 to nearly $6.00 per square foot – with the highest average value for Option 2 (Koski only).

- These *shovel-ready* values are partially offset by the costs of road and utility infrastructure (ranging from less than $1.00 to about $1.40 per square foot of land area for the Koski site) – with lower per square foot costs noted if averaged across both the Koski and Fleischer properties (on a combined basis).
- Added to infrastructure costs is Clark County's share of environmental remediation costs when the Fleischer property is included. The Clark County share is estimated at $0.93 per square foot of land area averaged across both the Koski and Fleischer properties.

  Assumed is that 50% of this cost is grant funded, as through the Washington State Department of Ecology. If remediation costs were to be fully funded through Clark County, the cost could approach $2.00 per square foot averaged across all 41.4 acres. If cost recovery is considered for the Fleischer acreage alone, remediation approaches $8.00 per square foot – exceeding the shovel-ready value of industrial land under any current market scenario.

Developer Incurred Costs. For purposes of the scenarios evaluated, developer incurred costs are defined as including the purchase price plus internal street/utility and treatment pond related infrastructure (assumed as a 100% developer responsibility). As noted, shovel-ready valuations are *adjusted down* by deducting the cost of infrastructure expense assumed by the developer (or property purchasers).

Purchaser incurred costs (prior to building development) range from$5.6 to $8.7 million, with higher costs associated with industrial (rather than campus) options and with the Fleischer plus Koski sites (due to greater developable land area and smaller, higher priced parcels involved).

County Proceeds. Clark County net proceeds are defined as the adjusted purchase price from developer(s) *minus* costs borne by Clark County for Fleischer site remediation and *minus* transaction costs (including brokerage commission and closing costs). Not included to date with Options 4-6 are the potential costs of purchasing the Fleischer property. For all options, net proceeds to Clark County can be considered from at least three perspectives:

- When evaluated at time of sale in 2014 dollars, net proceeds to Clark County range from $3.8 million to $5.4 million. Option 5 with industrial development and 88th Street access for both the Koski and Fleischer properties appears to yield the greatest value to Clark County. This assumes that 50% of environmental remediation for the Fleischer site comes from non-county sources and does not account for deductions to net sales proceeds for Fleischer property pricing yet to be determined with Clark County.
- When considered in terms of net present value (NPV) through the 5-11 year period of site disposition (and accounting for the cost of money over this period), the array of valuation is somewhat lower – ranging from an NPV of $3.0 to $4.5 million. Option 2 performs slightly ahead of Option 5 (by $200,000) in terms of NPV to Clark County due to a more rapid period of absorption – assuming 50% county funding of remediation

costs. The NPV results for the Fleischer options reflect not only Clark County's cost share of site remediation, but also the need to remediate *before* development can occur.

In terms of per square foot values, the NPV range is from $1.68 - $3.26 per square foot. NPV values are below nominal *sticker price* values due to a forecast time horizon of 5-11 year for completing all transactions, with discounting of revenues received in out-years.

- If state or federal funding support for remediating the Fleischer site is not available and Clark County becomes responsible for 100% of site remediation, the financial results to Clark County change considerably for the worse. The NPV of net proceeds to Clark County could be reduced to as little as $1.5 million – almost $3 million less than for the best option available with the Koski property developed alone. Whether for the Koski property alone or Koski + Fleischer assemblage, the 88th Street access options (Option 2 or 5) yield the a somewhat greater net return to Clark County than 90th Street options, due to greater efficiency (or less road length) of internal roadway configuration.

Valuation of Development @ Build-Out. At full build-out, valuation of new construction ranges from $42 to about $67 million (measured in 2014 dollars). The highest valuation is indicated for Option 6 (campus development on the Koski and Fleisher sites combined).

When measured in NPV terms to account for multi-year phasing, valuation is estimated at $36 to $52 million – with Option 6 also yielding the highest NPV.

Alternative Fleischer Remediation Implications. To this point, this analysis has assumed implementation of the Alternative 1 clean-up scenario – involving excavation and off-site disposal of impacted soil. Because of the substantial effect that this higher cost alternative has on overall project feasibility, it is useful to consider market and financial feasibility implications of the other two remediation alternatives as outlined by MFA.

As earlier described, Alternative 2 involves capping of impacted soil – and is the lowest cost of the three alternatives considered. Alternative 3 would involve targeted excavation of impacted soil supporting redevelopment with capping of remaining impact soil – coming in between the costs of Alternatives 1 and 2.

As depicted by the chart below, there is an approximate $1.1 million dollar difference in net present value (NPV) between Alternative 1 (high cost) and Alternative 3 (low cost) results. The valuation swing is somewhat lower with planning Option 6 due to larger land sales early-on.

Net Present Value of Proceeds to Clark County with Remediation Alternatives

Summary Results for Clark County by Cost of Fleischer Site Cleanup	Clark County NPV by Conceptual Planning Option (x $1,000)					
	Koski Property Only			Koski + Fleischer Properties		
	1 - Ind/90th	2-Ind/88th	3-Campus	4- Ind/90th	5-Ind/88th	6-Campus
Alternative 1 - $3.35 million				$4,168	$4,272	$3,033
Alternative 2 - $1.04 million	$4,235	$4,480	$3,374	$5,290	$5,394	$4,091
Alternative 3 - $1.84 million				$4,901	$5,004	$3,724

Sources: E. D. Hovee & Company, LLC.

There is no difference in NPV effects to concept options 1-3 that involve only the Koski property as added site remediation costs are applicable only to the Fleischer property. For Clark County:

- The implication of high cost Alternative 1 is to not proceed with Fleischer property purchase and development. The NPV proceeds to Clark County are less than would result from undertaking Koski property development alone, in effect meaning that Fleischer represents a net loss proposition to the County (plus added risk).
- Implementation of remediation Alternatives 2 or 3 would appear to swing the NPV calculation in the favor of obtaining the Fleischer property – as the NPVs of development and sale now exceed those of the Koski-only development options. This assumes that the as yet undetermined purchase price of the Fleischer property will not eliminate the apparent NPV advantage of proceeding with the development of both properties on a combined basis.

  While beyond the scope of this assignment to evaluate in monetary terms, the apparent NPV advantage of Fleischer site purchase may also be reduced to the extent that marketability to potential site users is impaired. This could occur, for example, to the extent that full or partial capping of the site proves to unduly constrain or increase the cost of building development. It is also possible that the lesser amount of remediation could reduce appeal for outside funding of remediation, raising the cost share of remediation that becomes the responsibility of Clark County.

As is indicated from this initial evaluation, a better understanding of the value of adding versus not proceeding with the Fleischer property can best be made based on: a) determination of a mutually agreed acquisition price; b) further evaluation of development constraints that may occur as a result of implementing lower cost remediation Alternatives 2 or 3, and c) discussion with state or related funding agencies as to cost share implications of these varied clean-up alternatives.

Community Economic Benefits

Economic benefits addressed with this analysis are employment, total annual payroll, and average annual wage. As noted, these benefits are considered in terms of:

- Direct on-site economic activity from businesses located at the redeveloped property, *plus*
- Economic multiplier effects of indirect spending (with business procurement purchases) and induced consumer household spending. Economic multipliers are for SW Washington, albeit with the bulk of the anticipated impact expected to be in Clark County.

All effects are as of project build-out, in 2014 dollars. A comparison of potential direct and multiplier effects across all six conceptual planning options is provided by the chart on the following page.

Community Economic Benefits – Six Conceptual Planning Options Compared

Employment & Payroll Category	Conceptual Planning Option					
	Koski Property Only			Koski + Fleischer Properties		
	1 - Ind/90th	2-Ind/88th	3-Campus	4- Ind/90th	5-Ind/88th	6-Campus
Employment						
Direct	705	735	820	980	1,050	1,220
Indirect & Induced	540	530	540	730	735	755
Total Economic Impact	1,245	1,265	1,360	1,710	1,785	1,975
Economic Multiplier	1.77	1.72	1.66	1.74	1.70	1.62
Payroll (x $1,000)						
Direct	$41,360	$42,090	$44,340	$56,890	$59,430	$64,380
Indirect & Induced	$25,310	$24,720	$24,970	$34,230	$34,000	$35,000
Total Economic Impact	$66,670	$66,810	$69,310	$91,120	$93,430	$99,380
Economic Multiplier	1.61	1.59	1.56	1.60	1.57	1.54
Average Wage						
Direct	$58,670	$57,270	$54,070	$58,050	$56,600	$52,770
Indirect & Induced	$46,870	$46,640	$46,240	$46,890	$46,260	$46,360
Total Economic Impact	$53,550	$52,810	$50,960	$53,290	$52,340	$50,320

Note: Estimates are as of completed site build-out; monetary values are estimated in 2014 dollars.

Source: E. D. Hovee & Company, LLC.

Key observations are noted as follows:

- The range of employment impact (including economic multiplier effects) is from 1,245 to 1,975 jobs. Due to greater land area, there is greater job potential if the Fleischer site is also made available for development. The campus option provides somewhat greater job potential (with more jobs per acre) than the industrial only concepts.
- Total annual payroll is roughly equivalent to job estimates across the options considered – with the major variation in payroll due to the acreage of property to be developed.
- Average annual wages (per worker) can be expected to be greater with the industrial only, when compared with the campus development options involving a greater mix of retail and office-related use.
- Economic multipliers (or ratios of total to direct impact) also are greater for industrial than campus-related development, due primarily to the wage differences noted.

Tax Revenue Implications

A final set of comparisons is made with respect to tax revenues anticipated to be generated from development of the subject property. Revenues are distinguished between:

- One-time revenues received in conjunction with property sale and construction – notably real estate excise tax (REET) and sales tax on construction.

- Ongoing tax revenues – received annually from operations of on-site businesses with building completion and occupancy, in the form of property and retail sales taxes.

Tax Revenue Benefits – Six Conceptual Planning Options Compared

Clark County & Other Jurisdiction Tax Revenue By Category	Conceptual Planning Option					
	Koski Property Only			Koski + Fleischer Properties		
	1 - Ind/90th	2-Ind/88th	3-Campus	4- Ind/90th	5-Ind/88th	6-Campus
One-Time Tax Revenues (w/Property Sale & Construction in 2014 $))						
Clark County						
Real Estate Excise (REET)	$26	$27	$20	$37	$37	$29
Sales Tax on Construction	$523	$507	$569	$706	$691	$807
Subtotal Clark County	$549	$534	$589	$743	$729	$836
Other Taxing Jurisdictions						
Real Estate Excise (REET)	$66	$70	$52	$94	$96	$74
Sales Tax on Construction	$3,138	$3,040	$3,414	$4,236	$4,147	$4,842
Subtotal Other Jurisdictions	$3,204	$3,109	$3,466	$4,330	$4,243	$4,916
All Taxing Jurisdictions						
Real Estate Excise (REET)	$92	$97	$72	$131	$133	$103
Sales Tax on Construction	$3,660	$3,546	$3,983	$4,942	$4,838	$5,649
Total All Jurisdictions	$3,752	$3,643	$4,055	$5,073	$4,971	$5,752
Ongoing Tax Revenues (Annualized @ Full Build-Out in 2014 $)						
Clark County						
Property Tax	$164	$159	$178	$221	$216	$253
Sales Tax	$122	$130	$174	$171	$187	$265
Subtotal Clark County	$285	$288	$352	$392	$404	$518
Cumulative NPV - 30 Years	$3,869	$4,022	$4,758	$5,023	$5,313	$5,949
Other Taxing Jurisdictions						
Property Tax	$465	$450	$506	$627	$614	$717
Sales Tax	$730	$777	$1,042	$1,025	$1,124	$1,592
Subtotal Other Jurisdictions	$1,195	$1,228	$1,547	$1,653	$1,738	$2,309
Cumulative NPV - 30 Years	$16,672	$17,586	$21,488	$21,786	$23,568	$27,174
All Taxing Jurisdictions						
Property Tax	$628	$609	$684	$848	$831	$970
Sales Tax	$852	$907	$1,215	$1,196	$1,311	$1,858
Total All Jurisdictions	$1,480	$1,516	$1,899	$2,044	$2,142	$2,828
Cumulative NPV - 30 Years	$20,541	$21,608	$26,246	$26,810	$28,881	$33,123

Source: E. D. Hovee & Company, LLC. See appendix for added tax rate detail.

Revenues are shown for Clark County and other benefitting state/local taxing jurisdictions. Revenues are estimated only for taxes derived directly from property redevelopment and subsequent operations. Observations of note are summarized as including:

- Total **one-time development related tax revenue** to all benefitting jurisdictions of $3.6 - $5.8 million through build-out (estimated in 2014 dollars). The Clark County share of this one-time tax revenue is estimated to range between $534,000 and $836,000.

The greatest potential for one-time tax revenue is associated with combined development of both the Koski and Fleischer properties. Campus-related development could be expected to generate somewhat greater values (about 8-16% more) than is estimated for industrial-only development.

Of the two primary one-time revenue sources, sales tax on construction can be expected to generate significantly more revenue than REET (although no estimate of REET has been made for future site re-sales beyond the initial property disposition by Clark County).

- **Ongoing tax revenue** is estimated to range between $1.5 - $2.8 million per year (as calculated in current 2014 dollars subsequent to site build-out). The Clark County share of property and sales tax revenues ranges between $285,000 - $518,000 per year.

  As with one-time revenues, greater revenue potential is associated with the combined assemblage of the Koski plus Fleischer properties and with campus rather than industrial-only development. For benefitting jurisdictions, sales tax revenue is expected to account for a larger share of total revenues than property tax. This is the case even though much lower portions of industrial-service business activities are subject to sales tax than for retail business – albeit with the major share of sales tax revenue accruing to the State of Washington. For Clark County, property and sales tax revenues are expected to be more evenly balanced.

Summary Comparison

This Phase 2 market report concludes with a one-page comparison of the six Leichner options considered followed by summary implications for subsequent site marketing and development.

Matrix Comparison. The chart on the following page provides a summary *matrix comparison* of the suitability of these uses in terms of such factors as build-out capacity, sales period, developer site costs, net proceeds to Clark County, construction build-out valuation, job and wage benefits, and direct one-time and ongoing tax revenues.

Also provided are summary notes by conception option, as well as by property assemblage alternatives. For ease of comparison, all of the financial figures associated with the Fleischer property in the matrix chart assume implementation of the high-end Alternative 1 clean-up involving excavation and off-site disposal of impacted soil.

Leichner Landfill Area Master Plan – Summary Comparison of Six Planning Concepts

Comparative Measure	Koski Property Only (31.5 acres)			Koski + Fleischer Properties (41.4 acres)		
	1 – Ind/90th	2 – Ind/88th	3 – Campus	4 – Ind/90th	5 – Ind/88th	6 – Campus
Build-out SF # of Parcels	• 457,560 SF • 6 parcels	• 432,310 SF • 6 parcels	• 461,560 SF • 3 parcels	• 611,610 SF • 9 parcels	• 579,780 SF • 8 parcels	• 636,930 SF • 4 parcels
Uses / Sales Time (for all parcels)	• O/R on 94th, M/W interior • 8 years	• O/R on 94th, M/W interior • 8 years	• BP on 94th, M/W interior • 5 years	• O/R on 94th, M/W interior • 11 years	• O/R on 94th, M/W interior • 11 years	• BP on 94th, M/W interior • 11 years
Developer Site Costs	• $6.3 million	• $6.8 million	• $5.6 million	• $8.7 million	• $8.8 million	• $7.5 million
County Income (2014$ / NPV)	• $4.9 million • $4.2 million NPV	• $5.2 million • $4.5 million NPV	• $3.8 million • $3.4 million NPV	• $5.3 million • $4.2 million NPV	• $5.4 million • $4.3 million NPV	• $3.8 million • $3.0 million NPV
Construction Buildout (2014$)	• $43.6 million	• $42.2 million	• $47.4 million	• $58.8 million	• $57.6 million	• $67.2 million
Total Jobs / Average Wage	• 1,245 jobs • $53,550 wage/yr	• 1,265 jobs • $52,810 wage/yr	• 1,360 jobs • $50,960 wage/yr	• 1,710 jobs • $53,290 wage/yr	• 1,785 jobs • $52,340 wage/yr	• 1,975 jobs • $50,320 wage/yr
Direct Taxes for All Jurisdictions	• $3.8 million one-time plus $1.5 million per year	• $3.6 million one-time plus $1.5 million per year	• $4.1 million one-time plus $1.9 million per year	• $5.1 million one-time plus $2.0 million per year	• $5.0 million one-time plus $2.1 million per year	• $5.8 million one-time plus $2.8 million per year
Comments by Option	• Highest average wage but lowest job count and annual tax revenue of six concept options	• Maximum net site income to Clark County of the Koski-only options (or of all 6 site options in NPV terms)	• Most rapid site sales w/small number of large plus small sites	• Most parcels of any site concept	• Greatest site cost to developer • Most site income to Clark County in 2014$ (w/ 50% county funding for remediation)	• Maximum value of development • Most one-time plus ongoing tax benefits
Comments by Assemblage	• Lowest cost and risk options due to quicker site disposition time and no substantial added remediation costs • Less market presence together with lower economic and tax benefits long-term than with full assemblage			• Greatest swing in net site income to county depending on non-county funding for remediation and land cost • Offers greatest economic and tax benefit potential • Estimates do not include cost of Fleischer site purchase		

Note: Use abbreviations are M – manufacturing, O – office, R – retail, W – warehouse/distribution, BP – business park.

Source: E. D. Hovee & Company, LLC. Analysis is intended for illustrative purposes, and subject to revision.

Summary Implications. As is clear from the evaluation in this Phase 2 market analysis, there is no conceptual planning option that comes out as a *clear winner* across all of the financial and economic impact factors considered. Selection of a preferred concept will depend, in large part, on the relative weights given to the outcome measures evaluated:

- If maximizing net sales income to Clark County is the primary priority, the Koski + Fleischer Option 5 appears to be a slight favorite over the Koski-only Option 2 scenario (with both options predicated on 88th Street access). This analysis assumes that no more than 50% of Fleischer site remediation costs are borne by Clark County and that the Fleischer property can be purchased at a relatively nominal value (of $250,000 or less).
- However, when considered in terms of net present value (NPV) to Clark County, the Koski-only Option 2 performs about $200,000 better than Option 5. This is because land sales with the combined Koski + Fleischer property are estimated to take about three years longer than with the Koski only approach. At this time, the Koski + Fleischer options also involve considerably greater risk due to as yet unresolved uncertainties related to total site remediation cost, the Clark County share of remediation costs, and land purchase price.
- At first glance, the Koski + Fleischer options would appear to be financially more favorable if lower cost remediation Alternatives 2 or 3 are implemented and/or if the County's share of remediation cost can be reduced below 50%. However, the lower cost remediation options involve some amount of capping that could affect site development capacity, marketability and/or grant funding appeal.
- Bottom-line, if Clark County's combined share of costs for purchase and/or remediation of the Fleischer site exceed a collective total of about $1.4 - $1.5 million, the best Koski-only development (with Option 2) likely yields greater NPV financial return to Clark County than the best available Koski + Fleischer (Option 5) development scenario.
- If a primary goal is to dispose of the property as quickly as possible, though likely on a phased basis, the Option 3 campus business park option becomes more attractive, assuming that a large site business park buyer can be secured within a reasonable time frame at pricing to market.
- Alternatively, if long-term community economic and local jurisdiction tax revenues are of primary importance, going with the larger Koski + Fleischer assemblage offers greater opportunity and community benefit than a Koski-only approach. The campus approach (Option 6) offers the greatest potential job and tax revenue yield, while the light industrial concepts may be associated with somewhat higher average annual wage levels.

All six options assume that parcel sales are phased over a multi-year time period. An alternative approach would be to sell all Koski or Koski + Fleischer properties wholesale as a single package. Sale of the full Koski site appears to be advantageous, if Clark County could achieve at least the NPV of a phased parcel sales program. The target price for a single sales transaction would appear to be in the range of about $4.2 - $4.5 million (or of up to about $3.25 per square foot).

A similar wholesale disposition and pricing approach could be taken with respect to valuing a package assemblage for the Koski + Fleischer properties combined. Determining appropriate pricing appears premature, pending resolution of environmental cleanup cost and funding responsibility together with a supportable purchase price for Fleischer property acquisition.

E. D. Hovee & Company, LLC appreciates the opportunity to provide this Phase 2 market assessment of Leichner site reuse concepts. We would be happy to respond to questions regarding any aspect of this report.

APPENDIX. SUPPLEMENTAL DATA TABLES

On the following pages are provided detailed supplemental data tables used for this Phase 2 market analysis of Leichner site reuse concepts.

Land Use & Construction Cost Allocation

The following site related and construction cost parameters are utilized with this analysis. These site and cost parameters are varied by IL versus BP site configuration and industrial versus commercial use.

Land Use & Construction Cost by Development Configuration & Use Type

Parcel Allocation	IL Configuration		BP Configuration	
	Industrial	Commercial	Industrial	Commercial
Land Allocation				
Site Parameters				
Number of Floors (Avg)	1.00	1.00	1.10	1.20
Parking Ratio	1 sp / 600 sf	1 sp / 250 sf	1 sp / 600 sf	1 sp / 300 sf
Parking Ratio/1000 SF	1.67	4.00	1.67	3.33
Land Area per Space (SF)	375	375	375	375
% Landscaping	10%	10%	15%	15%
% Site Utilization				
Building Footprint	45%	30%	45%	33%
Parking	28%	45%	28%	42%
Landscaping	10%	10%	15%	15%
Other Undeveloped	17%	15%	11%	10%
Total	100%	100%	100%	100%
Building FAR	0.45	0.30	0.50	0.40
Construction Costs				
Per Square Foot Costs				
Building Area (SF bldg)	$75	$90	$90	$120
Site Costs (per SF land)	$4.00	$4.00	$4.00	$4.00
Parking Area (SF pkg)	$7.50	$7.50	$7.50	$7.50

Note: Construction costs are estimated in 2014 dollars.

Sources: Rider Levett Bucknall, E. D. Hovee & Company, LLC.

Infrastructure Cost Estimate

The following charts detail infrastructure cost estimates associated with each of six conceptual planning options. Preliminary planning level quantity requirements and cost estimates are made by Maul Foster Alongi, as lead project consultant to Clark County.

MAUL FOSTER ALONGI

400 East Mill Plain Blvd., Suite 400 | Vancouver, WA 98660 | 360 694 2691 | www.maulfoster.com

Leichner Master Plan – Conceptual Planning Cost Estimates

42' wide road (Local Commercial/Industrial)
AASHTO Soil Type: A-4
6' sidewalks
Curb and Gutter
Subgrade Prep
0.6' HMA
12" Crushed Surfacing Base Course
12" Storm drain – MH's @ 400' – CB's @ intersections
8" Sanitary Pipe – MH's @ 400'
12" Water Main – Fire hydrants and gate valves @ 350'
Roadside Biofiltration – $28/LF

Road	*Option 1*	*Option 2*	*Option 3*	*Option 4*	*Option 5*	*Option 6*
Linear Feet of Road	2000	2290	2680	2240	2290	3050
Estimated Road	$ 993,100	$ 1,116,555	$ 1,312,260	$ 1,099,380	$ 1,116,555	$ 1,485,875
Estimated Roadside Biofiltration	$ 56,000	$ 64,120	$ 75,040	$ 62,720	$ 64,120	$ 85,400
Total Cost	$ 1,049,100	$ 1,180,675	$ 1,387,300	$ 1,162,100	$ 1,180,675	$ 1,571,275

Treatment Pond	*Options 1-3*	*Options 4-6*
Grading @ $0.35/SF	$ 10,600	$ 10,600
Excavation @ $8/CY	$ 102,175	$ 118,450
Fence @ $15/LF	$ 3,600	$ 3,600
Rock	$ 20,000	$ 20,000
Total Cost	$ 136,375	$ 152,650

	Option 1	*Option 2*	*Option 3*	*Option 4*	*Option 5*	*Option 6*
Road	$ 1,049,100	$ 1,180,675	$ 1,387,300	$ 1,162,100	$ 1,180,675	$ 1,571,275
Treatment Pond	$ 136,375	$ 136,375	$ 136,375	$ 152,650	$ 152,650	$ 152,650
Total Cost	**$ 1,185,475**	**$ 1,317,050**	**$ 1,523,675**	**$ 1,314,750**	**$ 1,333,325**	**$ 1,723,925**

Business & Economic Impact Factors

As with land use and construction cost, business and economic impact factors are varied by IL versus BP site configuration and industrial versus commercial use. These factors are depicted by the following chart.

Land Use & Construction Cost by Development Configuration & Use Type

Parcel Allocation	IL Configuration		BP Configuration	
	Industrial	Commercial	Industrial	Commercial
Business Revenues/SF				
Inflation Adjusted to 2014	$188.50	$243.60	$188.50	$255.20
% Subject to Sales Tax	7.50%	18.00%	7.50%	26.00%
Taxable Sales/SF Bldg	$14.14	$43.85	$14.14	$66.35
Taxable Sales/Ac ($1,000)	$277	$573	$277	$867
Employment Density				
Jobs per 1,000 nsf	1.10	2.60	1.10	2.50
Comments	90% eff w/flex	@ 90% NSF/GSF	90% eff w/flex	@ 90% NSF/GSF
Average Wage				
Inflation Adjusted to 2014	$65,140	$50,728	$65,140	$48,268
Economic Multipliers				
Jobs	1.97	1.52	1.97	1.49
Income/Payroll	1.71	1.46	1.71	1.47
Output	1.45	1.51	1.45	1.51
Comments	mix I/W/Flex	10% retail	mix I/W/Flex	20% retail

Notes: Construction costs are estimated in 2014 dollars. I denotes industrial, W wholesale/distribution.

Sources: Rider Levett Bucknall, E. D. Hovee & Company, LLC.

Tax Rates for State & Local Jurisdictions

This final chart on the following page provides current 2014 rates for applicable local and state taxes related to one-time development activities and ongoing business operations subsequent to construction.

Land Use & Construction Cost by Development Configuration & Use Type

Tax / Jurisdiction	Rate
Real Estate Excise Tax (REET)	
State	1.28%
Unincorp Clark County	0.50%
Total Rate	1.78%
Sales Tax (as % of Taxable Sales)	
Clark County Basic	0.50%
Clark County Optional	0.50%
Criminal Justice	0.10%
Mental Health	0.10%
Transit	0.70%
State	6.50%
Total Rate	8.40%
Clark County Subtotal	1.20%
Property Tax (per $1,000 TAV - 2014)	
STATE SCHOOLS	$2.347095
PORT VANCOUVER BONDS	$0.227447
PORT VANCOUVER GENERAL	$0.172241
SD114 EVERGREEN DEBT SVC	$1.959577
SD114 EVERGREEN M&O	$3.932508
SD114 EVERGREEN M&O ADREF	$0.023821
FIRE DIST #5 GENERAL	$1.500000
FT VANCOUVER REG LIBRARY	$0.497966
FT VANCOUVER REG LIBRARY ADREF	$0.001738
METROPOLITAN PARK DIST	$0.246451
METROPOLITAN PARK DIST ADREF	$0.000661
VETERANS ASST	$0.009228
ROADS	$1.735404
ROADS ADREF	$0.003743
ROADS DIVERSION	$0.248211
CONSERVATION FUTURES ADREF	$0.000190
CONSERVATION FUTURES	$0.057933
COUNTY GENERAL	$1.426384
COUNTY GENERAL ADREF	$0.004378
DEV DISABILITY	$0.012500
MENTAL HEALTH	$0.012500
PORT VANCOUVER GENERAL ADREF	$0.000000
Total Rate	$14.419975
Clark County + Parks Subtotal	$3.757581

Sources: State of Washington Department of Revenue, Clark County Assessor's Office.

APPENDIX H

DRAFT CLEANUP ACTION PLAN

DRAFT CLEANUP ACTION PLAN

Fleischer Properties
Vancouver, Washington

June 2015
Washington State Department of Ecology
Toxics Cleanup Program
Southwest Regional Office
Lacey, Washington

TABLE OF CONTENTS

DRAFT CLEANUP ACTION PLAN I

1.0 INTRODUCTION 1

1.1 DECLARATION 1
1.2 APPLICABILITY 1
1.3 ADMINISTRATIVE RECORD 1
1.4 CLEANUP PROCESS 2

2.0 SITE CONDITIONS 2

2.1 PROPERTY DESCRIPTION AND HISTORY 2
2.1.1 Property History 3
2.1.2 Historical and Current Uses of Adjacent Properties 3
2.1.3 Topography and Climate 4
2.1.4 Geology and Hydrogeology 5

3.0 ENVIRONMENTAL CONDITIONS 6

3.1 SOIL 6
3.2 GROUNDWATER 8
1.3. SURFACE WATER AND SEDIMENT 8

4.0 CLEANUP STANDARDS 8

4.1 TERRESTRIAL ECOLOGICAL EVALUATION 8
4.2 SITE CLEANUP LEVELS 9
4.3 POINT OF COMPLIANCE 9

5.0 CLEANUP ACTION SELECTION 9

5.1 REMEDIAL ACTION OBJECTIVES 9
5.2 CLEANUP ACTION ALTERNATIVES 10
5.2.1 Alternative 1: Excavation and off-site disposal of contaminated soil 10
5.2.2 Alternative 2: Capping of contaminated soils 10
5.2.3 Alternative 3: Targeted Excavation and Capping of Contaminated Soils 11
5.3 REGULATORY REQUIREMENTS 12
5.3.1 Threshold Requirements 12
5.3.2 Other Requirements 12
5.3.3 Cleanup Action Expectations 13
5.3.4 Applicable, Relevant, and Appropriate, and Local Requirements 13
5.4 EVALUATION OF CLEANUP ACTION ALTERNATIVES 14
5.4.1 Threshold Requirements 14
5.4.1.1 Protection of Human Health and the Environment 14
5.4.1.2 Compliance with Cleanup Standards 14
5.4.1.3 Compliance with State and Federal Laws 14
5.4.1.4 Provision for Compliance Monitoring 15
5.4.2 Other Requirements 15

5.4.2.1 Use of Permanent Solutions to the Maximum Extent Practicable 15
5.4.2.2 Provide a Reasonable Restoration Time Frame 17
5.4.3 Groundwater Cleanup Action Requirements 18
5.4.4 Cleanup Action Expectations 18
5.5 DECISION 18

6.0 SELECTED REMEDIAL ACTION 18

6.2 COMPLIANCE MONITORING 19
6.3 FINANCIAL ASSURANCE 19
6.4 PERIODIC REVIEW 19

7.0 REFERENCES CITED 20

LIST OF FIGURES

1. SITE LOCATION
2. SITE FEATURES
3. SITE TOPOGRAPHY
4. INVESTIGATION LOCATIONS
5. CLARIFIER SOLIDS DEPTH
6. PCB CONCENTRATIONS

LIST OF TABLES

1. SOIL ANALYTICAL RESULTS
2. TERRESTRIAL ECOLOGICAL EVALUATION
3. COST ESTIMATE ALTERNATIVE 1- EXCAVATION OF CONTAMINATED SOILS
4. COST ESTIMATE ALTERNATIVE 2- CAPPING OF CONTAMINATED SOILS
5. COST ESTIMATE ALTERNATIVE 3- TARGETED EXCAVATION AND CAPPING OF CONTAMINATED SOILS
6. DISPROPORTIONAL COST ANALYSIS

1.0 INTRODUCTION

This report presents the Washington State Department of Ecology's (Ecology's) proposed cleanup action plan for the Fleischer properties (Facility Site No. 20708), located at 9109 and 9115 Northeast 94th Avenue, Vancouver, in Clark County, Washington (the Properties) (see Figure 1). The Properties are not subject to an agreed order, but Clark County is evaluating the feasibility of purchasing the Properties and develop them in conjunction with the Leichner Brothers Landfill (the landfill), which is subject to an agreed order.

This Cleanup Action Plan (CAP) has been developed according to the Site cleanup process under the Model Toxics Control Act (MTCA), Chapter 70.105D Revised Code of Washington (RCW), implemented by Ecology. The cleanup action decision is based on the Focused Site Characterization Report (Maul Foster & Alongi, Inc. [MFA], 2014), and other historical investigation results.

This CAP outlines the following:

- The history of operations, ownership, and activities at the Site;
- The nature and extent of contamination;
- Cleanup levels (CULs) for the Site that are protective of human health and the environment;
- The selected remedial action for the Site; and
- Compliance monitoring and institutional control requirements (as applicable).

1.1 DECLARATION

Ecology has selected a remedy that is protective of human health and the environment. The selected remedy is consistent with the State of Washington's preference for permanent solutions to the maximum extent practicable and provides for adequate action to ensure effectiveness of the remedial action as stated in RCW 70.105D.030(1)(b).

1.2 APPLICABILITY

CULs specified in this CAP are applicable only to the Site. They were developed as a part of an overall remediation process under Ecology oversight using the authority of MTCA, and should not be considered as precedents for other sites.

1.3 ADMINISTRATIVE RECORD

The documents used to make the decisions discussed in this CAP are on file in the administrative record for the Site. Major documents are listed in the reference section. The administrative record for the Site is available for public review by appointment at Ecology's Southwest Regional Office, located at 300 Desmond Drive, Lacey, Washington 98503-1274.

The Focused Site Characterization Report (MFA, 2014) summarizes the most recent understanding of the Site and the results of earlier environmental investigations conducted at the Site.

1.4 CLEANUP PROCESS

Cleanup conducted under the MTCA process requires procedural tasks and the preparation of specific documents either by the Potentially Liable Party (PLP) or by Ecology. These procedural tasks and resulting documents, along with the MTCA section that requires their completion, are listed below, with a brief description of each task.

- Remedial Investigation and Feasibility Study (RI/FS)—Washington Administrative Code (WAC) 173-340-350
  The RI/FS documents the investigations and evaluations conducted at the Site from the discovery phase to the RI/FS report. The RI collects and presents information on the nature and extent of contamination, and the risks posed by the contamination. The FS presents and evaluates site cleanup alternatives and proposes a preferred cleanup alternative. The document is prepared by the PLP, is approved by Ecology, and undergoes public comment.
- CAP—WAC 173-340-380
  The CAP sets CULs and standards for the Site and selects the cleanup actions intended to achieve the CULs. The document is prepared by Ecology and undergoes public comment.
- Engineering Design Report, Construction Plans and Specifications—WAC 173-340-400
  These documents outline the details of the selected cleanup action, including any engineered systems and design components from the CAP. These may include construction plans and specifications with technical drawings. The documents are prepared by the PLP and approved by Ecology. Public comment is optional.
- Operation and Maintenance Plan(s)—WAC 173-340-400
  These plans summarize the requirements for inspection and maintenance of cleanup actions, including any actions required for operation and maintenance of equipment, structures, or other remedial systems. The document is prepared by the PLP and approved by Ecology.
- Cleanup Action Report—WAC 173-340-400
  The Cleanup Action Report is prepared following implementation of the cleanup action, and provides details on the cleanup activities along with documentation of adherence to or variance from the CAP. The document is prepared by the PLP and approved by Ecology.
- Compliance Monitoring Plan—WAC 173-340-410
  The Compliance Monitoring Plan provides details on the monitoring activities required to ensure that the cleanup action is performing as intended. It is prepared by the PLP and approved by Ecology.

2.0 SITE CONDITIONS

2.1 PROPERTIES DESCRIPTION AND HISTORY

The Properties comprise three tax lots (Clark County Tax Account Numbers 199861000, 199854000, and 199851000) located in the northwest quarter of section 59, township 2 north,

range 2 east, of the Willamette Meridian (see Figure 2). The Properties comprise approximately 9.5 acres. The closed landfill is located adjacent to the Properties to the north, east, and south. According to the Clark County Planning Department, the Properties and the properties surrounding it are zoned Light Industrial. Land use in the vicinity of the Properties is primarily industrial and residential.

2.1.1 Properties History

Archival records summarized in a GeoDesign, Inc. (GeoDesign) Phase I environmental site assessment (ESA) and Limited Surface Soil Evaluation (GeoDesign, 2010) describe the developmental history of the Properties is as follows:

- 1940: The Properties appear to be vacant land.

- 1945: Five structures (a residence and four associated outbuildings) were constructed on the northwest portion of the Properties between 1940 and 1945. The rest of the Properties' use appears to be agricultural.

- 1955–1970: The existing residence, garage, and small barn were constructed on the southwest portion and the four outbuildings were removed from the northwest portion between 1945 and 1955. The rest of the Properties appears to be used for agriculture. Fill reportedly comprised of clarifier solids from the former Boise Cascade Mill was placed on the Properties beginning in 1970.

- 1973–1990: The clarifier solids appear to be present over the majority of the Properties, with the exception of the area immediately west of the current residence as shown in a 1973 aerial photograph. The clarifier solids may have been placed as part of the former property owner's fertilizer-processing business (Drasler Organic Fertilizer Company). The Properties were purchased by the current property owner in 1977. Some of the clarifier solids appear to have been removed from the Properties (or are no longer visible in the photographs) between 1980 and 1990. In the 1990 aerial photographs, structures are discernible at the location of the existing abandoned structures.

- 1996–2009: The residence located on the northwest portion of the Properties was removed between 1990 and 1996. The Properties have been primarily unused land since the current owner purchased it. Clarifier solids are not evident in the 1996 and 2002 aerial photographs, although some areas of clarifier solids were observed during site reconnaissance in 2009 (GeoDesign, 2010).

2.1.2 Historical and Current Uses of Adjacent Properties

The following information obtained from a Phase I ESA provides descriptions of the current and historical uses of the adjoining properties (SCS Engineers, Inc. [SCS], 2014):

North of the Properties - Waste Connections, Inc. (WCI) (refer to Figure 2): Two-thirds of the Properties' northern boundary is bordered by WCI. WCI operates a garbage haul truck fleet facility (e.g., truck storage, fueling, maintenance, and repair) and a solid waste container storage yard. The WCI property had historical operations as a supporting facility for the adjacent landfill

when it was operational. The 1981, 1986, and 1990 aerial photographs show the WCI property as cleared and containing two or three structures that were presumably used to support the landfill operations. The 2000 aerial photograph has the same buildings and configuration as currently exists and several trucks and/or containers were present, indicating the property may have been used as a truck fleet facility.

North and east of the Properties - Leichner Brothers Landfill: The eastern third of the Properties' northern boundary and the Properties' eastern boundary is bordered by the closed landfill. The landfill property was used as a gravel pit before landfilling operations began in the 1930s. Before the mid-1960s, solid waste was reportedly burned at the landfill. After this period, the waste was presumably used to fill in former gravel pits. The 1981 aerial photograph displays the landfill property expanded to its current configuration with most of the land cleared and apparently used for landfill operations.

The landfill was closed in 1991. Regulatory closure of the landfill has not been issued to date. Investigations performed in the late 1980s identified that groundwater impacts were present at levels exceeding applicable regulatory screening levels in the shallow alluvium water-bearing zone beneath the landfill property. The landfill property was purchased by Clark County in December 2012. There is a landfill gas (LFG) flare station on the landfill property that is used to combust LFG.

South of the Properties - Koski property: The Properties' southern boundary is bordered by the Koski property. The Koski property is predominately void of structural development except for a residential dwelling in the northwest corner of the Koski property which was demolished in 2015. Aerial photographs from 1950, 1960, and 1970 show the Koski property appeared to have been used for agricultural purposes. From at least 1981 to 1990, a retention pond for the landfill was located in the north-central portion of the Koski property.

In the 1986 and 1990 aerial photographs, a dirt road was present that extended into the Koski property at the approximate location of former burn areas. The burn areas were reportedly associated with historical operations of the landfill and the remnants of the burn waste materials reportedly consisted primarily of glass with lesser amounts of metal and ash. Remediation of the former burn areas was conducted in 1992. The Koski property was purchased by Clark County in December 2012.

West of the Properties - Northeast 94th Avenue: The Properties' western boundary is bordered by Northeast 94th Avenue. Across Northeast 94th Avenue is a residential development.

2.1.3 Topography and Climate

The Properties are generally flat, although there are small bench or terrace features (see Figure 3). Based on the National Geodetic Vertical Datum of 1929, elevations range between approximately 205 and 225 feet above mean sea level. Structures at the Properties include a single-story residence with an attached garage, a small barn, and a pump house with a domestic well.

According to the Western Regional Climate Center (WRCC), rainfall averages 40 inches annually, with average summer temperatures in the mid-70s (degrees Fahrenheit) and average winter temperatures in the mid-30s (degrees Fahrenheit) (WRCC, 2015).

2.1.4 Geology and Hydrogeology

According to the Geologic Map of the Vancouver Quadrangle, Washington and Oregon, the Properties and vicinity are underlain by Pleistocene outburst flood deposits. The gravel-sized flood deposits typically consist of "well-rounded, foreset-bedded, well-sorted and stratified pebble and cobble gravel with angular to subangular boulders typically 2.5 meters or less in length; clast-supported with a sandy matrix; sandy matrix composed of mafic volcanic fragments, quartz, and muscovite…" (Phillips, 1987).

Soil conditions encountered during July 2014 field sampling (MFA, 2014) confirmed the presence of fill at the Properties. Observed fill thicknesses ranged from trace amounts to approximately 1.5 feet. Below the fill was generally 1 to 2 feet of dry sandy silt underlain by coarse sand and gravel to approximately 8.5 feet below ground surface (bgs), the maximum depth of investigation activities in 2014. Groundwater was not encountered during the 2014 investigation.

There is a domestic water well on the Properties. A well log describing subsurface conditions could not be located. Stormwater that falls on the Properties is expected to infiltrate or flow to the west, toward a drainage ditch located along Northeast 94th Avenue.

The geology and hydrogeology at the adjoining landfill has been extensively characterized (SCS, 2013) (see Figure 2). The investigations describe the geology beneath the landfill site as approximately 70 to 100 feet of alluvium, underlain by the upper member of the Troutdale Formation. The landfill hydrogeology consists of an approximately 10- to 40-foot-thick unsaturated (vadose) zone, and an unconfined alluvial water-bearing zone (WBZ), which ranges in thickness from 35 to 45 feet. The alluvium generally consists of sand and gravelly to silty sand.

Underlying the alluvial WBZ is the upper member of the Troutdale Formation aquifer. The Troutdale Formation aquifer generally consists of sandy to cobbly gravel with minor amounts of silt and clay. The alluvial WBZ and the Troutdale Formation aquifer are separated by a silt aquitard (sandy silt and clayey silt) east and south of the landfill. Southwest of the landfill, the silt aquitard is absent and the two aquifers are locally in hydraulic communication.

The Troutdale Formation aquifer and the overlying aquitard have not been evaluated in the northern and western portions of the landfill site. Depths to groundwater at the landfill site in the vicinity of the Properties range from approximately 25 to 40 feet bgs. The direction of groundwater flow, based on surveyed groundwater elevations in the alluvial WBZ, appears to be southwest (SCS, 2013).

Monitoring wells in the vicinity of the Properties (e.g., landfill monitoring wells LB-1S, LB-6S, LB-17I) have had detections of chloride, nitrate, total dissolved solids, dissolved iron, dissolved manganese, and select volatile organic compounds. Dissolved iron and dissolved manganese

have been detected in groundwater samples collected from these monitoring wells above compliance criteria (SCS, 2013).

3.0 ENVIRONMENTAL CONDITIONS

GeoDesign conducted a Phase I ESA and limited surface soil evaluation at the Properties in March 2010 (GeoDesign, 2010). In the Phase I ESA, GeoDesign identified clarifier solids on the Properties as a recognized environmental condition because this material reportedly had been acquired from the former Boise Cascade Mill, and GeoDesign concluded that it likely contained hazardous substances (e.g., polychlorinated biphenyls [PCBs]).

To evaluate the potential for environmental contamination on the Properties, MFA collected soil samples from test pits and analyzed for PCBs, metals, diesel- and lube-oil-range hydrocarbons, herbicides, organochlorine pesticides, and organophosphorus pesticides during the summer and fall of 2014.

The nature and extent of contamination are summarized below; the Focused Site Characterization report (MFA, 2014) provides additional details and supporting information (e.g. laboratory reports, etc.).

3.1 SOIL

GeoDesign sampled clarifier solids and soil in 2010 from the surface at two locations and analyzed for PCBs, total petroleum hydrocarbon—hydrocarbon identification, semivolatile organic compounds (SVOCs), and selected metals. One PCB Aroclor (Aroclor 1248) was detected in both soil samples at concentrations greater than the MTCA Method A CULs for both restricted and unrestricted land use.

Other PCB Aroclors were not detected above the method reporting limits (MRLs) in either sample. Diesel- and heavy-oil-range hydrocarbons and metals (including arsenic, chromium, copper, lead, mercury, and nickel) were detected, although concentrations were below the MTCA Method A CULs for unrestricted land use. SVOCs were not detected above the MRLs.

Based on this precursory sampling, GeoDesign divided the Properties into 20 sections for limited surface soil sampling for PCB analysis. Soil samples were generally collected between the ground surface and 0.5 feet bgs and homogenized into one composite sample per section.

PCB Aroclor 1248 was detected in each composite soil sample at concentrations ranging from 0.820 to 32.4 milligrams per kilogram (mg/kg). PCB Aroclor 1254 was detected in the composite soil sample from Section 1 at a concentration of 0.396 mg/kg. Except for the composite soil sample from Section 12, the detected concentrations of PCBs were all greater than the MTCA Method A CUL of 1 mg/kg for unrestricted land use. Sample results collected from eight of the 20 sections were greater than the MTCA Method A CUL of 10 mg/kg for restricted land use (GeoDesign, 2010).

GeoDesign identified PCBs, specifically Aroclor 1248 and Aroclor 1254, as the indicator hazardous substances (IHSs) for the Properties. GeoDesign identified metals and diesel-range hydrocarbons, and because of the historical agricultural use and reported fertilizer processing at

the Properties, chlorinated herbicides, organochlorine pesticides, and organophosphorus pesticides as additional chemicals of potential concern.

To assess the extent of contamination on the Properties, MFA collected soil samples from multiple depths from 53 test pits in July, 2014 (See Figure 4). PCB concentrations exceeded the CUL at various locations and in some instances near the Properties boundaries. In order to further define the lateral extent of impacts in soil, MFA collected soil samples from off-property in October, 2014 near the southern, eastern, and a portion of the northern Properties boundaries.

The investigations have delineated the approximate locations of clarifier solids (see Figure 5) and the PCB contamination in soil (see Figure 6 and Table 1). The deepest soil sample that exceeds the Method A CUL of 1 mg/kg was collected from 5.5 feet bgs (TP27). None of the soil samples selected for metals analysis exceeded their respective MTCA Method A CULs; however concentrations of zinc were detected above the ecological receptor criteria (see Table 2). Generally, PCBs are prevalent in shallow soils at the Properties above MTCA CULs (refer to Figure 6).

The vertical and lateral extent of PCB impacted soil at the Properties has been delineated, with exception of lateral extent of PCB impacts to the north (see Figure 6) adjacent to test pits TP10 and TP11. The vertical extent of PCBs was delineated in the test pit locations with exception of test pits TP42 and TP51. Manual test pit advancement encountered refusal at test pit TP51 at 2.0 feet bgs.

Laterally west of the Properties is Northeast 94th Avenue while approximately two thirds of the northern Properties boundary is shared with the WCI facility. Both Northeast 94th Avenue and the WCI facility (former landfill operations) were developed prior to clarifier solids being placed at the Properties. These operational constraints along with aerial photographs indicate that it is unlikely activities associated with the Properties would extend across these operational boundaries.

The eastern one third of the northern Properties boundary along with the eastern boundary and a small portion of the southern boundary is adjacent to the closed landfill. These areas were likely modified during landfill closure and cap installation. Visible indications of the geotextile commonly used for landfill caps are present off-Properties along the eastern boundary. Surface soil samples collected from these areas were not impacted with PCBs above the Method A CUL for unrestricted land use.

To the south, the Properties is boarded by the Koski property. PCB contamination in soil appears to extend off-Properties to the south. The lateral extent of PCBs in soil is defined to the south by the sampling done in October 2014. According to aerial photographs, a gravel road has been present along the southern Properties boundary since before 1964 (refer to Figure 2). In some cases, PCB impacted surface soil extends to approximately the northern side of this gravel road.

3.2 GROUNDWATER

Groundwater was not assessed because site characterization data showed that the Properties are not a source of groundwater contamination. Groundwater was not encountered during the assessments.

It is Ecology's position that groundwater contamination (i.e., iron and manganese) likely extends onto the Properties based on results from adjacent groundwater monitoring wells at the landfill and off-Properties evaluations conducted in regards to the landfill.

1.3. SURFACE WATER AND SEDIMENT

There is no surface water on the Properties and consequently, no sediment for evaluation.

4.0 CLEANUP STANDARDS

MTCA requires the establishment of cleanup standards for individual sites. The two primary components of cleanup standards are CULs and points of compliance (POCs). CULs determine the concentration at which a substance does not pose unacceptable risks to human health or the environment. Materials that exceed CULs are addressed through remedies that prevent exposure to the materials. POCs represent the locations on a site where CULs must be met.

4.1 TERRESTRIAL ECOLOGICAL EVALUATION

WAC 173-340-7490 requires that sites conduct a terrestrial ecological evaluation (TEE) to determine the potential effects of soil contamination on ecological receptors. As described in the attached TEE, the Site does not meet the exclusionary criteria. The Site also does not meet criteria for a simplified TEE. Therefore, the Site was evaluated using a site-specific TEE process.

Problem formulation involves:

- Selecting chemicals of ecological concern;
- Identifying complete exposure pathways; and
- Identifying current or potential future terrestrial ecological receptors of concern.

Chemicals detected in site soils (listed in the attached Table 2) were compared to values in MTCA Table 749-3. Since the Site is a commercial property, only risks to wildlife need to be considered. Those chemicals detected at the Site and having wildlife ecological soil criteria were carried forward in the TEE.

The evaluation of exposure pathways involves determining future site uses. Exposure pathways would be through direct contact and ingestion by wildlife. Since the Site is under a brownfields planning grant, the expectation of site redevelopment is high. Cleanup at the Site currently assumes soil contaminated above the MTCA Method A CULs will be excavated and removed from the Properties.

4.2 SITE CLEANUP LEVELS

The site investigation and previous investigations have documented the presence of contamination in soil at the Site. CULs will be developed for soil. Soil CULs for the protection of potable groundwater (leaching-to-groundwater pathway) are not necessary as potential cleanup targets for soil on the Properties. Site characterization data indicate that contamination is confined to shallow soil.

The Properties historically has been used for agricultural and residential purposes and it is anticipated that it will be used for commercial or light industrial purposes in the future based on the zoning and surrounding land uses. It is also anticipated that after remediation, the Properties will not have restrictions on use because of soil contamination. Therefore, soil samples were screened by comparing them to MTCA Method A CULs as available for unrestricted land use (see Table 1). These CULs are calculated using reasonable maximum human health exposure assumptions with target risk levels set at the MTCA acceptable risk level.

4.3 POINT OF COMPLIANCE

The MTCA cleanup regulations define the POC as the point or points where CULs shall be attained in the impacted media. Once CULs are met at the POCs, a site is no longer considered a threat to human health or the environment.

WAC 173-340-740(6) gives the POC requirements for soil. The soil POC is the depth bgs at which soil CULs shall be attained. The standard POC for Method A is soil within 15 feet of the ground surface throughout the site. This standard POC is applied to soil on the Properties.

5.0 CLEANUP ACTION SELECTION

5.1 REMEDIAL ACTION OBJECTIVES

The remedial action objectives describe the actions necessary to protect human health and the environment through eliminating, reducing, or otherwise controlling risks posed through the exposure pathways and migration routes. These objectives are developed by evaluating the characteristics of the contaminated media, the characteristics of the hazardous substances present, migration and exposure pathways, and potential receptor points.

Soil has been contaminated as a result of past activities at the Site. People are typically exposed to contaminated soil via dermal contact, inhalation of soil particles, or incidental ingestion of soil. Potential receptors (i.e., those with potentially complete exposure pathways) include on-site commercial workers, on-site construction workers, and on-site recreationists and ecological receptors.

The following remedial action objectives are intended to prevent or minimize direct contact, inhalation, or ingestion of contaminated soil by humans or ecological receptors.

5.2 CLEANUP ACTION ALTERNATIVES

The cleanup action alternatives address soil on the Properties impacted by PCBs and in one location zinc. PCB impacts were detected at the Properties in surface soil samples collected from generally 2 feet to 3 feet bgs. Cleanup action alternatives were evaluated as part of the Focused Site Characterization (MFA, 2014). The Focused Site Characterization included the evaluation of three options for managing impacted soil. The alternatives were scored and ranked using relevant criteria as described in WAC 173-340-360. The considered alternatives includes one or more of the following remedial actions:

- Soil removal and offsite disposal
- Installation of an engineered cap
- Implementation of institutional controls / restrictive covenants

These remedial action options were used to develop three alternatives. The following alternatives have been developed by Ecology, based on the alternatives proposed in the Focused Site Characterization prepared by MFA (MFA, 2014):

5.2.1 Alternative 1: Excavation and off-site disposal of contaminated soil

Alternative 1 includes excavation and off-site disposal at an appropriate landfill of soil that exceeds MTCA CULs. Costs for all alternatives are assumed to be estimates for planning purposes and reflect costs and conditions as they were presented in 2014. Final cost estimates will need to be completed upon selection of the ultimate remedy at the Property. The remedial action components are summarized in Table 3.

- Excavation. The lateral extent of PCB contamination, shown in Figure 6, will be excavated to a depth of 2 feet to 3 feet bgs. Characterization samples will be collected from soil stockpiles for waste profiling and for disposal. Confirmation samples will also be taken from the excavation areas to confirm PCB contamination removal. The excavation volume is estimated to be approximately 46,286 cubic yards. For the purpose of estimating costs, and based on existing data, it is assumed that the material excavated will be classified as nonhazardous material and disposed of at a Resource Conservation and Recovery Act (RCRA) Subtitle D permitted landfill.
- Grading. The site will be graded to the recommended ground surface elevation for stormwater management and redevelopment.
- Institutional controls. No institutional controls are warranted.
- Estimated cost. The estimated cost for alternative 1 is $3,350,00 (including 20 percent contingency). Details are presented in Table 3.

5.2.2 Alternative 2: Capping of contaminated soils

Alternative 2 is summarized in Table 4. Alternative 2 grades and caps the site to provide a barrier from PCB contaminated soil. The remedial action includes:

- Grading and capping. The existing grade may be modified to allow for stormwater drainage. Contaminants in soil that are left in place will be capped with a minimum 2 foot of clean soil and demarcation layer (e.g., landscape area with visual marker fabric), asphalt surface (e.g., parking lot), and concrete surface (e.g., walkway). It is assumed that the cap will apply to the entire Properties. Soil will be imported and placed on top of a demarcation layer, delineating the contaminated soil from cap material.
- Institutional controls. A soil management plan will be developed and an environmental covenant placed on the Properties to protect the engineered cap. The soil management plan will describe the nature and locations of contaminated soil that is left in place, discuss potential worker safety considerations, and identify the type of demarcation layer that is placed for future site activities that involve penetration of the soil cap. In addition, a cap inspection plan will be implemented to provide annual inspections.
- Estimated cost. The estimated cost for alternative 2 is $1,039,500 (including 20 percent contingency). Details are presented in Table 4.

5.2.3 Alternative 3: Targeted Excavation and Capping of Contaminated Soils

Alternative 3 is summarized in Table 5 and includes targeted soil excavation with off-site disposal, and capping of the Properties integrated with the assumption that a light industrial use may require buildings and associated parking areas. This alternative is based on a redevelopment scenario where approximately 1/3 (approximately 3 acres) of the Properties would be managed to create an unencumbered section of the Properties that fronts on 94th Avenue. The remedial action includes:

- Targeted soil removal. Excavate areas necessary to provide adequate cap cover based on the final site grade. The excavation volume is estimated to be 15,413 cubic yards. For cost estimating purposes, it is assumed that the soil may be disposed of at a RCRA Subtitle D landfill.
- Soil consolidation. If final site grade allows, soil excavated during redevelopment may be consolidated on site beneath the areas to be capped. For cost estimating, it was assumed that all excavated material will require off-site disposal.
- Capping. Contaminants in soil above MTCA CULs that are left in place will be capped with a minimum 2 foot of soil and demarcation layer (e.g., landscape area with visual marker fabric), asphalt surface (e.g., parking lot), and concrete surface (e.g., walkway), or located within the footprint of a building. Soil will be imported and placed on top of a demarcation layer, delineating the contaminated soil from cap material.
- Institutional controls. A soil management plan will be developed and an environmental covenant placed on the Properties to protect the engineered cap. The soil management plan will describe the nature and locations of contaminated soil that is left in place, discuss potential worker safety considerations, and identify the type of demarcation layer that is placed for future site activities that involve penetration of the cap. In addition, a cap inspection plan will be implemented to provide annual inspections.

Estimated cost. The estimated cost for alternative 3 is $1,842,300 (including 20 percent contingency). Details are presented in Table 5.

Table 6 presents a disproportionate cost analysis assessing each alternative with respect to protectiveness, permanence, long-term effectiveness, management of short-term risks, and implementability.

5.3 REGULATORY REQUIREMENTS

The MTCA cleanup regulation sets forth the minimum requirements and procedures for selecting a cleanup action. A cleanup action must meet each of the minimum requirements specified in WAC 173-340-360(2), including certain threshold and other requirements. These requirements are outlined below.

5.3.1 Threshold Requirements

WAC 173-340-360(2)(a) requires the cleanup action to:

- Protect human health and the environment;
- Comply with cleanup standards;
- Comply with applicable state and federal laws; and
- Provide for compliance monitoring, as needed.

5.3.2 Other Requirements

In addition, WAC 173-340-360(2)(b) states that the cleanup action shall:

- Use permanent solutions to the maximum extent practicable;
- Provide for a reasonable restoration time frame; and
- Consider public concerns.

WAC 173-340-360(3) describes the specific requirements and procedures for determining whether a cleanup action uses permanent solutions to the maximum extent practicable. A permanent solution is defined as one in which CULs can be met without further action being required at the Site other than the disposal of residue from the treatment of hazardous substances.

To determine whether a cleanup action uses permanent solutions to the maximum extent practicable, a disproportionate cost analysis is conducted. This analysis compares the costs and benefits of the cleanup action alternatives and involves the consideration of factors including:

- Protectiveness;
- Permanent reduction of toxicity, mobility and volume;
- Cost;
- Long-term effectiveness;
- Short-term risk;
- Implementability; and

- Consideration of public concerns.

The comparison of benefits and costs may be quantitative, but may often be qualitative and require the use of best professional judgment.

WAC 173-340-360(4) describes the specific requirements and procedures for determining whether a cleanup action provides for a reasonable restoration time frame.

5.3.3 Cleanup Action Expectations

WAC 173-340-370 sets forth the following expectations for the development of cleanup action alternatives and the selection of cleanup actions. These expectations represent the types of cleanup actions Ecology considers likely results of the remedy selection process; however, Ecology recognizes that there may be some sites where cleanup actions conforming to these expectations are not appropriate.

- Treatment technologies will be emphasized at sites with liquid wastes and in areas with high concentrations of hazardous substances or with highly mobile and/or highly treatable contaminants;
- To minimize the need for long-term management of contaminated materials, hazardous substances will be destroyed, detoxified, and/or removed to concentrations below CULs throughout sites with small volumes of hazardous substances;
- Engineering controls, such as containment, may be necessary at sites with large volumes of materials with relatively low levels of hazardous substances and where treatment is impracticable;
- To minimize the potential for migration of hazardous substances, active measures will be taken to prevent precipitation and runoff from coming into contact with contaminated soil or waste materials;
- When hazardous substances remain on site at concentrations that exceed CULs, they will be consolidated to the maximum extent practicable to minimize the potential for direct contact and migration of hazardous substances;
- For sites adjacent to surface water, active measures will be taken to prevent/minimize releases to that water; dilution will not be the sole method for achieving compliance;
- Natural attenuation of hazardous substances may be appropriate at sites where 1) source control is conducted to the maximum extent practicable, 2) leaving contaminants on site does not pose an unacceptable risk, 3) there is evidence that natural degradation is occurring and will continue to occur, and 4) appropriate monitoring is taking place; and
- Cleanup actions will not result in a significantly greater overall threat to human health and the environment than other alternatives.

5.3.4 Applicable, Relevant, and Appropriate, and Local Requirements

WAC 173-340-710(1) requires that cleanup actions comply with all applicable state and federal law. It further states that the term “applicable state and federal laws” shall include legally

applicable requirements and those that the department determines "…are relevant and appropriate requirements." This section discusses applicable state and federal law, relevant and appropriate requirements, and local permitting requirements that were considered of primary importance in selecting cleanup requirements for the Site. If other requirements are identified at a later date, they will be applied to the cleanup actions at that time.

MTCA provides an exemption from the procedural requirements of several state laws and from laws authorizing local government permits or approvals for remedial actions conducted under a consent decree, order, or agreed order (RCW 70.105D.090). However, the substantive requirements of a required permit must be met. The procedural requirements of the following state laws are exempted:

- Ch. 70.94 RCW, Washington Clean Air Act;
- Ch. 70.95 RCW, Solid Waste Management, Reduction, and Recycling;
- Ch. 70.105 RCW, Hazardous Waste Management;
- Ch. 77.55 RCW, Construction Projects in State Waters;
- Ch. 90.48 RCW, Water Pollution Control; and
- Ch. 90.58 RCW, Shoreline Management Act of 1971.

WAC 173-340-710(4) sets forth the criteria that Ecology evaluates when determining whether certain requirements are relevant and appropriate for a cleanup action. Local laws, which may be more stringent than specified state and federal laws, will govern where applicable.

5.4 EVALUATION OF CLEANUP ACTION ALTERNATIVES

The requirements and criteria outlined in Section 5.3 are used to conduct a comparative evaluation of the alternatives and to select a cleanup action from those alternatives.

5.4.1 Threshold Requirements

5.4.1.1 Protection of Human Health and the Environment

The three alternatives reduce or eliminate risk due to contaminated soil through removal or a combination of removal, consolidation, and capping. Therefore, they are intended to eliminate exposure pathways and protect human health and the environment.

5.4.1.2 Compliance with Cleanup Standards

The three alternatives were developed to meet cleanup standards.

5.4.1.3 Compliance with State and Federal Laws

The selected CULs are consistent with MTCA. In addition, local, state and federal laws related to environmental protection, health and safety, transportation, and disposal would apply to each alternative. During remedial design, the selected alternative will be designed and implemented to comply with applicable, relevant, and appropriate requirements.

5.4.1.4 Provision for Compliance Monitoring

There are three types of compliance monitoring: protection, performance, and confirmational. Protection monitoring is intended to protect human health and the environment during the construction and operation and maintenance phases of the cleanup action. Performance monitoring confirms that the cleanup action has met cleanup and/or performance standards. Confirmational monitoring confirms the long-term effectiveness of the cleanup action once cleanup standards have been met or other performance standards have been attained. The cleanup alternatives can be implemented to meet this provision.

5.4.2 Other Requirements

5.4.2.1 Use of Permanent Solutions to the Maximum Extent Practicable

MTCA states that when selecting a cleanup alternative, preference shall be given to "permanent solutions to the maximum extent practicable." "Permanent" is defined in WAC 173-340-200 as a cleanup action in which the cleanup standards of WAC 173-340-700 through 173-340-760 are met without further action being required at the site being cleaned up or at any other site involved with the cleanup action, other than the approved disposal of any residue from the treatment of hazardous substances.

In order to determine the "maximum extent practicable" for each alternative, a disproportionate-cost analysis outlined in WAC 173-340-360(3)(e) is used. Costs are determined to be disproportionate to benefits if the incremental cost of a more expensive alternative over that of a lower-cost alternative exceeds the incremental degree of benefits achieved by the more expensive alternative. Consistent with WAC 173-340-360(3)(f), the evaluation criteria used were a mix of qualitative and quantitative factors, including protectiveness, permanence, cost effectiveness over the long term, management of short-term risks, technical and administrative implementability, and consideration of public concerns.

The cleanup alternatives are evaluated by the criteria below.

- Protectiveness

Protectiveness is a factor by which human health and the environment are protected by the cleanup action, including the degree to which existing risks are reduced; time required to reduce risk at the facility and attain cleanup standards; on-site and off-site risks resulting from implementing the cleanup action alternative; and improvement of the overall environmental quality. The three alternatives are protective, preventing human and ecological exposure by removing soils exceeding CULs from the Properties or capping them in place. The three alternatives are ranked the same for protectiveness.

- Permanent Reduction of Toxicity, Mobility and Volume

Permanence is a factor by which the cleanup action alternative permanently reduces the toxicity, mobility, or volume of hazardous substances. It takes into account the adequacy of the alternative in destroying the hazardous substances, the reduction or elimination of hazardous substance releases and sources of releases, the degree of irreversibility of the waste-treatment process, and

the characteristics and quantity of treatment residuals generated. Removal of impacted soil would be considered the most permanent soil action because it permanently eliminates the source at the Site. Alternatives that include less soil removal would be less permanent because they would rely on institutional controls, which could be violated or removed from the Site in the future. Therefore, Alternative 1 would be ranked higher for permanence than Alternatives 2 or 3.

- Disproportionate Cost Analysis

In accordance with WAC 173-340-360(3)(e), the most practicable permanent solution evaluated will be the baseline cleanup action alternative to which the other cleanup action alternatives are compared. On this basis, alternative 1 is the baseline alternative for this analysis.

Table 6 summarizes the comparative analysis. Each alternative was given a rating between 1 and 5 (5 being optimal, 1 being inadequate). Where there were only slight differences, fractional ratings were applied.

- Based on these criteria, alternatives 1, 2, and 3 have close ratings, ranging from 4.4 to 4.8, respectively (see Table 6). Evaluating the above factors with the estimated cost for each alternative and a relative increased benefit, alternative 1 is preferred by 8 percent; however, the cost of alternative 1 is nearly three and one half times the cost of alternative 2.
- Long-Term Effectiveness

Long-term effectiveness includes the degree of certainty that the alternative will be successful; the reliability of the alternative for as long as hazardous substances are expected to remain on site at concentrations that exceed CULs; the magnitude of residual risk with the alternative in place; and the effectiveness of controls required to manage treatment residues or remaining wastes. Long-term effectiveness of alternative 1 would be considered slightly higher than for alternative 2 or 3, since it removes contaminated soil above MTCA CUL criteria.

- Short-Term Risk Management

Short-term risks to remediation workers, the public, and the environment are assessed under this criterion. Generally, short-term risks are expected to be linearly related to the amount of material handled, treated, and/or transported and disposed of (e.g., worker injury per cubic yard excavated [equipment failure], public exposure per cubic yard-mile transported [highway accident]).

This factor addresses the risk to human health and the environment associated with the alternative during construction and implementation of the selected remedy, and the effectiveness of measures that will be taken to manage such risks. Potential public exposure during transport, handling, and excavation required for alternatives 1 and 3 could lead to short-term risks. Alternative 3 requires less off-site transportation and handling of impacted soil than alternative 1 and so would involve lower short-term risks; it is therefore ranked higher than alternative 1. Alternative 2 is ranked the highest as no off-site transportation is needed.

- Technical and Administrative Implementability

This factor addresses whether an alternative can be implemented and is technically possible. The availability of necessary materials, regulatory requirements, scheduling, access for construction operations and monitoring, and integration with existing and neighboring site uses must be considered. The proposed alternatives are well proven and have been employed at many sites throughout the United States; the alternatives are readily implementable and rank equivalently.

- Consider Public Concerns

This factor includes considering concerns from individuals as well as community groups, local governments, tribes, federal and state agencies, and other organizations that may have an interest in or knowledge of the Site and that may have a preferred alternative. Clark County hosted a public open house on April 29, 2014 to give local residents and the general public information pertaining to the redevelopment plan for the adjacent landfill properties. During this open house information pertaining to Clark County's interest in investigation and possible acquisition of the Properties for redevelopment was made available to the public. No concerns were voiced at that time. No remedial options were presented at that time. Future public meetings will be held pertaining to the landfill planning process at which point additional information pertaining to the Properties and other adjacent properties may be conveyed.

The alternatives can provide opportunity for further public review of and comment on the plans.

5.4.2.2 Provide a Reasonable Restoration Time Frame

WAC 173-340-360(4) describes the specific requirements and procedures for determining whether a cleanup action provides for a reasonable restoration time frame, as required under subsection (2)(b)(ii). The factors that determine whether a cleanup action provides a reasonable restoration time frame are set forth in WAC 173-340-360(4)(b) and include:

- Potential risks posed by the site to human health and the environment;
- Practicability of achieving a shorter restoration time frame;
- Current site use and nearby resources that are or may be affected by the site;
- Potential future use of the site and of nearby resources that are or may be affected by the site;
- Availability of alternative water supplies;
- Likely effectiveness and reliability of institutional controls;
- Ability to monitor and control migration of hazardous substances;
- Toxicity of hazardous substances; and
- Natural processes, documented on the site, that reduce contaminant concentrations.

Alternatives that rely on soil removal would typically provide greater flexibility for current and future site use and greater reduction in risk, and would not rely on institutional controls. Alternatives that leave contaminants in soil above the CULs would rely on institutional controls, would have residual risk, and would increase the restoration time frame by leaving contamination in place. Alternative 1 is ranked higher than Alternatives 2 and 3, since

Alternative 1 is intended to remove a larger amount of contaminated soil, leading to restoration in a shorter time frame.

5.4.3 Groundwater Cleanup Action Requirements

There are no known groundwater impacts from contamination in the shallow surface soils at the Properties, and therefore the alternatives score equally.

5.4.4 Cleanup Action Expectations

Specific expectations of cleanup actions are outlined in WAC 173-340-370 and are described in Section 5.3.4. The alternatives address these expectations as follows:

- Alternative 1 would minimize the need for long-term management because soils contaminated above CULs would be removed rather than managed on site.
- Alternatives 2 and 3 include the installation of an engineered cap. Institutional controls will require the integrity of the cap to be maintained to prevent contact with soils that are contaminated above CULs.
- The alternatives would prevent surface water contacting contaminated soils above CULs and creating impacted runoff.

5.5 ECOLOGY DECISION

Based on the analysis described above, Alternative 1 has been selected by Ecology as the proposed remedial action for the Site. Alternative 1 meets each of the threshold requirements and uses permanent solutions to the maximum extent practicable relative to the cost of implementation. Figure 6 shows the remediation areas applicable to Alternative 1.

6.0 SELECTED REMEDIAL ACTION

The proposed cleanup action for the Site is alternative 1 and includes excavation and off-site disposal at an appropriate landfill of soil that exceeds MTCA CULs. The remedial action components are summarized in Table 3.

6.1 Institutional Controls

Institutional controls are measures undertaken to limit or prohibit activities that may interfere with the integrity of a cleanup action or result in exposure to hazardous substances at a site. Such measures are required to ensure both the continued protection of human health and the environment and the integrity of the cleanup action whenever hazardous substances remain at the site at concentrations exceeding applicable CULs. Institutional controls can include both physical measures and legal and administrative mechanisms. WAC 173-340-440 provides information on institutional controls and the conditions under which they may be removed.

No institutional controls are warranted for alternative 1.

6.2 COMPLIANCE MONITORING

There are three types of compliance monitoring: protection, performance, and conformational. Protection monitoring is intended to protect human health and the environment during the construction and operation and maintenance phases of a cleanup action. Performance monitoring is used to evaluate if the cleanup action has met cleanup and/or performance standards. Conformational monitoring is used to evaluate the long-term effectiveness of the cleanup action once cleanup standards have been met or other performance standards have been attained. The selected cleanup alternative does not require compliance monitoring as it includes removal of all impacted soils about the CUL.

6.3 FINANCIAL ASSURANCE

WAC 173-340-440 requires financial assurance mechanisms at sites where the selected cleanup action includes engineered and/or institutional controls. Financial assurances are not required at the Site because engineered controls will be not relied upon at the Site using alternative 1.

6.4 PERIODIC REVIEW

WAC 173-340-420 states that, as long as groundwater CULs have not been achieved at sites where a cleanup action requires institutional control(s), a periodic review shall be completed no less frequently than every five years after the initiation of a cleanup action. In addition, periodic reviews are required at sites that rely on institutional controls as part of the cleanup action. Periodic reviews will not be required at the Site using alternative 1.

7.0 REFERENCES CITED

GeoDesign. 2010. Phase I environmental site assessment and limited surface soil evaluation. Prepared for Jane Gilliland c/o Miller Nash LLP. GeoDesign, Inc. March 18.

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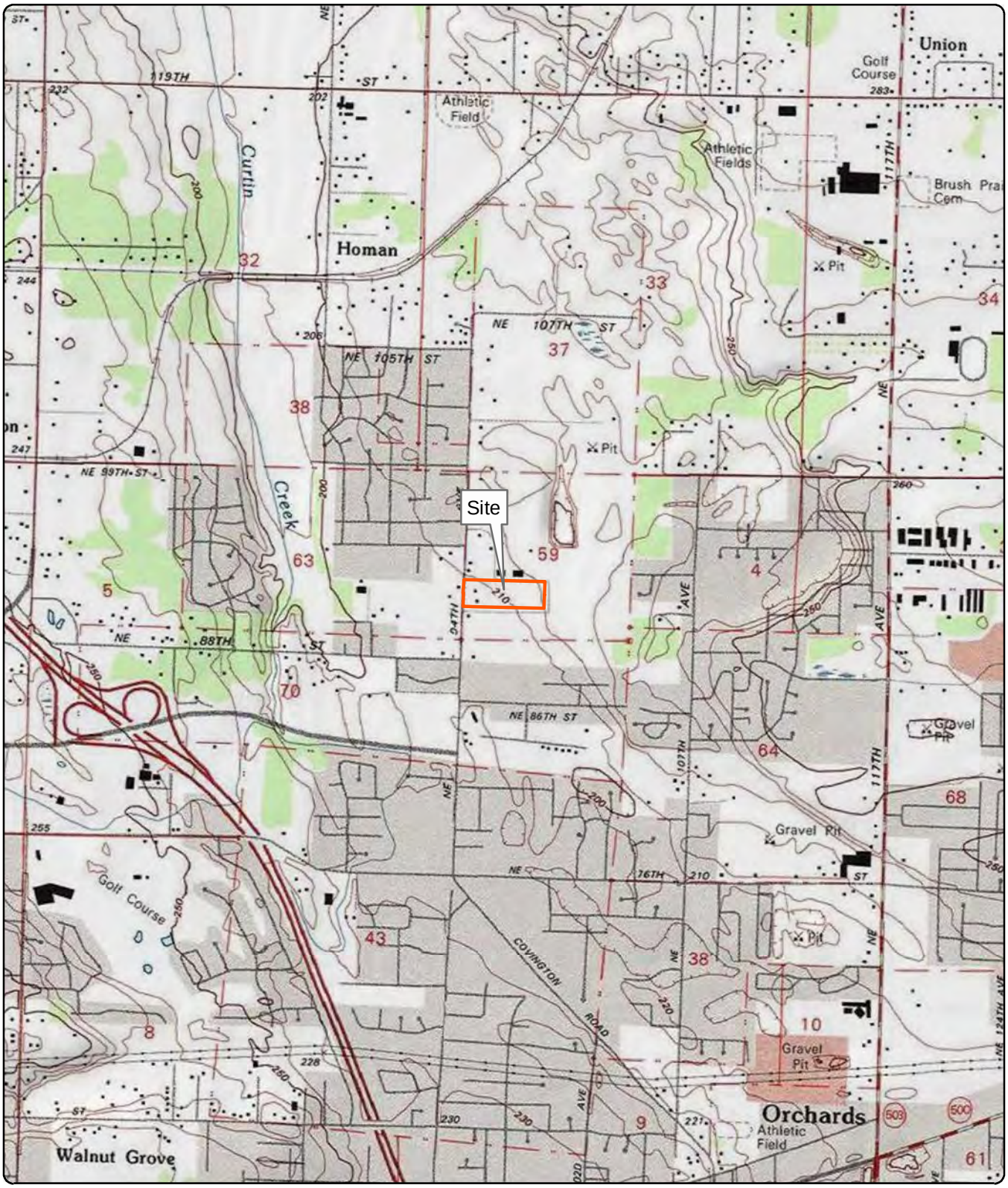
WRCC. 2015. Western Regional Climate Center. http://www.wrcc.dri.edu/, April.

FIGURES



Site Address: 9109 and 9115 Northeast 94th Avenue,
Vancouver, Washington 98662
Source: U.S. Geological Survey (1990) 7.5-minute
topographic quadrangle: Orchards
Section 59, Township 2 North, Range 2 East

Figure 1
Site Location

Fleischer Properties
Cleanup Action Plan
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington

0 1,000 2,000
Feet

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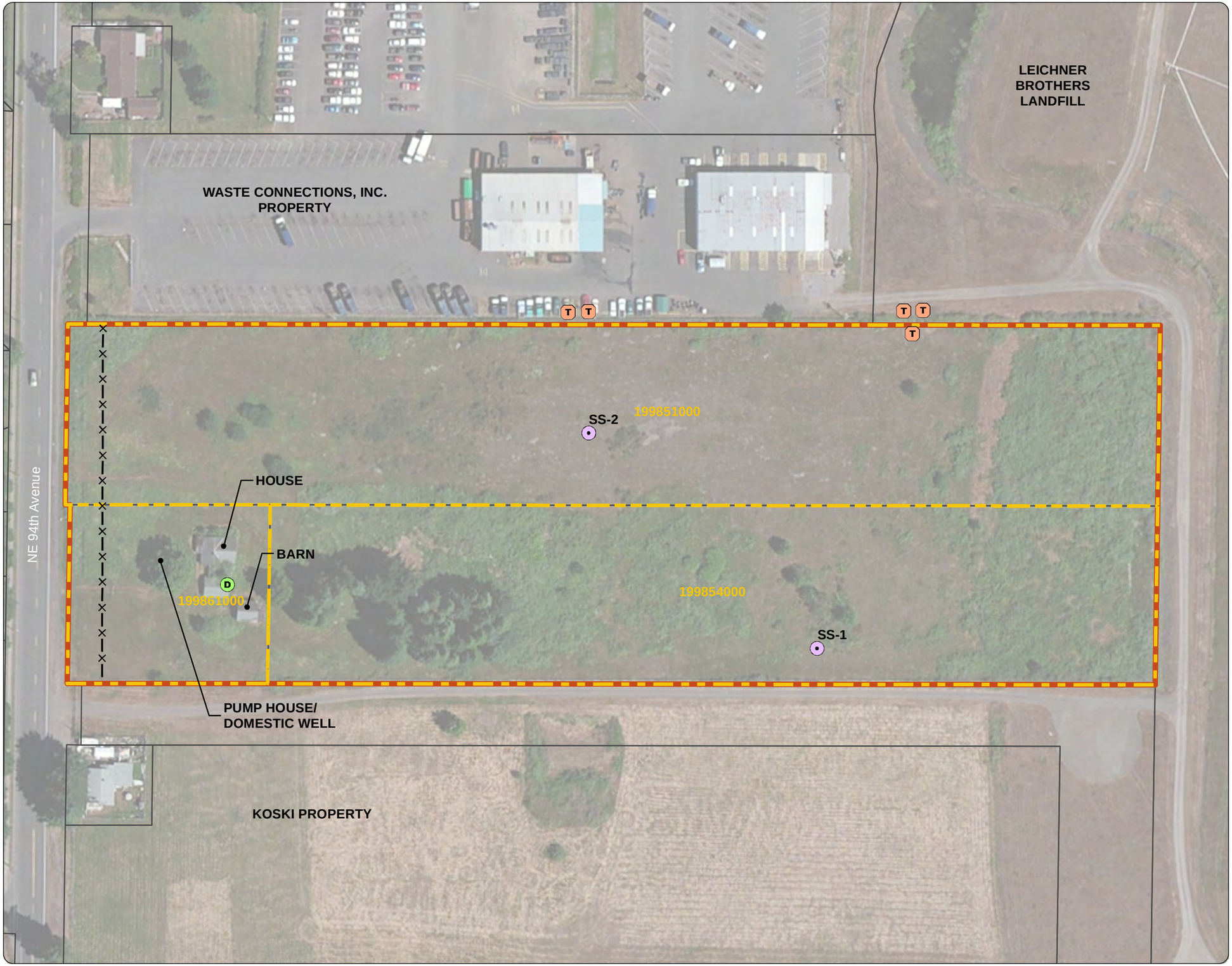
Path: X:\9059.07 Clark County\04 Fleischer IPG\Projects\Cleanup Action Plan\Fig1_Site Location.mxd
Print Date: 5/29/2015
Approved By: E. Hess
Produced By: jschane
Project: 9059.07

Figure 2
Site Features

Fleischer Properties
Cleanup Action Plan
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington



Legend

- Drum
- Pole-mounted Transformer
- Residual Fill Material Sample Location from 2010 GeoDesign, Inc. Investigation
- Fence
- Site Boundary
- Site Tax Lot
- Tax Lot Boundary

Note: All site feature locations are approximate.

0 50 100
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots obtained from Clark County

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Print Date: 5/29/2015
Approved By: kroslund
Produced By: jschane
Project: 9059.07.04

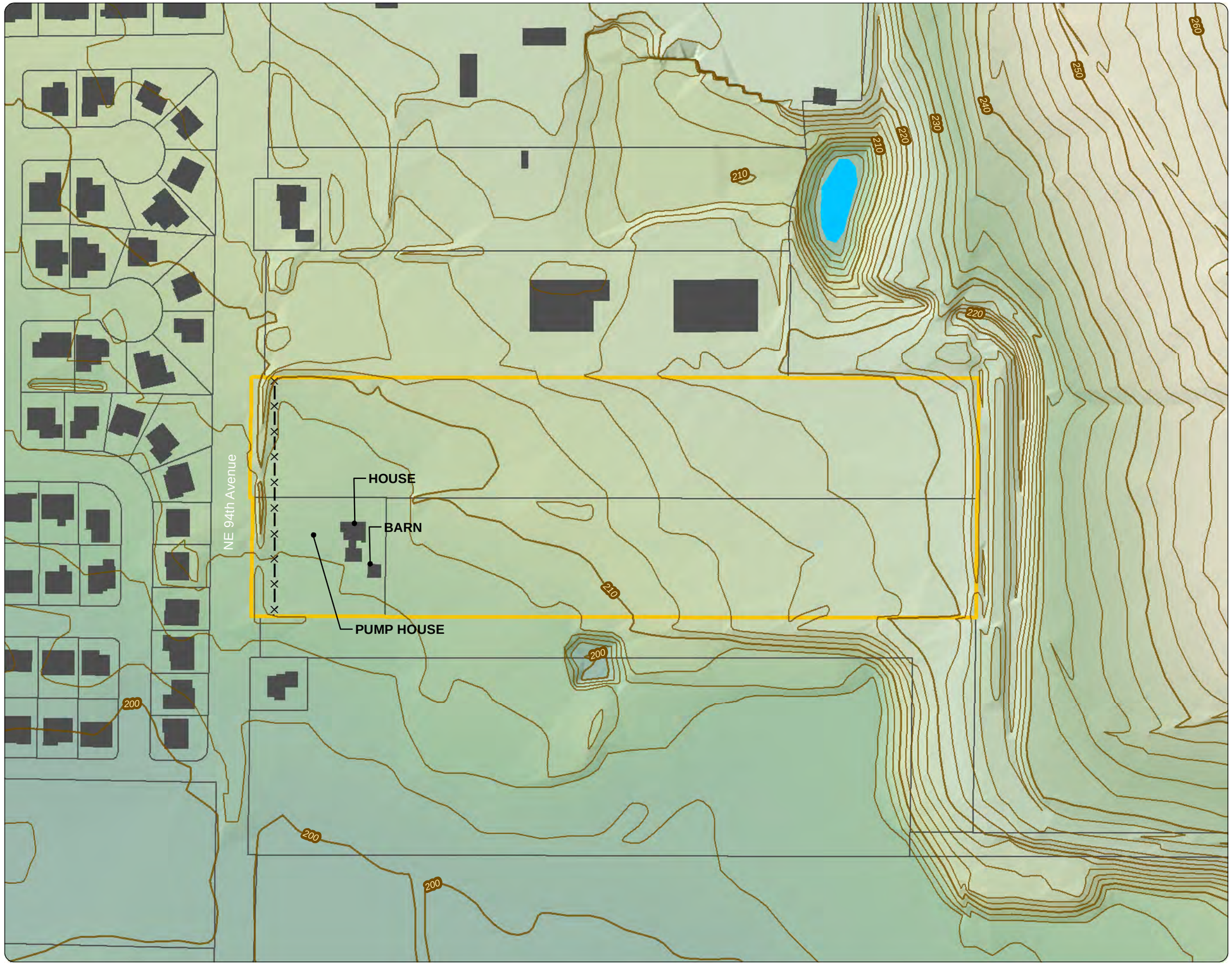

Figure 3
Topography
(LIDAR Derived)

Clark County
Cleanup Action Plan
9109 and 9115 NE 94th Avenue
Vancouver, Washington

DRAFT

Legend

- Fence
- Elevation Contour (10 ft)
- Elevation Contour (2 ft)
- Building Footprint
- Site Boundary
- Tax Lot Boundary

Elevation

High : 262.806

Low : 197.998

Note: All site feature locations are approximate.

0 75 150
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots, hydro, and elevation data obtained from Clark County.

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Print Date: 5/29/2015
Approved By: kroslund
Produced By: jschane
Project: 9059.07.04

Figure 4
Investigation Locations

Fleischer Properties
Cleanup Action Plan
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington

Legend

- Test Pit
- Pole-mounted Transformer
- Residual Fill Material Sample Location from 2010 GeoDesign, Inc. Investigation
- Site Boundary
- Site Tax Lot
- Tax Lot Boundary

Note: All site feature locations are approximate.

0 50 100
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots obtained from Clark County

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Approved By: kaslund
Produced By: jschane
Project: 9059.07.04

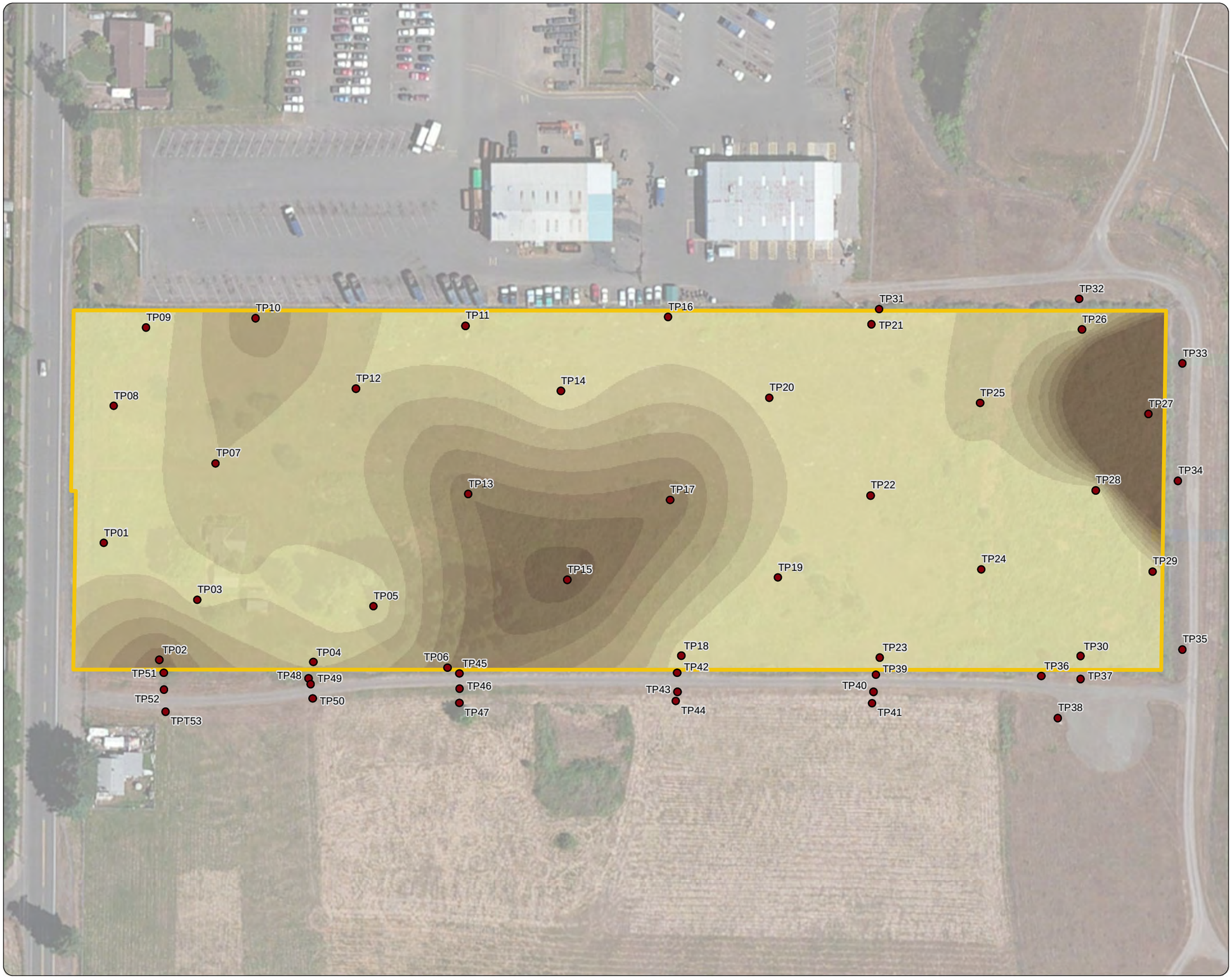

Figure 5
Clarifier Solids Depth

Fleischer Properties
Cleanup Action Plan
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington

Legend

- Test Pit
- Site Boundary

Interpolated Fill Depth (ft)

- 0 - 0.25
- 0.25 - 0.5
- 0.5 - 0.75
- 0.75 - 1
- 1 - 1.25
- 1.25 - 1.5
- 1.5 - 1.75
- > 1.75

Notes:
1. All site feature locations are approximate.
2. The Natural Neighbor method was used to interpolate measured Fill Depth.

0 50 100
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots obtained from Clark County

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Print Date: 5/29/2015
Approved By: kroslund
Produced By: jschane
Project: 9059.07.04

Figure 6
PCB Concentrations

Fleischer Properties
Cleanup Action Plan
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington

Legend

- Test Pit
- Site Boundary

PCB Concentrations (mg/kg)

- < 1
- 1-10
- > 10

Notes:
1. All site feature locations are approximate.
2. Dpth = depth in feet below ground surface.
3. mg/kg = milligrams per kilogram.
4. PCB = polychlorinated biphenyl.
5. PCB Concentrations value is for total PCBs.
6. Model Toxics Control Act Method A cleanup level for unrestricted land use is 1mg/kg for PCB mixtures in soil.

0 50 100
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots obtained from Clark County

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Print Date: 5/29/2015
Approved By: knoslund
Produced By: jschane
Project: 9059.07.04

TABLES

Table 1
Soil Analytical Results
Cleanup Action Plan
Fleischer Properties
Vancouver, Washington

			Location:	TP01	TP02		TP03	TP04		TP05		TP06	
			Sample Name:	TP01-S-0.5	TP02-S-0.5	TP02-S-2.0	TP03-S-0.5	TP04-S-0.25	TP04-S-1.0	TP05-S-0.5	TP05-S-1.5	TP06-S-0.5	TP06-S-2.0
			Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
			Collection Depth (ft bgs):	0.5	0.5	2	0.5	0.25	1	0.5	1.5	0.5	2
	MTCA A, Soil Unrestricted Land Use	MTCA A, Soil Industrial Properties	MTCA B, Soil										
Metals (mg/kg)													
Arsenic	20	20	NA	--	**2.57**	--	**2.95**	**3.09**	--	--	--	**2.05**	--
Chromium[a]	2000	2000	NA	--	**14.8**	--	**9.98**	**14.1**	--	--	--	**16**	--
Copper	NV	NV	3200	--	**35.7**	--	**29.7**	**43.2**	--	--	--	**44.4**	--
Iron	NV	NV	56000	--	--	--	--	--	--	--	--	--	--
Lead	250	1000	NA	--	**38.8**	--	**7.71**	**53.6**	--	--	--	**45.9**	--
Manganese	NV	NV	11200	--	--	--	--	--	--	--	--	--	--
Mercury	2	2	NA	--	**0.0341**	--	0.0192 U	**0.0631**	--	--	--	**0.0485**	--
Nickel	NV	NV	1600	--	**16.3**	--	**10.1**	**12.6**	--	--	--	**11.4**	--
Zinc	NV	NV	24000	--	**601**	--	**78.5**	**836**	--	--	--	**2380**	--
PCBs (mg/kg)													
Aroclor 1016	NV	NV	5.6	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1221	NV	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1232	NV	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1242	NV	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1248	NV	NV	NV	**0.389** J	**32.4**	**0.185**	0.000406 U	**6.13**	**0.0667**	**38** J	**0.0458**	**48.3**	**0.114**
Aroclor 1254	NV	NV	0.5	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1260	NV	NV	0.5	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1262	NV	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1268	NV	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Total PCBs	1	10	NA	**0.389** J	**32.4**	**0.185**	0.000406 U	**6.13**	**0.0667**	**38** J	**0.0458**	**48.3**	**0.114**
Chlorinated Herbicides (mg/kg)													
2,4,5-T	NV	NV	800	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
2,4-D	NV	NV	800	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
2,4-DB	NV	NV	640	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
4-Nitrophenol	NV	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
Dicamba	NV	NV	2400	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
Dichlorprop	NV	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
Dinoseb	NV	NV	80	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
MCPA	NV	NV	40	0.801 U	0.726 U	--	0.813 U	--	0.856 U	0.779 U	--	0.759 U	--

			Location:	TP01	TP02		TP03	TP04		TP05		TP06	
			Sample Name:	TP01-S-0.5	TP02-S-0.5	TP02-S-2.0	TP03-S-0.5	TP04-S-0.25	TP04-S-1.0	TP05-S-0.5	TP05-S-1.5	TP06-S-0.5	TP06-S-2.0
			Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
			Collection Depth (ft bgs):	0.5	0.5	2	0.5	0.25	1	0.5	1.5	0.5	2
MCPP	NV	NV	80	0.801 U	0.726 U	--	0.813 U	--	0.856 U	0.779 U	--	0.759 U	--
Pentachlorophenol	NV	NV	2.5	**0.0191**	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	**0.0144**	--
Silvex	NV	NV	640	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
Organophosphorus Pesticides (mg/kg)													
Bladan	NV	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Coumaphos	NV	NV	NV	0.12 U	0.109 U	--	0.122 U	--	0.128 U	0.117 U	--	0.114 U	--
Demeton-S	NV	NV	NV	0.0601 U	0.0545 U	--	0.061 U	--	0.0642 U	0.0584 U	--	0.0569 U	--
Diazinon	NV	NV	56	0.0601 U	0.0545 U	--	0.061 U	--	0.0642 U	0.0584 U	--	0.0569 U	--
Dichlorvos	NV	NV	3.45	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Dimethoate	NV	NV	16	0.0601 U	0.0545 U	--	0.061 U	--	0.0642 U	0.0584 U	--	0.0569 U	--
Disulfoton	NV	NV	3.2	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Dursban	NV	NV	80	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Ethoprop	NV	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Fensulfothion	NV	NV	NV	0.12 U	0.109 U	--	0.122 U	--	0.128 U	0.117 U	--	0.114 U	--
Fenthion	NV	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Guthion	NV	NV	NV	0.3 U	0.272 U	--	0.305 U	--	0.321 U	0.292 U	--	0.285 U	--
Merphos oxide	NV	NV	2.4	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Methyl parathion	NV	NV	20	0.12 U	0.109 U	--	0.122 U	--	0.128 U	0.117 U	--	0.114 U	--
Mevinphos	NV	NV	NV	0.12 U	0.109 U	--	0.122 U	--	0.128 U	0.117 U	--	0.114 U	--
Naled	NV	NV	160	0.3 U	0.272 U	--	0.305 U	--	0.321 U	0.292 U	--	0.285 U	--
Parathion	NV	NV	480	0.0601 U	0.0545 U	--	0.061 U	--	0.0642 U	0.0584 U	--	0.0569 U	--
Phorate	NV	NV	16	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Ronnel	NV	NV	4000	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Santox	NV	NV	0.8	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Stirofos	NV	NV	41.7	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Sulfotepp	NV	NV	40	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Sulprofos	NV	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Sumitox	NV	NV	1600	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Tokuthion	NV	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Trichloronate	NV	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--

Table 1
Soil Analytical Results
Cleanup Action Plan
Fleischer Properties
Vancouver, Washington

			Location:	TP01	TP02		TP03	TP04		TP05		TP06	
			Sample Name:	TP01-S-0.5	TP02-S-0.5	TP02-S-2.0	TP03-S-0.5	TP04-S-0.25	TP04-S-1.0	TP05-S-0.5	TP05-S-1.5	TP06-S-0.5	TP06-S-2.0
			Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
			Collection Depth (ft bgs):	0.5	0.5	2	0.5	0.25	1	0.5	1.5	0.5	2
Organochlorine Pesticides (mg/kg)													
4,4'-DDD	NV	NV	4.17	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
4,4'-DDE	NV	NV	2.94	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
4,4'-DDT	3	4	NA	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Aldrin	NV	NV	0.059	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
alpha-BHC	NV	NV	0.159	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
alpha-Chlordane	NV	NV	2.86	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
beta-BHC	NV	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Chlordane	NV	NV	2.86	0.00801 UJ	0.00726 UJ	--	0.00813 UJ	--	0.00856 UJ	0.00779 UJ	--	0.00759 UJ	--
delta-BHC	NV	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Dieldrin	NV	NV	0.063	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endosulfan I	NV	NV	480	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endosulfan II	NV	NV	480	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endosulfan sulfate	NV	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endrin	NV	NV	24	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endrin aldehyde	NV	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endrin ketone	NV	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Gamma-Chlordane	NV	NV	2.86	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Heptachlor	NV	NV	0.222	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Heptachlor epoxide	NV	NV	0.11	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Lindane	0.01	0.01	NA	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Methoxychlor	NV	NV	400	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Toxaphene	NV	NV	0.909	0.00801 UJ	0.00726 UJ	--	0.00813 UJ	--	0.00856 UJ	0.00779 UJ	--	0.00759 UJ	--
TPH (mg/kg)													
Diesel	2000	2000	NA	--	**138** J	--	18.3 U	**85.7** J	--	--	--	**111** J	--
Lube Oil	2000	2000	NA	--	**855**	--	**67** J	**659** J	--	--	--	**386** J	--
Ammonia (mg/kg)													
Nitrogen, Ammonia as N	NV	NV	NV	--	--	--	--	--	--	--	--	--	--

Table 1
Soil Analytical Results
Cleanup Action Plan
Fleischer Properties
Vancouver, Washington

			Location:	TP07		TP08	TP09		TP10			TP11	
			Sample Name:	TP07-S-0.25	TP07-S-1.0	TP08-S-0.5	TP09-S-0.5	TP09-S-4.5	TP10-S-0.5	TP-S-0.5DUP	TP10-S-1.5	TP11-S-0.5	TP11-S-4.5
			Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
			Collection Depth (ft bgs):	0.25	1	0.5	0.5	4.5	0.5	0.5	1.5	0.5	4.5
	MTCA A, Soil Unrestricted Land Use	MTCA A, Soil Industrial Properties	MTCA B, Soil										
Metals (mg/kg)													
Arsenic	20	20	NA	**3.9**	--	**2.51**	--	--	**2.96**	**2.74**	--	--	--
Chromium[a]	2000	2000	NA	**13.8**	--	**9.87**	--	--	**14.3**	**14.4**	--	--	--
Copper	NV	NV	3200	**40.1**	--	**28.3**	--	--	**38.1**	**45.3**	--	--	--
Iron	NV	NV	56000	--	--	--	--	--	--	--	--	--	--
Lead	250	1000	NA	**56.3**	--	**15.4**	--	--	**39.3**	**34.8**	--	--	--
Manganese	NV	NV	11200	--	--	--	--	--	--	--	--	--	--
Mercury	2	2	NA	**0.075**	--	**0.0277**	--	--	**0.055**	**0.0608**	--	--	--
Nickel	NV	NV	1600	**20.2**	--	**10.4**	--	--	**20.4**	**11.3**	--	--	--
Zinc	NV	NV	24000	**238**	--	**83.8**	--	--	**1030**	**1340**	--	--	--
PCBs (mg/kg)													
Aroclor 1016	NV	NV	5.6	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1221	NV	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1232	NV	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1242	NV	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1248	NV	NV	NV	**1.26** J	**0.045**	**0.0822**	**0.997**	0.000366 U	**68.5**	**53.2**	**0.0343**	**5.66**	0.000374 U
Aroclor 1254	NV	NV	0.5	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1260	NV	NV	0.5	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1262	NV	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1268	NV	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Total PCBs	1	10	NA	**1.26** J	**0.045**	**0.0822**	**0.997**	0.000366 U	**68.5**	**53.2**	**0.0343**	**5.66**	0.000374 U
Chlorinated Herbicides (mg/kg)													
2,4,5-T	NV	NV	800	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
2,4-D	NV	NV	800	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
2,4-DB	NV	NV	640	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
4-Nitrophenol	NV	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Dicamba	NV	NV	2400	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Dichlorprop	NV	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Dinoseb	NV	NV	80	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
MCPA	NV	NV	40	--	0.814 U	0.76 U	0.861 U	--	--	--	0.809 U	0.782 U	--

			Location:	TP07		TP08	TP09		TP10			TP11	
			Sample Name:	TP07-S-0.25	TP07-S-1.0	TP08-S-0.5	TP09-S-0.5	TP09-S-4.5	TP10-S-0.5	TP-S-0.5DUP	TP10-S-1.5	TP11-S-0.5	TP11-S-4.5
			Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
			Collection Depth (ft bgs):	0.25	1	0.5	0.5	4.5	0.5	0.5	1.5	0.5	4.5
MCPP	NV	NV	80	--	0.814 U	0.76 U	0.861 U	--	--	--	0.809 U	0.782 U	--
Pentachlorophenol	NV	NV	2.5	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Silvex	NV	NV	640	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Organophosphorus Pesticides (mg/kg)													
Bladan	NV	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Coumaphos	NV	NV	NV	--	0.122 U	0.114 U	0.129 U	--	--	--	0.121 U	0.117 U	--
Demeton-S	NV	NV	NV	--	0.061 U	0.057 U	0.0646 U	--	--	--	0.0607 U	0.0586 U	--
Diazinon	NV	NV	56	--	0.061 U	0.057 U	0.0646 U	--	--	--	0.0607 U	0.0586 U	--
Dichlorvos	NV	NV	3.45	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Dimethoate	NV	NV	16	--	0.061 U	0.057 U	0.0646 U	--	--	--	0.0607 U	0.0586 U	--
Disulfoton	NV	NV	3.2	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Dursban	NV	NV	80	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Ethoprop	NV	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Fensulfothion	NV	NV	NV	--	0.122 U	0.114 U	0.129 U	--	--	--	0.121 U	0.117 U	--
Fenthion	NV	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Guthion	NV	NV	NV	--	0.305 U	0.285 U	0.323 U	--	--	--	0.303 U	0.293 U	--
Merphos oxide	NV	NV	2.4	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Methyl parathion	NV	NV	20	--	0.122 U	0.114 U	0.129 U	--	--	--	0.121 U	0.117 U	--
Mevinphos	NV	NV	NV	--	0.122 U	0.114 U	0.129 U	--	--	--	0.121 U	0.117 U	--
Naled	NV	NV	160	--	0.305 U	0.285 U	0.323 U	--	--	--	0.303 U	0.293 U	--
Parathion	NV	NV	480	--	0.061 U	0.057 U	0.0646 U	--	--	--	0.0607 U	0.0586 U	--
Phorate	NV	NV	16	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Ronnel	NV	NV	4000	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Santox	NV	NV	0.8	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Stirofos	NV	NV	41.7	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Sulfotepp	NV	NV	40	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Sulprofos	NV	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Sumitox	NV	NV	1600	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Tokuthion	NV	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Trichloronate	NV	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--

			Location:	TP07		TP08	TP09		TP10			TP11	
			Sample Name:	TP07-S-0.25	TP07-S-1.0	TP08-S-0.5	TP09-S-0.5	TP09-S-4.5	TP10-S-0.5	TP-S-0.5DUP	TP10-S-1.5	TP11-S-0.5	TP11-S-4.5
			Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
			Collection Depth (ft bgs):	0.25	1	0.5	0.5	4.5	0.5	0.5	1.5	0.5	4.5
Organochlorine Pesticides (mg/kg)													
4,4'-DDD	NV	NV	4.17	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
4,4'-DDE	NV	NV	2.94	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
4,4'-DDT	3	4	NA	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Aldrin	NV	NV	0.059	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
alpha-BHC	NV	NV	0.159	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
alpha-Chlordane	NV	NV	2.86	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
beta-BHC	NV	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Chlordane	NV	NV	2.86	--	0.00814 UJ	0.0076 UJ	0.00861 UJ	--	--	--	0.00809 UJ	0.00782 UJ	--
delta-BHC	NV	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Dieldrin	NV	NV	0.063	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endosulfan I	NV	NV	480	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endosulfan II	NV	NV	480	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endosulfan sulfate	NV	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endrin	NV	NV	24	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endrin aldehyde	NV	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endrin ketone	NV	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Gamma-Chlordane	NV	NV	2.86	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Heptachlor	NV	NV	0.222	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Heptachlor epoxide	NV	NV	0.11	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Lindane	0.01	0.01	NA	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Methoxychlor	NV	NV	400	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Toxaphene	NV	NV	0.909	--	0.00814 UJ	0.0076 UJ	0.00861 UJ	--	--	--	0.00809 UJ	0.00782 UJ	--
TPH (mg/kg)													
Diesel	2000	2000	NA	**149** J	--	**52.3**	--	--	**98.8** J	**78.2** J	--	--	--
Lube Oil	2000	2000	NA	**825** J	--	**405** J	--	--	**359** J	**232** J	--	--	--
Ammonia (mg/kg)													
Nitrogen, Ammonia as N	NV	NV	NV	--	--	--	--	--	--	--	--	--	--

Table 1
Soil Analytical Results
Cleanup Action Plan
Fleischer Properties
Vancouver, Washington

			Location:	TP12	TP13			TP14		TP15		
			Sample Name:	TP12-S-0.5	TP13-S-0.5	TP13-S-1.5	TP13-S-5.5	TP14-S-0.5	TP14-S-4.5	TP15-S-0.5	TP15-S-1.75	TP15-S-6.0
			Collection Date:	7/15/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	1.5	5.5	0.5	4.5	0.5	1.75	6
	MTCA A, Soil Unrestricted Land Use	MTCA A, Soil Industrial Properties	MTCA B, Soil									
Metals (mg/kg)												
Arsenic	20	20	NA	**2.61**	--	**3.95**	--	--	--	--	**2.67**	--
Chromium[a]	2000	2000	NA	**12.1**	--	**16**	--	--	--	--	**15.7**	--
Copper	NV	NV	3200	**30.7**	--	**41.5**	--	--	--	--	**28.8**	--
Iron	NV	NV	56000	--	--	--	--	--	--	--	--	--
Lead	250	1000	NA	**8.65**	--	**52.5**	--	--	--	--	**33.3**	--
Manganese	NV	NV	11200	--	--	--	--	--	--	--	--	--
Mercury	2	2	NA	**0.0235**	--	**0.0899**	--	--	--	--	**0.0877**	--
Nickel	NV	NV	1600	**11.5**	--	**14.6**	--	--	--	--	**9.86**	--
Zinc	NV	NV	24000	**89.9**	--	**893**	--	--	--	--	**1320**	--
PCBs (mg/kg)												
Aroclor 1016	NV	NV	5.6	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1221	NV	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1232	NV	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1242	NV	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1248	NV	NV	NV	**0.493**	0.000399 U	**11.2** J	**0.124**	**13.9** J	**0.0256**	**0.108**	**39.2**	**0.0871**
Aroclor 1254	NV	NV	0.5	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1260	NV	NV	0.5	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1262	NV	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1268	NV	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Total PCBs	1	10	NA	**0.493**	0.000399 U	**11.2** J	**0.124**	**13.9** J	**0.0256**	**0.108**	**39.2**	**0.0871**
Chlorinated Herbicides (mg/kg)												
2,4,5-T	NV	NV	800	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
2,4-D	NV	NV	800	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
2,4-DB	NV	NV	640	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
4-Nitrophenol	NV	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Dicamba	NV	NV	2400	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Dichlorprop	NV	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Dinoseb	NV	NV	80	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
MCPA	NV	NV	40	0.792 U	0.799 U	--	--	0.824 U	--	--	0.841 U	--

			Location:	TP12	TP13			TP14		TP15		
			Sample Name:	TP12-S-0.5	TP13-S-0.5	TP13-S-1.5	TP13-S-5.5	TP14-S-0.5	TP14-S-4.5	TP15-S-0.5	TP15-S-1.75	TP15-S-6.0
			Collection Date:	7/15/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	1.5	5.5	0.5	4.5	0.5	1.75	6
MCPP	NV	NV	80	0.792 U	0.799 U	--	--	0.824 U	--	--	0.841 U	--
Pentachlorophenol	NV	NV	2.5	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Silvex	NV	NV	640	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Organophosphorus Pesticides (mg/kg)												
Bladan	NV	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Coumaphos	NV	NV	NV	0.119 U	0.12 U	--	--	0.124 U	--	--	0.126 U	--
Demeton-S	NV	NV	NV	0.0594 U	0.0599 U	--	--	0.0618 U	--	--	0.0631 U	--
Diazinon	NV	NV	56	0.0594 U	0.0599 U	--	--	0.0618 U	--	--	0.0631 U	--
Dichlorvos	NV	NV	3.45	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Dimethoate	NV	NV	16	0.0594 U	0.0599 U	--	--	0.0618 U	--	--	0.0631 U	--
Disulfoton	NV	NV	3.2	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Dursban	NV	NV	80	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Ethoprop	NV	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Fensulfothion	NV	NV	NV	0.119 U	0.12 U	--	--	0.124 U	--	--	0.126 U	--
Fenthion	NV	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Guthion	NV	NV	NV	0.297 U	0.3 U	--	--	0.309 U	--	--	0.315 U	--
Merphos oxide	NV	NV	2.4	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Methyl parathion	NV	NV	20	0.119 U	0.12 U	--	--	0.124 U	--	--	0.126 U	--
Mevinphos	NV	NV	NV	0.119 U	0.12 U	--	--	0.124 U	--	--	0.126 U	--
Naled	NV	NV	160	0.297 U	0.3 U	--	--	0.309 U	--	--	0.315 U	--
Parathion	NV	NV	480	0.0594 U	0.0599 U	--	--	0.0618 U	--	--	0.0631 U	--
Phorate	NV	NV	16	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Ronnel	NV	NV	4000	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Santox	NV	NV	0.8	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Stirofos	NV	NV	41.7	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Sulfotepp	NV	NV	40	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Sulprofos	NV	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Sumitox	NV	NV	1600	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Tokuthion	NV	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Trichloronate	NV	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--

			Location:	TP12	TP13			TP14		TP15		
			Sample Name:	TP12-S-0.5	TP13-S-0.5	TP13-S-1.5	TP13-S-5.5	TP14-S-0.5	TP14-S-4.5	TP15-S-0.5	TP15-S-1.75	TP15-S-6.0
			Collection Date:	7/15/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	1.5	5.5	0.5	4.5	0.5	1.75	6
Organochlorine Pesticides (mg/kg)												
4,4'-DDD	NV	NV	4.17	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
4,4'-DDE	NV	NV	2.94	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
4,4'-DDT	3	4	NA	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Aldrin	NV	NV	0.059	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
alpha-BHC	NV	NV	0.159	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
alpha-Chlordane	NV	NV	2.86	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
beta-BHC	NV	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Chlordane	NV	NV	2.86	0.00792 UJ	0.00799 UJ	--	--	0.00824 UJ	--	--	0.00841 UJ	--
delta-BHC	NV	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Dieldrin	NV	NV	0.063	0.000396 UJ	**0.00241** J	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endosulfan I	NV	NV	480	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endosulfan II	NV	NV	480	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endosulfan sulfate	NV	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endrin	NV	NV	24	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endrin aldehyde	NV	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endrin ketone	NV	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Gamma-Chlordane	NV	NV	2.86	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Heptachlor	NV	NV	0.222	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Heptachlor epoxide	NV	NV	0.11	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Lindane	0.01	0.01	NA	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Methoxychlor	NV	NV	400	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Toxaphene	NV	NV	0.909	0.00792 UJ	0.00799 UJ	--	--	0.00824 UJ	--	--	0.00841 UJ	--
TPH (mg/kg)												
Diesel	2000	2000	NA	17.8 U	--	**25.8** J	--	--	--	--	**65.7** J	--
Lube Oil	2000	2000	NA	**85.2** J	--	**91.7** J	--	--	--	--	**201** J	--
Ammonia (mg/kg)												
Nitrogen, Ammonia as N	NV	NV	NV	--	--	--	--	--	--	--	--	--

Table 1
Soil Analytical Results
Cleanup Action Plan
Fleischer Properties
Vancouver, Washington

			Location:	TP16	TP17			TP18	TP19	TP20	TP21	
			Sample Name:	TP16-S-0.5	TP17-S-0.5	TP17-S-1.25	TP17-S-4.5	TP18-S-0.5	TP19-S-0.5	TP20-S-0.5	TP21-S-0.5	TP21-S-5.0
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	1.25	4.5	0.5	0.5	0.5	0.5	5
	MTCA A, Soil Unrestricted Land Use	MTCA A, Soil Industrial Properties	MTCA B, Soil									
Metals (mg/kg)												
Arsenic	20	20	NA	**3.62**	--	**2.48**	--	**2.5**	--	**2.07**	**4.9**	--
Chromium[a]	2000	2000	NA	**15.6**	--	**12.8**	--	**11.9**	--	**12.7**	**15.3**	--
Copper	NV	NV	3200	**33.2**	--	**29.3**	--	**27.5**	--	**24.3**	**28.8**	--
Iron	NV	NV	56000	--	--	--	--	--	--	--	--	--
Lead	250	1000	NA	**8.1**	--	**38.1**	--	**6.98**	--	**6.14**	**18.5**	--
Manganese	NV	NV	11200	--	--	--	--	--	--	--	--	--
Mercury	2	2	NA	0.0214 U	--	**0.067**	--	**0.0286**	--	0.0186 U	**0.0304**	--
Nickel	NV	NV	1600	**18.8**	--	**7.71**	--	**7.42**	--	**19.4**	**13.8**	--
Zinc	NV	NV	24000	**5010**	--	**694**	--	**1250**	--	**348**	**2700**	--
PCBs (mg/kg)												
Aroclor 1016	NV	NV	5.6	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1221	NV	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1232	NV	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1242	NV	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1248	NV	NV	NV	**0.0191**	**1.71**	**86.6** J	**0.134**	**0.793**	**0.187**	**0.803**	**13.4**	0.000375 U
Aroclor 1254	NV	NV	0.5	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1260	NV	NV	0.5	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1262	NV	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1268	NV	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Total PCBs	1	10	NA	**0.0191**	**1.71**	**86.6**	**0.134**	**0.793**	**0.187**	**0.803**	**13.4**	0.000375 U
Chlorinated Herbicides (mg/kg)												
2,4,5-T	NV	NV	800	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
2,4-D	NV	NV	800	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
2,4-DB	NV	NV	640	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
4-Nitrophenol	NV	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Dicamba	NV	NV	2400	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Dichlorprop	NV	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Dinoseb	NV	NV	80	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
MCPA	NV	NV	40	0.856 U	--	0.837 U	--	0.79 U	0.853 U	0.815 U	0.768 U	--

			Location:	TP16	TP17			TP18	TP19	TP20	TP21	
			Sample Name:	TP16-S-0.5	TP17-S-0.5	TP17-S-1.25	TP17-S-4.5	TP18-S-0.5	TP19-S-0.5	TP20-S-0.5	TP21-S-0.5	TP21-S-5.0
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	1.25	4.5	0.5	0.5	0.5	0.5	5
MCPP	NV	NV	80	0.856 U	--	0.837 U	--	0.79 U	0.853 U	0.815 U	0.768 U	--
Pentachlorophenol	NV	NV	2.5	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Silvex	NV	NV	640	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Organophosphorus Pesticides (mg/kg)												
Bladan	NV	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Coumaphos	NV	NV	NV	0.128 U	--	0.125 U	--	0.118 U	0.128 U	0.122 U	0.115 U	--
Demeton-S	NV	NV	NV	0.0642 U	--	0.0627 U	--	0.0592 U	0.0639 U	0.0611 U	0.0576 U	--
Diazinon	NV	NV	56	0.0642 U	--	0.0627 U	--	0.0592 U	0.0639 U	0.0611 U	0.0576 U	--
Dichlorvos	NV	NV	3.45	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Dimethoate	NV	NV	16	0.0642 U	--	0.0627 U	--	0.0592 U	0.0639 U	0.0611 U	0.0576 U	--
Disulfoton	NV	NV	3.2	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Dursban	NV	NV	80	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Ethoprop	NV	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Fensulfothion	NV	NV	NV	0.128 U	--	0.125 U	--	0.118 U	0.128 U	0.122 U	0.115 U	--
Fenthion	NV	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Guthion	NV	NV	NV	0.321 U	--	0.314 U	--	0.296 U	0.32 U	0.306 U	0.288 U	--
Merphos oxide	NV	NV	2.4	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Methyl parathion	NV	NV	20	0.128 U	--	0.125 U	--	0.118 U	0.128 U	0.122 U	0.115 U	--
Mevinphos	NV	NV	NV	0.128 U	--	0.125 U	--	0.118 U	0.128 U	0.122 U	0.115 U	--
Naled	NV	NV	160	0.321 U	--	0.314 U	--	0.296 U	0.32 U	0.306 U	0.288 U	--
Parathion	NV	NV	480	0.0642 U	--	0.0627 U	--	0.0592 U	0.0639 U	0.0611 U	0.0576 U	--
Phorate	NV	NV	16	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Ronnel	NV	NV	4000	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Santox	NV	NV	0.8	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Stirofos	NV	NV	41.7	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Sulfotepp	NV	NV	40	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Sulprofos	NV	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Sumitox	NV	NV	1600	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Tokuthion	NV	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Trichloronate	NV	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--

			Location:	TP16	TP17			TP18	TP19	TP20	TP21	
			Sample Name:	TP16-S-0.5	TP17-S-0.5	TP17-S-1.25	TP17-S-4.5	TP18-S-0.5	TP19-S-0.5	TP20-S-0.5	TP21-S-0.5	TP21-S-5.0
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	1.25	4.5	0.5	0.5	0.5	0.5	5
Organochlorine Pesticides (mg/kg)												
4,4'-DDD	NV	NV	4.17	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
4,4'-DDE	NV	NV	2.94	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
4,4'-DDT	3	4	NA	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Aldrin	NV	NV	0.059	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
alpha-BHC	NV	NV	0.159	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
alpha-Chlordane	NV	NV	2.86	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
beta-BHC	NV	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Chlordane	NV	NV	2.86	0.00856 UJ	--	0.00837 UJ	--	0.0079 UJ	0.00853 UJ	0.00815 UJ	0.00768 UJ	--
delta-BHC	NV	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Dieldrin	NV	NV	0.063	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endosulfan I	NV	NV	480	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endosulfan II	NV	NV	480	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endosulfan sulfate	NV	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endrin	NV	NV	24	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endrin aldehyde	NV	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endrin ketone	NV	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Gamma-Chlordane	NV	NV	2.86	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Heptachlor	NV	NV	0.222	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Heptachlor epoxide	NV	NV	0.11	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Lindane	0.01	0.01	NA	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Methoxychlor	NV	NV	400	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Toxaphene	NV	NV	0.909	0.00856 UJ	--	0.00837 UJ	--	0.0079 UJ	0.00853 UJ	0.00815 UJ	0.00768 UJ	--
TPH (mg/kg)												
Diesel	2000	2000	NA	19.3 U	--	**59.7** J	--	17.8 U	--	**22.6** J	**37.5** J	--
Lube Oil	2000	2000	NA	**82.2** J	--	**165** J	--	**79.4** J	--	**105** J	**162** J	--
Ammonia (mg/kg)												
Nitrogen, Ammonia as N	NV	NV	NV	--	--	--	--	--	--	--	--	--

			Location:	TP22	TP23		TP24	TP25		TP26	
			Sample Name:	TP22-S-0.5	TP23-S-0.5	TP23-S-4.5	TP24-S-0.5	TP25-S-0.5	TP25-S-4.5	TP26-S-0.5	TP26-S-5.0
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	4.5	0.5	0.5	4.5	0.5	5
	MTCA A, Soil Unrestricted Land Use	MTCA A, Soil Industrial Properties	MTCA B, Soil								
Metals (mg/kg)											
Arsenic	20	20	NA	**2.5**	**2.24**	--	**2.18**	**3.7**	--	**4.19**	--
Chromium[a]	2000	2000	NA	**9.46**	**10.6**	--	**10.1**	**12.6**	--	**26.2**	--
Copper	NV	NV	3200	**41.6**	**22.8**	--	**27.4**	**29.2**	--	**35.5**	--
Iron	NV	NV	56000	--	--	--	--	--	--	**31200**	--
Lead	250	1000	NA	**7.13**	**13.7**	--	**32.2**	**23.8**	--	**95.3**	--
Manganese	NV	NV	11200	--	--	--	--	--	--	**538**	--
Mercury	2	2	NA	0.0201 U	**0.0497**	--	**0.114**	**0.0597**	--	**0.0723**	--
Nickel	NV	NV	1600	**10.6**	**10.1**	--	**8.7**	**10.6** J	--	**11.3**	--
Zinc	NV	NV	24000	**168**	**608**	--	**177**	**314**	--	**2380**	--
PCBs (mg/kg)											
Aroclor 1016	NV	NV	5.6	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1221	NV	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1232	NV	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1242	NV	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1248	NV	NV	NV	**0.635**	**17.1**	0.000363 U	**0.514** J	**26.9**	0.00037 U	**33.2** J	0.00036 U
Aroclor 1254	NV	NV	0.5	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1260	NV	NV	0.5	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1262	NV	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1268	NV	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Total PCBs	1	10	NA	**0.635**	**17.1**	0.000363 U	**0.514** J	**26.9**	0.000185 U	**33.2** J	0.00036 U
Chlorinated Herbicides (mg/kg)											
2,4,5-T	NV	NV	800	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
2,4-D	NV	NV	800	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
2,4-DB	NV	NV	640	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
4-Nitrophenol	NV	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
Dicamba	NV	NV	2400	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
Dichlorprop	NV	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
Dinoseb	NV	NV	80	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
MCPA	NV	NV	40	0.868 U	0.796 UJ	--	0.772 U	0.774 U	--	0.787 U	--

			Location:	TP22	TP23		TP24	TP25		TP26	
			Sample Name:	TP22-S-0.5	TP23-S-0.5	TP23-S-4.5	TP24-S-0.5	TP25-S-0.5	TP25-S-4.5	TP26-S-0.5	TP26-S-5.0
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	4.5	0.5	0.5	4.5	0.5	5
MCPP	NV	NV	80	0.868 U	0.796 UJ	--	0.772 U	0.774 U	--	0.787 U	--
Pentachlorophenol	NV	NV	2.5	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	**0.172**	--
Silvex	NV	NV	640	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
Organophosphorus Pesticides (mg/kg)											
Bladan	NV	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Coumaphos	NV	NV	NV	0.13 U	0.119 U	--	0.116 U	0.116 U	--	0.118 U	--
Demeton-S	NV	NV	NV	0.0651 U	0.0597 U	--	0.0579 U	0.0581 U	--	0.059 U	--
Diazinon	NV	NV	56	0.0651 U	0.0597 U	--	0.0579 U	0.0581 U	--	0.059 U	--
Dichlorvos	NV	NV	3.45	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Dimethoate	NV	NV	16	0.0651 U	0.0597 U	--	0.0579 U	0.0581 U	--	0.059 U	--
Disulfoton	NV	NV	3.2	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Dursban	NV	NV	80	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Ethoprop	NV	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Fensulfothion	NV	NV	NV	0.13 U	0.119 U	--	0.116 U	0.116 U	--	0.118 U	--
Fenthion	NV	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Guthion	NV	NV	NV	0.326 U	0.298 U	--	0.289 U	0.29 U	--	0.295 U	--
Merphos oxide	NV	NV	2.4	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Methyl parathion	NV	NV	20	0.13 U	0.119 U	--	0.116 U	0.116 U	--	0.118 U	--
Mevinphos	NV	NV	NV	0.13 U	0.119 U	--	0.116 U	0.116 U	--	0.118 U	--
Naled	NV	NV	160	0.326 U	0.298 U	--	0.289 U	0.29 U	--	0.295 U	--
Parathion	NV	NV	480	0.0651 U	0.0597 U	--	0.0579 U	0.0581 U	--	0.059 U	--
Phorate	NV	NV	16	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Ronnel	NV	NV	4000	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Santox	NV	NV	0.8	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Stirofos	NV	NV	41.7	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Sulfotepp	NV	NV	40	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Sulprofos	NV	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Sumitox	NV	NV	1600	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Tokuthion	NV	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Trichloronate	NV	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--

			Location:	TP22	TP23		TP24	TP25		TP26	
			Sample Name:	TP22-S-0.5	TP23-S-0.5	TP23-S-4.5	TP24-S-0.5	TP25-S-0.5	TP25-S-4.5	TP26-S-0.5	TP26-S-5.0
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
			Collection Depth (ft bgs):	0.5	0.5	4.5	0.5	0.5	4.5	0.5	5
Organochlorine Pesticides (mg/kg)											
4,4'-DDD	NV	NV	4.17	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
4,4'-DDE	NV	NV	2.94	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
4,4'-DDT	3	4	NA	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Aldrin	NV	NV	0.059	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
alpha-BHC	NV	NV	0.159	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
alpha-Chlordane	NV	NV	2.86	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
beta-BHC	NV	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Chlordane	NV	NV	2.86	0.00868 UJ	0.00796 UJ	--	0.00772 UJ	0.00774 UJ	--	0.00787 UJ	--
delta-BHC	NV	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Dieldrin	NV	NV	0.063	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endosulfan I	NV	NV	480	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endosulfan II	NV	NV	480	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endosulfan sulfate	NV	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endrin	NV	NV	24	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endrin aldehyde	NV	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endrin ketone	NV	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Gamma-Chlordane	NV	NV	2.86	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Heptachlor	NV	NV	0.222	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Heptachlor epoxide	NV	NV	0.11	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Lindane	0.01	0.01	NA	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Methoxychlor	NV	NV	400	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Toxaphene	NV	NV	0.909	0.00868 UJ	0.00796 UJ	--	0.00772 UJ	0.00774 UJ	--	0.00787 UJ	--
TPH (mg/kg)											
Diesel	2000	2000	NA	19.5 U	**23.2** J	--	**19.3**	**62.4** J	--	**44.9**	--
Lube Oil	2000	2000	NA	65.1 U	**104** J	--	**104** J	**215** J	--	**133**	--
Ammonia (mg/kg)											
Nitrogen, Ammonia as N	NV	NV	NV	--	--	--	--	--	--	4.72 U	--

Table 1
Soil Analytical Results
Cleanup Action Plan
Fleischer Properties
Vancouver, Washington

			Location:	TP27			TP28	TP29				TP30		TP31
			Sample Name:	TP27-S-0.5	TP27-S-5.5	TP27-S-8.5	TP28-S-0.5	TP29-S-0.5	TP-S-0.5DUP	TP29-S-3.5	TP29-S-7.5	TP30-S-0.5	TP30-S-4.0	TP31-S-0.5
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	10/1/2014
			Collection Depth (ft bgs):	0.5	5.5	8.5	0.5	0.5	0.5	3.5	7.5	0.5	4	0.5
	MTCA A, Soil Unrestricted Land Use	MTCA A, Soil Industrial Properties	MTCA B, Soil											
Metals (mg/kg)														
Arsenic	20	20	NA	**14.6**	--	--	--	**3.08**	**2.88**	--	--	--	--	--
Chromium[a]	2000	2000	NA	**17**	--	--	--	**11.9**	**15.5**	--	--	--	--	--
Copper	NV	NV	3200	**35.5**	--	--	--	**25.7**	**24.5**	--	--	--	--	--
Iron	NV	NV	56000	**27200**	--	--	**47400**	**36900**	**43300**	--	--	**41700**	--	--
Lead	250	1000	NA	**96.4**	--	--	--	**15.5**	**12.6**	--	--	--	--	--
Manganese	NV	NV	11200	**333**	--	--	**817**	**429**	**437**	--	--	**517**	--	--
Mercury	2	2	NA	**0.11**	--	--	--	**0.0444**	**0.0405**	--	--	--	--	--
Nickel	NV	NV	1600	**8.97**	--	--	--	**10.5**	**15.3**	--	--	--	--	--
Zinc	NV	NV	24000	**448**	--	--	--	**382**	**390**	--	--	--	--	--
PCBs (mg/kg)														
Aroclor 1016	NV	NV	5.6	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363
Aroclor 1221	NV	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363
Aroclor 1232	NV	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363
Aroclor 1242	NV	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363
Aroclor 1248	NV	NV	NV	**63.1** J	**1.56**	**0.392**	**0.532** J	**3.98** J	**3.64** J	**4.21**	**0.186**	**17.3** J	0.000362 U	**0.0694**
Aroclor 1254	NV	NV	0.5	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363
Aroclor 1260	NV	NV	0.5	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363
Aroclor 1262	NV	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363
Aroclor 1268	NV	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363
Total PCBs	1	10	NA	**63.1** J	**1.56**	**0.392**	**0.532** J	**3.98** J	**3.64** J	**4.21**	**0.186**	**17.3** J	0.000362 U	**0.0694**
Chlorinated Herbicides (mg/kg)														
2,4,5-T	NV	NV	800	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--
2,4-D	NV	NV	800	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--
2,4-DB	NV	NV	640	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--
4-Nitrophenol	NV	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--
Dicamba	NV	NV	2400	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--
Dichlorprop	NV	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--
Dinoseb	NV	NV	80	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--
MCPA	NV	NV	40	0.923 U	--	--	0.782 U	0.765 U	0.773 U	--	--	0.764 U	--	--

			Location:	TP27			TP28	TP29				TP30		TP31
			Sample Name:	TP27-S-0.5	TP27-S-5.5	TP27-S-8.5	TP28-S-0.5	TP29-S-0.5	TP-S-0.5DUP	TP29-S-3.5	TP29-S-7.5	TP30-S-0.5	TP30-S-4.0	TP31-S-0.5
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	10/1/2014
			Collection Depth (ft bgs):	0.5	5.5	8.5	0.5	0.5	0.5	3.5	7.5	0.5	4	0.5
MCPP	NV	NV	80	0.923 U	--	--	0.782 U	0.765 U	0.773 U	--	--	0.764 U	--	--
Pentachlorophenol	NV	NV	2.5	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	**0.00902**	--	--
Silvex	NV	NV	640	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--
Organophosphorus Pesticides (mg/kg)														
Bladan	NV	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Coumaphos	NV	NV	NV	0.138 U	--	--	0.117 U	0.115 U	0.116 U	--	--	0.115 U	--	--
Demeton-S	NV	NV	NV	0.0692 U	--	--	0.0587 U	0.0574 U	0.058 U	--	--	0.0573 U	--	--
Diazinon	NV	NV	56	0.0692 U	--	--	0.0587 U	0.0574 U	0.058 U	--	--	0.0573 U	--	--
Dichlorvos	NV	NV	3.45	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Dimethoate	NV	NV	16	0.0692 U	--	--	0.0587 U	0.0574 U	0.058 U	--	--	0.0573 U	--	--
Disulfoton	NV	NV	3.2	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Dursban	NV	NV	80	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Ethoprop	NV	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Fensulfothion	NV	NV	NV	0.138 U	--	--	0.117 U	0.115 U	0.116 U	--	--	0.115 U	--	--
Fenthion	NV	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Guthion	NV	NV	NV	0.346 U	--	--	0.293 U	0.287 U	0.29 U	--	--	0.287 U	--	--
Merphos oxide	NV	NV	2.4	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Methyl parathion	NV	NV	20	0.138 U	--	--	0.117 U	0.115 U	0.116 U	--	--	0.115 U	--	--
Mevinphos	NV	NV	NV	0.138 U	--	--	0.117 U	0.115 U	0.116 U	--	--	0.115 U	--	--
Naled	NV	NV	160	0.346 U	--	--	0.293 U	0.287 U	0.29 U	--	--	0.287 U	--	--
Parathion	NV	NV	480	0.0692 U	--	--	0.0587 U	0.0574 U	0.058 U	--	--	0.0573 U	--	--
Phorate	NV	NV	16	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Ronnel	NV	NV	4000	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Santox	NV	NV	0.8	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Stirofos	NV	NV	41.7	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Sulfotepp	NV	NV	40	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Sulprofos	NV	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Sumitox	NV	NV	1600	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Tokuthion	NV	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--
Trichloronate	NV	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--

			Location:	TP27			TP28	TP29				TP30		TP31
			Sample Name:	TP27-S-0.5	TP27-S-5.5	TP27-S-8.5	TP28-S-0.5	TP29-S-0.5	TP-S-0.5DUP	TP29-S-3.5	TP29-S-7.5	TP30-S-0.5	TP30-S-4.0	TP31-S-0.5
			Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	10/1/2014
			Collection Depth (ft bgs):	0.5	5.5	8.5	0.5	0.5	0.5	3.5	7.5	0.5	4	0.5
Organochlorine Pesticides (mg/kg)														
4,4'-DDD	NV	NV	4.17	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
4,4'-DDE	NV	NV	2.94	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
4,4'-DDT	3	4	NA	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Aldrin	NV	NV	0.059	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
alpha-BHC	NV	NV	0.159	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
alpha-Chlordane	NV	NV	2.86	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
beta-BHC	NV	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Chlordane	NV	NV	2.86	0.00923 UJ	--	--	0.00782 UJ	0.00765 UJ	0.00773 UJ	--	--	0.00764 UJ	--	--
delta-BHC	NV	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Dieldrin	NV	NV	0.063	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Endosulfan I	NV	NV	480	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Endosulfan II	NV	NV	480	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Endosulfan sulfate	NV	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Endrin	NV	NV	24	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Endrin aldehyde	NV	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Endrin ketone	NV	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Gamma-Chlordane	NV	NV	2.86	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Heptachlor	NV	NV	0.222	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Heptachlor epoxide	NV	NV	0.11	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Lindane	0.01	0.01	NA	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Methoxychlor	NV	NV	400	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--
Toxaphene	NV	NV	0.909	0.00923 UJ	--	--	0.00782 UJ	0.00765 UJ	0.00773 UJ	--	--	0.00764 UJ	--	--
TPH (mg/kg)														
Diesel	2000	2000	NA	**69.3**	--	--	--	**19.7**	**23.1**	--	--	--	--	--
Lube Oil	2000	2000	NA	**162**	--	--	--	**104**	**105**	--	--	--	--	--
Ammonia (mg/kg)														
Nitrogen, Ammonia as N	NV	NV	NV	5.54 U	--	--	4.69 U	4.59 U	4.64 U	--	--	4.59 U	--	--

Table 1
Soil Analytical Results
Cleanup Action Plan
Fleischer Properties
Vancouver, Washington

			Location:		TP32	TP33	TP34	TP35	TP36	TP37	TP38	TP39		TP40
			Sample Name:		TP32-S-0.5	TP33-S-0.5	TP34-S-0.5	TP35-S-0.5	TP36-S-0.5	TP37-S-0.5	TP38-S-0.5	TP39-S-0.5	TP39-S-2.0	TP40-S-0.5
			Collection Date:		10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
			Collection Depth (ft bgs):		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5
	MTCA A, Soil Unrestricted Land Use	MTCA A, Soil Industrial Properties	MTCA B, Soil											
Metals (mg/kg)														
Arsenic	20	20	NA		--	--	--	--	--	--	--	--	--	--
Chromium[a]	2000	2000	NA		--	--	--	--	--	--	--	--	--	--
Copper	NV	NV	3200		--	--	--	--	--	--	--	--	--	--
Iron	NV	NV	56000		--	--	--	--	--	--	--	--	--	--
Lead	250	1000	NA		--	--	--	--	--	--	--	--	--	--
Manganese	NV	NV	11200		--	--	--	--	--	--	--	--	--	--
Mercury	2	2	NA		--	--	--	--	--	--	--	--	--	--
Nickel	NV	NV	1600		--	--	--	--	--	--	--	--	--	--
Zinc	NV	NV	24000		--	--	--	--	--	--	--	--	--	--
PCBs (mg/kg)														
Aroclor 1016	NV	NV	5.6	U	0.000401 U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1221	NV	NV	NV	U	0.000401 U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1232	NV	NV	NV	U	0.000401 U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1242	NV	NV	NV	U	0.000401 U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1248	NV	NV	NV		**0.0187**	0.000337 U	0.000347 U	**0.0431**	**0.00404**	0.000362 U	0.000383 U	**19.6** J	**0.434**	0.000359 U
Aroclor 1254	NV	NV	0.5	U	0.000401 U	0.000337 U	**0.00955**	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1260	NV	NV	0.5	U	0.000401 U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1262	NV	NV	NV	U	0.000401 U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1268	NV	NV	NV	U	0.000401 U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Total PCBs	1	10	NA		**0.0187**	0.000337 U	**0.00955**	**0.0431**	**0.00404**	0.000362 U	0.000383 U	**19.6** J	**0.434**	0.000359 U
Chlorinated Herbicides (mg/kg)														
2,4,5-T	NV	NV	800		--	--	--	--	--	--	--	--	--	--
2,4-D	NV	NV	800		--	--	--	--	--	--	--	--	--	--
2,4-DB	NV	NV	640		--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	NV	NV	NV		--	--	--	--	--	--	--	--	--	--
Dicamba	NV	NV	2400		--	--	--	--	--	--	--	--	--	--
Dichlorprop	NV	NV	NV		--	--	--	--	--	--	--	--	--	--
Dinoseb	NV	NV	80		--	--	--	--	--	--	--	--	--	--
MCPA	NV	NV	40		--	--	--	--	--	--	--	--	--	--

			Location:		TP32	TP33	TP34	TP35	TP36	TP37	TP38	TP39		TP40
			Sample Name:		TP32-S-0.5	TP33-S-0.5	TP34-S-0.5	TP35-S-0.5	TP36-S-0.5	TP37-S-0.5	TP38-S-0.5	TP39-S-0.5	TP39-S-2.0	TP40-S-0.5
			Collection Date:		10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
			Collection Depth (ft bgs):		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5
MCPP	NV	NV	80		--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	NV	NV	2.5		--	--	--	--	--	--	--	--	--	--
Silvex	NV	NV	640		--	--	--	--	--	--	--	--	--	--
Organophosphorus Pesticides (mg/kg)														
Bladan	NV	NV	NV		--	--	--	--	--	--	--	--	--	--
Coumaphos	NV	NV	NV		--	--	--	--	--	--	--	--	--	--
Demeton-S	NV	NV	NV		--	--	--	--	--	--	--	--	--	--
Diazinon	NV	NV	56		--	--	--	--	--	--	--	--	--	--
Dichlorvos	NV	NV	3.45		--	--	--	--	--	--	--	--	--	--
Dimethoate	NV	NV	16		--	--	--	--	--	--	--	--	--	--
Disulfoton	NV	NV	3.2		--	--	--	--	--	--	--	--	--	--
Dursban	NV	NV	80		--	--	--	--	--	--	--	--	--	--
Ethoprop	NV	NV	NV		--	--	--	--	--	--	--	--	--	--
Fensulfothion	NV	NV	NV		--	--	--	--	--	--	--	--	--	--
Fenthion	NV	NV	NV		--	--	--	--	--	--	--	--	--	--
Guthion	NV	NV	NV		--	--	--	--	--	--	--	--	--	--
Merphos oxide	NV	NV	2.4		--	--	--	--	--	--	--	--	--	--
Methyl parathion	NV	NV	20		--	--	--	--	--	--	--	--	--	--
Mevinphos	NV	NV	NV		--	--	--	--	--	--	--	--	--	--
Naled	NV	NV	160		--	--	--	--	--	--	--	--	--	--
Parathion	NV	NV	480		--	--	--	--	--	--	--	--	--	--
Phorate	NV	NV	16		--	--	--	--	--	--	--	--	--	--
Ronnel	NV	NV	4000		--	--	--	--	--	--	--	--	--	--
Santox	NV	NV	0.8		--	--	--	--	--	--	--	--	--	--
Stirofos	NV	NV	41.7		--	--	--	--	--	--	--	--	--	--
Sulfotepp	NV	NV	40		--	--	--	--	--	--	--	--	--	--
Sulprofos	NV	NV	NV		--	--	--	--	--	--	--	--	--	--
Sumitox	NV	NV	1600		--	--	--	--	--	--	--	--	--	--
Tokuthion	NV	NV	NV		--	--	--	--	--	--	--	--	--	--
Trichloronate	NV	NV	NV		--	--	--	--	--	--	--	--	--	--

Table 1
Soil Analytical Results
Cleanup Action Plan
Fleischer Properties
Vancouver, Washington

			Location:		TP32	TP33	TP34	TP35	TP36	TP37	TP38	TP39		TP40
			Sample Name:		TP32-S-0.5	TP33-S-0.5	TP34-S-0.5	TP35-S-0.5	TP36-S-0.5	TP37-S-0.5	TP38-S-0.5	TP39-S-0.5	TP39-S-2.0	TP40-S-0.5
			Collection Date:		10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
			Collection Depth (ft bgs):		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5
Organochlorine Pesticides (mg/kg)														
4,4'-DDD	NV	NV	4.17		--	--	--	--	--	--	--	--	--	--
4,4'-DDE	NV	NV	2.94		--	--	--	--	--	--	--	--	--	--
4,4'-DDT	3	4	NA		--	--	--	--	--	--	--	--	--	--
Aldrin	NV	NV	0.059		--	--	--	--	--	--	--	--	--	--
alpha-BHC	NV	NV	0.159		--	--	--	--	--	--	--	--	--	--
alpha-Chlordane	NV	NV	2.86		--	--	--	--	--	--	--	--	--	--
beta-BHC	NV	NV	NV		--	--	--	--	--	--	--	--	--	--
Chlordane	NV	NV	2.86		--	--	--	--	--	--	--	--	--	--
delta-BHC	NV	NV	NV		--	--	--	--	--	--	--	--	--	--
Dieldrin	NV	NV	0.063		--	--	--	--	--	--	--	--	--	--
Endosulfan I	NV	NV	480		--	--	--	--	--	--	--	--	--	--
Endosulfan II	NV	NV	480		--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	NV	NV	NV		--	--	--	--	--	--	--	--	--	--
Endrin	NV	NV	24		--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	NV	NV	NV		--	--	--	--	--	--	--	--	--	--
Endrin ketone	NV	NV	NV		--	--	--	--	--	--	--	--	--	--
Gamma-Chlordane	NV	NV	2.86		--	--	--	--	--	--	--	--	--	--
Heptachlor	NV	NV	0.222		--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	NV	NV	0.11		--	--	--	--	--	--	--	--	--	--
Lindane	0.01	0.01	NA		--	--	--	--	--	--	--	--	--	--
Methoxychlor	NV	NV	400		--	--	--	--	--	--	--	--	--	--
Toxaphene	NV	NV	0.909		--	--	--	--	--	--	--	--	--	--
TPH (mg/kg)														
Diesel	2000	2000	NA		--	--	--	--	--	--	--	--	--	--
Lube Oil	2000	2000	NA		--	--	--	--	--	--	--	--	--	--
Ammonia (mg/kg)														
Nitrogen, Ammonia as N	NV	NV	NV		--	--	--	--	--	--	--	--	--	--

Table 1
Soil Analytical Results
Cleanup Action Plan
Fleischer Properties
Vancouver, Washington

			Location:	TP42		TP43	TP45			TP46	TP48	TP51		TP52
			Sample Name:	TP42-S-0.5	TP42-S-2.0	TP43-S-0.5	TP45-S-0.5	TP-S-DUP	TP45-S-2.5	TP46-S-0.5	TP48-S-0.5	TP51-S-0.5	TP51-S-2.0	TP52-S-0.5
			Collection Date:	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
			Collection Depth (ft bgs):	0.5	2	0.5	0.5	0.5	2.5	0.5	0.5	0.5	2	0.5
	MTCA A, Soil Unrestricted Land Use	MTCA A, Soil Industrial Properties	MTCA B, Soil											
Metals (mg/kg)														
Arsenic	20	20	NA	--	--	--	--	--	--	--	--	--	--	--
Chromium[a]	2000	2000	NA	--	--	--	--	--	--	--	--	--	--	--
Copper	NV	NV	3200	--	--	--	--	--	--	--	--	--	--	--
Iron	NV	NV	56000	--	--	--	--	--	--	--	--	--	--	--
Lead	250	1000	NA	--	--	--	--	--	--	--	--	--	--	--
Manganese	NV	NV	11200	--	--	--	--	--	--	--	--	--	--	--
Mercury	2	2	NA	--	--	--	--	--	--	--	--	--	--	--
Nickel	NV	NV	1600	--	--	--	--	--	--	--	--	--	--	--
Zinc	NV	NV	24000	--	--	--	--	--	--	--	--	--	--	--
PCBs (mg/kg)														
Aroclor 1016	NV	NV	5.6	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358
Aroclor 1221	NV	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358
Aroclor 1232	NV	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358
Aroclor 1242	NV	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358
Aroclor 1248	NV	NV	NV	**118**	**3.93**	**0.605**	**10.8**	**9.84**	**0.818**	0.000385 U	0.000356 U	**40.3**	**2.84**	0.000358
Aroclor 1254	NV	NV	0.5	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	**0.0119**	0.000368 U	0.000369 U	0.000358
Aroclor 1260	NV	NV	0.5	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	**0.0319**
Aroclor 1262	NV	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358
Aroclor 1268	NV	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358
Total PCBs	1	10	NA	**118**	**3.93**	**0.605**	**10.8**	**9.84**	**0.818**	0.000385 U	**0.0119**	**40.3**	**2.84**	**0.0319**
Chlorinated Herbicides (mg/kg)														
2,4,5-T	NV	NV	800	--	--	--	--	--	--	--	--	--	--	--
2,4-D	NV	NV	800	--	--	--	--	--	--	--	--	--	--	--
2,4-DB	NV	NV	640	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dicamba	NV	NV	2400	--	--	--	--	--	--	--	--	--	--	--
Dichlorprop	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dinoseb	NV	NV	80	--	--	--	--	--	--	--	--	--	--	--
MCPA	NV	NV	40	--	--	--	--	--	--	--	--	--	--	--

			Location:	TP42		TP43	TP45			TP46	TP48	TP51		TP52
			Sample Name:	TP42-S-0.5	TP42-S-2.0	TP43-S-0.5	TP45-S-0.5	TP-S-DUP	TP45-S-2.5	TP46-S-0.5	TP48-S-0.5	TP51-S-0.5	TP51-S-2.0	TP52-S-0.5
			Collection Date:	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
			Collection Depth (ft bgs):	0.5	2	0.5	0.5	0.5	2.5	0.5	0.5	0.5	2	0.5
MCPP	NV	NV	80	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	NV	NV	2.5	--	--	--	--	--	--	--	--	--	--	--
Silvex	NV	NV	640	--	--	--	--	--	--	--	--	--	--	--
Organophosphorus Pesticides (mg/kg)														
Bladan	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Coumaphos	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Demeton-S	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Diazinon	NV	NV	56	--	--	--	--	--	--	--	--	--	--	--
Dichlorvos	NV	NV	3.45	--	--	--	--	--	--	--	--	--	--	--
Dimethoate	NV	NV	16	--	--	--	--	--	--	--	--	--	--	--
Disulfoton	NV	NV	3.2	--	--	--	--	--	--	--	--	--	--	--
Dursban	NV	NV	80	--	--	--	--	--	--	--	--	--	--	--
Ethoprop	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Fensulfothion	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Fenthion	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Guthion	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Merphos oxide	NV	NV	2.4	--	--	--	--	--	--	--	--	--	--	--
Methyl parathion	NV	NV	20	--	--	--	--	--	--	--	--	--	--	--
Mevinphos	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Naled	NV	NV	160	--	--	--	--	--	--	--	--	--	--	--
Parathion	NV	NV	480	--	--	--	--	--	--	--	--	--	--	--
Phorate	NV	NV	16	--	--	--	--	--	--	--	--	--	--	--
Ronnel	NV	NV	4000	--	--	--	--	--	--	--	--	--	--	--
Santox	NV	NV	0.8	--	--	--	--	--	--	--	--	--	--	--
Stirofos	NV	NV	41.7	--	--	--	--	--	--	--	--	--	--	--
Sulfotepp	NV	NV	40	--	--	--	--	--	--	--	--	--	--	--
Sulprofos	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Sumitox	NV	NV	1600	--	--	--	--	--	--	--	--	--	--	--
Tokuthion	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Trichloronate	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--

Table 1
Soil Analytical Results
Cleanup Action Plan
Fleischer Properties
Vancouver, Washington

			Location:	TP42		TP43	TP45			TP46	TP48	TP51		TP52
			Sample Name:	TP42-S-0.5	TP42-S-2.0	TP43-S-0.5	TP45-S-0.5	TP-S-DUP	TP45-S-2.5	TP46-S-0.5	TP48-S-0.5	TP51-S-0.5	TP51-S-2.0	TP52-S-0.5
			Collection Date:	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
			Collection Depth (ft bgs):	0.5	2	0.5	0.5	0.5	2.5	0.5	0.5	0.5	2	0.5
Organochlorine Pesticides (mg/kg)														
4,4'-DDD	NV	NV	4.17	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	NV	NV	2.94	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	3	4	NA	--	--	--	--	--	--	--	--	--	--	--
Aldrin	NV	NV	0.059	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	NV	NV	0.159	--	--	--	--	--	--	--	--	--	--	--
alpha-Chlordane	NV	NV	2.86	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Chlordane	NV	NV	2.86	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	NV	NV	0.063	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	NV	NV	480	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	NV	NV	480	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Endrin	NV	NV	24	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Endrin ketone	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Gamma-Chlordane	NV	NV	2.86	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	NV	NV	0.222	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	NV	NV	0.11	--	--	--	--	--	--	--	--	--	--	--
Lindane	0.01	0.01	NA	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	NV	NV	400	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	NV	NV	0.909	--	--	--	--	--	--	--	--	--	--	--
TPH (mg/kg)														
Diesel	2000	2000	NA	--	--	--	--	--	--	--	--	--	--	--
Lube Oil	2000	2000	NA	--	--	--	--	--	--	--	--	--	--	--
Ammonia (mg/kg)														
Nitrogen, Ammonia as N	NV	NV	NV	--	--	--	--	--	--	--	--	--	--	--

			Location:	
			Sample Name:	
			Collection Date:	
			Collection Depth (ft bgs):	
	MTCA A, Soil Unrestricted Land Use	MTCA A, Soil Industrial Properties	MTCA B, Soil	
Metals (mg/kg)				
Arsenic	20	20	NA	
Chromium[a]	2000	2000	NA	
Copper	NV	NV	3200	
Iron	NV	NV	56000	
Lead	250	1000	NA	
Manganese	NV	NV	11200	
Mercury	2	2	NA	
Nickel	NV	NV	1600	
Zinc	NV	NV	24000	
PCBs (mg/kg)				
Aroclor 1016	NV	NV	5.6	U
Aroclor 1221	NV	NV	NV	U
Aroclor 1232	NV	NV	NV	U
Aroclor 1242	NV	NV	NV	U
Aroclor 1248	NV	NV	NV	U
Aroclor 1254	NV	NV	0.5	U
Aroclor 1260	NV	NV	0.5	
Aroclor 1262	NV	NV	NV	U
Aroclor 1268	NV	NV	NV	U
Total PCBs	1	10	NA	
Chlorinated Herbicides (mg/kg)				
2,4,5-T	NV	NV	800	
2,4-D	NV	NV	800	
2,4-DB	NV	NV	640	
4-Nitrophenol	NV	NV	NV	
Dicamba	NV	NV	2400	
Dichlorprop	NV	NV	NV	
Dinoseb	NV	NV	80	
MCPA	NV	NV	40	

			Location:	
			Sample Name:	
			Collection Date:	
			Collection Depth (ft bgs):	
MCPP	NV	NV	80	
Pentachlorophenol	NV	NV	2.5	
Silvex	NV	NV	640	
Organophosphorus Pesticides (mg/kg)				
Bladan	NV	NV	NV	
Coumaphos	NV	NV	NV	
Demeton-S	NV	NV	NV	
Diazinon	NV	NV	56	
Dichlorvos	NV	NV	3.45	
Dimethoate	NV	NV	16	
Disulfoton	NV	NV	3.2	
Dursban	NV	NV	80	
Ethoprop	NV	NV	NV	
Fensulfothion	NV	NV	NV	
Fenthion	NV	NV	NV	
Guthion	NV	NV	NV	
Merphos oxide	NV	NV	2.4	
Methyl parathion	NV	NV	20	
Mevinphos	NV	NV	NV	
Naled	NV	NV	160	
Parathion	NV	NV	480	
Phorate	NV	NV	16	
Ronnel	NV	NV	4000	
Santox	NV	NV	0.8	
Stirofos	NV	NV	41.7	
Sulfotepp	NV	NV	40	
Sulprofos	NV	NV	NV	
Sumitox	NV	NV	1600	
Tokuthion	NV	NV	NV	
Trichloronate	NV	NV	NV	

			Location:	
			Sample Name:	
			Collection Date:	
			Collection Depth (ft bgs):	
Organochlorine Pesticides (mg/kg)				
4,4'-DDD	NV	NV	4.17	
4,4'-DDE	NV	NV	2.94	
4,4'-DDT	3	4	NA	
Aldrin	NV	NV	0.059	
alpha-BHC	NV	NV	0.159	
alpha-Chlordane	NV	NV	2.86	
beta-BHC	NV	NV	NV	
Chlordane	NV	NV	2.86	
delta-BHC	NV	NV	NV	
Dieldrin	NV	NV	0.063	
Endosulfan I	NV	NV	480	
Endosulfan II	NV	NV	480	
Endosulfan sulfate	NV	NV	NV	
Endrin	NV	NV	24	
Endrin aldehyde	NV	NV	NV	
Endrin ketone	NV	NV	NV	
Gamma-Chlordane	NV	NV	2.86	
Heptachlor	NV	NV	0.222	
Heptachlor epoxide	NV	NV	0.11	
Lindane	0.01	0.01	NA	
Methoxychlor	NV	NV	400	
Toxaphene	NV	NV	0.909	
TPH (mg/kg)				
Diesel	2000	2000	NA	
Lube Oil	2000	2000	NA	
Ammonia (mg/kg)				
Nitrogen, Ammonia as N	NV	NV	NV	

NOTES:
Detections are in **bold** font.
Detections that exceed one or more MTCA cleanup level are shaded gray. Non-detect results are not evaluated against cleanup criteria.
MTCA B values are used when no MTCA A values are available. The lower of MTCA B cancer or non-cancer value is used.
-- = not analyzed.
ft bgs = feet below ground surface.
J = Result is an estimated value.
mg/kg = milligrams per kilogram (parts per million).
MTCA = Model Toxics Control Act.
NA = not applicable.
ND = not detected at or above the method reporting limit.
NV = no value.
PCB = polychlorinated biphenyl.
Total PCBs = sum of PCB Aroclors. Non-detect results are summed as zero. For samples in which all Aroclors are non-detect, total PCB is assigned the highest reporting limit value.
TPH = total petroleum hydrocarbon.
U = Result is non-detect based on the method reporting limit.
UJ = Result is non-detect and an estimated value.
[a]Trivalent chromium MTCA cleanup levels are used.

		Location:	TP01	TP02		TP03	TP04		TP05		TP06	
		Sample Name:	TP01-S-0.5	TP02-S-0.5	TP02-S-2.0	TP03-S-0.5	TP04-S-0.25	TP04-S-1.0	TP05-S-0.5	TP05-S-1.5	TP06-S-0.5	TP06-S-2.0
		Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
		Collection Depth (ft bgs):	0.5	0.5	2	0.5	0.25	1	0.5	1.5	0.5	2
	MTCA TEE Table 749-2, Unrestricted Land Use	MTCA TEE Table 749-2, Commercial/ Industrial Properties										
Metals (mg/kg)												
Arsenic	20	20	--	**2.57**	--	**2.95**	**3.09**	--	--	--	**2.05**	--
Chromium[a]	42	135	--	**14.8**	--	**9.98**	**14.1**	--	--	--	**16**	--
Copper	100	550	--	**35.7**	--	**29.7**	**43.2**	--	--	--	**44.4**	--
Iron	NV	NV	--	--	--	--	--	--	--	--	--	--
Lead	220	220	--	**38.8**	--	**7.71**	**53.6**	--	--	--	**45.9**	--
Manganese	NV	23500	--	--	--	--	--	--	--	--	--	--
Mercury	9	9	--	**0.0341**	--	0.0192 U	**0.0631**	--	--	--	**0.0485**	--
Nickel	100	1850	--	**16.3**	--	**10.1**	**12.6**	--	--	--	**11.4**	--
Zinc	270	570	--	**601**	--	**78.5**	**836**	--	--	--	**2380**	--
PCBs (mg/kg)												
Aroclor 1016	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1221	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1232	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1242	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1248	NV	NV	**0.389** J	**32.4**	**0.185**	0.000406 U	**6.13**	**0.0667**	**38** J	**0.0458**	**48.3**	**0.114**
Aroclor 1254	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1260	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1262	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1268	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Total PCBs	2	2	**0.389** J	**32.4**	**0.185**	0.000406 U	**6.13**	**0.0667**	**38** J	**0.0458**	**48.3**	**0.114**
Chlorinated Herbicides (mg/kg)												
2,4,5-T	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
2,4-D	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
2,4-DB	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
4-Nitrophenol	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
Dicamba	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
Dichlorprop	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
Dinoseb	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
MCPA	NV	NV	0.801 U	0.726 U	--	0.813 U	--	0.856 U	0.779 U	--	0.759 U	--

		Location:	TP01	TP02		TP03	TP04		TP05		TP06	
		Sample Name:	TP01-S-0.5	TP02-S-0.5	TP02-S-2.0	TP03-S-0.5	TP04-S-0.25	TP04-S-1.0	TP05-S-0.5	TP05-S-1.5	TP06-S-0.5	TP06-S-2.0
		Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
		Collection Depth (ft bgs):	0.5	0.5	2	0.5	0.25	1	0.5	1.5	0.5	2
MCPP	NV	NV	0.801 U	0.726 U	--	0.813 U	--	0.856 U	0.779 U	--	0.759 U	--
Pentachlorophenol	11	11	**0.0191**	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	**0.0144**	--
Silvex	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
Organophosphorus Pesticides (mg/kg)												
Bladan	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Coumaphos	NV	NV	0.12 U	0.109 U	--	0.122 U	--	0.128 U	0.117 U	--	0.114 U	--
Demeton-S	NV	NV	0.0601 U	0.0545 U	--	0.061 U	--	0.0642 U	0.0584 U	--	0.0569 U	--
Diazinon	NV	NV	0.0601 U	0.0545 U	--	0.061 U	--	0.0642 U	0.0584 U	--	0.0569 U	--
Dichlorvos	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Dimethoate	NV	NV	0.0601 U	0.0545 U	--	0.061 U	--	0.0642 U	0.0584 U	--	0.0569 U	--
Disulfoton	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Dursban	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Ethoprop	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Fensulfothion	NV	NV	0.12 U	0.109 U	--	0.122 U	--	0.128 U	0.117 U	--	0.114 U	--
Fenthion	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Guthion	NV	NV	0.3 U	0.272 U	--	0.305 U	--	0.321 U	0.292 U	--	0.285 U	--
Merphos oxide	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Methyl parathion	NV	NV	0.12 U	0.109 U	--	0.122 U	--	0.128 U	0.117 U	--	0.114 U	--
Mevinphos	NV	NV	0.12 U	0.109 U	--	0.122 U	--	0.128 U	0.117 U	--	0.114 U	--
Naled	NV	NV	0.3 U	0.272 U	--	0.305 U	--	0.321 U	0.292 U	--	0.285 U	--
Parathion	NV	NV	0.0601 U	0.0545 U	--	0.061 U	--	0.0642 U	0.0584 U	--	0.0569 U	--
Phorate	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Ronnel	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Santox	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Stirofos	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Sulfotepp	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Sulprofos	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Sumitox	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Tokuthion	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Trichloronate	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--

		Location:	TP01	TP02		TP03	TP04		TP05		TP06	
		Sample Name:	TP01-S-0.5	TP02-S-0.5	TP02-S-2.0	TP03-S-0.5	TP04-S-0.25	TP04-S-1.0	TP05-S-0.5	TP05-S-1.5	TP06-S-0.5	TP06-S-2.0
		Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
		Collection Depth (ft bgs):	0.5	0.5	2	0.5	0.25	1	0.5	1.5	0.5	2
Organochlorine Pesticides (mg/kg)												
4,4'-DDD	1	1	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
4,4'-DDE	1	1	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
4,4'-DDT	1	1	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Aldrin	0.17	0.17	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
alpha-BHC	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
alpha-Chlordane	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
beta-BHC	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Chlordane	1	7	0.00801 UJ	0.00726 UJ	--	0.00813 UJ	--	0.00856 UJ	0.00779 UJ	--	0.00759 UJ	--
delta-BHC	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Dieldrin	0.17	0.17	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endosulfan I	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endosulfan II	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endosulfan sulfate	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endrin	0.4	0.4	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endrin aldehyde	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endrin ketone	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Gamma-Chlordane	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Heptachlor	0.6	0.6	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Heptachlor epoxide	0.6	0.6	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Lindane	10	10	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Methoxychlor	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Toxaphene	NV	NV	0.00801 UJ	0.00726 UJ	--	0.00813 UJ	--	0.00856 UJ	0.00779 UJ	--	0.00759 UJ	--
TPH (mg/kg)												
Diesel	460	15000	--	**138** J	--	18.3 U	**85.7** J	--	--	--	**111** J	--
Lube Oil	NV	NV	--	**855**	--	**67** J	**659** J	--	--	--	**386** J	--
Ammonia (mg/kg)												
Nitrogen, Ammonia as N	NV	NV	--	--	--	--	--	--	--	--	--	--

		Location:	TP07		TP08	TP09		TP10			TP11	
		Sample Name:	TP07-S-0.25	TP07-S-1.0	TP08-S-0.5	TP09-S-0.5	TP09-S-4.5	TP10-S-0.5	TP-S-0.5DUP	TP10-S-1.5	TP11-S-0.5	TP11-S-4.5
		Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
		Collection Depth (ft bgs):	0.25	1	0.5	0.5	4.5	0.5	0.5	1.5	0.5	4.5
	MTCA TEE Table 749-2, Unrestricted Land Use	MTCA TEE Table 749-2, Commercial/ Industrial Properties										
Metals (mg/kg)												
Arsenic	20	20	**3.9**	--	**2.51**	--	--	**2.96**	**2.74**	--	--	--
Chromium[a]	42	135	**13.8**	--	**9.87**	--	--	**14.3**	**14.4**	--	--	--
Copper	100	550	**40.1**	--	**28.3**	--	--	**38.1**	**45.3**	--	--	--
Iron	NV	NV	--	--	--	--	--	--	--	--	--	--
Lead	220	220	**56.3**	--	**15.4**	--	--	**39.3**	**34.8**	--	--	--
Manganese	NV	23500	--	--	--	--	--	--	--	--	--	--
Mercury	9	9	**0.075**	--	**0.0277**	--	--	**0.055**	**0.0608**	--	--	--
Nickel	100	1850	**20.2**	--	**10.4**	--	--	**20.4**	**11.3**	--	--	--
Zinc	270	570	**238**	--	**83.8**	--	--	**1030**	**1340**	--	--	--
PCBs (mg/kg)												
Aroclor 1016	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1221	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1232	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1242	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1248	NV	NV	**1.26** J	**0.045**	**0.0822**	**0.997**	0.000366 U	**68.5**	**53.2**	**0.0343**	**5.66**	0.000374 U
Aroclor 1254	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1260	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1262	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1268	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Total PCBs	2	2	**1.26** J	**0.045**	**0.0822**	**0.997**	0.000366 U	**68.5**	**53.2**	**0.0343**	**5.66**	0.000374 U
Chlorinated Herbicides (mg/kg)												
2,4,5-T	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
2,4-D	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
2,4-DB	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
4-Nitrophenol	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Dicamba	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Dichlorprop	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Dinoseb	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
MCPA	NV	NV	--	0.814 U	0.76 U	0.861 U	--	--	--	0.809 U	0.782 U	--

		Location:	TP07		TP08	TP09		TP10			TP11	
		Sample Name:	TP07-S-0.25	TP07-S-1.0	TP08-S-0.5	TP09-S-0.5	TP09-S-4.5	TP10-S-0.5	TP-S-0.5DUP	TP10-S-1.5	TP11-S-0.5	TP11-S-4.5
		Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
		Collection Depth (ft bgs):	0.25	1	0.5	0.5	4.5	0.5	0.5	1.5	0.5	4.5
MCPP	NV	NV	--	0.814 U	0.76 U	0.861 U	--	--	--	0.809 U	0.782 U	--
Pentachlorophenol	11	11	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Silvex	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Organophosphorus Pesticides (mg/kg)												
Bladan	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Coumaphos	NV	NV	--	0.122 U	0.114 U	0.129 U	--	--	--	0.121 U	0.117 U	--
Demeton-S	NV	NV	--	0.061 U	0.057 U	0.0646 U	--	--	--	0.0607 U	0.0586 U	--
Diazinon	NV	NV	--	0.061 U	0.057 U	0.0646 U	--	--	--	0.0607 U	0.0586 U	--
Dichlorvos	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Dimethoate	NV	NV	--	0.061 U	0.057 U	0.0646 U	--	--	--	0.0607 U	0.0586 U	--
Disulfoton	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Dursban	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Ethoprop	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Fensulfothion	NV	NV	--	0.122 U	0.114 U	0.129 U	--	--	--	0.121 U	0.117 U	--
Fenthion	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Guthion	NV	NV	--	0.305 U	0.285 U	0.323 U	--	--	--	0.303 U	0.293 U	--
Merphos oxide	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Methyl parathion	NV	NV	--	0.122 U	0.114 U	0.129 U	--	--	--	0.121 U	0.117 U	--
Mevinphos	NV	NV	--	0.122 U	0.114 U	0.129 U	--	--	--	0.121 U	0.117 U	--
Naled	NV	NV	--	0.305 U	0.285 U	0.323 U	--	--	--	0.303 U	0.293 U	--
Parathion	NV	NV	--	0.061 U	0.057 U	0.0646 U	--	--	--	0.0607 U	0.0586 U	--
Phorate	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Ronnel	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Santox	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Stirofos	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Sulfotepp	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Sulprofos	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Sumitox	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Tokuthion	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Trichloronate	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--

		Location:	TP07		TP08	TP09		TP10			TP11	
		Sample Name:	TP07-S-0.25	TP07-S-1.0	TP08-S-0.5	TP09-S-0.5	TP09-S-4.5	TP10-S-0.5	TP-S-0.5DUP	TP10-S-1.5	TP11-S-0.5	TP11-S-4.5
		Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
		Collection Depth (ft bgs):	0.25	1	0.5	0.5	4.5	0.5	0.5	1.5	0.5	4.5
Organochlorine Pesticides (mg/kg)												
4,4'-DDD	1	1	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
4,4'-DDE	1	1	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
4,4'-DDT	1	1	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Aldrin	0.17	0.17	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
alpha-BHC	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
alpha-Chlordane	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
beta-BHC	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Chlordane	1	7	--	0.00814 UJ	0.0076 UJ	0.00861 UJ	--	--	--	0.00809 UJ	0.00782 UJ	--
delta-BHC	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Dieldrin	0.17	0.17	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endosulfan I	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endosulfan II	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endosulfan sulfate	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endrin	0.4	0.4	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endrin aldehyde	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endrin ketone	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Gamma-Chlordane	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Heptachlor	0.6	0.6	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Heptachlor epoxide	0.6	0.6	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Lindane	10	10	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Methoxychlor	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Toxaphene	NV	NV	--	0.00814 UJ	0.0076 UJ	0.00861 UJ	--	--	--	0.00809 UJ	0.00782 UJ	--
TPH (mg/kg)												
Diesel	460	15000	**149** J	--	**52.3**	--	--	**98.8** J	**78.2** J	--	--	--
Lube Oil	NV	NV	**825** J	--	**405** J	--	--	**359** J	**232** J	--	--	--
Ammonia (mg/kg)												
Nitrogen, Ammonia as N	NV	NV	--	--	--	--	--	--	--	--	--	--

		Location:	TP12	TP13			TP14		TP15		
		Sample Name:	TP12-S-0.5	TP13-S-0.5	TP13-S-1.5	TP13-S-5.5	TP14-S-0.5	TP14-S-4.5	TP15-S-0.5	TP15-S-1.75	TP15-S-6.0
		Collection Date:	7/15/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	1.5	5.5	0.5	4.5	0.5	1.75	6
	MTCA TEE Table 749-2, Unrestricted Land Use	MTCA TEE Table 749-2, Commercial/ Industrial Properties									
Metals (mg/kg)											
Arsenic	20	20	**2.61**	--	**3.95**	--	--	--	--	**2.67**	--
Chromium[a]	42	135	**12.1**	--	**16**	--	--	--	--	**15.7**	--
Copper	100	550	**30.7**	--	**41.5**	--	--	--	--	**28.8**	--
Iron	NV	NV	--	--	--	--	--	--	--	--	--
Lead	220	220	**8.65**	--	**52.5**	--	--	--	--	**33.3**	--
Manganese	NV	23500	--	--	--	--	--	--	--	--	--
Mercury	9	9	**0.0235**	--	**0.0899**	--	--	--	--	**0.0877**	--
Nickel	100	1850	**11.5**	--	**14.6**	--	--	--	--	**9.86**	--
Zinc	270	570	**89.9**	--	**893**	--	--	--	--	**1320**	--
PCBs (mg/kg)											
Aroclor 1016	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1221	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1232	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1242	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1248	NV	NV	**0.493**	0.000399 U	**11.2** J	**0.124**	**13.9** J	**0.0256**	**0.108**	**39.2**	**0.0871**
Aroclor 1254	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1260	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1262	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1268	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Total PCBs	2	2	**0.493**	0.000399 U	**11.2** J	**0.124**	**13.9** J	**0.0256**	**0.108**	**39.2**	**0.0871**
Chlorinated Herbicides (mg/kg)											
2,4,5-T	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
2,4-D	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
2,4-DB	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
4-Nitrophenol	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Dicamba	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Dichlorprop	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Dinoseb	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
MCPA	NV	NV	0.792 U	0.799 U	--	--	0.824 U	--	--	0.841 U	--

		Location:	TP12	TP13			TP14		TP15		
		Sample Name:	TP12-S-0.5	TP13-S-0.5	TP13-S-1.5	TP13-S-5.5	TP14-S-0.5	TP14-S-4.5	TP15-S-0.5	TP15-S-1.75	TP15-S-6.0
		Collection Date:	7/15/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	1.5	5.5	0.5	4.5	0.5	1.75	6
MCPP	NV	NV	0.792 U	0.799 U	--	--	0.824 U	--	--	0.841 U	--
Pentachlorophenol	11	11	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Silvex	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Organophosphorus Pesticides (mg/kg)											
Bladan	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Coumaphos	NV	NV	0.119 U	0.12 U	--	--	0.124 U	--	--	0.126 U	--
Demeton-S	NV	NV	0.0594 U	0.0599 U	--	--	0.0618 U	--	--	0.0631 U	--
Diazinon	NV	NV	0.0594 U	0.0599 U	--	--	0.0618 U	--	--	0.0631 U	--
Dichlorvos	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Dimethoate	NV	NV	0.0594 U	0.0599 U	--	--	0.0618 U	--	--	0.0631 U	--
Disulfoton	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Dursban	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Ethoprop	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Fensulfothion	NV	NV	0.119 U	0.12 U	--	--	0.124 U	--	--	0.126 U	--
Fenthion	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Guthion	NV	NV	0.297 U	0.3 U	--	--	0.309 U	--	--	0.315 U	--
Merphos oxide	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Methyl parathion	NV	NV	0.119 U	0.12 U	--	--	0.124 U	--	--	0.126 U	--
Mevinphos	NV	NV	0.119 U	0.12 U	--	--	0.124 U	--	--	0.126 U	--
Naled	NV	NV	0.297 U	0.3 U	--	--	0.309 U	--	--	0.315 U	--
Parathion	NV	NV	0.0594 U	0.0599 U	--	--	0.0618 U	--	--	0.0631 U	--
Phorate	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Ronnel	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Santox	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Stirofos	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Sulfotepp	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Sulprofos	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Sumitox	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Tokuthion	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Trichloronate	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--

		Location:	TP12	TP13			TP14		TP15		
		Sample Name:	TP12-S-0.5	TP13-S-0.5	TP13-S-1.5	TP13-S-5.5	TP14-S-0.5	TP14-S-4.5	TP15-S-0.5	TP15-S-1.75	TP15-S-6.0
		Collection Date:	7/15/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	1.5	5.5	0.5	4.5	0.5	1.75	6
Organochlorine Pesticides (mg/kg)											
4,4'-DDD	1	1	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
4,4'-DDE	1	1	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
4,4'-DDT	1	1	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Aldrin	0.17	0.17	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
alpha-BHC	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
alpha-Chlordane	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
beta-BHC	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Chlordane	1	7	0.00792 UJ	0.00799 UJ	--	--	0.00824 UJ	--	--	0.00841 UJ	--
delta-BHC	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Dieldrin	0.17	0.17	0.000396 UJ	**0.00241** J	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endosulfan I	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endosulfan II	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endosulfan sulfate	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endrin	0.4	0.4	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endrin aldehyde	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endrin ketone	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Gamma-Chlordane	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Heptachlor	0.6	0.6	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Heptachlor epoxide	0.6	0.6	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Lindane	10	10	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Methoxychlor	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Toxaphene	NV	NV	0.00792 UJ	0.00799 UJ	--	--	0.00824 UJ	--	--	0.00841 UJ	--
TPH (mg/kg)											
Diesel	460	15000	17.8 U	--	**25.8** J	--	--	--	--	**65.7** J	--
Lube Oil	NV	NV	**85.2** J	--	**91.7** J	--	--	--	--	**201** J	--
Ammonia (mg/kg)											
Nitrogen, Ammonia as N	NV	NV	--	--	--	--	--	--	--	--	--

		Location:	TP16	TP17			TP18	TP19	TP20	TP21	
		Sample Name:	TP16-S-0.5	TP17-S-0.5	TP17-S-1.25	TP17-S-4.5	TP18-S-0.5	TP19-S-0.5	TP20-S-0.5	TP21-S-0.5	TP21-S-5.0
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	1.25	4.5	0.5	0.5	0.5	0.5	5
	MTCA TEE Table 749-2, Unrestricted Land Use	MTCA TEE Table 749-2, Commercial/ Industrial Properties									
Metals (mg/kg)											
Arsenic	20	20	**3.62**	--	**2.48**	--	**2.5**	--	**2.07**	**4.9**	--
Chromium[a]	42	135	**15.6**	--	**12.8**	--	**11.9**	--	**12.7**	**15.3**	--
Copper	100	550	**33.2**	--	**29.3**	--	**27.5**	--	**24.3**	**28.8**	--
Iron	NV	NV	--	--	--	--	--	--	--	--	--
Lead	220	220	**8.1**	--	**38.1**	--	**6.98**	--	**6.14**	**18.5**	--
Manganese	NV	23500	--	--	--	--	--	--	--	--	--
Mercury	9	9	0.0214 U	--	**0.067**	--	**0.0286**	--	0.0186 U	**0.0304**	--
Nickel	100	1850	**18.8**	--	**7.71**	--	**7.42**	--	**19.4**	**13.8**	--
Zinc	270	570	**5010**	--	**694**	--	**1250**	--	**348**	**2700**	--
PCBs (mg/kg)											
Aroclor 1016	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1221	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1232	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1242	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1248	NV	NV	**0.0191**	**1.71**	**86.6** J	**0.134**	**0.793**	**0.187**	**0.803**	**13.4**	0.000375 U
Aroclor 1254	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1260	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1262	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1268	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Total PCBs	2	2	**0.0191**	**1.71**	**86.6**	**0.134**	**0.793**	**0.187**	**0.803**	**13.4**	0.000375 U
Chlorinated Herbicides (mg/kg)											
2,4,5-T	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
2,4-D	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
2,4-DB	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
4-Nitrophenol	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Dicamba	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Dichlorprop	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Dinoseb	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
MCPA	NV	NV	0.856 U	--	0.837 U	--	0.79 U	0.853 U	0.815 U	0.768 U	--

		Location:	TP16	TP17			TP18	TP19	TP20	TP21	
		Sample Name:	TP16-S-0.5	TP17-S-0.5	TP17-S-1.25	TP17-S-4.5	TP18-S-0.5	TP19-S-0.5	TP20-S-0.5	TP21-S-0.5	TP21-S-5.0
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	1.25	4.5	0.5	0.5	0.5	0.5	5
MCPP	NV	NV	0.856 U	--	0.837 U	--	0.79 U	0.853 U	0.815 U	0.768 U	--
Pentachlorophenol	11	11	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Silvex	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Organophosphorus Pesticides (mg/kg)											
Bladan	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Coumaphos	NV	NV	0.128 U	--	0.125 U	--	0.118 U	0.128 U	0.122 U	0.115 U	--
Demeton-S	NV	NV	0.0642 U	--	0.0627 U	--	0.0592 U	0.0639 U	0.0611 U	0.0576 U	--
Diazinon	NV	NV	0.0642 U	--	0.0627 U	--	0.0592 U	0.0639 U	0.0611 U	0.0576 U	--
Dichlorvos	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Dimethoate	NV	NV	0.0642 U	--	0.0627 U	--	0.0592 U	0.0639 U	0.0611 U	0.0576 U	--
Disulfoton	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Dursban	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Ethoprop	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Fensulfothion	NV	NV	0.128 U	--	0.125 U	--	0.118 U	0.128 U	0.122 U	0.115 U	--
Fenthion	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Guthion	NV	NV	0.321 U	--	0.314 U	--	0.296 U	0.32 U	0.306 U	0.288 U	--
Merphos oxide	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Methyl parathion	NV	NV	0.128 U	--	0.125 U	--	0.118 U	0.128 U	0.122 U	0.115 U	--
Mevinphos	NV	NV	0.128 U	--	0.125 U	--	0.118 U	0.128 U	0.122 U	0.115 U	--
Naled	NV	NV	0.321 U	--	0.314 U	--	0.296 U	0.32 U	0.306 U	0.288 U	--
Parathion	NV	NV	0.0642 U	--	0.0627 U	--	0.0592 U	0.0639 U	0.0611 U	0.0576 U	--
Phorate	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Ronnel	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Santox	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Stirofos	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Sulfotepp	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Sulprofos	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Sumitox	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Tokuthion	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Trichloronate	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--

		Location:	TP16	TP17			TP18	TP19	TP20	TP21	
		Sample Name:	TP16-S-0.5	TP17-S-0.5	TP17-S-1.25	TP17-S-4.5	TP18-S-0.5	TP19-S-0.5	TP20-S-0.5	TP21-S-0.5	TP21-S-5.0
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	1.25	4.5	0.5	0.5	0.5	0.5	5
Organochlorine Pesticides (mg/kg)											
4,4'-DDD	1	1	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
4,4'-DDE	1	1	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
4,4'-DDT	1	1	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Aldrin	0.17	0.17	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
alpha-BHC	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
alpha-Chlordane	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
beta-BHC	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Chlordane	1	7	0.00856 UJ	--	0.00837 UJ	--	0.0079 UJ	0.00853 UJ	0.00815 UJ	0.00768 UJ	--
delta-BHC	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Dieldrin	0.17	0.17	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endosulfan I	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endosulfan II	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endosulfan sulfate	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endrin	0.4	0.4	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endrin aldehyde	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endrin ketone	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Gamma-Chlordane	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Heptachlor	0.6	0.6	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Heptachlor epoxide	0.6	0.6	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Lindane	10	10	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Methoxychlor	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Toxaphene	NV	NV	0.00856 UJ	--	0.00837 UJ	--	0.0079 UJ	0.00853 UJ	0.00815 UJ	0.00768 UJ	--
TPH (mg/kg)											
Diesel	460	15000	19.3 U	--	**59.7** J	--	17.8 U	--	**22.6** J	**37.5** J	--
Lube Oil	NV	NV	**82.2** J	--	**165** J	--	**79.4** J	--	**105** J	**162** J	--
Ammonia (mg/kg)											
Nitrogen, Ammonia as N	NV	NV	--	--	--	--	--	--	--	--	--

		Location:	TP22	TP23		TP24	TP25		TP26	
		Sample Name:	TP22-S-0.5	TP23-S-0.5	TP23-S-4.5	TP24-S-0.5	TP25-S-0.5	TP25-S-4.5	TP26-S-0.5	TP26-S-5.0
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	4.5	0.5	0.5	4.5	0.5	5
	MTCA TEE Table 749-2, Unrestricted Land Use	MTCA TEE Table 749-2, Commercial/ Industrial Properties								
Metals (mg/kg)										
Arsenic	20	20	**2.5**	**2.24**	--	**2.18**	**3.7**	--	**4.19**	--
Chromium[a]	42	135	**9.46**	**10.6**	--	**10.1**	**12.6**	--	**26.2**	--
Copper	100	550	**41.6**	**22.8**	--	**27.4**	**29.2**	--	**35.5**	--
Iron	NV	NV	--	--	--	--	--	--	**31200**	--
Lead	220	220	**7.13**	**13.7**	--	**32.2**	**23.8**	--	**95.3**	--
Manganese	NV	23500	--	--	--	--	--	--	**538**	--
Mercury	9	9	0.0201 U	**0.0497**	--	**0.114**	**0.0597**	--	**0.0723**	--
Nickel	100	1850	**10.6**	**10.1**	--	**8.7**	**10.6** J	--	**11.3**	--
Zinc	270	570	**168**	**608**	--	**177**	**314**	--	**2380**	--
PCBs (mg/kg)										
Aroclor 1016	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1221	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1232	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1242	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1248	NV	NV	**0.635**	**17.1**	0.000363 U	**0.514** J	**26.9**	0.00037 U	**33.2** J	0.00036 U
Aroclor 1254	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1260	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1262	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1268	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Total PCBs	2	2	**0.635**	**17.1**	0.000363 U	**0.514** J	**26.9**	0.000185 U	**33.2** J	0.00036 U
Chlorinated Herbicides (mg/kg)										
2,4,5-T	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
2,4-D	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
2,4-DB	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
4-Nitrophenol	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
Dicamba	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
Dichlorprop	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
Dinoseb	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
MCPA	NV	NV	0.868 U	0.796 UJ	--	0.772 U	0.774 U	--	0.787 U	--

		Location:	TP22	TP23		TP24	TP25		TP26	
		Sample Name:	TP22-S-0.5	TP23-S-0.5	TP23-S-4.5	TP24-S-0.5	TP25-S-0.5	TP25-S-4.5	TP26-S-0.5	TP26-S-5.0
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	4.5	0.5	0.5	4.5	0.5	5
MCPP	NV	NV	0.868 U	0.796 UJ	--	0.772 U	0.774 U	--	0.787 U	--
Pentachlorophenol	11	11	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	**0.172**	--
Silvex	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
Organophosphorus Pesticides (mg/kg)										
Bladan	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Coumaphos	NV	NV	0.13 U	0.119 U	--	0.116 U	0.116 U	--	0.118 U	--
Demeton-S	NV	NV	0.0651 U	0.0597 U	--	0.0579 U	0.0581 U	--	0.059 U	--
Diazinon	NV	NV	0.0651 U	0.0597 U	--	0.0579 U	0.0581 U	--	0.059 U	--
Dichlorvos	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Dimethoate	NV	NV	0.0651 U	0.0597 U	--	0.0579 U	0.0581 U	--	0.059 U	--
Disulfoton	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Dursban	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Ethoprop	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Fensulfothion	NV	NV	0.13 U	0.119 U	--	0.116 U	0.116 U	--	0.118 U	--
Fenthion	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Guthion	NV	NV	0.326 U	0.298 U	--	0.289 U	0.29 U	--	0.295 U	--
Merphos oxide	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Methyl parathion	NV	NV	0.13 U	0.119 U	--	0.116 U	0.116 U	--	0.118 U	--
Mevinphos	NV	NV	0.13 U	0.119 U	--	0.116 U	0.116 U	--	0.118 U	--
Naled	NV	NV	0.326 U	0.298 U	--	0.289 U	0.29 U	--	0.295 U	--
Parathion	NV	NV	0.0651 U	0.0597 U	--	0.0579 U	0.0581 U	--	0.059 U	--
Phorate	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Ronnel	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Santox	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Stirofos	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Sulfotepp	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Sulprofos	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Sumitox	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Tokuthion	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Trichloronate	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--

		Location:	TP22	TP23		TP24	TP25		TP26	
		Sample Name:	TP22-S-0.5	TP23-S-0.5	TP23-S-4.5	TP24-S-0.5	TP25-S-0.5	TP25-S-4.5	TP26-S-0.5	TP26-S-5.0
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	4.5	0.5	0.5	4.5	0.5	5
Organochlorine Pesticides (mg/kg)										
4,4'-DDD	1	1	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
4,4'-DDE	1	1	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
4,4'-DDT	1	1	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Aldrin	0.17	0.17	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
alpha-BHC	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
alpha-Chlordane	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
beta-BHC	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Chlordane	1	7	0.00868 UJ	0.00796 UJ	--	0.00772 UJ	0.00774 UJ	--	0.00787 UJ	--
delta-BHC	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Dieldrin	0.17	0.17	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endosulfan I	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endosulfan II	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endosulfan sulfate	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endrin	0.4	0.4	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endrin aldehyde	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endrin ketone	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Gamma-Chlordane	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Heptachlor	0.6	0.6	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Heptachlor epoxide	0.6	0.6	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Lindane	10	10	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Methoxychlor	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Toxaphene	NV	NV	0.00868 UJ	0.00796 UJ	--	0.00772 UJ	0.00774 UJ	--	0.00787 UJ	--
TPH (mg/kg)										
Diesel	460	15000	19.5 U	**23.2** J	--	**19.3**	**62.4** J	--	**44.9**	--
Lube Oil	NV	NV	65.1 U	**104** J	--	**104** J	**215** J	--	**133**	--
Ammonia (mg/kg)										
Nitrogen, Ammonia as N	NV	NV	--	--	--	--	--	--	4.72 U	--

		Location:	TP27			TP28	TP29				TP30		TP31	TP32
		Sample Name:	TP27-S-0.5	TP27-S-5.5	TP27-S-8.5	TP28-S-0.5	TP29-S-0.5	TP-S-0.5DUP	TP29-S-3.5	TP29-S-7.5	TP30-S-0.5	TP30-S-4.0	TP31-S-0.5	TP32-S-0.5
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	10/1/2014	10/1/2014
		Collection Depth (ft bgs):	0.5	5.5	8.5	0.5	0.5	0.5	3.5	7.5	0.5	4	0.5	0.5
	MTCA TEE Table 749-2, Unrestricted Land Use	MTCA TEE Table 749-2, Commercial/ Industrial Properties												
Metals (mg/kg)														
Arsenic	20	20	**14.6**	--	--	--	**3.08**	**2.88**	--	--	--	--	--	--
Chromium[a]	42	135	**17**	--	--	--	**11.9**	**15.5**	--	--	--	--	--	--
Copper	100	550	**35.5**	--	--	--	**25.7**	**24.5**	--	--	--	--	--	--
Iron	NV	NV	**27200**	--	--	**47400**	**36900**	**43300**	--	--	**41700**	--	--	--
Lead	220	220	**96.4**	--	--	--	**15.5**	**12.6**	--	--	--	--	--	--
Manganese	NV	23500	**333**	--	--	**817**	**429**	**437**	--	--	**517**	--	--	--
Mercury	9	9	**0.11**	--	--	--	**0.0444**	**0.0405**	--	--	--	--	--	--
Nickel	100	1850	**8.97**	--	--	--	**10.5**	**15.3**	--	--	--	--	--	--
Zinc	270	570	**448**	--	--	--	**382**	**390**	--	--	--	--	--	--
PCBs (mg/kg)														
Aroclor 1016	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U	0.000401
Aroclor 1221	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U	0.000401
Aroclor 1232	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U	0.000401
Aroclor 1242	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U	0.000401
Aroclor 1248	NV	NV	**63.1** J	**1.56**	**0.392**	**0.532** J	**3.98** J	**3.64** J	**4.21**	**0.186**	**17.3** J	0.000362 U	**0.0694**	**0.0187**
Aroclor 1254	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U	0.000401
Aroclor 1260	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U	0.000401
Aroclor 1262	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U	0.000401
Aroclor 1268	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U	0.000401
Total PCBs	2	2	**63.1** J	**1.56**	**0.392**	**0.532** J	**3.98** J	**3.64** J	**4.21**	**0.186**	**17.3** J	0.000362 U	**0.0694**	**0.0187**
Chlorinated Herbicides (mg/kg)														
2,4,5-T	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--	--
2,4-D	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--	--
2,4-DB	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--	--
4-Nitrophenol	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--	--
Dicamba	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--	--
Dichlorprop	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--	--
Dinoseb	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--	--
MCPA	NV	NV	0.923 U	--	--	0.782 U	0.765 U	0.773 U	--	--	0.764 U	--	--	--

		Location:	TP27			TP28	TP29				TP30		TP31	TP32
		Sample Name:	TP27-S-0.5	TP27-S-5.5	TP27-S-8.5	TP28-S-0.5	TP29-S-0.5	TP-S-0.5DUP	TP29-S-3.5	TP29-S-7.5	TP30-S-0.5	TP30-S-4.0	TP31-S-0.5	TP32-S-0.5
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	10/1/2014	10/1/2014
		Collection Depth (ft bgs):	0.5	5.5	8.5	0.5	0.5	0.5	3.5	7.5	0.5	4	0.5	0.5
MCPP	NV	NV	0.923 U	--	--	0.782 U	0.765 U	0.773 U	--	--	0.764 U	--	--	--
Pentachlorophenol	11	11	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	**0.00902**	--	--	--
Silvex	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--	--
Organophosphorus Pesticides (mg/kg)														
Bladan	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Coumaphos	NV	NV	0.138 U	--	--	0.117 U	0.115 U	0.116 U	--	--	0.115 U	--	--	--
Demeton-S	NV	NV	0.0692 U	--	--	0.0587 U	0.0574 U	0.058 U	--	--	0.0573 U	--	--	--
Diazinon	NV	NV	0.0692 U	--	--	0.0587 U	0.0574 U	0.058 U	--	--	0.0573 U	--	--	--
Dichlorvos	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Dimethoate	NV	NV	0.0692 U	--	--	0.0587 U	0.0574 U	0.058 U	--	--	0.0573 U	--	--	--
Disulfoton	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Dursban	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Ethoprop	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Fensulfothion	NV	NV	0.138 U	--	--	0.117 U	0.115 U	0.116 U	--	--	0.115 U	--	--	--
Fenthion	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Guthion	NV	NV	0.346 U	--	--	0.293 U	0.287 U	0.29 U	--	--	0.287 U	--	--	--
Merphos oxide	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Methyl parathion	NV	NV	0.138 U	--	--	0.117 U	0.115 U	0.116 U	--	--	0.115 U	--	--	--
Mevinphos	NV	NV	0.138 U	--	--	0.117 U	0.115 U	0.116 U	--	--	0.115 U	--	--	--
Naled	NV	NV	0.346 U	--	--	0.293 U	0.287 U	0.29 U	--	--	0.287 U	--	--	--
Parathion	NV	NV	0.0692 U	--	--	0.0587 U	0.0574 U	0.058 U	--	--	0.0573 U	--	--	--
Phorate	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Ronnel	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Santox	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Stirofos	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Sulfotepp	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Sulprofos	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Sumitox	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Tokuthion	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Trichloronate	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--

		Location:	TP27			TP28	TP29				TP30		TP31	TP32
		Sample Name:	TP27-S-0.5	TP27-S-5.5	TP27-S-8.5	TP28-S-0.5	TP29-S-0.5	TP-S-0.5DUP	TP29-S-3.5	TP29-S-7.5	TP30-S-0.5	TP30-S-4.0	TP31-S-0.5	TP32-S-0.5
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	10/1/2014	10/1/2014
		Collection Depth (ft bgs):	0.5	5.5	8.5	0.5	0.5	0.5	3.5	7.5	0.5	4	0.5	0.5
Organochlorine Pesticides (mg/kg)														
4,4'-DDD	1	1	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
4,4'-DDE	1	1	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
4,4'-DDT	1	1	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Aldrin	0.17	0.17	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
alpha-BHC	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
alpha-Chlordane	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
beta-BHC	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Chlordane	1	7	0.00923 UJ	--	--	0.00782 UJ	0.00765 UJ	0.00773 UJ	--	--	0.00764 UJ	--	--	--
delta-BHC	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Dieldrin	0.17	0.17	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Endosulfan I	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Endosulfan II	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Endosulfan sulfate	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Endrin	0.4	0.4	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Endrin aldehyde	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Endrin ketone	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Gamma-Chlordane	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Heptachlor	0.6	0.6	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Heptachlor epoxide	0.6	0.6	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Lindane	10	10	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Methoxychlor	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Toxaphene	NV	NV	0.00923 UJ	--	--	0.00782 UJ	0.00765 UJ	0.00773 UJ	--	--	0.00764 UJ	--	--	--
TPH (mg/kg)														
Diesel	460	15000	**69.3**	--	--	--	**19.7**	**23.1**	--	--	--	--	--	--
Lube Oil	NV	NV	**162**	--	--	--	**104**	**105**	--	--	--	--	--	--
Ammonia (mg/kg)														
Nitrogen, Ammonia as N	NV	NV	5.54 U	--	--	4.69 U	4.59 U	4.64 U	--	--	4.59 U	--	--	--

		Location:		TP33	TP34	TP35	TP36	TP37	TP38	TP39		TP40
		Sample Name:		TP33-S-0.5	TP34-S-0.5	TP35-S-0.5	TP36-S-0.5	TP37-S-0.5	TP38-S-0.5	TP39-S-0.5	TP39-S-2.0	TP40-S-0.5
		Collection Date:		10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
		Collection Depth (ft bgs):		0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5
	MTCA TEE Table 749-2, Unrestricted Land Use	MTCA TEE Table 749-2, Commercial/ Industrial Properties										
Metals (mg/kg)												
Arsenic	20	20		--	--	--	--	--	--	--	--	--
Chromium[a]	42	135		--	--	--	--	--	--	--	--	--
Copper	100	550		--	--	--	--	--	--	--	--	--
Iron	NV	NV		--	--	--	--	--	--	--	--	--
Lead	220	220		--	--	--	--	--	--	--	--	--
Manganese	NV	23500		--	--	--	--	--	--	--	--	--
Mercury	9	9		--	--	--	--	--	--	--	--	--
Nickel	100	1850		--	--	--	--	--	--	--	--	--
Zinc	270	570		--	--	--	--	--	--	--	--	--
PCBs (mg/kg)												
Aroclor 1016	NV	NV	U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1221	NV	NV	U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1232	NV	NV	U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1242	NV	NV	U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1248	NV	NV		0.000337 U	0.000347 U	**0.0431**	**0.00404**	0.000362 U	0.000383 U	**19.6** J	**0.434**	0.000359 U
Aroclor 1254	NV	NV	U	0.000337 U	**0.00955**	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1260	NV	NV	U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1262	NV	NV	U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1268	NV	NV	U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Total PCBs	2	2		0.000337 U	**0.00955**	**0.0431**	**0.00404**	0.000362 U	0.000383 U	**19.6** J	**0.434**	0.000359 U
Chlorinated Herbicides (mg/kg)												
2,4,5-T	NV	NV		--	--	--	--	--	--	--	--	--
2,4-D	NV	NV		--	--	--	--	--	--	--	--	--
2,4-DB	NV	NV		--	--	--	--	--	--	--	--	--
4-Nitrophenol	NV	NV		--	--	--	--	--	--	--	--	--
Dicamba	NV	NV		--	--	--	--	--	--	--	--	--
Dichlorprop	NV	NV		--	--	--	--	--	--	--	--	--
Dinoseb	NV	NV		--	--	--	--	--	--	--	--	--
MCPA	NV	NV		--	--	--	--	--	--	--	--	--

			Location:	TP33	TP34	TP35	TP36	TP37	TP38	TP39		TP40
			Sample Name:	TP33-S-0.5	TP34-S-0.5	TP35-S-0.5	TP36-S-0.5	TP37-S-0.5	TP38-S-0.5	TP39-S-0.5	TP39-S-2.0	TP40-S-0.5
			Collection Date:	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
			Collection Depth (ft bgs):	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5
MCPP	NV	NV		--	--	--	--	--	--	--	--	--
Pentachlorophenol	11	11		--	--	--	--	--	--	--	--	--
Silvex	NV	NV		--	--	--	--	--	--	--	--	--
Organophosphorus Pesticides (mg/kg)												
Bladan	NV	NV		--	--	--	--	--	--	--	--	--
Coumaphos	NV	NV		--	--	--	--	--	--	--	--	--
Demeton-S	NV	NV		--	--	--	--	--	--	--	--	--
Diazinon	NV	NV		--	--	--	--	--	--	--	--	--
Dichlorvos	NV	NV		--	--	--	--	--	--	--	--	--
Dimethoate	NV	NV		--	--	--	--	--	--	--	--	--
Disulfoton	NV	NV		--	--	--	--	--	--	--	--	--
Dursban	NV	NV		--	--	--	--	--	--	--	--	--
Ethoprop	NV	NV		--	--	--	--	--	--	--	--	--
Fensulfothion	NV	NV		--	--	--	--	--	--	--	--	--
Fenthion	NV	NV		--	--	--	--	--	--	--	--	--
Guthion	NV	NV		--	--	--	--	--	--	--	--	--
Merphos oxide	NV	NV		--	--	--	--	--	--	--	--	--
Methyl parathion	NV	NV		--	--	--	--	--	--	--	--	--
Mevinphos	NV	NV		--	--	--	--	--	--	--	--	--
Naled	NV	NV		--	--	--	--	--	--	--	--	--
Parathion	NV	NV		--	--	--	--	--	--	--	--	--
Phorate	NV	NV		--	--	--	--	--	--	--	--	--
Ronnel	NV	NV		--	--	--	--	--	--	--	--	--
Santox	NV	NV		--	--	--	--	--	--	--	--	--
Stirofos	NV	NV		--	--	--	--	--	--	--	--	--
Sulfotepp	NV	NV		--	--	--	--	--	--	--	--	--
Sulprofos	NV	NV		--	--	--	--	--	--	--	--	--
Sumitox	NV	NV		--	--	--	--	--	--	--	--	--
Tokuthion	NV	NV		--	--	--	--	--	--	--	--	--
Trichloronate	NV	NV		--	--	--	--	--	--	--	--	--

			Location:	TP33	TP34	TP35	TP36	TP37	TP38	TP39		TP40
			Sample Name:	TP33-S-0.5	TP34-S-0.5	TP35-S-0.5	TP36-S-0.5	TP37-S-0.5	TP38-S-0.5	TP39-S-0.5	TP39-S-2.0	TP40-S-0.5
			Collection Date:	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
			Collection Depth (ft bgs):	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5
Organochlorine Pesticides (mg/kg)												
4,4'-DDD	1	1		--	--	--	--	--	--	--	--	--
4,4'-DDE	1	1		--	--	--	--	--	--	--	--	--
4,4'-DDT	1	1		--	--	--	--	--	--	--	--	--
Aldrin	0.17	0.17		--	--	--	--	--	--	--	--	--
alpha-BHC	NV	NV		--	--	--	--	--	--	--	--	--
alpha-Chlordane	NV	NV		--	--	--	--	--	--	--	--	--
beta-BHC	NV	NV		--	--	--	--	--	--	--	--	--
Chlordane	1	7		--	--	--	--	--	--	--	--	--
delta-BHC	NV	NV		--	--	--	--	--	--	--	--	--
Dieldrin	0.17	0.17		--	--	--	--	--	--	--	--	--
Endosulfan I	NV	NV		--	--	--	--	--	--	--	--	--
Endosulfan II	NV	NV		--	--	--	--	--	--	--	--	--
Endosulfan sulfate	NV	NV		--	--	--	--	--	--	--	--	--
Endrin	0.4	0.4		--	--	--	--	--	--	--	--	--
Endrin aldehyde	NV	NV		--	--	--	--	--	--	--	--	--
Endrin ketone	NV	NV		--	--	--	--	--	--	--	--	--
Gamma-Chlordane	NV	NV		--	--	--	--	--	--	--	--	--
Heptachlor	0.6	0.6		--	--	--	--	--	--	--	--	--
Heptachlor epoxide	0.6	0.6		--	--	--	--	--	--	--	--	--
Lindane	10	10		--	--	--	--	--	--	--	--	--
Methoxychlor	NV	NV		--	--	--	--	--	--	--	--	--
Toxaphene	NV	NV		--	--	--	--	--	--	--	--	--
TPH (mg/kg)												
Diesel	460	15000		--	--	--	--	--	--	--	--	--
Lube Oil	NV	NV		--	--	--	--	--	--	--	--	--
Ammonia (mg/kg)												
Nitrogen, Ammonia as N	NV	NV		--	--	--	--	--	--	--	--	--

		Location:	TP42		TP43	TP45			TP46	TP48	TP51		TP52
		Sample Name:	TP42-S-0.5	TP42-S-2.0	TP43-S-0.5	TP45-S-0.5	TP-S-DUP	TP45-S-2.5	TP46-S-0.5	TP48-S-0.5	TP51-S-0.5	TP51-S-2.0	TP52-S-0.5
		Collection Date:	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
		Collection Depth (ft bgs):	0.5	2	0.5	0.5	0.5	2.5	0.5	0.5	0.5	2	0.5
	MTCA TEE Table 749-2, Unrestricted Land Use	MTCA TEE Table 749-2, Commercial/ Industrial Properties											
Metals (mg/kg)													
Arsenic	20	20	--	--	--	--	--	--	--	--	--	--	--
Chromium[a]	42	135	--	--	--	--	--	--	--	--	--	--	--
Copper	100	550	--	--	--	--	--	--	--	--	--	--	--
Iron	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Lead	220	220	--	--	--	--	--	--	--	--	--	--	--
Manganese	NV	23500	--	--	--	--	--	--	--	--	--	--	--
Mercury	9	9	--	--	--	--	--	--	--	--	--	--	--
Nickel	100	1850	--	--	--	--	--	--	--	--	--	--	--
Zinc	270	570	--	--	--	--	--	--	--	--	--	--	--
PCBs (mg/kg)													
Aroclor 1016	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Aroclor 1221	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Aroclor 1232	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Aroclor 1242	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Aroclor 1248	NV	NV	**118**	**3.93**	**0.605**	**10.8**	**9.84**	**0.818**	0.000385 U	0.000356 U	**40.3**	**2.84**	0.000358 U
Aroclor 1254	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	**0.0119**	0.000368 U	0.000369 U	0.000358 U
Aroclor 1260	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	**0.0319**
Aroclor 1262	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Aroclor 1268	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Total PCBs	2	2	**118**	**3.93**	**0.605**	**10.8**	**9.84**	**0.818**	0.000385 U	**0.0119**	**40.3**	**2.84**	**0.0319**
Chlorinated Herbicides (mg/kg)													
2,4,5-T	NV	NV	--	--	--	--	--	--	--	--	--	--	--
2,4-D	NV	NV	--	--	--	--	--	--	--	--	--	--	--
2,4-DB	NV	NV	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dicamba	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dichlorprop	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dinoseb	NV	NV	--	--	--	--	--	--	--	--	--	--	--
MCPA	NV	NV	--	--	--	--	--	--	--	--	--	--	--

		Location:	TP42		TP43	TP45			TP46	TP48	TP51		TP52
		Sample Name:	TP42-S-0.5	TP42-S-2.0	TP43-S-0.5	TP45-S-0.5	TP-S-DUP	TP45-S-2.5	TP46-S-0.5	TP48-S-0.5	TP51-S-0.5	TP51-S-2.0	TP52-S-0.5
		Collection Date:	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
		Collection Depth (ft bgs):	0.5	2	0.5	0.5	0.5	2.5	0.5	0.5	0.5	2	0.5
MCPP	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	11	11	--	--	--	--	--	--	--	--	--	--	--
Silvex	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Organophosphorus Pesticides (mg/kg)													
Bladan	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Coumaphos	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Demeton-S	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Diazinon	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dichlorvos	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dimethoate	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Disulfoton	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dursban	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Ethoprop	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Fensulfothion	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Fenthion	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Guthion	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Merphos oxide	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Methyl parathion	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Mevinphos	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Naled	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Parathion	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Phorate	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Ronnel	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Santox	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Stirofos	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Sulfotepp	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Sulprofos	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Sumitox	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Tokuthion	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Trichloronate	NV	NV	--	--	--	--	--	--	--	--	--	--	--

		Location:	TP42		TP43	TP45			TP46	TP48	TP51		TP52
		Sample Name:	TP42-S-0.5	TP42-S-2.0	TP43-S-0.5	TP45-S-0.5	TP-S-DUP	TP45-S-2.5	TP46-S-0.5	TP48-S-0.5	TP51-S-0.5	TP51-S-2.0	TP52-S-0.5
		Collection Date:	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
		Collection Depth (ft bgs):	0.5	2	0.5	0.5	0.5	2.5	0.5	0.5	0.5	2	0.5
Organochlorine Pesticides (mg/kg)													
4,4'-DDD	1	1	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	1	1	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	1	1	--	--	--	--	--	--	--	--	--	--	--
Aldrin	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	NV	NV	--	--	--	--	--	--	--	--	--	--	--
alpha-Chlordane	NV	NV	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Chlordane	1	7	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Endrin	0.4	0.4	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Endrin ketone	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Gamma-Chlordane	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	0.6	0.6	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	0.6	0.6	--	--	--	--	--	--	--	--	--	--	--
Lindane	10	10	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	NV	NV	--	--	--	--	--	--	--	--	--	--	--
TPH (mg/kg)													
Diesel	460	15000	--	--	--	--	--	--	--	--	--	--	--
Lube Oil	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Ammonia (mg/kg)													
Nitrogen, Ammonia as N	NV	NV	--	--	--	--	--	--	--	--	--	--	--

NOTES:
Detections are in **bold** font.
Detections that exceed one or more MTCA TEE screening levels are shaded gray. Non-detect results are not evaluated against screening levels.
-- = not analyzed.
ft bgs = feet below ground surface.
J = Result is an estimated value.
mg/kg = milligrams per kilogram (parts per million).
MTCA = Model Toxics Control Act.
NA = not applicable.
ND = not detected at or above the method reporting limit.
NV = no value.
PCB = polychlorinated biphenyl.
TEE = terrestrial ecological evaluation.
Total PCBs = sum of PCB Aroclors. Non-detect results are summed as zero. For samples in which all Aroclors are non-detect, total PCB is assigned the highest reporting limit value.
TPH = total petroleum hydrocarbon.
U = Result is non-detect based on the method reporting limit.
UJ = Result is non-detect and an estimated value.
[a]Total~~rivalen~~t chromium MTCA TEE screening levels ~~cleanup levels~~ are used.

Table 3
Cost Estimate Alternative 1—Excavation of Contaminated Soils
Cleanup Action Plan
Fleischer Properties
Vancouver, Washington

Remedy Components

1 Excavate soil above the MTCA CUL and dispose of off site.
2 Backfill with clean, imported material.
3 Grade site for stormwater drainage.

Assumptions

1 Density of soil = 1.85 tons/cy.
2 Density of select borrow = 1.85 tons/cy.
3 The volume of impacted soil reflects a site-wide average of 3 feet of excavation.
4 Excavated material has been characterized for off-site disposal. For cost estimating purposes, it is assumed that material will be nonhazardous and disposed of at a Subtitle D landfill.
5 Import fill will be clean material and compacted to a minimum of 95 percent, based on the Modified Proctor Test (ASTM, 2012).
6 Final grade will be made consistent with surrounding grades.
7 Engineer's estimate is used for cost estimating purposes only and assumes costs and conditions presented in 2014. Estimated costs will need to be recalculated upon remedy selection.
8 Twenty percent contingency.

Item	Description	Quantity	Units	Unit Cost	Total Cost
Remedial Action					
Mobilization		1	LS	$50,000	$50,000
High Visibility Construction Fencing		2,983	LF	$4	$11,932
Silt Fencing		2,983	LF	$4	$11,932
Construction Entrance		1	EA	$8,000	$8,000
Clear and Grub		9.74	AC	$1,000	$9,740
Excavate 3 feet of Contaminated Soil		46,286	CY	$8	$370,288
Transport and Dispose of Contaminated Soil		62,486	TON	$34	$2,124,524
Perform Minor Grading		46,286	SY	$1	$46,286
Hydroseed		10	AC	$1,500	$14,340
	Contingency			20%	$529,000
				Remedial Action Subtotal	**$3,176,000**
Professional Services					
Permitting and agency negotiations		1	LS	$5,000	$5,000
Survey		1	LS	$5,000	$5,000
Remedial design		1	LS	$25,000	$25,000
Procurement		1	LS	$5,000	$5,000
Construction oversight		5	WK	$14,000	$70,000
Confirmation Soil Sampling		1	LS	$25,000	$25,000
Reporting		1	LS	$10,000	$10,000
	Contingency			20%	$29,000
				Professional Services Subtotal	**$174,000**
ESTIMATED COST					**$3,350,000**

NOTES: % = percent; ASTM = American Society for Testing and Materials; AC = acre; CUL = cleanup level; CY = cubic yard; EA = each; HR = hour; LF = linear foot; LS = lump sum; MTCA = Model Toxics Control Act; SY = square yard; WK = week.

Table 4
Cost Estimate Alternative 2—Capping of Contaminated Soils
Cleanup Action Plan
Fleischer Properties
Vancouver, Washington

Remedy Components

1 Regrade and cap existing soil.
2 Cap with clean, imported material.
3 Grade site for stormwater drainage.

Assumptions

1 Density of soil = 1.85 tons/cy.
2 Density of select borrow = 1.85 tons/cy.
3 Import fill will be clean material and compacted to a minimum of 95 percent, based on the Modified Proctor Test (ASTM, 2012).
4 Final grade will be made consistent with surrounding grades.
5 Twenty percent contingency.

Item	Description	Quantity	Units	Unit Cost	Total Cost
Remedial Action					
Mobilization		1	LS	$50,000	$50,000
High Visibility Construction Fencing		2,983	LF	$4	$11,932
Silt Fencing		2,983	LF	$4	$11,932
Construction Entrance		1	EA	$8,000	$8,000
Clear and Grub		9.56	AC	$1,000	$9,560
Perform Grading		46,286	SY	$1	$46,286
Place Demarcation Fabric		46,286	SY	$2	$92,572
Place 2 feet of Clean Soil Cap		30,857	CY	$15	$462,855
Hydroseed		9.56	AC	$1,500	$14,340
	Contingency			20%	$141,000
				Remedial Action Subtotal	**$848,500**
Professional Services					
Permitting and agency negotiations		1	LS	$5,000	$5,000
Survey		1	LS	$5,000	$5,000
Remedial design		1	LS	$25,000	$25,000
Procurement		1	LS	$5,000	$5,000
Construction oversight		6	WK	$14,000	$84,000
Documentation Soil Sampling		1	LS	$25,000	$25,000
Reporting		1	LS	$10,000	$10,000
	Contingency			20%	$32,000
				Professional Services Subtotal	**$191,000**
ESTIMATED COST					**$1,039,500**

NOTES: % = percent; ASTM = American Society for Testing and Materials; AC = acre; CY = cubic yard; EA = each; LF = linear foot; LS = lump sum; PID = photoionization detector; SY = square yard; WK = week.

Table 5
Cost Estimate Alternative 3—Targeted Excavation and Capping of Contaminated Soils
Cleanup Action Plan
Fleischer Properties
Vancouver, Washington

Remedy Components

1 Excavate impacted soil necessary to support redevelopment (e.g., foundation, utility corridors) and dispose of off site.
2 Cap site through redevelopment (building footprint, parking/walkways, and landscaped areas).

Assumptions

1 Density of soil = 1.85 tons/cy.
2 Density of select borrow = 1.85 tons/cy.
3 Density of asphalt = 2 tons/cy.
4 The volume of excavated soil based on 1/3 of Property area estimate for redevelopment.
5 Import fill (landscape cap) will be clean material and compacted to a minimum of 95 percent, based on the Modified Proctor Test (ASTM, 2012).
6 Excavated material has been characterized for off-site disposal. For cost estimating purposes, it is assumed that material will be nonhazardous and disposed of at a Subtitle D landfill.
7 Engineer's estimate is used for cost estimating purposes only and assumes costs and conditions presented in 2014. Estimated costs will need to be recalculated upon remedy selection.
8 Twenty percent contingency.

Item	Description	Quantity	Units	Unit Cost	Total Cost
Remedial Action					
Mobilization		1	LS	$50,000	$50,000
High Visibility Construction Fencing		2,983	LF	$4	$11,932
Silt Fencing		2,983	LF	$4	$11,932
Construction Entrance		1	EA	$8,000	$8,000
Clear and Grub		9.56	AC	$1,000	$9,560
Excavate 3 feet of Contaminated Soil		15,413	CY	$8	$123,304
Transport and Dispose of Contaminated Soil		20,808	TN	$34	$707,472
Perform Grading		46,286	SY	$1	$46,286
Place Demarcation Fabric		30,873	SY	$2	$61,746
Place 2 Feet Clean Import Soil Cap		20,583	CY	$15.00	$308,745
Hydroseed		9.56	AC	$1,500	$14,340
	Contingency			20%	$271,000
				Remedial Action Subtotal	**$1,624,300**
Professional Services					
Permitting and agency negotiations		1	LS	$5,000	$5,000
Environmental covenant		1	LS	$2,000	$2,000
Soil management plan		1	LS	$5,000	$5,000
Survey		1	LS	$5,000	$5,000
Remedial design		1	LS	$25,000	$25,000
Procurement		1	LS	$5,000	$5,000
Construction oversight		7	WK	$14,000	$98,000
Confirmation/Documentation Soil Sampling		1	LS	$25,000	$25,000
Reporting		1	LS	$12,000	$12,000
	Contingency			20%	$36,000
				Professional Services Subtotal	**$218,000**
ESTIMATED COST					**$1,842,300**

NOTES: % = percent; AC = acre; ASTM = American Society for Testing and Materials; CF = cubic feet; cy = cubic yard; EA = each; LF = linear foot; LS = lump sum; SF = square foot; SY = square yard; TN = ton; WK= week.

Table 6
Disproportionate Cost Analysis
Cleanup Action Plan
Fleischer Properties
Vancouver, Washington

Alternative	Description	Protectiveness	Permanence	Long-Term Effectiveness	Management of Short-Term Risks	Implementability	**Average**	Public Concerns	**Estimated Cost**
Alternative 1	Excavation and off-site disposal of impacted soil.	5	5	5	4	5	**4.8**	TBD	**$ 3,350,000**
Alternative 2	Capping of impacted soil.	5	3	4	5	5	**4.4**	TBD	**$ 1,039,500**
Alternative 3	Targeted excavation of impacted soil supporting redevelopment. Capping of remaining impacted soil.	5	4	4	4	5	**4.4**	TBD	**$ 1,842,300**

Notes: TBD = to be determined.

TEE APPENDIX

TERRESTRIAL ECOLOGICAL EVALUATION

The terrestrial ecological evaluation (TEE) process is required at all Model Toxics Control Act (MTCA) sites where there has been a release or threatened release of a hazardous substance that may pose a threat to human health or the environment. The TEE procedure is structured with the intent to protect terrestrial wildlife at industrial and commercial sites, and terrestrial plants, soil biota, and terrestrial wildlife at other sites, as provided under Washington Administrative Code (WAC) 173-340-7490(3)(b).

A TEE for the Properties (located at 9109 and 9115 Northeast 94th Avenue, Vancouver, Washington and comprising three tax lots [Clark County Tax Account Numbers 199861000, 199854000, and 199851000]) was performed following the procedures outlined in WAC 173-340-7490 and 173-340-7493. The purpose of this TEE is to (1) present sufficient information to characterize risks to ecological receptors, and (2) evaluate the ecological protectiveness of the remedial alternatives being assessed for the Properties (see WAC 173-340-7490(1)(b)).

The Properties are approximately 9.5 acres. According to the Clark County Planning Department the Site and surrounding properties are zoned Light Industrial. The closed Leichner Brothers Landfill is located adjacent to the north, east, and south of the Properties. Waste Connections, Inc. borders two-thirds of the Properties' northern boundary. Waste Connections, Inc. operates a garbage haul truck fleet facility (e.g., truck storage, fueling, maintenance, and repair) and a solid waste container storage yard.

The Properties' southern boundary is bordered by the Koski property which is predominately void of structural development except for a residential dwelling in the northwest corner. The Properties' western boundary is bordered by Northeast 94th Avenue; across Northeast 94th Avenue is a residential development.

SITE DESCRIPTION

Land use in the vicinity of the Property is primarily industrial and residential and includes the Interstate-205 corridor to the west. The Property is mostly undeveloped and the density and diversity of plants is low, with some ruderal vegetation present and a few trees in the southwestern portion.

Large areas of the Property is vegetated with grass. Based on these factors, the Property and surrounding areas are not expected to be attractive to wildlife. Furthermore, based on Washington Department of Fish and Wildlife information, threatened/endangered and priority species and habitats are not present at or within 500 feet of the Property (see attached Species of Concern report). Some priority aquatic palustrine habitat is located more than 1,000 feet to the east and west of the Property.

TEE APPROACH

An initial step in the TEE process is to determine whether a site qualifies for a TEE exclusion. If the site meets at least one of the four exclusionary criteria, then no further evaluation of ecological risk is necessary (WAC 173-340-7491). The four exclusionary criteria are:

1) the contamination is present only below the point of compliance in soil (i.e., below 15 feet below ground surface [bgs],

2) there is incomplete exposure pathways (i.e., all soil contaminated above MTCA criteria will be covered by physical barriers),

3) the type of contamination and proximity to ecological receptors (i.e., the site is located on or near a limited amount of undeveloped land) and,

4) all concentrations are below background levels in soils.

Chemical concentrations in soils less than 15 feet bgs exceed available WAC TEE criteria. It is therefore concluded that exclusionary criterion 1 is not met. The site does not meet exclusionary criteria 2 and 3 as it is uncertain whether future development would cover all areas of potential exposure to contaminated soil and the Property includes more than 1.5 acres of undeveloped land. Some anthropogenic chemicals exceed WAC TEE criteria and therefore exclusionary criterion 4 is not met. Since the site cannot be excluded from the TEE process, a simplified or site-specific TEE is required.

The simplified TEE is intended to identify only those sites that do not have substantial potential for posing a threat of significant adverse effects to terrestrial ecological receptors and that therefore may be removed from further ecological consideration during the remedial investigation and cleanup process (WAC 173-340-7492). MTCA specifies that a simplified TEE applies provided the site is:

1) not located on or adjacent to natural areas or land use plans will restore native vegetation,

2) not utilized by vulnerable species,

3) less than 10 acres of native vegetation within the site vicinity is present, and

4) there is no risk to significant wildlife populations, as determined by Ecology (WAC 173-340-7491).

A simplified TEE is appropriate for the Property because: the Property is less than 10 acres and is surrounded by light industrial and residential developments, and no species of concern are identified for the Property (see attached Species of Concern report).

WAC 173-340-7492(2) provides the steps necessary for conducting the simplified TEE. The simplified TEE can be ended if any of three criteria (exposure analysis, pathway analysis, and contaminant analysis) are met.

Based primarily on the acreage of undeveloped land, the Property does not meet the exposure analysis exclusionary criteria. Similarly, the pathway analysis exclusionary criteria is not met as it is currently uncertain whether the Property would be developed with structures that provide physical barriers to contaminated soil. Therefore, the contaminant analysis was conducted to determine if chemical concentrations meet WAC Table 749-2 TEE criteria protective of ecological receptors for industrial or commercial sites. In addition, Table 749-2

TEE criteria for unrestricted land use were evaluated to account for potential non-commercial/industrial future land uses.

TEE CONTAMINANT ANALYSIS

An ecological screening evaluation was performed to identify discrete locations where chemicals evaluated in soil are found at concentrations greater than the TEE criteria. The attached Table provides the results of the screening evaluation. All concentrations in soil samples are below TEE criteria, with the exception of zinc and total polychlorinated biphenyls (PCBs).

Zinc exceeds the TEE criteria in some locations for industrial/commercial and unrestricted land use. Similarly, total PCBs exceed industrial/commercial and unrestricted land use TEE criteria in some locations. Note that the zinc and total PCB exceedances tend to be co-located and the general nature and extent of PCBs is further described in the main text of the Cleanup Action Plan.

ECOLOGICAL CLEANUP LEVELS AND REMEDY EVALUATION

The WAC Table 749-2 TEE criteria for unrestricted land use are proposed for use as ecological cleanup levels (CULs) for the Property. Although the Property is currently zoned light industrial, use of the unrestricted land use TEE criteria accounts for potential future exposure to ecological receptors, in the event of a change in land use. As such, institutional controls to prevent future ecological exposure would not be needed for the Property, provided the unrestricted land use based ecological CULs are met (WAC 173-340-7492(3)).

The selected remedial action (excavation and off-site soil disposal) developed to protect human health at the Property is further evaluated in the context of the ecological CULs to determine if the resulting conditions would be protective of the environment. As described in the previous section, total PCBs and zinc are the known chemicals of concern that exceed the ecological CULs:

- Total PCBs – The CUL protective of ecological receptors is (2 milligrams per kilogram [mg/kg]) is higher than the human health CUL of 1 mg/kg. Therefore, the selected remedial action protective of human health (i.e., removal and disposal of soil exceeding 1 mg/kg total PCBs) would also be protective of ecological receptors.

- Zinc – The CUL protective of ecological receptors (270 mg/kg) is exceeded in soil samples for which there are also total PCB human health CUL exceedances, with one exception. Therefore, the selected remedial action (i.e., removal and disposal of soil exceeding 1 mg/kg total PCBs) would generally account for the removal for zinc in excess of 270 mg/kg. The exception is location TP16 (0 to 0.5 bgs), at which zinc was observed at 5,010 mg/kg and total PCBs were detected at 0.0191 mg/kg.

Based on the elevated zinc concentrations at TP16 (0 to 0.5 feet bgs), additional soil excavation and off-site disposal is recommended at this location to meet the zinc CUL.

CONCLUSIONS

The selected remedial action for the Property is soil excavation and off-site disposal of the soil that exceeds the human health PCB CUL of 1 mg/kg and the soil around TP16. This remedial action would be protective of ecological receptors.

Attachments: Table
Figure
Species of Concern Report

TABLE

		Location:	TP01	TP02		TP03	TP04		TP05		TP06	
		Sample Name:	TP01-S-0.5	TP02-S-0.5	TP02-S-2.0	TP03-S-0.5	TP04-S-0.25	TP04-S-1.0	TP05-S-0.5	TP05-S-1.5	TP06-S-0.5	TP06-S-2.0
		Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
		Collection Depth (ft bgs):	0.5	0.5	2	0.5	0.25	1	0.5	1.5	0.5	2
	MTCA TEE Table 749-2, Unrestricted Land Use	MTCA TEE Table 749-2, Commercial/ Industrial Properties										
Metals (mg/kg)												
Arsenic	20	20	--	**2.57**	--	**2.95**	**3.09**	--	--	--	**2.05**	--
Chromium[a]	42	135	--	**14.8**	--	**9.98**	**14.1**	--	--	--	**16**	--
Copper	100	550	--	**35.7**	--	**29.7**	**43.2**	--	--	--	**44.4**	--
Iron	NV	NV	--	--	--	--	--	--	--	--	--	--
Lead	220	220	--	**38.8**	--	**7.71**	**53.6**	--	--	--	**45.9**	--
Manganese	NV	23500	--	--	--	--	--	--	--	--	--	--
Mercury	9	9	--	**0.0341**	--	0.0192 U	**0.0631**	--	--	--	**0.0485**	--
Nickel	100	1850	--	**16.3**	--	**10.1**	**12.6**	--	--	--	**11.4**	--
Zinc	270	570	--	**601**	--	**78.5**	**836**	--	--	--	**2380**	--
PCBs (mg/kg)												
Aroclor 1016	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1221	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1232	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1242	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1248	NV	NV	**0.389** J	**32.4**	**0.185**	0.000406 U	**6.13**	**0.0667**	**38** J	**0.0458**	**48.3**	**0.114**
Aroclor 1254	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1260	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1262	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Aroclor 1268	NV	NV	0.0004 U	0.000363 U	0.000377 U	0.000406 U	0.000397 U	0.000427 U	0.000389 U	0.000406 U	0.000379 U	0.00038 U
Total PCBs	2	2	**0.389** J	**32.4**	**0.185**	0.000406 U	**6.13**	**0.0667**	**38** J	**0.0458**	**48.3**	**0.114**
Chlorinated Herbicides (mg/kg)												
2,4,5-T	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
2,4-D	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
2,4-DB	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
4-Nitrophenol	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
Dicamba	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
Dichlorprop	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
Dinoseb	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
MCPA	NV	NV	0.801 U	0.726 U	--	0.813 U	--	0.856 U	0.779 U	--	0.759 U	--

		Location:	TP01	TP02		TP03	TP04		TP05		TP06	
		Sample Name:	TP01-S-0.5	TP02-S-0.5	TP02-S-2.0	TP03-S-0.5	TP04-S-0.25	TP04-S-1.0	TP05-S-0.5	TP05-S-1.5	TP06-S-0.5	TP06-S-2.0
		Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
		Collection Depth (ft bgs):	0.5	0.5	2	0.5	0.25	1	0.5	1.5	0.5	2
MCPP	NV	NV	0.801 U	0.726 U	--	0.813 U	--	0.856 U	0.779 U	--	0.759 U	--
Pentachlorophenol	11	11	**0.0191**	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	**0.0144**	--
Silvex	NV	NV	0.00801 U	0.00726 U	--	0.00813 U	--	0.00856 U	0.00779 U	--	0.00759 U	--
Organophosphorus Pesticides (mg/kg)												
Bladan	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Coumaphos	NV	NV	0.12 U	0.109 U	--	0.122 U	--	0.128 U	0.117 U	--	0.114 U	--
Demeton-S	NV	NV	0.0601 U	0.0545 U	--	0.061 U	--	0.0642 U	0.0584 U	--	0.0569 U	--
Diazinon	NV	NV	0.0601 U	0.0545 U	--	0.061 U	--	0.0642 U	0.0584 U	--	0.0569 U	--
Dichlorvos	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Dimethoate	NV	NV	0.0601 U	0.0545 U	--	0.061 U	--	0.0642 U	0.0584 U	--	0.0569 U	--
Disulfoton	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Dursban	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Ethoprop	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Fensulfothion	NV	NV	0.12 U	0.109 U	--	0.122 U	--	0.128 U	0.117 U	--	0.114 U	--
Fenthion	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Guthion	NV	NV	0.3 U	0.272 U	--	0.305 U	--	0.321 U	0.292 U	--	0.285 U	--
Merphos oxide	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Methyl parathion	NV	NV	0.12 U	0.109 U	--	0.122 U	--	0.128 U	0.117 U	--	0.114 U	--
Mevinphos	NV	NV	0.12 U	0.109 U	--	0.122 U	--	0.128 U	0.117 U	--	0.114 U	--
Naled	NV	NV	0.3 U	0.272 U	--	0.305 U	--	0.321 U	0.292 U	--	0.285 U	--
Parathion	NV	NV	0.0601 U	0.0545 U	--	0.061 U	--	0.0642 U	0.0584 U	--	0.0569 U	--
Phorate	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Ronnel	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Santox	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Stirofos	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Sulfotepp	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Sulprofos	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Sumitox	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Tokuthion	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--
Trichloronate	NV	NV	0.024 U	0.0218 U	--	0.0244 U	--	0.0257 U	0.0234 U	--	0.0228 U	--

		Location:	TP01	TP02		TP03	TP04		TP05		TP06	
		Sample Name:	TP01-S-0.5	TP02-S-0.5	TP02-S-2.0	TP03-S-0.5	TP04-S-0.25	TP04-S-1.0	TP05-S-0.5	TP05-S-1.5	TP06-S-0.5	TP06-S-2.0
		Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
		Collection Depth (ft bgs):	0.5	0.5	2	0.5	0.25	1	0.5	1.5	0.5	2
Organochlorine Pesticides (mg/kg)												
4,4'-DDD	1	1	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
4,4'-DDE	1	1	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
4,4'-DDT	1	1	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Aldrin	0.17	0.17	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
alpha-BHC	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
alpha-Chlordane	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
beta-BHC	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Chlordane	1	7	0.00801 UJ	0.00726 UJ	--	0.00813 UJ	--	0.00856 UJ	0.00779 UJ	--	0.00759 UJ	--
delta-BHC	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Dieldrin	0.17	0.17	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endosulfan I	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endosulfan II	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endosulfan sulfate	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endrin	0.4	0.4	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endrin aldehyde	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Endrin ketone	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Gamma-Chlordane	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Heptachlor	0.6	0.6	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Heptachlor epoxide	0.6	0.6	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Lindane	10	10	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Methoxychlor	NV	NV	0.0004 UJ	0.000363 UJ	--	0.000407 UJ	--	0.000428 UJ	0.00039 UJ	--	0.000379 UJ	--
Toxaphene	NV	NV	0.00801 UJ	0.00726 UJ	--	0.00813 UJ	--	0.00856 UJ	0.00779 UJ	--	0.00759 UJ	--
TPH (mg/kg)												
Diesel	460	15000	--	**138** J	--	18.3 U	**85.7** J	--	--	--	**111** J	--
Lube Oil	NV	NV	--	**855**	--	**67** J	**659** J	--	--	--	**386** J	--
Ammonia (mg/kg)												
Nitrogen, Ammonia as N	NV	NV	--	--	--	--	--	--	--	--	--	--

		Location:	TP07		TP08	TP09		TP10			TP11	
		Sample Name:	TP07-S-0.25	TP07-S-1.0	TP08-S-0.5	TP09-S-0.5	TP09-S-4.5	TP10-S-0.5	TP-S-0.5DUP	TP10-S-1.5	TP11-S-0.5	TP11-S-4.5
		Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
		Collection Depth (ft bgs):	0.25	1	0.5	0.5	4.5	0.5	0.5	1.5	0.5	4.5
	MTCA TEE Table 749-2, Unrestricted Land Use	MTCA TEE Table 749-2, Commercial/ Industrial Properties										
Metals (mg/kg)												
Arsenic	20	20	**3.9**	--	**2.51**	--	--	**2.96**	**2.74**	--	--	--
Chromium[a]	42	135	**13.8**	--	**9.87**	--	--	**14.3**	**14.4**	--	--	--
Copper	100	550	**40.1**	--	**28.3**	--	--	**38.1**	**45.3**	--	--	--
Iron	NV	NV	--	--	--	--	--	--	--	--	--	--
Lead	220	220	**56.3**	--	**15.4**	--	--	**39.3**	**34.8**	--	--	--
Manganese	NV	23500	--	--	--	--	--	--	--	--	--	--
Mercury	9	9	**0.075**	--	**0.0277**	--	--	**0.055**	**0.0608**	--	--	--
Nickel	100	1850	**20.2**	--	**10.4**	--	--	**20.4**	**11.3**	--	--	--
Zinc	270	570	**238**	--	**83.8**	--	--	**1030**	**1340**	--	--	--
PCBs (mg/kg)												
Aroclor 1016	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1221	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1232	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1242	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1248	NV	NV	**1.26** J	**0.045**	**0.0822**	**0.997**	0.000366 U	**68.5**	**53.2**	**0.0343**	**5.66**	0.000374 U
Aroclor 1254	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1260	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1262	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Aroclor 1268	NV	NV	0.000361 U	0.000406 U	0.00038 U	0.00043 U	0.000366 U	0.000399 U	0.000399 U	0.000404 U	0.000391 U	0.000374 U
Total PCBs	2	2	**1.26** J	**0.045**	**0.0822**	**0.997**	0.000366 U	**68.5**	**53.2**	**0.0343**	**5.66**	0.000374 U
Chlorinated Herbicides (mg/kg)												
2,4,5-T	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
2,4-D	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
2,4-DB	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
4-Nitrophenol	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Dicamba	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Dichlorprop	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Dinoseb	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
MCPA	NV	NV	--	0.814 U	0.76 U	0.861 U	--	--	--	0.809 U	0.782 U	--

		Location:	TP07		TP08	TP09		TP10			TP11	
		Sample Name:	TP07-S-0.25	TP07-S-1.0	TP08-S-0.5	TP09-S-0.5	TP09-S-4.5	TP10-S-0.5	TP-S-0.5DUP	TP10-S-1.5	TP11-S-0.5	TP11-S-4.5
		Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
		Collection Depth (ft bgs):	0.25	1	0.5	0.5	4.5	0.5	0.5	1.5	0.5	4.5
MCPP	NV	NV	--	0.814 U	0.76 U	0.861 U	--	--	--	0.809 U	0.782 U	--
Pentachlorophenol	11	11	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Silvex	NV	NV	--	0.00814 U	0.0076 U	0.00861 U	--	--	--	0.00809 U	0.00782 U	--
Organophosphorus Pesticides (mg/kg)												
Bladan	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Coumaphos	NV	NV	--	0.122 U	0.114 U	0.129 U	--	--	--	0.121 U	0.117 U	--
Demeton-S	NV	NV	--	0.061 U	0.057 U	0.0646 U	--	--	--	0.0607 U	0.0586 U	--
Diazinon	NV	NV	--	0.061 U	0.057 U	0.0646 U	--	--	--	0.0607 U	0.0586 U	--
Dichlorvos	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Dimethoate	NV	NV	--	0.061 U	0.057 U	0.0646 U	--	--	--	0.0607 U	0.0586 U	--
Disulfoton	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Dursban	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Ethoprop	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Fensulfothion	NV	NV	--	0.122 U	0.114 U	0.129 U	--	--	--	0.121 U	0.117 U	--
Fenthion	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Guthion	NV	NV	--	0.305 U	0.285 U	0.323 U	--	--	--	0.303 U	0.293 U	--
Merphos oxide	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Methyl parathion	NV	NV	--	0.122 U	0.114 U	0.129 U	--	--	--	0.121 U	0.117 U	--
Mevinphos	NV	NV	--	0.122 U	0.114 U	0.129 U	--	--	--	0.121 U	0.117 U	--
Naled	NV	NV	--	0.305 U	0.285 U	0.323 U	--	--	--	0.303 U	0.293 U	--
Parathion	NV	NV	--	0.061 U	0.057 U	0.0646 U	--	--	--	0.0607 U	0.0586 U	--
Phorate	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Ronnel	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Santox	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Stirofos	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Sulfotepp	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Sulprofos	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Sumitox	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Tokuthion	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--
Trichloronate	NV	NV	--	0.0244 U	0.0228 U	0.0258 U	--	--	--	0.0243 U	0.0235 U	--

		Location:	TP07		TP08	TP09		TP10			TP11	
		Sample Name:	TP07-S-0.25	TP07-S-1.0	TP08-S-0.5	TP09-S-0.5	TP09-S-4.5	TP10-S-0.5	TP-S-0.5DUP	TP10-S-1.5	TP11-S-0.5	TP11-S-4.5
		Collection Date:	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014	7/15/2014
		Collection Depth (ft bgs):	0.25	1	0.5	0.5	4.5	0.5	0.5	1.5	0.5	4.5
Organochlorine Pesticides (mg/kg)												
4,4'-DDD	1	1	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
4,4'-DDE	1	1	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
4,4'-DDT	1	1	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Aldrin	0.17	0.17	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
alpha-BHC	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
alpha-Chlordane	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
beta-BHC	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Chlordane	1	7	--	0.00814 UJ	0.0076 UJ	0.00861 UJ	--	--	--	0.00809 UJ	0.00782 UJ	--
delta-BHC	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Dieldrin	0.17	0.17	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endosulfan I	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endosulfan II	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endosulfan sulfate	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endrin	0.4	0.4	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endrin aldehyde	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Endrin ketone	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Gamma-Chlordane	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Heptachlor	0.6	0.6	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Heptachlor epoxide	0.6	0.6	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Lindane	10	10	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Methoxychlor	NV	NV	--	0.000407 UJ	0.00038 UJ	0.00043 UJ	--	--	--	0.000405 UJ	0.000391 UJ	--
Toxaphene	NV	NV	--	0.00814 UJ	0.0076 UJ	0.00861 UJ	--	--	--	0.00809 UJ	0.00782 UJ	--
TPH (mg/kg)												
Diesel	460	15000	**149** J	--	**52.3**	--	--	**98.8** J	**78.2** J	--	--	--
Lube Oil	NV	NV	**825** J	--	**405** J	--	--	**359** J	**232** J	--	--	--
Ammonia (mg/kg)												
Nitrogen, Ammonia as N	NV	NV	--	--	--	--	--	--	--	--	--	--

		Location:	TP12	TP13			TP14		TP15		
		Sample Name:	TP12-S-0.5	TP13-S-0.5	TP13-S-1.5	TP13-S-5.5	TP14-S-0.5	TP14-S-4.5	TP15-S-0.5	TP15-S-1.75	TP15-S-6.0
		Collection Date:	7/15/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	1.5	5.5	0.5	4.5	0.5	1.75	6
	MTCA TEE Table 749-2, Unrestricted Land Use	MTCA TEE Table 749-2, Commercial/ Industrial Properties									
Metals (mg/kg)											
Arsenic	20	20	**2.61**	--	**3.95**	--	--	--	--	**2.67**	--
Chromium[a]	42	135	**12.1**	--	**16**	--	--	--	--	**15.7**	--
Copper	100	550	**30.7**	--	**41.5**	--	--	--	--	**28.8**	--
Iron	NV	NV	--	--	--	--	--	--	--	--	--
Lead	220	220	**8.65**	--	**52.5**	--	--	--	--	**33.3**	--
Manganese	NV	23500	--	--	--	--	--	--	--	--	--
Mercury	9	9	**0.0235**	--	**0.0899**	--	--	--	--	**0.0877**	--
Nickel	100	1850	**11.5**	--	**14.6**	--	--	--	--	**9.86**	--
Zinc	270	570	**89.9**	--	**893**	--	--	--	--	**1320**	--
PCBs (mg/kg)											
Aroclor 1016	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1221	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1232	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1242	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1248	NV	NV	**0.493**	0.000399 U	**11.2** J	**0.124**	**13.9** J	**0.0256**	**0.108**	**39.2**	**0.0871**
Aroclor 1254	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1260	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1262	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Aroclor 1268	NV	NV	0.000396 U	0.000399 U	0.000421 U	0.00037 U	0.000412 U	0.00037 U	0.000397 U	0.00042 U	0.000373 U
Total PCBs	2	2	**0.493**	0.000399 U	**11.2** J	**0.124**	**13.9** J	**0.0256**	**0.108**	**39.2**	**0.0871**
Chlorinated Herbicides (mg/kg)											
2,4,5-T	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
2,4-D	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
2,4-DB	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
4-Nitrophenol	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Dicamba	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Dichlorprop	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Dinoseb	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
MCPA	NV	NV	0.792 U	0.799 U	--	--	0.824 U	--	--	0.841 U	--

		Location:	TP12	TP13			TP14		TP15		
		Sample Name:	TP12-S-0.5	TP13-S-0.5	TP13-S-1.5	TP13-S-5.5	TP14-S-0.5	TP14-S-4.5	TP15-S-0.5	TP15-S-1.75	TP15-S-6.0
		Collection Date:	7/15/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	1.5	5.5	0.5	4.5	0.5	1.75	6
MCPP	NV	NV	0.792 U	0.799 U	--	--	0.824 U	--	--	0.841 U	--
Pentachlorophenol	11	11	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Silvex	NV	NV	0.00792 U	0.00799 U	--	--	0.00824 U	--	--	0.00841 U	--
Organophosphorus Pesticides (mg/kg)											
Bladan	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Coumaphos	NV	NV	0.119 U	0.12 U	--	--	0.124 U	--	--	0.126 U	--
Demeton-S	NV	NV	0.0594 U	0.0599 U	--	--	0.0618 U	--	--	0.0631 U	--
Diazinon	NV	NV	0.0594 U	0.0599 U	--	--	0.0618 U	--	--	0.0631 U	--
Dichlorvos	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Dimethoate	NV	NV	0.0594 U	0.0599 U	--	--	0.0618 U	--	--	0.0631 U	--
Disulfoton	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Dursban	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Ethoprop	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Fensulfothion	NV	NV	0.119 U	0.12 U	--	--	0.124 U	--	--	0.126 U	--
Fenthion	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Guthion	NV	NV	0.297 U	0.3 U	--	--	0.309 U	--	--	0.315 U	--
Merphos oxide	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Methyl parathion	NV	NV	0.119 U	0.12 U	--	--	0.124 U	--	--	0.126 U	--
Mevinphos	NV	NV	0.119 U	0.12 U	--	--	0.124 U	--	--	0.126 U	--
Naled	NV	NV	0.297 U	0.3 U	--	--	0.309 U	--	--	0.315 U	--
Parathion	NV	NV	0.0594 U	0.0599 U	--	--	0.0618 U	--	--	0.0631 U	--
Phorate	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Ronnel	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Santox	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Stirofos	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Sulfotepp	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Sulprofos	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Sumitox	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Tokuthion	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--
Trichloronate	NV	NV	0.0238 U	0.024 U	--	--	0.0247 U	--	--	0.0252 U	--

		Location:	TP12	TP13			TP14		TP15		
		Sample Name:	TP12-S-0.5	TP13-S-0.5	TP13-S-1.5	TP13-S-5.5	TP14-S-0.5	TP14-S-4.5	TP15-S-0.5	TP15-S-1.75	TP15-S-6.0
		Collection Date:	7/15/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	1.5	5.5	0.5	4.5	0.5	1.75	6
Organochlorine Pesticides (mg/kg)											
4,4'-DDD	1	1	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
4,4'-DDE	1	1	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
4,4'-DDT	1	1	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Aldrin	0.17	0.17	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
alpha-BHC	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
alpha-Chlordane	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
beta-BHC	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Chlordane	1	7	0.00792 UJ	0.00799 UJ	--	--	0.00824 UJ	--	--	0.00841 UJ	--
delta-BHC	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Dieldrin	0.17	0.17	0.000396 UJ	**0.00241** J	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endosulfan I	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endosulfan II	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endosulfan sulfate	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endrin	0.4	0.4	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endrin aldehyde	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Endrin ketone	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Gamma-Chlordane	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Heptachlor	0.6	0.6	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Heptachlor epoxide	0.6	0.6	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Lindane	10	10	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Methoxychlor	NV	NV	0.000396 UJ	0.000399 UJ	--	--	0.000412 UJ	--	--	0.00042 UJ	--
Toxaphene	NV	NV	0.00792 UJ	0.00799 UJ	--	--	0.00824 UJ	--	--	0.00841 UJ	--
TPH (mg/kg)											
Diesel	460	15000	17.8 U	--	**25.8** J	--	--	--	--	**65.7** J	--
Lube Oil	NV	NV	**85.2** J	--	**91.7** J	--	--	--	--	**201** J	--
Ammonia (mg/kg)											
Nitrogen, Ammonia as N	NV	NV	--	--	--	--	--	--	--	--	--

		Location:	TP16	TP17			TP18	TP19	TP20	TP21	
		Sample Name:	TP16-S-0.5	TP17-S-0.5	TP17-S-1.25	TP17-S-4.5	TP18-S-0.5	TP19-S-0.5	TP20-S-0.5	TP21-S-0.5	TP21-S-5.0
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	1.25	4.5	0.5	0.5	0.5	0.5	5
	MTCA TEE Table 749-2, Unrestricted Land Use	MTCA TEE Table 749-2, Commercial/ Industrial Properties									
Metals (mg/kg)											
Arsenic	20	20	**3.62**	--	**2.48**	--	**2.5**	--	**2.07**	**4.9**	--
Chromium[a]	42	135	**15.6**	--	**12.8**	--	**11.9**	--	**12.7**	**15.3**	--
Copper	100	550	**33.2**	--	**29.3**	--	**27.5**	--	**24.3**	**28.8**	--
Iron	NV	NV	--	--	--	--	--	--	--	--	--
Lead	220	220	**8.1**	--	**38.1**	--	**6.98**	--	**6.14**	**18.5**	--
Manganese	NV	23500	--	--	--	--	--	--	--	--	--
Mercury	9	9	0.0214 U	--	**0.067**	--	**0.0286**	--	0.0186 U	**0.0304**	--
Nickel	100	1850	**18.8**	--	**7.71**	--	**7.42**	--	**19.4**	**13.8**	--
Zinc	270	570	**5010**	--	**694**	--	**1250**	--	**348**	**2700**	--
PCBs (mg/kg)											
Aroclor 1016	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1221	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1232	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1242	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1248	NV	NV	**0.0191**	**1.71**	**86.6** J	**0.134**	**0.793**	**0.187**	**0.803**	**13.4**	0.000375 U
Aroclor 1254	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1260	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1262	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Aroclor 1268	NV	NV	0.000428 U	0.000385 U	0.000418 U	0.000375 U	0.000395 U	0.000426 U	0.000407 U	0.000383 U	0.000375 U
Total PCBs	2	2	**0.0191**	**1.71**	**86.6**	**0.134**	**0.793**	**0.187**	**0.803**	**13.4**	0.000375 U
Chlorinated Herbicides (mg/kg)											
2,4,5-T	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
2,4-D	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
2,4-DB	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
4-Nitrophenol	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Dicamba	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Dichlorprop	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Dinoseb	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
MCPA	NV	NV	0.856 U	--	0.837 U	--	0.79 U	0.853 U	0.815 U	0.768 U	--

		Location:	TP16	TP17			TP18	TP19	TP20	TP21	
		Sample Name:	TP16-S-0.5	TP17-S-0.5	TP17-S-1.25	TP17-S-4.5	TP18-S-0.5	TP19-S-0.5	TP20-S-0.5	TP21-S-0.5	TP21-S-5.0
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	1.25	4.5	0.5	0.5	0.5	0.5	5
MCPP	NV	NV	0.856 U	--	0.837 U	--	0.79 U	0.853 U	0.815 U	0.768 U	--
Pentachlorophenol	11	11	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Silvex	NV	NV	0.00856 U	--	0.00837 U	--	0.0079 U	0.00853 U	0.00815 U	0.00768 U	--
Organophosphorus Pesticides (mg/kg)											
Bladan	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Coumaphos	NV	NV	0.128 U	--	0.125 U	--	0.118 U	0.128 U	0.122 U	0.115 U	--
Demeton-S	NV	NV	0.0642 U	--	0.0627 U	--	0.0592 U	0.0639 U	0.0611 U	0.0576 U	--
Diazinon	NV	NV	0.0642 U	--	0.0627 U	--	0.0592 U	0.0639 U	0.0611 U	0.0576 U	--
Dichlorvos	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Dimethoate	NV	NV	0.0642 U	--	0.0627 U	--	0.0592 U	0.0639 U	0.0611 U	0.0576 U	--
Disulfoton	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Dursban	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Ethoprop	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Fensulfothion	NV	NV	0.128 U	--	0.125 U	--	0.118 U	0.128 U	0.122 U	0.115 U	--
Fenthion	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Guthion	NV	NV	0.321 U	--	0.314 U	--	0.296 U	0.32 U	0.306 U	0.288 U	--
Merphos oxide	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Methyl parathion	NV	NV	0.128 U	--	0.125 U	--	0.118 U	0.128 U	0.122 U	0.115 U	--
Mevinphos	NV	NV	0.128 U	--	0.125 U	--	0.118 U	0.128 U	0.122 U	0.115 U	--
Naled	NV	NV	0.321 U	--	0.314 U	--	0.296 U	0.32 U	0.306 U	0.288 U	--
Parathion	NV	NV	0.0642 U	--	0.0627 U	--	0.0592 U	0.0639 U	0.0611 U	0.0576 U	--
Phorate	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Ronnel	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Santox	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Stirofos	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Sulfotepp	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Sulprofos	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Sumitox	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Tokuthion	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--
Trichloronate	NV	NV	0.0257 U	--	0.0251 U	--	0.0237 U	0.0256 U	0.0245 U	0.023 U	--

		Location:	TP16	TP17			TP18	TP19	TP20	TP21	
		Sample Name:	TP16-S-0.5	TP17-S-0.5	TP17-S-1.25	TP17-S-4.5	TP18-S-0.5	TP19-S-0.5	TP20-S-0.5	TP21-S-0.5	TP21-S-5.0
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	1.25	4.5	0.5	0.5	0.5	0.5	5
Organochlorine Pesticides (mg/kg)											
4,4'-DDD	1	1	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
4,4'-DDE	1	1	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
4,4'-DDT	1	1	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Aldrin	0.17	0.17	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
alpha-BHC	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
alpha-Chlordane	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
beta-BHC	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Chlordane	1	7	0.00856 UJ	--	0.00837 UJ	--	0.0079 UJ	0.00853 UJ	0.00815 UJ	0.00768 UJ	--
delta-BHC	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Dieldrin	0.17	0.17	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endosulfan I	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endosulfan II	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endosulfan sulfate	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endrin	0.4	0.4	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endrin aldehyde	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Endrin ketone	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Gamma-Chlordane	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Heptachlor	0.6	0.6	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Heptachlor epoxide	0.6	0.6	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Lindane	10	10	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Methoxychlor	NV	NV	0.000428 UJ	--	0.000418 UJ	--	0.000395 UJ	0.000426 UJ	0.000408 UJ	0.000384 UJ	--
Toxaphene	NV	NV	0.00856 UJ	--	0.00837 UJ	--	0.0079 UJ	0.00853 UJ	0.00815 UJ	0.00768 UJ	--
TPH (mg/kg)											
Diesel	460	15000	19.3 U	--	**59.7** J	--	17.8 U	--	**22.6** J	**37.5** J	--
Lube Oil	NV	NV	**82.2** J	--	**165** J	--	**79.4** J	--	**105** J	**162** J	--
Ammonia (mg/kg)											
Nitrogen, Ammonia as N	NV	NV	--	--	--	--	--	--	--	--	--

		Location:	TP22	TP23		TP24	TP25		TP26	
		Sample Name:	TP22-S-0.5	TP23-S-0.5	TP23-S-4.5	TP24-S-0.5	TP25-S-0.5	TP25-S-4.5	TP26-S-0.5	TP26-S-5.0
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	4.5	0.5	0.5	4.5	0.5	5
	MTCA TEE Table 749-2, Unrestricted Land Use	MTCA TEE Table 749-2, Commercial/ Industrial Properties								
Metals (mg/kg)										
Arsenic	20	20	**2.5**	**2.24**	--	**2.18**	**3.7**	--	**4.19**	--
Chromium[a]	42	135	**9.46**	**10.6**	--	**10.1**	**12.6**	--	**26.2**	--
Copper	100	550	**41.6**	**22.8**	--	**27.4**	**29.2**	--	**35.5**	--
Iron	NV	NV	--	--	--	--	--	--	**31200**	--
Lead	220	220	**7.13**	**13.7**	--	**32.2**	**23.8**	--	**95.3**	--
Manganese	NV	23500	--	--	--	--	--	--	**538**	--
Mercury	9	9	0.0201 U	**0.0497**	--	**0.114**	**0.0597**	--	**0.0723**	--
Nickel	100	1850	**10.6**	**10.1**	--	**8.7**	**10.6** J	--	**11.3**	--
Zinc	270	570	**168**	**608**	--	**177**	**314**	--	**2380**	--
PCBs (mg/kg)										
Aroclor 1016	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1221	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1232	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1242	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1248	NV	NV	**0.635**	**17.1**	0.000363 U	**0.514** J	**26.9**	0.00037 U	**33.2** J	0.00036 U
Aroclor 1254	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1260	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1262	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Aroclor 1268	NV	NV	0.000434 U	0.000397 U	0.000363 U	0.000386 U	0.000387 U	0.00037 U	0.000393 U	0.00036 U
Total PCBs	2	2	**0.635**	**17.1**	0.000363 U	**0.514** J	**26.9**	0.000185 U	**33.2** J	0.00036 U
Chlorinated Herbicides (mg/kg)										
2,4,5-T	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
2,4-D	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
2,4-DB	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
4-Nitrophenol	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
Dicamba	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
Dichlorprop	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
Dinoseb	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
MCPA	NV	NV	0.868 U	0.796 UJ	--	0.772 U	0.774 U	--	0.787 U	--

		Location:	TP22	TP23		TP24	TP25		TP26	
		Sample Name:	TP22-S-0.5	TP23-S-0.5	TP23-S-4.5	TP24-S-0.5	TP25-S-0.5	TP25-S-4.5	TP26-S-0.5	TP26-S-5.0
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	4.5	0.5	0.5	4.5	0.5	5
MCPP	NV	NV	0.868 U	0.796 UJ	--	0.772 U	0.774 U	--	0.787 U	--
Pentachlorophenol	11	11	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	**0.172**	--
Silvex	NV	NV	0.00868 U	0.00796 UJ	--	0.00772 U	0.00774 U	--	0.00787 U	--
Organophosphorus Pesticides (mg/kg)										
Bladan	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Coumaphos	NV	NV	0.13 U	0.119 U	--	0.116 U	0.116 U	--	0.118 U	--
Demeton-S	NV	NV	0.0651 U	0.0597 U	--	0.0579 U	0.0581 U	--	0.059 U	--
Diazinon	NV	NV	0.0651 U	0.0597 U	--	0.0579 U	0.0581 U	--	0.059 U	--
Dichlorvos	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Dimethoate	NV	NV	0.0651 U	0.0597 U	--	0.0579 U	0.0581 U	--	0.059 U	--
Disulfoton	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Dursban	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Ethoprop	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Fensulfothion	NV	NV	0.13 U	0.119 U	--	0.116 U	0.116 U	--	0.118 U	--
Fenthion	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Guthion	NV	NV	0.326 U	0.298 U	--	0.289 U	0.29 U	--	0.295 U	--
Merphos oxide	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Methyl parathion	NV	NV	0.13 U	0.119 U	--	0.116 U	0.116 U	--	0.118 U	--
Mevinphos	NV	NV	0.13 U	0.119 U	--	0.116 U	0.116 U	--	0.118 U	--
Naled	NV	NV	0.326 U	0.298 U	--	0.289 U	0.29 U	--	0.295 U	--
Parathion	NV	NV	0.0651 U	0.0597 U	--	0.0579 U	0.0581 U	--	0.059 U	--
Phorate	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Ronnel	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Santox	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Stirofos	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Sulfotepp	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Sulprofos	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Sumitox	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Tokuthion	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--
Trichloronate	NV	NV	0.026 U	0.0239 U	--	0.0232 U	0.0232 U	--	0.0236 U	--

		Location:	TP22	TP23		TP24	TP25		TP26	
		Sample Name:	TP22-S-0.5	TP23-S-0.5	TP23-S-4.5	TP24-S-0.5	TP25-S-0.5	TP25-S-4.5	TP26-S-0.5	TP26-S-5.0
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014
		Collection Depth (ft bgs):	0.5	0.5	4.5	0.5	0.5	4.5	0.5	5
Organochlorine Pesticides (mg/kg)										
4,4'-DDD	1	1	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
4,4'-DDE	1	1	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
4,4'-DDT	1	1	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Aldrin	0.17	0.17	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
alpha-BHC	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
alpha-Chlordane	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
beta-BHC	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Chlordane	1	7	0.00868 UJ	0.00796 UJ	--	0.00772 UJ	0.00774 UJ	--	0.00787 UJ	--
delta-BHC	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Dieldrin	0.17	0.17	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endosulfan I	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endosulfan II	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endosulfan sulfate	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endrin	0.4	0.4	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endrin aldehyde	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Endrin ketone	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Gamma-Chlordane	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Heptachlor	0.6	0.6	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Heptachlor epoxide	0.6	0.6	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Lindane	10	10	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Methoxychlor	NV	NV	0.000434 UJ	0.000398 UJ	--	0.000386 UJ	0.000387 UJ	--	0.000393 UJ	--
Toxaphene	NV	NV	0.00868 UJ	0.00796 UJ	--	0.00772 UJ	0.00774 UJ	--	0.00787 UJ	--
TPH (mg/kg)										
Diesel	460	15000	19.5 U	**23.2** J	--	**19.3**	**62.4** J	--	**44.9**	--
Lube Oil	NV	NV	65.1 U	**104** J	--	**104** J	**215** J	--	**133**	--
Ammonia (mg/kg)										
Nitrogen, Ammonia as N	NV	NV	--	--	--	--	--	--	4.72 U	--

		Location:	TP27			TP28	TP29				TP30		TP31	TP32
		Sample Name:	TP27-S-0.5	TP27-S-5.5	TP27-S-8.5	TP28-S-0.5	TP29-S-0.5	TP-S-0.5DUP	TP29-S-3.5	TP29-S-7.5	TP30-S-0.5	TP30-S-4.0	TP31-S-0.5	TP32-S-0.5
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	10/1/2014	10/1/2014
		Collection Depth (ft bgs):	0.5	5.5	8.5	0.5	0.5	0.5	3.5	7.5	0.5	4	0.5	0.5
	MTCA TEE Table 749-2, Unrestricted Land Use	MTCA TEE Table 749-2, Commercial/ Industrial Properties												
Metals (mg/kg)														
Arsenic	20	20	**14.6**	--	--	--	**3.08**	**2.88**	--	--	--	--	--	--
Chromium[a]	42	135	**17**	--	--	--	**11.9**	**15.5**	--	--	--	--	--	--
Copper	100	550	**35.5**	--	--	--	**25.7**	**24.5**	--	--	--	--	--	--
Iron	NV	NV	**27200**	--	--	**47400**	**36900**	**43300**	--	--	**41700**	--	--	--
Lead	220	220	**96.4**	--	--	--	**15.5**	**12.6**	--	--	--	--	--	--
Manganese	NV	23500	**333**	--	--	**817**	**429**	**437**	--	--	**517**	--	--	--
Mercury	9	9	**0.11**	--	--	--	**0.0444**	**0.0405**	--	--	--	--	--	--
Nickel	100	1850	**8.97**	--	--	--	**10.5**	**15.3**	--	--	--	--	--	--
Zinc	270	570	**448**	--	--	--	**382**	**390**	--	--	--	--	--	--
PCBs (mg/kg)														
Aroclor 1016	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U	0.000401
Aroclor 1221	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U	0.000401
Aroclor 1232	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U	0.000401
Aroclor 1242	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U	0.000401
Aroclor 1248	NV	NV	**63.1** J	**1.56**	**0.392**	**0.532** J	**3.98** J	**3.64** J	**4.21**	**0.186**	**17.3** J	0.000362 U	**0.0694**	**0.0187**
Aroclor 1254	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U	0.000401
Aroclor 1260	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U	0.000401
Aroclor 1262	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U	0.000401
Aroclor 1268	NV	NV	0.000461 U	0.000412 U	0.000377 U	0.000391 U	0.000382 U	0.000386 U	0.000448 U	0.000358 U	0.000382 U	0.000362 U	0.000363 U	0.000401
Total PCBs	2	2	**63.1** J	**1.56**	**0.392**	**0.532** J	**3.98** J	**3.64** J	**4.21**	**0.186**	**17.3** J	0.000362 U	**0.0694**	**0.0187**
Chlorinated Herbicides (mg/kg)														
2,4,5-T	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--	--
2,4-D	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--	--
2,4-DB	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--	--
4-Nitrophenol	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--	--
Dicamba	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--	--
Dichlorprop	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--	--
Dinoseb	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--	--
MCPA	NV	NV	0.923 U	--	--	0.782 U	0.765 U	0.773 U	--	--	0.764 U	--	--	--

		Location:	TP27			TP28	TP29				TP30		TP31	TP32
		Sample Name:	TP27-S-0.5	TP27-S-5.5	TP27-S-8.5	TP28-S-0.5	TP29-S-0.5	TP-S-0.5DUP	TP29-S-3.5	TP29-S-7.5	TP30-S-0.5	TP30-S-4.0	TP31-S-0.5	TP32-S-0.5
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	10/1/2014	10/1/2014
		Collection Depth (ft bgs):	0.5	5.5	8.5	0.5	0.5	0.5	3.5	7.5	0.5	4	0.5	0.5
MCPP	NV	NV	0.923 U	--	--	0.782 U	0.765 U	0.773 U	--	--	0.764 U	--	--	--
Pentachlorophenol	11	11	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	**0.00902**	--	--	--
Silvex	NV	NV	0.00923 U	--	--	0.00782 U	0.00765 U	0.00773 U	--	--	0.00764 U	--	--	--
Organophosphorus Pesticides (mg/kg)														
Bladan	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Coumaphos	NV	NV	0.138 U	--	--	0.117 U	0.115 U	0.116 U	--	--	0.115 U	--	--	--
Demeton-S	NV	NV	0.0692 U	--	--	0.0587 U	0.0574 U	0.058 U	--	--	0.0573 U	--	--	--
Diazinon	NV	NV	0.0692 U	--	--	0.0587 U	0.0574 U	0.058 U	--	--	0.0573 U	--	--	--
Dichlorvos	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Dimethoate	NV	NV	0.0692 U	--	--	0.0587 U	0.0574 U	0.058 U	--	--	0.0573 U	--	--	--
Disulfoton	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Dursban	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Ethoprop	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Fensulfothion	NV	NV	0.138 U	--	--	0.117 U	0.115 U	0.116 U	--	--	0.115 U	--	--	--
Fenthion	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Guthion	NV	NV	0.346 U	--	--	0.293 U	0.287 U	0.29 U	--	--	0.287 U	--	--	--
Merphos oxide	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Methyl parathion	NV	NV	0.138 U	--	--	0.117 U	0.115 U	0.116 U	--	--	0.115 U	--	--	--
Mevinphos	NV	NV	0.138 U	--	--	0.117 U	0.115 U	0.116 U	--	--	0.115 U	--	--	--
Naled	NV	NV	0.346 U	--	--	0.293 U	0.287 U	0.29 U	--	--	0.287 U	--	--	--
Parathion	NV	NV	0.0692 U	--	--	0.0587 U	0.0574 U	0.058 U	--	--	0.0573 U	--	--	--
Phorate	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Ronnel	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Santox	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Stirofos	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Sulfotepp	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Sulprofos	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Sumitox	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Tokuthion	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--
Trichloronate	NV	NV	0.0277 U	--	--	0.0235 U	0.023 U	0.0232 U	--	--	0.0229 U	--	--	--

		Location:	TP27			TP28	TP29				TP30		TP31	TP32
		Sample Name:	TP27-S-0.5	TP27-S-5.5	TP27-S-8.5	TP28-S-0.5	TP29-S-0.5	TP-S-0.5DUP	TP29-S-3.5	TP29-S-7.5	TP30-S-0.5	TP30-S-4.0	TP31-S-0.5	TP32-S-0.5
		Collection Date:	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	7/16/2014	10/1/2014	10/1/2014
		Collection Depth (ft bgs):	0.5	5.5	8.5	0.5	0.5	0.5	3.5	7.5	0.5	4	0.5	0.5
Organochlorine Pesticides (mg/kg)														
4,4'-DDD	1	1	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
4,4'-DDE	1	1	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
4,4'-DDT	1	1	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Aldrin	0.17	0.17	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
alpha-BHC	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
alpha-Chlordane	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
beta-BHC	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Chlordane	1	7	0.00923 UJ	--	--	0.00782 UJ	0.00765 UJ	0.00773 UJ	--	--	0.00764 UJ	--	--	--
delta-BHC	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Dieldrin	0.17	0.17	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Endosulfan I	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Endosulfan II	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Endosulfan sulfate	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Endrin	0.4	0.4	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Endrin aldehyde	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Endrin ketone	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Gamma-Chlordane	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Heptachlor	0.6	0.6	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Heptachlor epoxide	0.6	0.6	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Lindane	10	10	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Methoxychlor	NV	NV	0.000462 UJ	--	--	0.000391 UJ	0.000383 UJ	0.000386 UJ	--	--	0.000382 UJ	--	--	--
Toxaphene	NV	NV	0.00923 UJ	--	--	0.00782 UJ	0.00765 UJ	0.00773 UJ	--	--	0.00764 UJ	--	--	--
TPH (mg/kg)														
Diesel	460	15000	**69.3**	--	--	--	**19.7**	**23.1**	--	--	--	--	--	--
Lube Oil	NV	NV	**162**	--	--	--	**104**	**105**	--	--	--	--	--	--
Ammonia (mg/kg)														
Nitrogen, Ammonia as N	NV	NV	5.54 U	--	--	4.69 U	4.59 U	4.64 U	--	--	4.59 U	--	--	--

		Location:		TP33	TP34	TP35	TP36	TP37	TP38	TP39		TP40
		Sample Name:		TP33-S-0.5	TP34-S-0.5	TP35-S-0.5	TP36-S-0.5	TP37-S-0.5	TP38-S-0.5	TP39-S-0.5	TP39-S-2.0	TP40-S-0.5
		Collection Date:		10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
		Collection Depth (ft bgs):		0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5
	MTCA TEE Table 749-2, Unrestricted Land Use	MTCA TEE Table 749-2, Commercial/ Industrial Properties										
Metals (mg/kg)												
Arsenic	20	20		--	--	--	--	--	--	--	--	--
Chromium[a]	42	135		--	--	--	--	--	--	--	--	--
Copper	100	550		--	--	--	--	--	--	--	--	--
Iron	NV	NV		--	--	--	--	--	--	--	--	--
Lead	220	220		--	--	--	--	--	--	--	--	--
Manganese	NV	23500		--	--	--	--	--	--	--	--	--
Mercury	9	9		--	--	--	--	--	--	--	--	--
Nickel	100	1850		--	--	--	--	--	--	--	--	--
Zinc	270	570		--	--	--	--	--	--	--	--	--
PCBs (mg/kg)												
Aroclor 1016	NV	NV	U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1221	NV	NV	U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1232	NV	NV	U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1242	NV	NV	U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1248	NV	NV		0.000337 U	0.000347 U	**0.0431**	**0.00404**	0.000362 U	0.000383 U	**19.6** J	**0.434**	0.000359 U
Aroclor 1254	NV	NV	U	0.000337 U	**0.00955**	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1260	NV	NV	U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1262	NV	NV	U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Aroclor 1268	NV	NV	U	0.000337 U	0.000347 U	0.000349 U	0.000362 U	0.000362 U	0.000383 U	0.000385 U	0.000379 U	0.000359 U
Total PCBs	2	2		0.000337 U	**0.00955**	**0.0431**	**0.00404**	0.000362 U	0.000383 U	**19.6** J	**0.434**	0.000359 U
Chlorinated Herbicides (mg/kg)												
2,4,5-T	NV	NV		--	--	--	--	--	--	--	--	--
2,4-D	NV	NV		--	--	--	--	--	--	--	--	--
2,4-DB	NV	NV		--	--	--	--	--	--	--	--	--
4-Nitrophenol	NV	NV		--	--	--	--	--	--	--	--	--
Dicamba	NV	NV		--	--	--	--	--	--	--	--	--
Dichlorprop	NV	NV		--	--	--	--	--	--	--	--	--
Dinoseb	NV	NV		--	--	--	--	--	--	--	--	--
MCPA	NV	NV		--	--	--	--	--	--	--	--	--

		Location:		TP33	TP34	TP35	TP36	TP37	TP38	TP39		TP40
		Sample Name:		TP33-S-0.5	TP34-S-0.5	TP35-S-0.5	TP36-S-0.5	TP37-S-0.5	TP38-S-0.5	TP39-S-0.5	TP39-S-2.0	TP40-S-0.5
		Collection Date:		10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
		Collection Depth (ft bgs):		0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5
MCPP	NV	NV		--	--	--	--	--	--	--	--	--
Pentachlorophenol	11	11		--	--	--	--	--	--	--	--	--
Silvex	NV	NV		--	--	--	--	--	--	--	--	--
Organophosphorus Pesticides (mg/kg)												
Bladan	NV	NV		--	--	--	--	--	--	--	--	--
Coumaphos	NV	NV		--	--	--	--	--	--	--	--	--
Demeton-S	NV	NV		--	--	--	--	--	--	--	--	--
Diazinon	NV	NV		--	--	--	--	--	--	--	--	--
Dichlorvos	NV	NV		--	--	--	--	--	--	--	--	--
Dimethoate	NV	NV		--	--	--	--	--	--	--	--	--
Disulfoton	NV	NV		--	--	--	--	--	--	--	--	--
Dursban	NV	NV		--	--	--	--	--	--	--	--	--
Ethoprop	NV	NV		--	--	--	--	--	--	--	--	--
Fensulfothion	NV	NV		--	--	--	--	--	--	--	--	--
Fenthion	NV	NV		--	--	--	--	--	--	--	--	--
Guthion	NV	NV		--	--	--	--	--	--	--	--	--
Merphos oxide	NV	NV		--	--	--	--	--	--	--	--	--
Methyl parathion	NV	NV		--	--	--	--	--	--	--	--	--
Mevinphos	NV	NV		--	--	--	--	--	--	--	--	--
Naled	NV	NV		--	--	--	--	--	--	--	--	--
Parathion	NV	NV		--	--	--	--	--	--	--	--	--
Phorate	NV	NV		--	--	--	--	--	--	--	--	--
Ronnel	NV	NV		--	--	--	--	--	--	--	--	--
Santox	NV	NV		--	--	--	--	--	--	--	--	--
Stirofos	NV	NV		--	--	--	--	--	--	--	--	--
Sulfotepp	NV	NV		--	--	--	--	--	--	--	--	--
Sulprofos	NV	NV		--	--	--	--	--	--	--	--	--
Sumitox	NV	NV		--	--	--	--	--	--	--	--	--
Tokuthion	NV	NV		--	--	--	--	--	--	--	--	--
Trichloronate	NV	NV		--	--	--	--	--	--	--	--	--

		Location:		TP33	TP34	TP35	TP36	TP37	TP38	TP39		TP40
		Sample Name:		TP33-S-0.5	TP34-S-0.5	TP35-S-0.5	TP36-S-0.5	TP37-S-0.5	TP38-S-0.5	TP39-S-0.5	TP39-S-2.0	TP40-S-0.5
		Collection Date:		10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
		Collection Depth (ft bgs):		0.5	0.5	0.5	0.5	0.5	0.5	0.5	2	0.5
Organochlorine Pesticides (mg/kg)												
4,4'-DDD	1	1		--	--	--	--	--	--	--	--	--
4,4'-DDE	1	1		--	--	--	--	--	--	--	--	--
4,4'-DDT	1	1		--	--	--	--	--	--	--	--	--
Aldrin	0.17	0.17		--	--	--	--	--	--	--	--	--
alpha-BHC	NV	NV		--	--	--	--	--	--	--	--	--
alpha-Chlordane	NV	NV		--	--	--	--	--	--	--	--	--
beta-BHC	NV	NV		--	--	--	--	--	--	--	--	--
Chlordane	1	7		--	--	--	--	--	--	--	--	--
delta-BHC	NV	NV		--	--	--	--	--	--	--	--	--
Dieldrin	0.17	0.17		--	--	--	--	--	--	--	--	--
Endosulfan I	NV	NV		--	--	--	--	--	--	--	--	--
Endosulfan II	NV	NV		--	--	--	--	--	--	--	--	--
Endosulfan sulfate	NV	NV		--	--	--	--	--	--	--	--	--
Endrin	0.4	0.4		--	--	--	--	--	--	--	--	--
Endrin aldehyde	NV	NV		--	--	--	--	--	--	--	--	--
Endrin ketone	NV	NV		--	--	--	--	--	--	--	--	--
Gamma-Chlordane	NV	NV		--	--	--	--	--	--	--	--	--
Heptachlor	0.6	0.6		--	--	--	--	--	--	--	--	--
Heptachlor epoxide	0.6	0.6		--	--	--	--	--	--	--	--	--
Lindane	10	10		--	--	--	--	--	--	--	--	--
Methoxychlor	NV	NV		--	--	--	--	--	--	--	--	--
Toxaphene	NV	NV		--	--	--	--	--	--	--	--	--
TPH (mg/kg)												
Diesel	460	15000		--	--	--	--	--	--	--	--	--
Lube Oil	NV	NV		--	--	--	--	--	--	--	--	--
Ammonia (mg/kg)												
Nitrogen, Ammonia as N	NV	NV		--	--	--	--	--	--	--	--	--

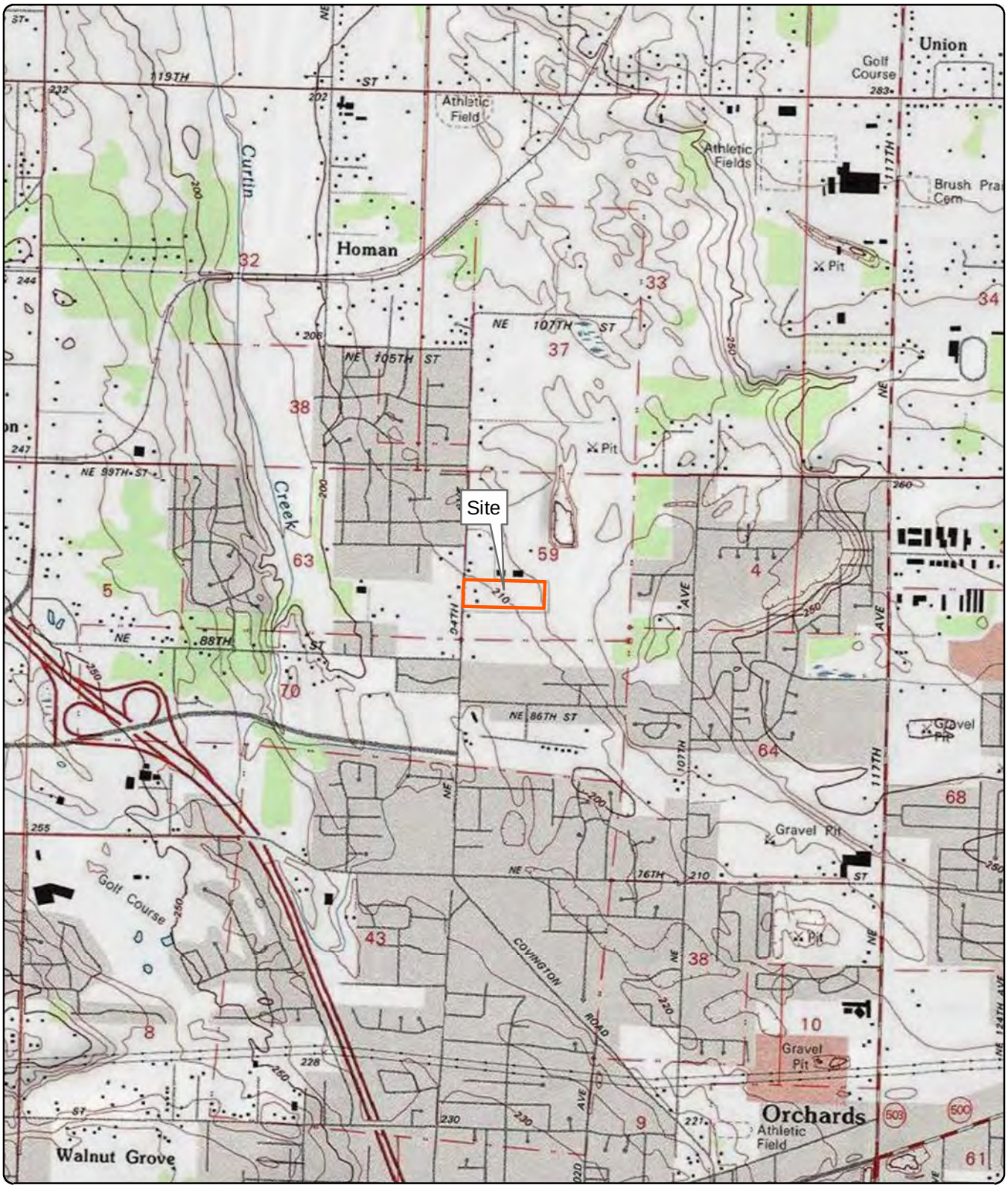
		Location:	TP42		TP43	TP45			TP46	TP48	TP51		TP52
		Sample Name:	TP42-S-0.5	TP42-S-2.0	TP43-S-0.5	TP45-S-0.5	TP-S-DUP	TP45-S-2.5	TP46-S-0.5	TP48-S-0.5	TP51-S-0.5	TP51-S-2.0	TP52-S-0.5
		Collection Date:	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
		Collection Depth (ft bgs):	0.5	2	0.5	0.5	0.5	2.5	0.5	0.5	0.5	2	0.5
	MTCA TEE Table 749-2, Unrestricted Land Use	MTCA TEE Table 749-2, Commercial/ Industrial Properties											
Metals (mg/kg)													
Arsenic	20	20	--	--	--	--	--	--	--	--	--	--	--
Chromium[a]	42	135	--	--	--	--	--	--	--	--	--	--	--
Copper	100	550	--	--	--	--	--	--	--	--	--	--	--
Iron	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Lead	220	220	--	--	--	--	--	--	--	--	--	--	--
Manganese	NV	23500	--	--	--	--	--	--	--	--	--	--	--
Mercury	9	9	--	--	--	--	--	--	--	--	--	--	--
Nickel	100	1850	--	--	--	--	--	--	--	--	--	--	--
Zinc	270	570	--	--	--	--	--	--	--	--	--	--	--
PCBs (mg/kg)													
Aroclor 1016	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Aroclor 1221	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Aroclor 1232	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Aroclor 1242	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Aroclor 1248	NV	NV	**118**	**3.93**	**0.605**	**10.8**	**9.84**	**0.818**	0.000385 U	0.000356 U	**40.3**	**2.84**	0.000358 U
Aroclor 1254	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	**0.0119**	0.000368 U	0.000369 U	0.000358 U
Aroclor 1260	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	**0.0319**
Aroclor 1262	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Aroclor 1268	NV	NV	0.000378 U	0.00036 U	0.000365 U	0.000376 U	0.000382 U	0.000365 U	0.000385 U	0.000356 U	0.000368 U	0.000369 U	0.000358 U
Total PCBs	2	2	**118**	**3.93**	**0.605**	**10.8**	**9.84**	**0.818**	0.000385 U	**0.0119**	**40.3**	**2.84**	**0.0319**
Chlorinated Herbicides (mg/kg)													
2,4,5-T	NV	NV	--	--	--	--	--	--	--	--	--	--	--
2,4-D	NV	NV	--	--	--	--	--	--	--	--	--	--	--
2,4-DB	NV	NV	--	--	--	--	--	--	--	--	--	--	--
4-Nitrophenol	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dicamba	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dichlorprop	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dinoseb	NV	NV	--	--	--	--	--	--	--	--	--	--	--
MCPA	NV	NV	--	--	--	--	--	--	--	--	--	--	--

		Location:	TP42		TP43	TP45			TP46	TP48	TP51		TP52
		Sample Name:	TP42-S-0.5	TP42-S-2.0	TP43-S-0.5	TP45-S-0.5	TP-S-DUP	TP45-S-2.5	TP46-S-0.5	TP48-S-0.5	TP51-S-0.5	TP51-S-2.0	TP52-S-0.5
		Collection Date:	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
		Collection Depth (ft bgs):	0.5	2	0.5	0.5	0.5	2.5	0.5	0.5	0.5	2	0.5
MCPP	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	11	11	--	--	--	--	--	--	--	--	--	--	--
Silvex	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Organophosphorus Pesticides (mg/kg)													
Bladan	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Coumaphos	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Demeton-S	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Diazinon	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dichlorvos	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dimethoate	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Disulfoton	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dursban	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Ethoprop	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Fensulfothion	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Fenthion	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Guthion	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Merphos oxide	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Methyl parathion	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Mevinphos	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Naled	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Parathion	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Phorate	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Ronnel	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Santox	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Stirofos	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Sulfotepp	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Sulprofos	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Sumitox	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Tokuthion	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Trichloronate	NV	NV	--	--	--	--	--	--	--	--	--	--	--

		Location:	TP42		TP43	TP45			TP46	TP48	TP51		TP52
		Sample Name:	TP42-S-0.5	TP42-S-2.0	TP43-S-0.5	TP45-S-0.5	TP-S-DUP	TP45-S-2.5	TP46-S-0.5	TP48-S-0.5	TP51-S-0.5	TP51-S-2.0	TP52-S-0.5
		Collection Date:	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014	10/1/2014
		Collection Depth (ft bgs):	0.5	2	0.5	0.5	0.5	2.5	0.5	0.5	0.5	2	0.5
Organochlorine Pesticides (mg/kg)													
4,4'-DDD	1	1	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	1	1	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	1	1	--	--	--	--	--	--	--	--	--	--	--
Aldrin	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--
alpha-BHC	NV	NV	--	--	--	--	--	--	--	--	--	--	--
alpha-Chlordane	NV	NV	--	--	--	--	--	--	--	--	--	--	--
beta-BHC	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Chlordane	1	7	--	--	--	--	--	--	--	--	--	--	--
delta-BHC	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	0.17	0.17	--	--	--	--	--	--	--	--	--	--	--
Endosulfan I	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Endosulfan II	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Endrin	0.4	0.4	--	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Endrin ketone	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Gamma-Chlordane	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	0.6	0.6	--	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	0.6	0.6	--	--	--	--	--	--	--	--	--	--	--
Lindane	10	10	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Toxaphene	NV	NV	--	--	--	--	--	--	--	--	--	--	--
TPH (mg/kg)													
Diesel	460	15000	--	--	--	--	--	--	--	--	--	--	--
Lube Oil	NV	NV	--	--	--	--	--	--	--	--	--	--	--
Ammonia (mg/kg)													
Nitrogen, Ammonia as N	NV	NV	--	--	--	--	--	--	--	--	--	--	--

NOTES:
Detections are in **bold** font.
Detections that exceed one or more MTCA TEE screening levels are shaded gray. Non-detect results are not evaluated against screening levels.
-- = not analyzed.
ft bgs = feet below ground surface.
J = Result is an estimated value.
mg/kg = milligrams per kilogram (parts per million).
MTCA = Model Toxics Control Act.
NA = not applicable.
ND = not detected at or above the method reporting limit.
NV = no value.
PCB = polychlorinated biphenyl.
TEE = terrestrial ecological evaluation.
Total PCBs = sum of PCB Aroclors. Non-detect results are summed as zero. For samples in which all Aroclors are non-detect, total PCB is assigned the highest reporting limit value.
TPH = total petroleum hydrocarbon.
U = Result is non-detect based on the method reporting limit.
UJ = Result is non-detect and an estimated value.
[a]Total~~rivalen~~t chromium MTCA TEE screening levels ~~cleanup levels~~ are used.

FIGURE



Site Address: 9109 and 9115 Northeast 94th Avenue,
Vancouver, Washington 98662
Source: U.S. Geological Survey (1990) 7.5-minute
topographic quadrangle: Orchards
Section 59, Township 2 North, Range 2 East

Figure 1
Site Location

Fleischer Properties
Cleanup Action Plan
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington

0 1,000 2,000
Feet

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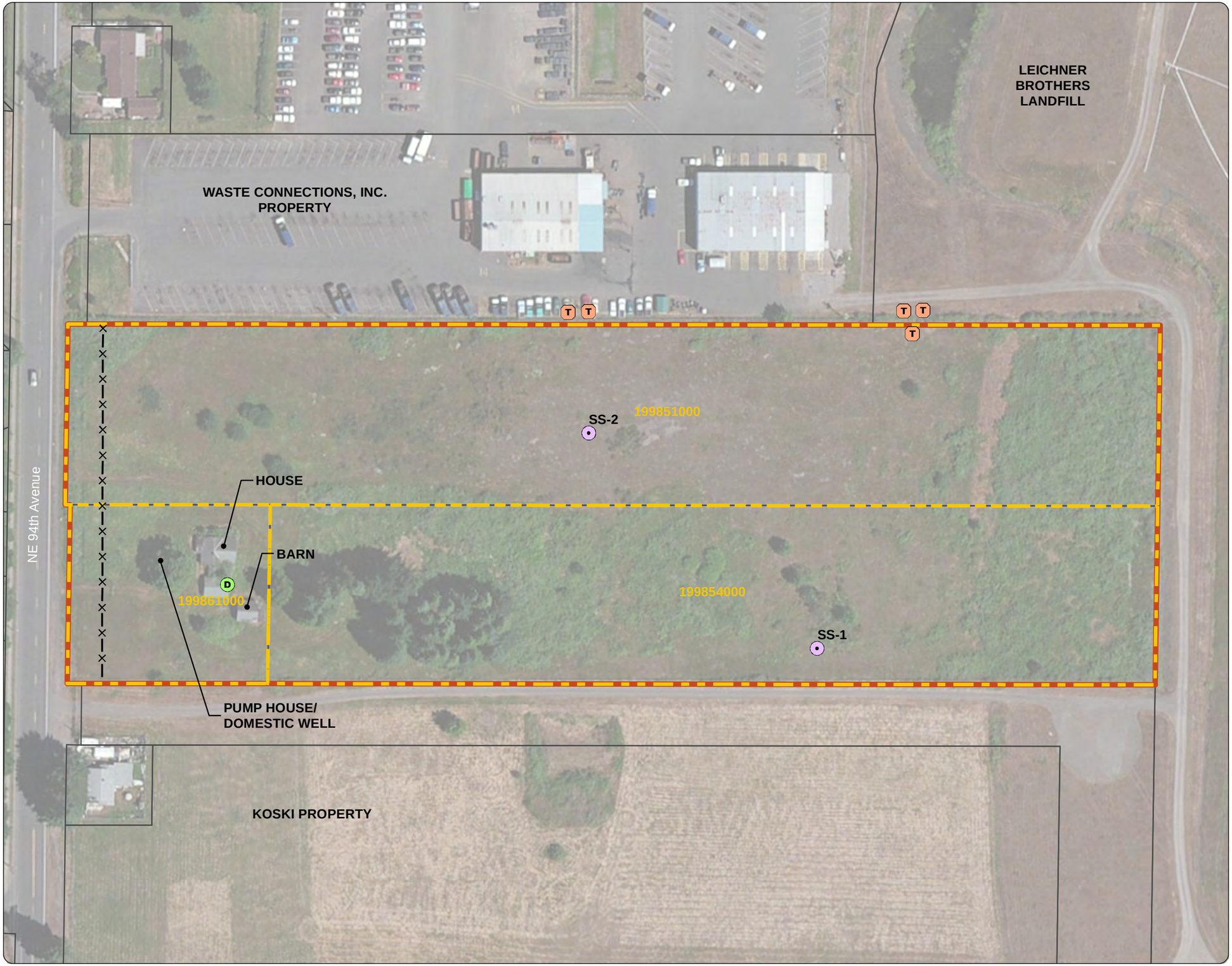
Path: X:\9059.07 Clark County\04 Fleischer IPG\Projects\Cleanup Action Plan\Fig1_Site Location.mxd
Print Date: 5/29/2015
Approved By: E. Hess
Produced By: jschane
Project: 9059.07

Figure 2
Site Features

Fleischer Properties
Cleanup Action Plan
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington



Legend

- Drum
- Pole-mounted Transformer
- Residual Fill Material Sample Location from 2010 GeoDesign, Inc. Investigation
- Fence
- Site Boundary
- Site Tax Lot
- Tax Lot Boundary

Note: All site feature locations are approximate.

0 50 100
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots obtained from Clark County

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Print Date: 5/29/2015
Approved By: kroslund
Produced By: jschane
Project: 9059.07.04

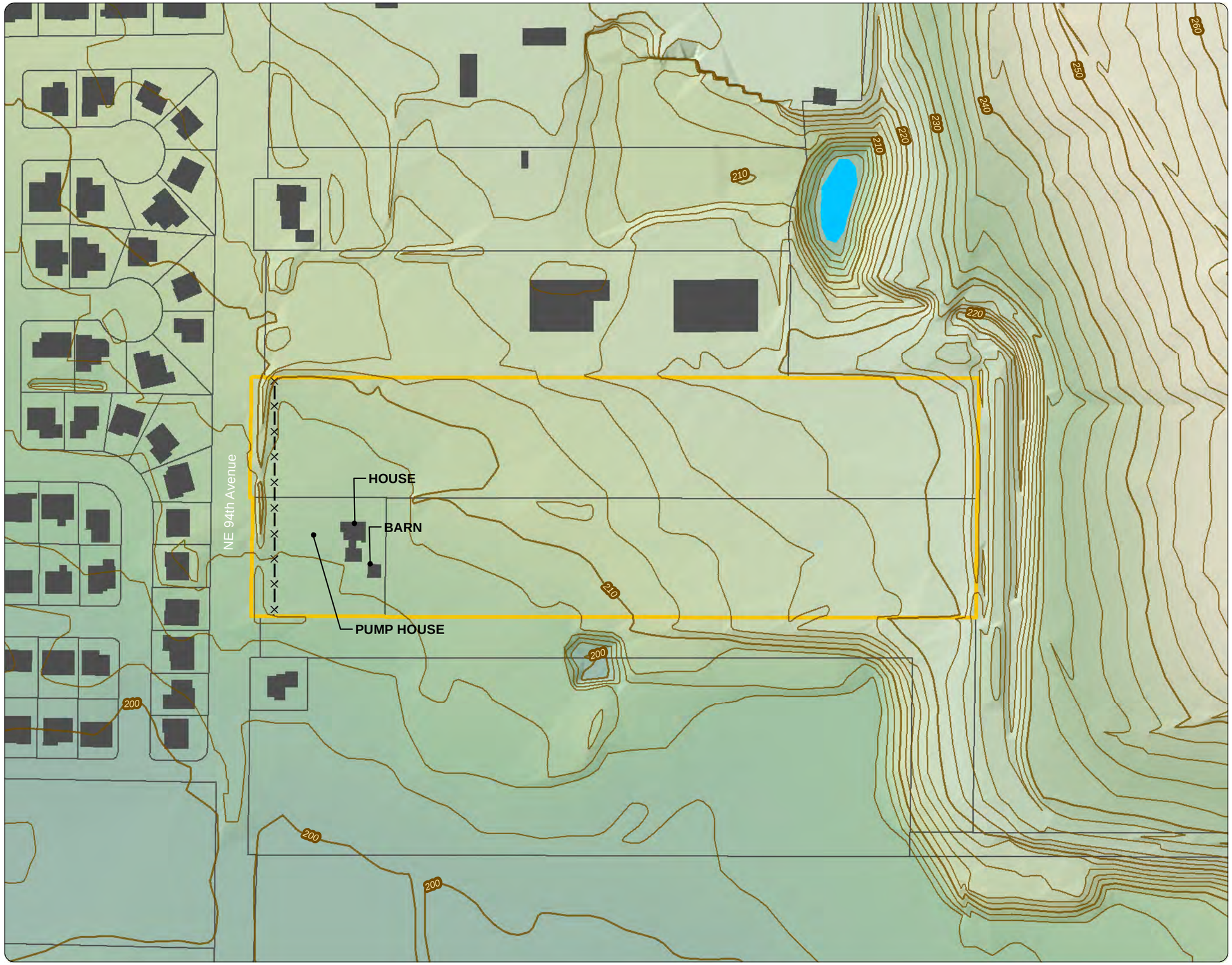

Figure 3
Topography
(LIDAR Derived)

Clark County
Cleanup Action Plan
9109 and 9115 NE 94th Avenue
Vancouver, Washington

DRAFT

Legend

- Fence
- Elevation Contour (10 ft)
- Elevation Contour (2 ft)
- Building Footprint
- Site Boundary
- Tax Lot Boundary

Elevation

High : 262.806

Low : 197.998

Note: All site feature locations are approximate.

0 75 150
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots, hydro, and elevation data obtained from Clark County.

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Print Date: 5/29/2015
Approved By: kroslund
Produced By: jschane
Project: 9059.07.04

Figure 4
Investigation Locations

Fleischer Properties
Cleanup Action Plan
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington

Legend

- Test Pit
- Pole-mounted Transformer
- Residual Fill Material Sample Location from 2010 GeoDesign, Inc. Investigation
- Site Boundary
- Site Tax Lot
- Tax Lot Boundary

Note: All site feature locations are approximate.

0 50 100
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots obtained from Clark County

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Print Date: 5/29/2015
Approved By: kaslund
Produced By: jschane
Project: 9059.07.04

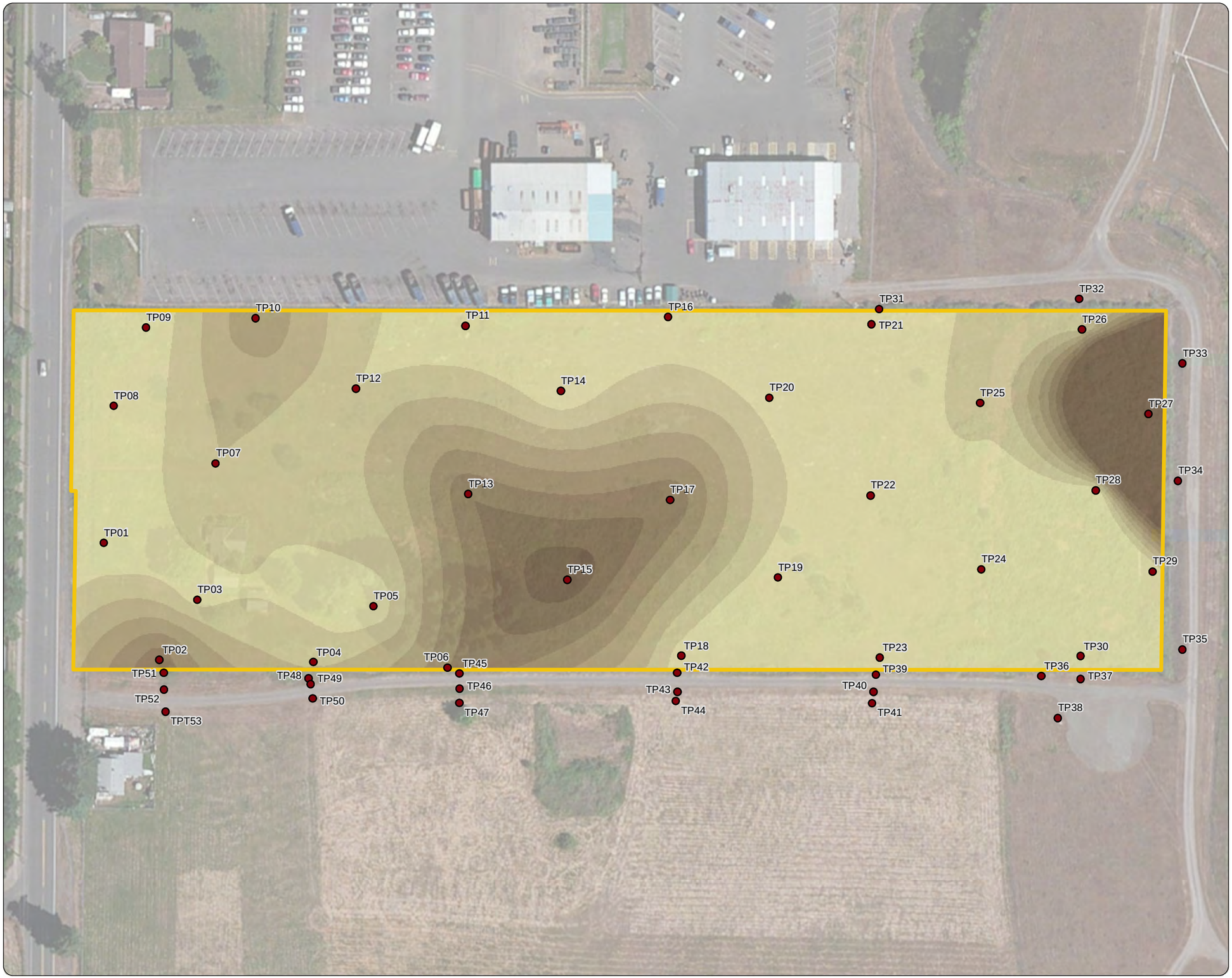

Figure 5
Clarifier Solids Depth

Fleischer Properties
Cleanup Action Plan
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington

Legend

- Test Pit
- Site Boundary

Interpolated Fill Depth (ft)

- 0 - 0.25
- 0.25 - 0.5
- 0.5 - 0.75
- 0.75 - 1
- 1 - 1.25
- 1.25 - 1.5
- 1.5 - 1.75
- > 1.75

Notes:
1. All site feature locations are approximate.
2. The Natural Neighbor method was used to interpolate measured Fill Depth.

0 50 100
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots obtained from Clark County

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Path: X:\9059.07 Clark County\04 Fleischer IPG\Projects\Cleanup Action Plan\Fig5_Clarifier Solids Depth.mxd
Print Date: 5/29/2015
Approved By: kroslund
Produced By: jschane
Project: 9059.07.04

Figure 6
PCB Concentrations

Fleischer Properties
Cleanup Action Plan
9109 and 9115 Northeast 94th Avenue
Vancouver, Washington

Legend

- Test Pit
- Site Boundary

PCB Concentrations (mg/kg)

- < 1
- 1-10
- > 10

Notes:
1. All site feature locations are approximate.
2. Dpth = depth in feet below ground surface.
3. mg/kg = milligrams per kilogram.
4. PCB = polychlorinated biphenyl.
5. PCB Concentrations value is for total PCBs.
6. Model Toxics Control Act Method A cleanup level for unrestricted land use is 1mg/kg for PCB mixtures in soil.

0 50 100
Feet

Source: Aerial photograph obtained from Esri ArcGIS Online; tax lots obtained from Clark County

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This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Path: X:\9059.07 Clark County\04 Fleischer IPG\Projects\Cleanup Action Plan\Fig6_PCB Concentrations.mxd
Print Date: 5/29/2015
Approved By: knoslund
Produced By: jschane
Project: 9059.07.04

ATTACHMENT

SPECIES OF CONCERN REPORT

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
PRIORITY HABITATS AND SPECIES REPORT

SOURCE DATASET: PHSPlusPublic
REPORT DATE: 05/18/2015 11.48

Query ID: P150518114814

Common Name	Site Name	Priority Area	Accuracy	Federal Status	Sensitive Data	Source Entity
Scientific Name	Source Dataset	Occurrence Type		State Status	Resolution	Geometry Type
	Source Record	More Information (URL)		PHS Listing Status		
Notes	Source Date	Mgmt Recommendations				

DISCLAIMER. This report includes information that the Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. It is not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife. This information only documents the location of fish and wildlife resources to the best of our knowledge. It is not a complete inventory and it is important to note that fish and wildlife resources may occur in areas not currently known to WDFW biologists, or in areas for which comprehensive surveys have not been conducted. Site specific surveys are frequently necesssary to rule out the presence of priority resources. Locations of fish and wildlife resources are subject to vraition caused by disturbance, changes in season and weather, and other factors. WDFW does not recommend using reports more than six months old.

WDFW Test Map

May 18, 2015

- PHS Report Clip Area
- PT
- LN
- AS MAPPED
- SECTION
- QTR-TWP
- TOWNSHIP

1:19,842

0 0.15 0.3 0.6 mi

0 0.275 0.55 1.1 km

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and