



SECOND PERIODIC REVIEW REPORT FINAL

WOLFE AND PARKS PROPERTIES

Facility Site ID#: 7937547

Cleanup Site ID#: 342

**149 & 167 East Main Avenue
Morton, Washington 98356**

**Southwest Regional Office
TOXICS CLEANUP PROGRAM**

August 2023

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Table of Contents

1.0	INTRODUCTION	1
2.0	SUMMARY OF SITE CONDITIONS	3
2.1	Site Background and History	3
2.2	Cleanup Levels	4
2.3	Site Investigations, Interim Action, and Feasibility Study	5
2.4	Final Remedial Actions	7
2.5	Long Term Groundwater Monitoring	8
2.6	Restrictive Covenant	8
3.0	PERIODIC REVIEW	11
3.1	Effectiveness of Completed Cleanup Actions	11
3.2	New Scientific Information for Individual Hazardous Substances for Mixtures Present at the Site	12
3.3	New Applicable State and Federal Laws for Hazardous Substances Present at the Site	12
3.4	Current and Projected Site Use	12
3.5	Availability and Practicability of Higher Preference Technologies	12
3.6	Availability of Improved Analytical Techniques to Evaluate Compliance with Cleanup Levels	13
4.0	CONCLUSIONS	14
4.1	Next Review	14
5.0	REFERENCES	15
6.0	APPENDICES	16
6.1	Vicinity Map	17
6.2	Site Plan	18
6.3	Site Historical Features	19
6.4	Soil Boring and Groundwater Monitoring Well Locations	20
6.5	Site East-West Geologic Cross-Section A-A'	22
6.6	Soil Sample Results	23
6.7	Water Level Elevation Contours and Groundwater Sample Results	26
6.8	Interim Action Remedial Excavation Area and Confirmation Soil Sample Results	30
6.9	Compliance Groundwater Monitoring Well Locations, Groundwater Elevation Contour Map, and Monitoring Results for Wells MW-7, MW-15, and MW-16	35
6.10	Restrictive Covenant	46
6.11	Photo Log	53

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1.0 INTRODUCTION

This document is a review by the Washington State Department of Ecology (Ecology) of post-cleanup conditions and monitoring data to ensure that human health and the environment are being protected at the Wolfe and Parks Properties site (Site). Cleanup at this Site was implemented under the Model Toxics Control Act (MTCA) regulations, Chapter 173-340 Washington Administrative Code (WAC). The First periodic review was completed in October 2016. This periodic review evaluates the period from November 2016 through December 2021.

Cleanup activities at this Site were completed by the potentially liable persons under an Enforcement Order No. DE 3683 dated August 22, 2006. The cleanup actions resulted in concentrations of gasoline, and diesel-range petroleum hydrocarbons (TPH-G, and TPH-D) and benzene in soil and groundwater that exceeds MTCA Method A cleanup levels. The MTCA Method A cleanup levels for soil are established under WAC 173-340-740(2). The groundwater cleanup levels were established under WAC 173-340-720(2). WAC 173-340-420 (2) requires that Ecology conduct a periodic review of a site every five years under the following conditions:

- Whenever the department conducts a cleanup action.
- Whenever the department approves a cleanup action under an order, agreed order or consent decree.
- Or, as resources permit, whenever the department issues a no further action (NFA) opinion.
- And one of the following conditions exists:
 - (a) Institutional controls or financial assurance are required as part of the cleanup.
 - (b) Where the cleanup level is based on a practical quantitation limit.
 - (c) Where, in the department's judgment, modifications to the default equations or assumptions using site-specific information would significantly increase the concentration of hazardous substances remaining at the site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

When evaluating whether human health and the environment are being protected, the factors the department shall consider include [WAC 173-340-420(4)]:

- (a) The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous substances remaining at the Site.
- (b) New scientific information for individual hazardous substances of mixtures present at the Site.
- (c) New applicable state and federal laws for hazardous substances present at the Site.

- (d) Current and projected Site use.
- (e) Availability and practicability of higher preference technologies.
- (f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

The department shall publish a notice of all periodic reviews in the Site Register and provide an opportunity for public comment.

2.0 SUMMARY OF SITE CONDITIONS

2.1 Site Background and History

The Site is located at 149 and 167 Main Avenue, in Morton in Lewis County, Washington. The Site was a former bulk terminal located near the northeast corner of the intersection of Main Avenue and First Street in Morton, Washington. The terminal was fenced and included six above-ground storage tanks (ASTs; two 19,000-gallon, one 13,000-gallon, and three 6,000-gallon tanks) for storing gasoline, diesel, kerosene, and heating oil. The terminal also included tank truck and rail car unloading headers (TTUHs and TCUHs), tank truck loading racks (TTLRs), and a pump house. Other structures included a 2,500 square-foot building, portions of which were used as a garage, a warehouse for storage of drummed petroleum products (oil and grease), product load-out, and 300 square-foot office space. Figure 2 in Appendix 6.3 shows the Site historical features.

Historical records indicate that Standard Oil Company of California constructed the former bulk terminal in 1924 near the intersection of Main Avenue and First Street on property leased from Chehalis Western Railroad. From 1924 until the mid-1950s the terminal was supplied by rail. Rail tank cars were positioned on a railroad spur located southwest of the warehouse and unloaded via the TCUHs. The facility was later modified to allow unloading of tank trucks via TTUHs located near the ASTs. In 1971 a tank truck loading area was constructed to the east of the warehouse. The terminal operated until the late 1970s. Around 1981 the ASTs, piping, pumps, and headers were removed from the Site. The warehouse and office building were left intact and remain on the Site.

In 1985 the property on which the terminal was located, which consisted of two separate parcels, was sold to Pacific Fire Trails. Pacific Fire Trails did not develop the property and, in 1993, sold it to Dana and Diana Wolfe. The Wolfes soon after sold the western parcel to Janet Parks. The Parks parcel contains a 5,000 square-foot building, which currently houses a Thrift Store (Jan's Lost & Found). This structure existed during the period the bulk terminal was in operation; however, it was located outside of the terminal fence and was not associated with terminal operations. A portion of the warehouse and the office building from the former bulk terminal are still located on the eastern parcel. Adjacent properties are owned by Chester Walker and the City of Tacoma (Figure 2).

In 2003, a citizen reported to Ecology that a fuel odor had been noted during an excavation at the Site in the early 1980s. Lewis County Health Department, in conjunction with Ecology, conducted an initial investigation and identified petroleum-contaminated soil at several locations. Based on these findings, Ecology issued an Enforcement Order No. DE 03TCPSR-5715 to Chevron, Dana and Diana Wolfe, and Janet Parks on January 20, 2004, requiring the parties to investigate and cleanup petroleum contamination at the Site. Chevron initiated a remedial investigation.

In June 2005, the Cowlitz River Valley Historical Society (CRVHS) acquired the eastern parcel of the former terminal Site from Dana and Diana Wolfe. The CRVHS plans to develop the Site as an

historic tourist facility. On October 15, 2005, a partially restored railway depot was moved onto the property. Future development plans include the construction of a railway platform adjacent to the depot, a parking area, museum, and restrooms. A vicinity map, and current Site Plan are available as Appendix 6.1, and Appendix 6.2, respectively.

2.2 Cleanup Levels

WAC 173-340-704 states that MTCA Method A may be used to establish cleanup levels at sites that have few hazardous substances, are undergoing a routine cleanup action, and where numerical standards are available for all indicator hazardous substances in the media for which the Method A cleanup level is being used.

However, due to the nature of the contaminants present at the Site and the planned future land use, a combination of cleanup components was used at the Site. As a result, remediation levels were developed based on the specific exposure pathways, such as direct contact, protection of groundwater, protection of ecological receptors, and protection from vapors. In addition, some of the most contaminated soil samples were analyzed for volatile petroleum hydrocarbons (VPHs) and extractable petroleum hydrocarbons (EPHs). Using these results MTCA Method B cleanup level of 2,225 milligrams per kilogram (mg/kg) was calculated for total petroleum hydrocarbons using the “Washington Department of Ecology Workbook for Calculating Cleanup Levels for Petroleum Contaminated Sites (MTCATPH, Version 10) spread sheet.

To calculate the soil cleanup levels based on the vapor intrusion for the indoor air, Johnson and Ettinger vapor Intrusion Model (J&E Model) was used. Based on the input parameters, the only contaminant detected in onsite soils that could potentially result in adversely impacting indoor air was benzene. The cleanup level calculated by the J&E Model for benzene was 0.06 mg/kg. Since this value is higher than the MTCA Method A soil cleanup level of 0.03 mg/kg for benzene, the cleanup level for benzene in soil for the vapor pathway was considered to be the MTCA Method A cleanup level.

For groundwater MTCA Method A cleanup levels were used at the Site. Currently there are no drinking water wells at the Site. The Train Depot and the Thrift Shop are being served by the City’s municipal water supply system. Based on the contaminants of concerns identified at the Site, the Table below presents the soil and groundwater cleanup levels selected for the Site.

Table 1. Soil and groundwater cleanup levels. The groundwater cleanup level for TPH-G (gasoline-range total petroleum hydrocarbons) lists two numbers: the first is the cleanup level when benzene is present; the second number is the cleanup level when no detectable benzene is present. TPH-D is diesel-range total petroleum hydrocarbons. NA means not available.

Contaminant	Soil cleanup level (mg/kg)	Groundwater cleanup level (µg/l) ^c
Total Petroleum Hydrocarbons	2,225 ^a	NA
TPH-G	200 ^b	800/1,000
TPH-D	460 ^b	500
Lead	220 ^b	15
Benzene	0.03 ^c	5
Toluene	NA	1,000
Ethylbenzene	NA	700
Xylenes	NA	1,000

Table notes

a: MTCA Method B cleanup level

b: Cleanup level calculated based on the protection of ecological receptors (TEE)

c: MTCA Method A cleanup level

2.3 Site Investigations, Interim Action, and Feasibility Study

2.3.1 Site Investigations – May through October 2004

Soil and groundwater investigations were conducted from May through October of 2004 to define the nature and extent of contamination. As a part of this investigation a total of 55 soil borings and 12 groundwater monitoring wells were installed. Soil borings and groundwater monitoring wells locations are included as Appendix 6.4. Gasoline-range total petroleum hydrocarbon (TPH-G) is the most widespread contamination at the Site occurring in concentrations above MTCA Method A cleanup levels throughout the ASTs area, between the AST area and the railroad tracks, beneath the northern portion of the warehouse, and to the south and southeast of the warehouse.

2.3.2 Hydrogeology/Geology

Soil boring logs indicated that the Site is underlain by unconsolidated materials consisting of fill and alluvial deposits. The uppermost unit at the Site is fill that typically ranges between one to four feet in thickness, but is absent in places. The fill consists of poorly sorted silt, and gravel. Below the fill is a sequence of mottled silts and clays, organic-rich in places, that is split by a thin sand and/or sandy gravel. The coarse-grained unit occurs at a depth of between 8 to 12 feet and is continuous across a portion of the Site. The lower units that have been investigated at the Site consists mostly of thinly interstratified silts and sands. Groundwater is generally

present between 5 to 10 feet below the ground surface in the vicinity of the Site. An east-west geologic cross-section is included as Appendix 6.5.

2.3.3 Soil Investigation

A total of 110 soil samples were collected and analyzed for gasoline, diesel and oil-range total petroleum hydrocarbons (TPH-G, TPH-D and TPH-O), benzene, toluene, ethylbenzene and xylenes (BTEX), ethylene dibromide (EDB), ethylene dichloride (EDC), methyl tertiary-butyl ether (MTBE), carcinogenic polycyclic aromatic hydrocarbons (cPAHs), n-hexane, dissolved lead and polychlorinated biphenyls (PCBs). Also, some of the highly contaminated soil samples were analyzed for volatile petroleum hydrocarbons (VPHs) and extractable petroleum hydrocarbons (EPHs). Based on the results of soil samples, TPH-G, TPH-D, TPH-O, and BTEX were identified as the contaminants of potential concerns (COPCs) for the Site. The soil sample results showed that TPH-G, TPH-D, and benzene concentrations ranged from 43 milligrams per kilogram (mg/kg) to 1,100 mg/kg; 2,100 mg/kg to 5,700 mg/kg; and 0.041 mg/kg to 2.46 mg/kg, respectively. These concentrations exceeded their MTCA Method A cleanup levels of 30 mg/kg, 2,000 mg/kg and 0.03 mg/kg, respectively. Soil boring locations and soil sample results are included as Appendix 6.6.

2.3.4 Groundwater Investigation

Four rounds of quarterly groundwater monitoring were conducted from October 2004 through July 2004 for defining the extent of groundwater contamination. All the groundwater samples were analyzed for the same parameters as soil samples. Based on the results, TPH-G, TPH-D, TPH-O, and benzene were identified as COPCs at the Site. The groundwater sample results indicated that TPH-G, TPH-D, and benzene concentrations ranged from 860 micrograms per liter (µg/l) to 2,800 µg/l; 630 µg/l to 1,800 µg/l; and 5.6 µg/l to 1,100 µg/l, respectively. These concentrations exceeded their MTCA Method A cleanup levels of 800 µg/l; 500 µg/l; and 15 µg/l, respectively. Groundwater monitoring well locations, water level elevations and groundwater sample results are included as Appendix 6.7.

2.3.5 Interim Action

An interim action was performed in October 2005. The interim action involved removing approximately 1,290 tons (860 cubic yards) of petroleum-contaminated soil from the south-central portion of the Site in order to accommodate the movement of an historical railroad depot onto the CRVHS property. This action consisted of the excavation of contaminated soil beneath the footprint of the depot, properly disposing of the excavated soil, collecting and analyzing performance monitoring samples using an onsite mobile laboratory, and backfilling the excavation with clean, compacted material. The completed excavation measured approximately 60 feet by 70 feet and ranged in depth between 4 feet (east end) and 13 feet (west end) below ground surface. All the excavated soil was transported to Rinker Materials Northwest in Everett, Washington, where it was treated using the low-temperature thermal desorption. The results of confirmation soil samples collected at the floor of the excavation

were all below the MTCA Method A cleanup levels. TPH-G and benzene were detected above MTCA Method A cleanup levels in some of the sidewall samples beyond the depot footprint. However, the interim action was not intended to remove petroleum-contaminated soil beyond the depot footprint. The remaining soil contamination was addressed as part of the final cleanup action at the Site. The approximate extent of soil excavation and the confirmation soil sample results are included as Appendix 6.8.

2.3.6 Feasibility Study

Following the excavation of approximately 1,290 tons of TPH contaminated soils as discussed above within the depot footprint, concentrations of TPH-G, TPH-D and benzene above cleanup levels still remained in soil and groundwater at the Site. In March 2006, a feasibility study was conducted to screen the remedial technologies to address the residual contamination remaining on the Site. The screening process resulted in the following three potential alternatives:

Alternative 1: Containment and Monitored Natural Attenuation (MNA).

Alternative 2: Hot spot excavation, Containment, oxygen releasing compound (ORC), and MNA.

Alternative 3: Excavation, ORC, and MNA.

The selected alternative was the number 2 alternative above with Ecology's concurrence. This alternative included the following cleanup components:

- Excavation of petroleum contaminated soils to MTCA Method A cleanup levels in zones 1 and 2, and MNA of soil in Zone 3 and Peripheral.
- Addition of oxygen-releasing compound (ORC) to groundwater during excavation activities.
- Manage/treat excavated soil.
- Deed restrictions/Soil management plan.
- Implementation of environmental monitoring.

2.4 Final Remedial Actions

In November 2006, the final cleanup action was conducted under an Enforcement Order No. DE 3683. As a part of this action, a total of approximately 600 cubic yards of contaminated soil was excavated exceeding the remediation level for direct contact/ingestion by human pathway (MTCA Method B cleanup level of 2,225 mg/kg for total petroleum hydrocarbons and 250 mg/kg lead) and soil exceeding remediation level for the vapor pathway (0.03 mg/kg benzene). All the excavated soil was transported to the Waste Management Inc. landfill in Hillsboro, Oregon for disposal. The groundwater was treated with the addition of ORC into the excavation. The addition of ORC to the contaminated groundwater accelerates the natural biodegradation process by increasing the oxygen levels in the groundwater. In addition, two

heating oil above ground storage tanks were also removed and associated stained soil was excavated for disposal. Approximately 9,700 square feet of area of the Site was paved with asphalt over the soils left on Site posing risk to ecological receptors (i.e., contaminant concentrations exceeding TEE cleanup levels as presented in Table 1 above). A long-term groundwater monitoring plan was implemented at the Site. Figures showing the approximate extent of soil excavation areas, extent of petroleum contaminated soils left in place and asphalt paved areas are included as Appendix 6.9A and 6.9B, respectively.

2.5 Long Term Groundwater Monitoring

As part of the approved Compliance Groundwater Monitoring Plan (October 2008), eleven wells were selected for the long-term compliance groundwater monitoring. Since the implementation of the final remedial action in October 2008, thirty (30) rounds of quarterly groundwater monitoring have been conducted at the Site. All the groundwater samples were analyzed for the parameters as discussed in section 2.3.3 above. During the eight years of quarterly monitoring, only TPH-G and TPH-D were detected above MTCA Method A cleanup levels in three groundwater monitoring wells (MW-7, MW-15 and MW-16). No other contaminants were detected in any of the other eight monitoring wells. Based on these results, Chevron requested to reduce the sampling frequency from quarterly to semi-annual, reduce the number of monitoring wells from twelve to five (MW-7, MW-11, MW-12, MW-15 and MW-16) and decommissioning of four monitoring wells, MW-14, MW-18, MW-19 and MW-12. Following the review of all the groundwater results, Ecology approved Chevron's request on April 24, 2017. Currently the groundwater is being sampled for chemical analysis in five wells on a semi-annual basis (Quarter 1 and Quarter 3) reflecting the highest and lowest groundwater elevations. In addition, two monitoring wells, MW-13 and MW-17 were retained just for groundwater level measurements for defining a more precise groundwater flow direction.

Results of the latest round of semi-annual groundwater monitoring conducted in July 13, 2021 indicated the exceedance of TPH-D in monitoring well MW-7 and MW-16 at a concentration 1,080 µg/l and 550 µg/l, respectively to MTCA cleanup level of 500 µg/l. None of the other analyzed constituents were detected at concentrations above MTCA Method A cleanup levels. During this round, the depth of groundwater flow direction was to the south-southwest with a hydraulic gradient of 0.014 foot/foot. Groundwater monitoring well locations, approximate groundwater flow direction and monitoring results are included as Appendix 6.9.

2.6 Restrictive Covenant

The required RC (now referred to as an Environmental Covenant) was recorded for the Site on July 1, 2011, in Lewis County. The Covenant was required because the Remedial Action resulted in residual concentrations of TPH-G, TPH-D, and benzene exceeding the MTCA Method A cleanup levels at the Site. The Environmental Covenant (EC) imposes the following limitations:

Section 1:

1. No groundwater may be taken for domestic, agricultural, or any use from the Property.
2. (a) A portion of the Property contains gasoline, diesel, and benzene contaminated soil located under part or all of Cowlitz River Valley Historical Society, Jan's Lost and Found Thrift Shop. On Jan's Lost and Found Thrift Shop parcel, contaminated soil exists beneath and adjacent to the existing building, and under asphalt pavement. On the Cowlitz River Valley Historical Society parcel, contaminated soil exists beneath a planter box located in the northwest corner of the parcel. The Owner shall not alter, modify, or remove the existing structure(s) in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology.

(b) Any activity on the Property that may result in the release or exposure to the environment of the contaminated soil that was contained as a part of Remedial Action, or create a new exposure pathway, is prohibited. Some examples of activities that are prohibited in the capped areas include: drilling, digging, placement of any objects or use of any equipment which deforms or stresses the surface beyond its load bearing capability, piercing the surface with a rod, spike or similar item, bulldozing or earthwork.

Section 2: Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.

Section 3: Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior approval from Ecology.

Section 4: The Owner of the property must give thirty (30) day advance 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 shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.

Section 5: The Owner must restrict leases to uses and activities consistent with the Covenant and notify all lessees of the restrictions on the use of the Property.

Section 6: The Owner must notify and obtain from Ecology prior to any use of the Property that is inconsistent with the terms of this EC. Ecology may approve any inconsistent use only after public notice and comment.

Section 7: The Owner shall allow authorized representatives of Ecology the right to enter the property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the property, to determine compliance with this Covenant, and to inspect records that are related to the Remedial Action.

Section 8: The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this EC shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

The EC is available as Appendix 6.10.

3.0 PERIODIC REVIEW

3.1 Effectiveness of Completed Cleanup Actions

Based upon the Site visit conducted on July 16, 2021, the asphalt cover at the Site continue to eliminate direct exposure pathways (ingestion, contact) to contaminated soils. Additionally, the asphalt cover prevents water infiltration which could increase the mobility of the contaminants to groundwater. The asphalt cap appears in satisfactory condition with no repairs, maintenance or contingency actions needed. A photo log is available as Appendix 6.11.

Soils remain at the Site with TPH-G, TPH-D and benzene concentrations exceeding MTCA Method A cleanup levels. The contaminated soils remain contained beneath asphalt pavement and buildings. The TPH-G concentration in groundwater exceeds MTCA Method A cleanup level. The presence of institutional controls including the restrictions on groundwater use will protect human health and the environment from residual soil and groundwater contamination present on the Site. Compliance groundwater monitoring is being conducted at the Site on a quarterly basis.

An EC was recorded for the Site and remains active. This EC restricts groundwater extraction for domestic, agricultural, or any other use and the use of property that is inconsistent with the Covenant or will release contaminants remaining in soil at the Site.

3.1.1 Soil to Vapor Pathway

Evaluation of the soil to vapor pathway is required at sites contaminated with volatile organic hydrocarbons (VOCs) to determine the potential for adverse impacts on the indoor air quality that may pose a threat to human health and the environment. Examples of when this pathway should be evaluated include at sites where soil TPH-G and/or other VOC concentrations are significantly higher than the cleanup levels derived for the protection of groundwater for drinking water beneficial use, or where soil TPH-D concentrations are higher than 10,000 mg/kg; WAC 173-340-740(3)(B)(iii)(C). As a part of this investigation, procedures outlined in the Department of Ecology draft “Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remediation Action” should be used.

As discussed in section 2.2, only benzene was identified as the contaminant detected at the Site that could adversely impact the indoor air. As a part of evaluating the Site-specific cleanup levels, Johnson and Ettinger Vapor Intrusion Model was used to determine the benzene concentration in soil that may adversely impact the indoor air quality. The remediation level calculated by the model for benzene was 0.06 mg/kg, which is higher than the MTCA Method A cleanup level of 0.03 mg/kg. Hence benzene concentration of 0.03 mg/kg was selected as the cleanup level for the Site. The Site cleanup included the excavation and disposal of approximately 1,500 cubic yards of petroleum contaminated soil. As a part of this excavation, all the contaminated soil exceeding the 0.03 mg/kg of benzene was excavated eliminating any potential risk posed by the vapor intrusion at the Site.

3.1.2 Residual Saturation

WAC 173-340-747(10) provides that, “the soil concentrations must not result in the accumulation of non-aqueous phase liquid on or in groundwater. To determine if this criterion is met....residual saturation screening levels must be established and compared with the soil concentrations...”

A residual saturation screening level of 1,000 mg/kg has been established for weathered gasoline, which is applicable to this Site. The maximum TPH-G concentration left on the Site was 240 mg/kg which was well below the above screening level. In addition, for this Site, sufficient groundwater monitoring data exists to demonstrate that TPH-G concentrations in soil are not resulting in the accumulation of non-aqueous phase liquids at the Site. Groundwater monitoring data has been collected over a sufficient time period (30 rounds of quarterly monitoring data over a period of eight years) to allow for migration of contaminants from soil to groundwater. The monitoring data has demonstrated that TPH-G, TPH-D and benzene concentrations have declined in groundwater. Additionally, the last four rounds of groundwater monitoring results showed the detection of TPH-G and TPH-D at lower concentrations in the groundwater. This indicates that the TPH-G and TPH-D concentrations left in soil do not appear to be contributing to additional groundwater contamination at the Site.

3.2 New Scientific Information for Individual Hazardous Substances for Mixtures Present at the Site

There is no new relevant scientific information for hazardous substances remaining at the Site.

3.3 New Applicable State and Federal Laws for Hazardous Substances Present at the Site

MTCA Method A cleanup levels for contaminants of concern at the Site have not changed since the implementation of the final remedial action. The cleanup levels remain protective of human health and the environment.

3.4 Current and Projected Site Use

The Site is currently occupied by an asphalt paved parking lot, a Historical Train Depot Museum and an office building. This use is not likely to have a negative impact on the risk posed by hazardous substances contained at the Site. There are no changes projected in the Site use.

3.5 Availability and Practicability of Higher Preference Technologies

The remedy implemented included capping of hazardous substances and it continues to be protective of human health and the environment. While higher preference cleanup technologies may be available, they are still not practicable at this Site.

3.6 Availability of Improved Analytical Techniques to Evaluate Compliance with Cleanup Levels

The analytical methods used at the time of the remedial actions were capable of detection below Site cleanup levels. The presence of improved analytical techniques would not affect decisions or recommendations made for the Site.

4.0 CONCLUSIONS

- The cleanup actions completed at the Site appear to be protective of human health and the environment.
- Soil cleanup levels have not been met at the Site; however, under WAC 173-340-740(6) (d), the cleanup action could comply with cleanup standards if the long-term integrity of the containment system was ensured and the requirements for containment technologies in WAC 173-340-360 have been met.
- The groundwater cleanup levels have not been met at the Site. However, the TPH-G, and TPH-D concentrations have been decreasing. Restrictions on the groundwater use and implemented institutional controls at the Site have been effective in protecting the human health and the environment. The compliance groundwater monitoring is being conducted and will continue until the contaminant concentrations reduce to below their cleanup levels. Also, the empirical demonstration based on the groundwater monitoring data confirms that the soil remediation conducted in 2008 was effective and the remaining residual TPH contaminated soil is not impacting the groundwater.
- The EC for the property is in place and will be effective in protecting public health from exposure to hazardous substances and protecting the integrity of the cleanup action.

Based on this review, Ecology has determined that the remedial actions conducted at the Site continue to be protective of human health and the environment. The requirements of the EC are being satisfactorily followed and no additional remedial actions are required at this time. It is the property owner's responsibility to continue to inspect the Site to assure that the integrity of the surface cover is maintained.

4.1 Next Review

The next review for the Site will be scheduled five years from the date of this periodic review. In the event that additional cleanup actions or institutional controls are required, the next periodic review will be scheduled five years from the completion of those activities.

5.0 REFERENCES

SAIC. February 28, 2011. Soil Management Plan, Former Chevron Bulk Plant, Wolfe & Parks Site, 149 & 167 Main Street, Morton, Washington.

SAIC. October 11, 2006. Cleanup Action Plan, Former Standard Oil Bulk Terminal Chevron Facility, 149 and 167 Main Avenue, Morton, Washington.

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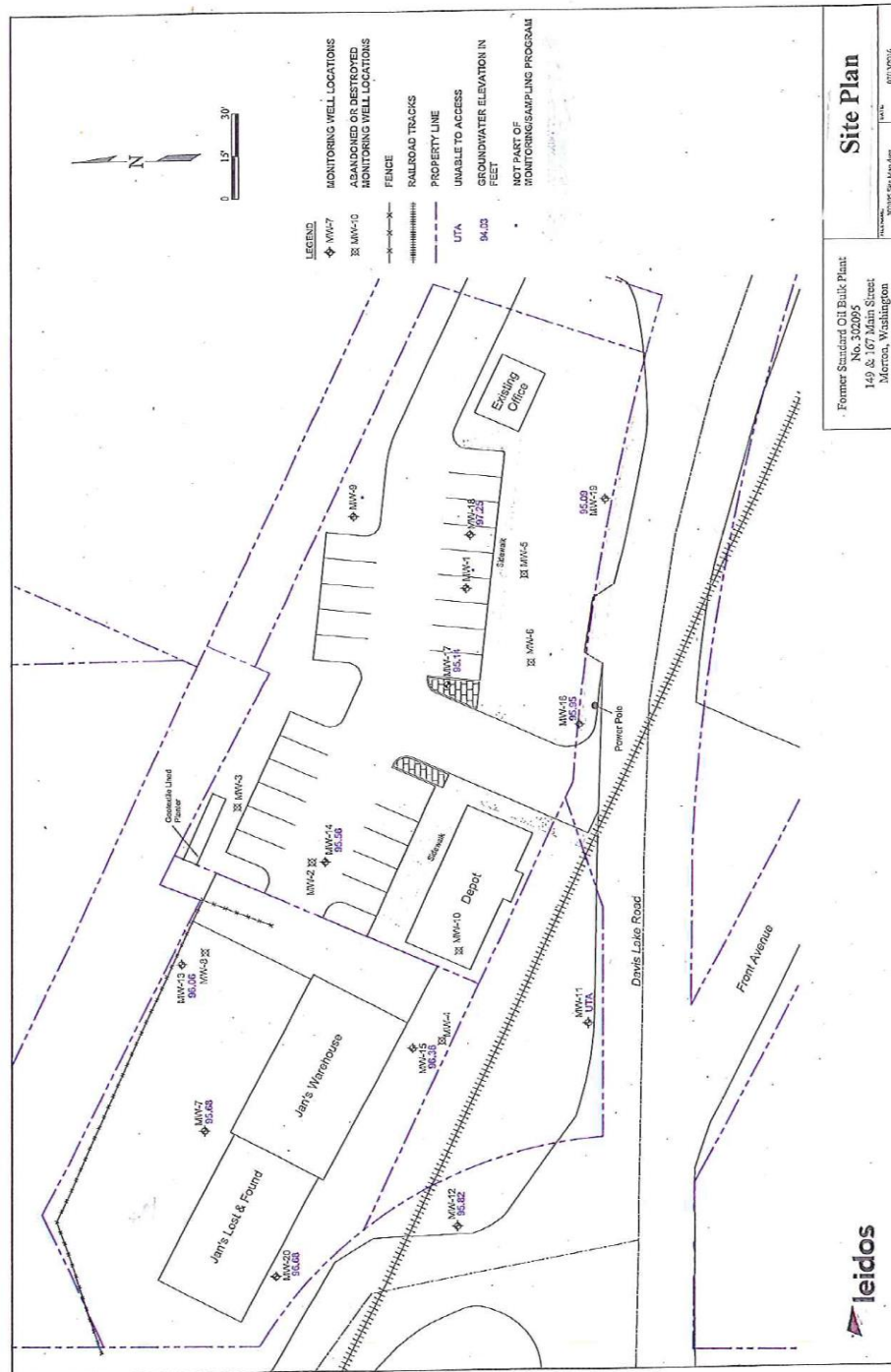
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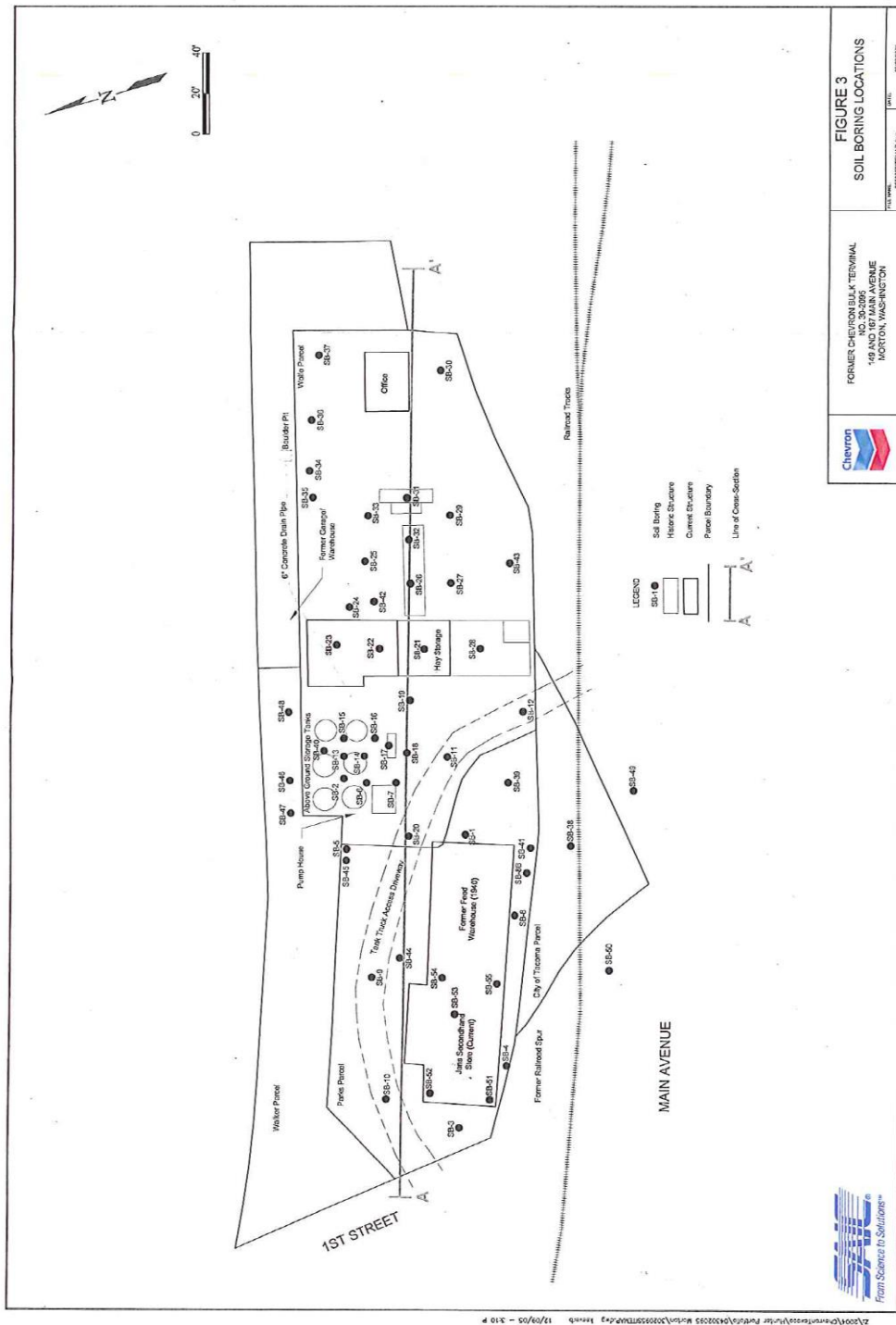
6.0 APPENDICES

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6.2 Site Plan



6.4 Soil Boring and Groundwater Monitoring Well Locations





6.6 Soil Sample Results

Morton 30-2095 Interim Action Plan

Table 1. Soil Analytical Results Summary

Soil Boring	Sample Depth (ft)	Sample Date	Gasoline-Range Hydrocarbons (mg/kg)	Diesel-Range Hydrocarbons (mg/kg)	Benzene (mg/kg)
SB-1	7	5/17/2004	20	10	<0.0005
SB-2	6.5	5/17/2004	880	2500	0.265
	9	5/17/2004	--	--	0.068
SB-3	2.5	5/18/2004	<1.0	<3.0	<0.0005
	4.5	5/18/2004	<1.0	<3.0	<0.0005
	6	5/18/2004	<1.0	<3.0	<0.0005
SB-4	2.5	5/18/2004	<1.0	<3.0	<0.0005
	6	5/19/2004	370	190	<0.062
	10	5/19/2004	8	7.5	<0.0020
SB-5	2.5	5/18/2004	<1.0	<3.0	<0.0005
	4.75	5/18/2004	<1.0	<3.0	<0.0005
	6.5	5/18/2004	18	7.2	<0.0005
SB-6	6	5/18/2004	1300	1400	<0.063
	7	5/18/2004	690	750	0.42
SB-7	6	5/18/2004	1000	2100	<0.062
	6 (Dup)	5/18/2004	280	1600	0.022
SB-8	1.5	5/18/2004	<1.0	4.1	<0.0005
	5.5	5/18/2004	170	6.9	<0.0010
SB-9	2.5	5/18/2004	8.2	4.3	<0.0005
	5	5/18/2004	53	570	<0.0020
	8.5	5/19/2004	9.6	9.8	<0.0005
SB-10	3.5	5/18/2004	<1.0	<3.0	<0.0005
	5.5	5/18/2004	23	6.1	<0.0005
	8.5	5/19/2004	11	<3.0	<0.0005
SB-11	1.5	5/18/2004	75	13	0.15
	3.5	5/18/2004	1600	1400	0.18
	11	6/8/2004	<1.0	<3.0	0.006
SB-12	2.5	5/18/2004	240	460	<0.0010
	5.5	5/18/2004	210	500	<0.0005
	5.5 (Dup)	5/18/2004	210	180	<0.0030
SB-13	5.5	5/19/2004	<1.0	43	<0.0005
	6.5	5/19/2004	1400	1100	0.18
SB-14	4.5	5/19/2004	<10	680	<0.0005
	5.5	5/19/2004	1000	1000	0.25
	11	6/8/2004	<1.0	<3.0	0.002
SB-15	2	5/19/2004	<10	150	<0.0005
	6.5	5/19/2004	1300	1100	0.1

September 20, 2005

10

Morton 30-2095 Interim Action Plan

Table 1. Soil Analytical Results Summary

Soil Boring	Sample Depth (ft)	Sample Date	Gasoline-Range Hydrocarbons (mg/kg)	Diesel-Range Hydrocarbons (mg/kg)	Benzene (mg/kg)
SB-16	5.5	5/19/2004	970	830	0.1
	8	5/19/2004	160	540	0.341
SB-17	3.5	5/19/2004	<1.0	24	<0.0005
	5.5	5/19/2004	1300	2400	0.44
SB-18				2500	1.3
	4	5/19/2004	1200		
	8	5/19/2004	1300	880	2.46
	9	5/19/2004	23	11	0.002
SB-19	15	5/19/2004	<1.0	4.6	0.006
	4	5/19/2004	<1.0	5.5	<0.0005
	5	5/19/2004	160	480	0.002
SB-20	2	5/19/2004	490	370	<0.063
	2 (Dup)	5/19/2004	730	670	<0.062
	4.5	5/19/2004	1200	1000	<0.050
SB-21	4.5	5/19/2004	280	39	<0.0005
	8	5/19/2004	4.2	<3.0	<0.0005
SB-22	1	5/20/2004	770	730	0.003
	3	5/20/2004	66	70	0.0006
SB-23	2.5	5/20/2004	1.7	27	<0.0005
	4.5	5/20/2004	380	620	<0.0030
SB-24	2.5	5/20/2004	2.4	<3.0	<0.0005
	4	5/20/2004	59	72	<0.0005
SB-25	3.5	5/20/2004	2.6	82	<0.0005
	5.5	5/20/2004	110	200	<0.0030
SB-26	2.5	5/20/2004	<1.0	<3.0	<0.0005
	4	5/20/2004	2.4	12	<0.0005
SB-27	3	5/20/2004	14	<3.0	0.041
	4.5	5/20/2004	6.3	5.4	0.01
SB-28	4.5	5/20/2004	330	110	<0.0005
	8	6/8/2004	1.1	<3.0	<0.0005
SB-29	3.5	5/20/2004	1.7	5.4	<0.0005
	5	5/20/2004	<1.0	<3.0	<0.0005
SB-30	3	5/20/2004	1.2	15	<0.0005
SB-31	3	5/20/2004	290	1400	<0.0030
SB-32	3	5/20/2004	<1.0	<3.0	<0.0005
	6	5/20/2004	23	230	<0.0005
SB-33	2.5	5/20/2004	15	<3.0	<0.0005
	3.5	5/20/2004	<1.0	<3.0	<0.0005
	3.5 (Dup)	5/20/2004	1.2	<3.0	<0.0005

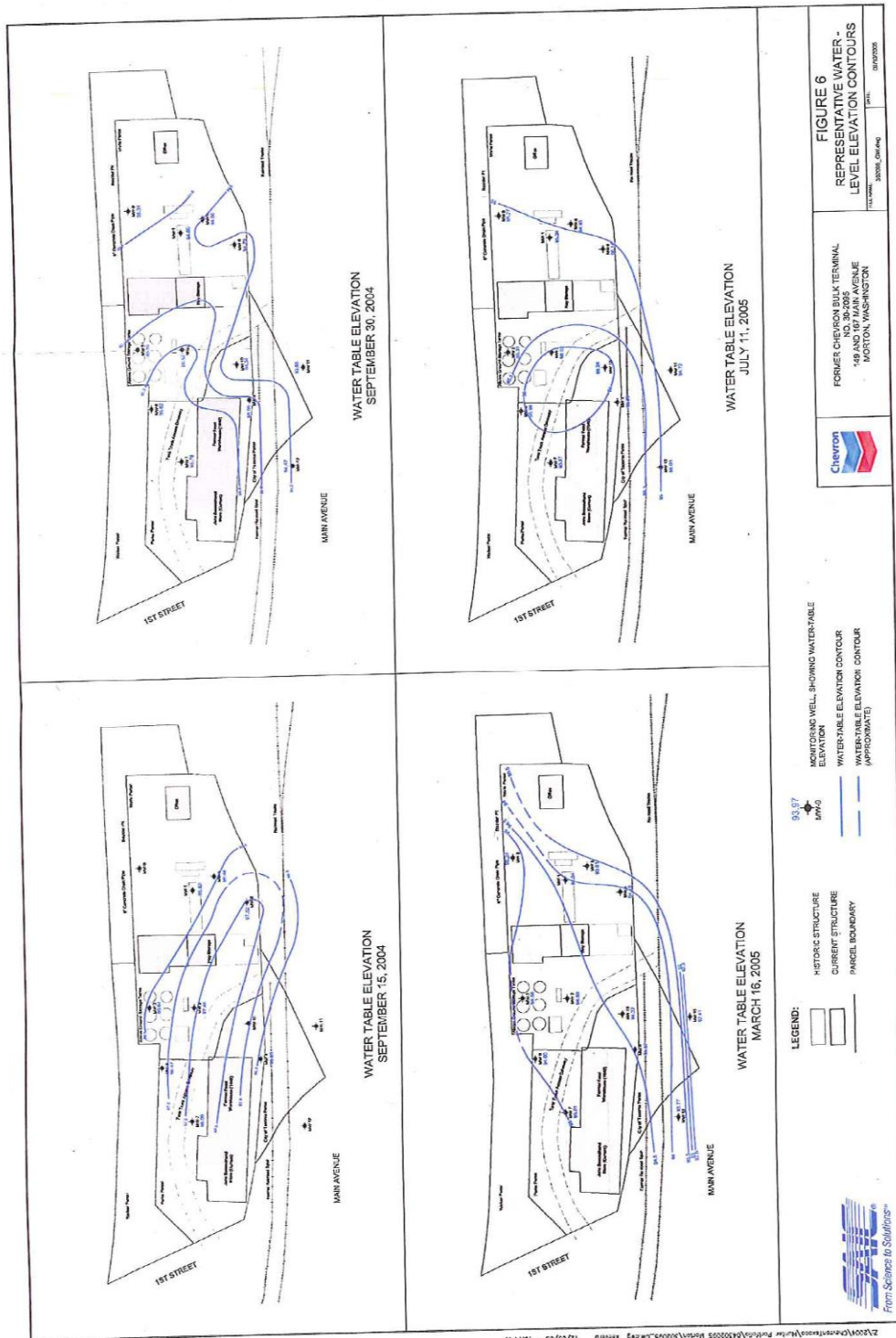
September 20, 2005

Morton 30-2095 Interim Action Plan

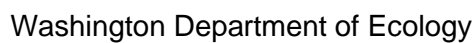
Table 1. Soil Analytical Results Summary

Soil Boring	Sample Depth (ft)	Sample Date	Gasoline-Range Hydrocarbons (mg/kg)	Diesel-Range Hydrocarbons (mg/kg)	Benzene (mg/kg)
SB-34	3	5/20/2004	<1.0	<3.0	<0.0005
SB-35	2.5	5/20/2004	<1.0	<3.0	<0.0005
SB-36	5.5	5/20/2004	<1.0	<3.0	<0.0005
SB-37	4	5/20/2004	43	180	<0.0005
	5.5	5/20/2004	1.6	8.2	<0.0005
SB-38	2.5	5/20/2004	220	2100	<0.0030
	5.5	5/20/2004	190	92	<0.0020
SB-39	2	6/7/2004	1.4	3.7	<0.0005
	5	6/7/2004	950	2100	0.071
	12	6/8/2004	360	38	0.006
SB-40	7	6/28/2004	310	250	0.29
SB-41	2.5	6/28/2004	250	1500	0.003
	5	6/28/2004	1400	510	0.12
SB-42	5	6/28/2004	110	180	<0.0030
SB-43	4	9/14/2004	91	240	<0.0010
	8	9/14/2004	550	920	<0.063
SB-44	4	9/14/2004	180	5700	<0.062
SB-45	4	9/14/2004	<1.0	<3.0	<0.0005
SB-46	5	9/14/2004	<1.0	4.6	<0.0005
SB-47	4	9/14/2004	<1.0	<3.0	<0.0005
	7	9/14/2004	22	21	<0.0005
SB-48	4	9/14/2004	<1.0	5.5	<0.0005
	7.5	9/14/2004	<1.0	4.2	0.002
SB-49	5	9/30/2004	<1.0	<3.0	<0.0005
	15	9/30/2004	<1.0	<3.0	<0.0005
SB-50	5	9/30/2004	<1.0	<3.0	<0.0005
	12.5	9/30/2004	<1.0	<3.0	<0.0005
SB-51	5.75	10/1/2004	<1.0	<3.0	<0.0005
SB-52	4.5	10/1/2004	660	1600	<0.063
	7	10/1/2004	98	220	<0.0005
SB-53	6.5	10/1/2004	460	1200	<0.0030
SB-54	6.5	10/1/2004	74	690	<0.0005
SB-55	5.5	10/1/2004	<1.0	<3.0	<0.0005

6.7 Water Level Elevation Contours and Groundwater Sample Results

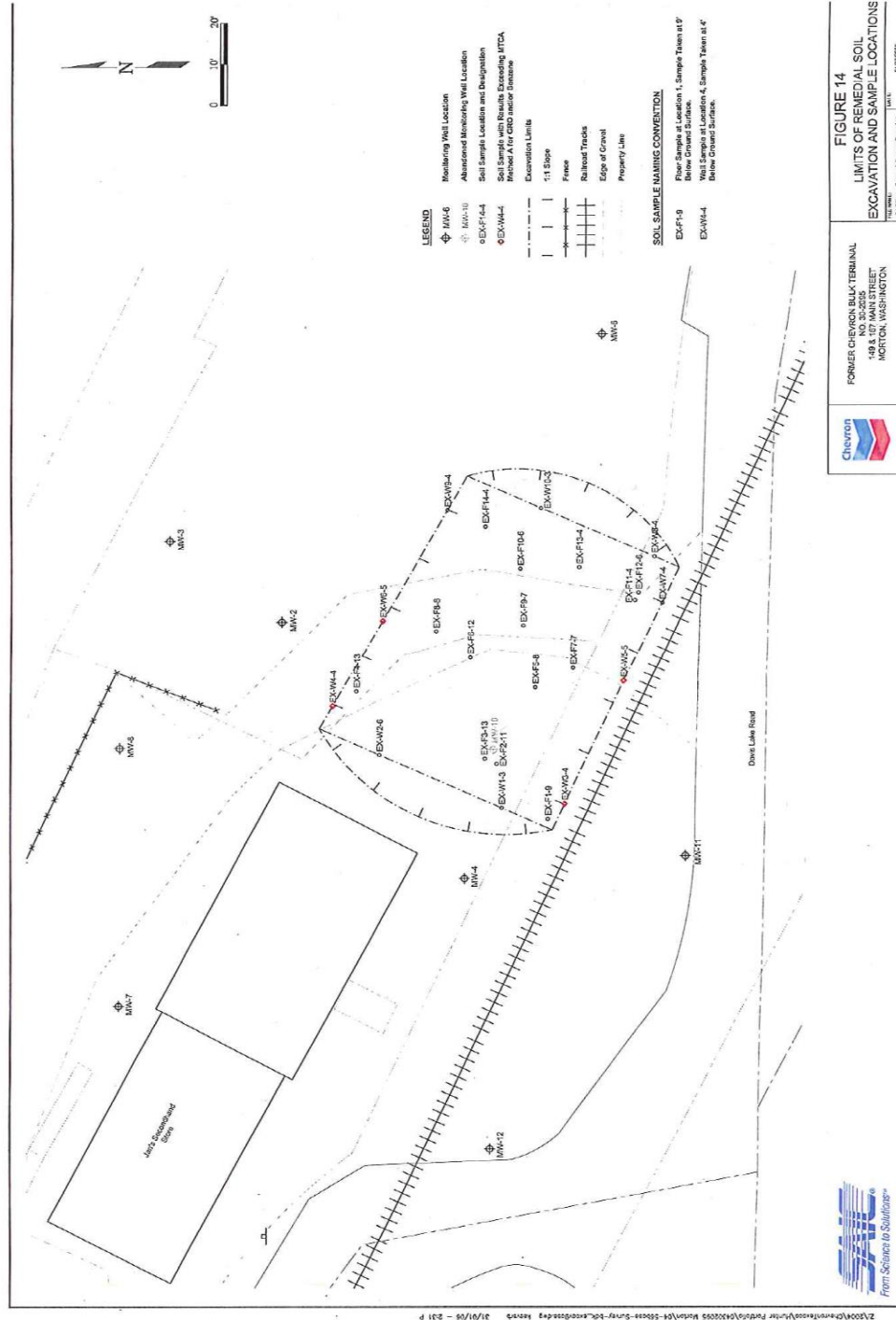








6.8 Interim Action Remedial Excavation Area and Confirmation Soil Sample Results



Morton 30-2095 RI Report

Table 4. Results of the Soil Excavation Confirmation Samples

Soil Sample ID ¹	Sample Depth (ft)	Sample Date	Aromatic Hydrocarbons ² (mg/kg)				Gasoline-Range Hydrocarbons ³ (mg/kg)	Diesel-Range Hydrocarbons ³ (mg/kg)
			Benzene	Toluene	Ethylbenzene	Xylenes		
EX-W1-3	3	10/07/05	nd	nd	nd	nd	nd	850
EX-W2-6	6	10/07/05	nd	nd	nd	nd	nd	120
EX-W3-4	4	10/07/05	0.42	2.1	1.1	5.3	53	1,200
EX-W4-4	4	10/11/05	2.3	0.85	1.8	0.89	240	990
EX-W5-5	5	10/12/05	0.05	nd	nd	0.4	110	590
EX-W6-5	5	10/12/05	0.07	nd	0.15	nd	13	20
EX-W7-4	4	10/13/05	nd	nd	nd	nd	nd	nd
EX-W8-14	14	10/13/05	nd	nd	nd	nd	nd	nd
EX-W9-4	4	10/13/05	nd	nd	nd	nd	nd	nd
EX-W10-3	3	10/13/05	nd	nd	nd	nd	nd	nd
EX-F1-9	9	10/07/05	nd	nd	nd	nd	nd	nd
EX-F2-11	11	10/07/05	nd	nd	nd	nd	24	250
EX-F3-13	13	10/07/05	nd	nd	nd	nd	nd	nd
EX-F4-13	13	10/07/05	nd	nd	nd	nd	nd	nd
EX-F5-8	8	10/11/05	nd	nd	nd	nd	nd	nd
EX-F6-12	12	10/11/05	nd	nd	nd	nd	nd	nd
EX-F7-7	7	10/12/05	nd	nd	nd	nd	nd	nd
EX-F8-8	8	10/12/05	nd	nd	nd	nd	nd	nd
EX-F9-7	7	10/12/05	nd	nd	nd	nd	nd	40
EX-F10-6	6	10/12/05	nd	nd	nd	nd	nd	nd

February 2006

Morton 30-2095 RI Report

Table 4. Results of the Soil Excavation Confirmation Samples

Soil Sample ID ¹	Sample Depth (ft)	Sample Date	Aromatic Hydrocarbons ² (mg/kg)				Gasoline-Range Hydrocarbons ³ (mg/kg)	Diesel-Range Hydrocarbons ⁴ (mg/kg)
			Benzene	Toluene	Ethylbenzene	Xylenes		
EX-F11-4	4	10/13/05	nd	nd	nd	nd	16	190
EX-F12-6	6	10/13/05	nd	nd	nd	nd	nd	nd
EX-F13-4	4	10/13/05	nd	nd	nd	nd	nd	20
EX-F14-4	4	10/13/05	nd	nd	nd	nd	nd	nd
MTCA Method A Cleanup Levels			0.03	7	6	9	30 / 100	2000

Notes:

¹Soil sample locations are shown on Figure 3.

²Analyzed by method 8021b

³Analyzed by method NWTPG-Gx

⁴Analyzed by method NWTPH-Dx ext with a silica gel cleanup

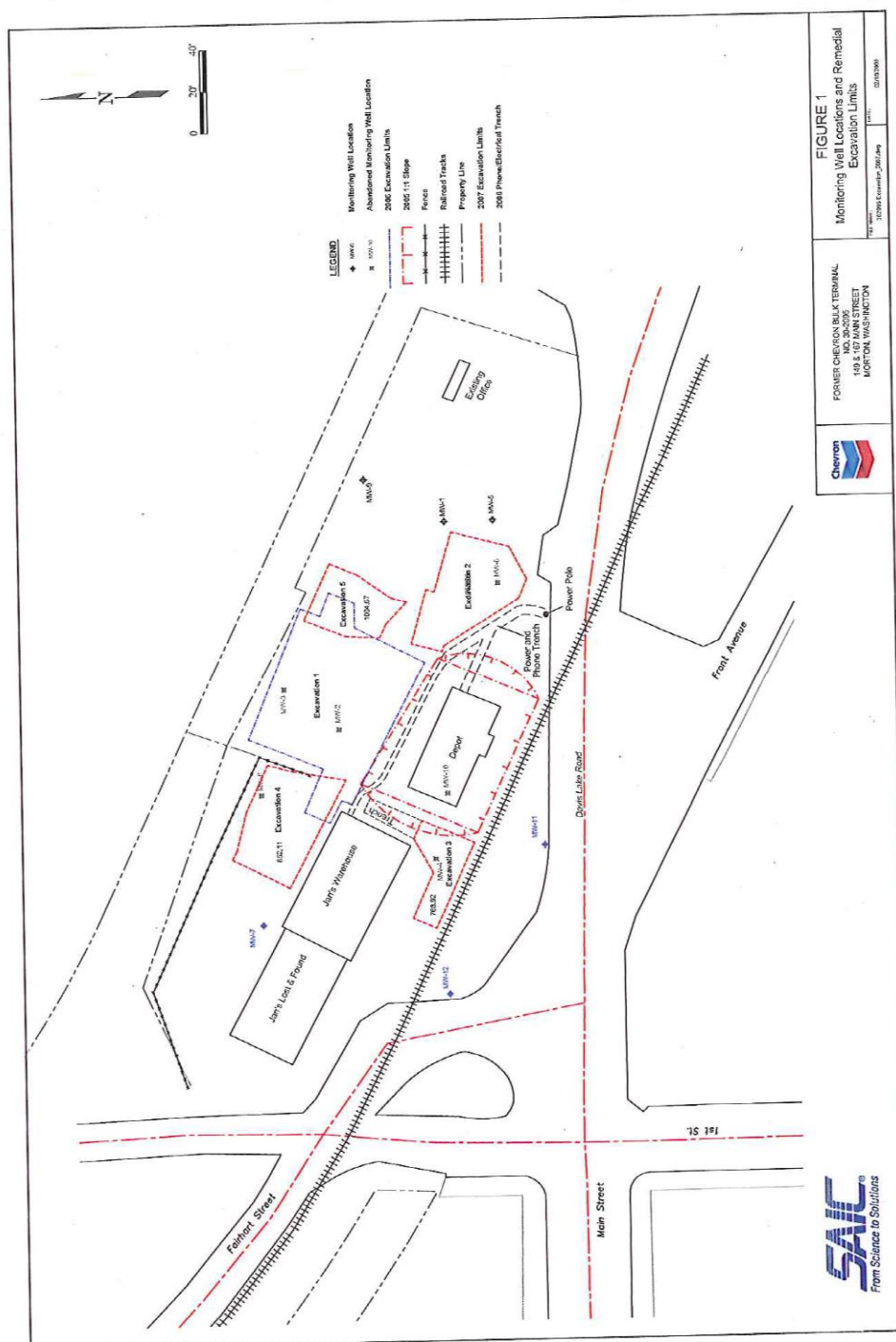
Bolded values indicate that the concentration is greater than the MTCA Method A cleanup levels

nd = Not detected at or above the laboratory reporting limit

February 2006

19

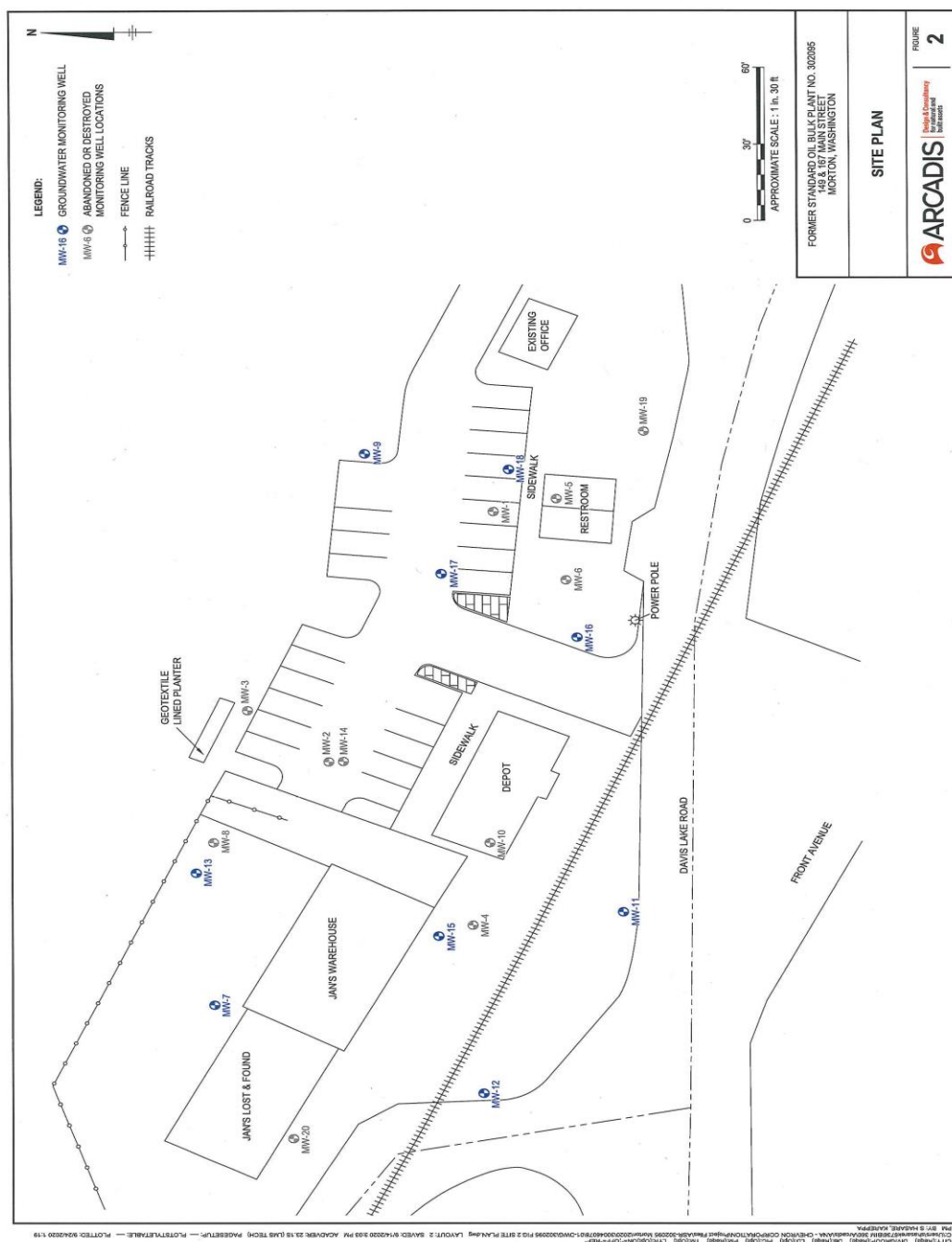
6.8A. Remedial Excavation Areas

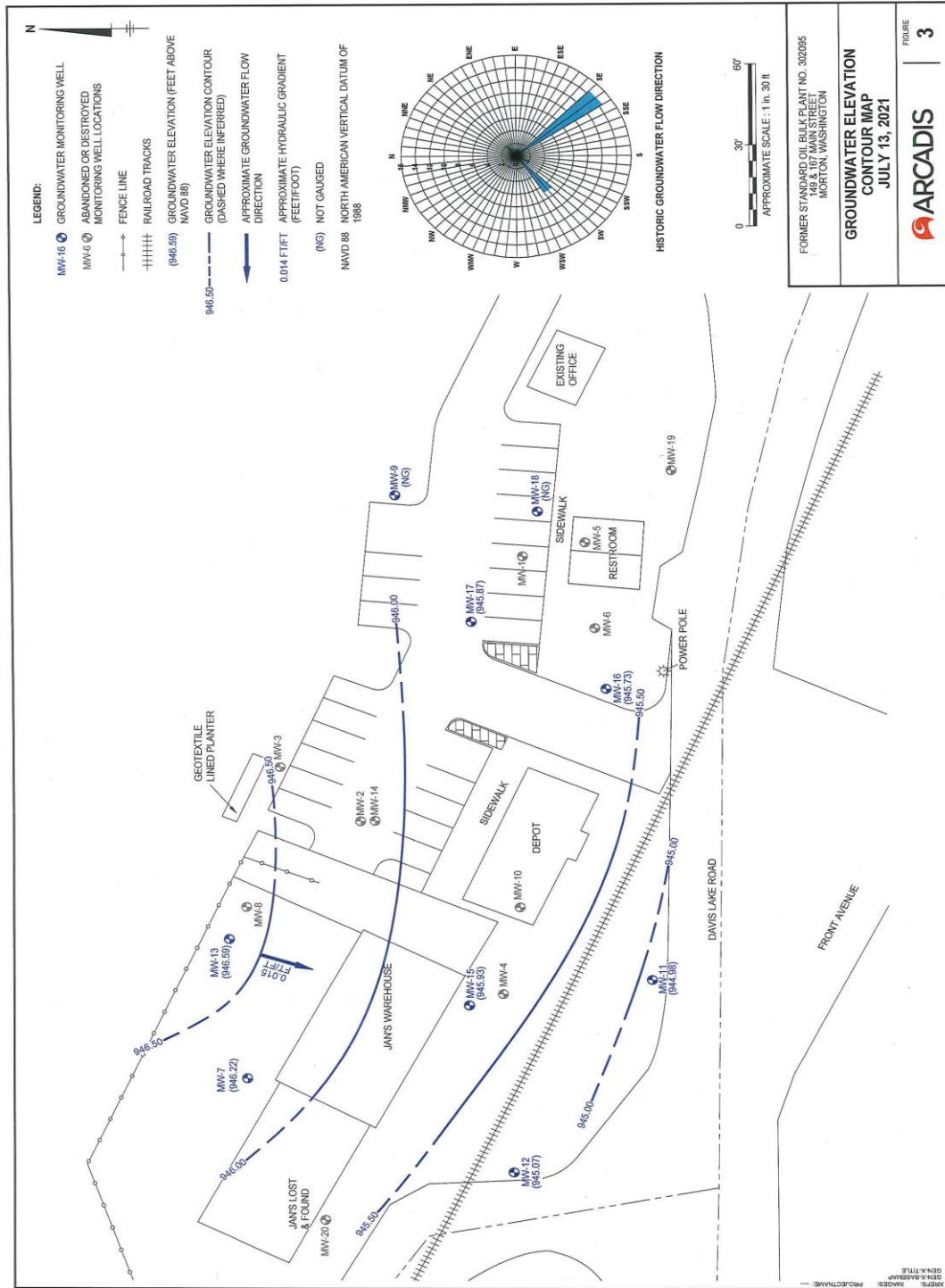


6.8B. Approximate Extent of Soil Contamination Left on the Site/Soil Management Area



6.9 Compliance Groundwater Monitoring Well Locations, Groundwater Elevation Contour Map, and Monitoring Results for Wells MW-7, MW-15, and MW-16





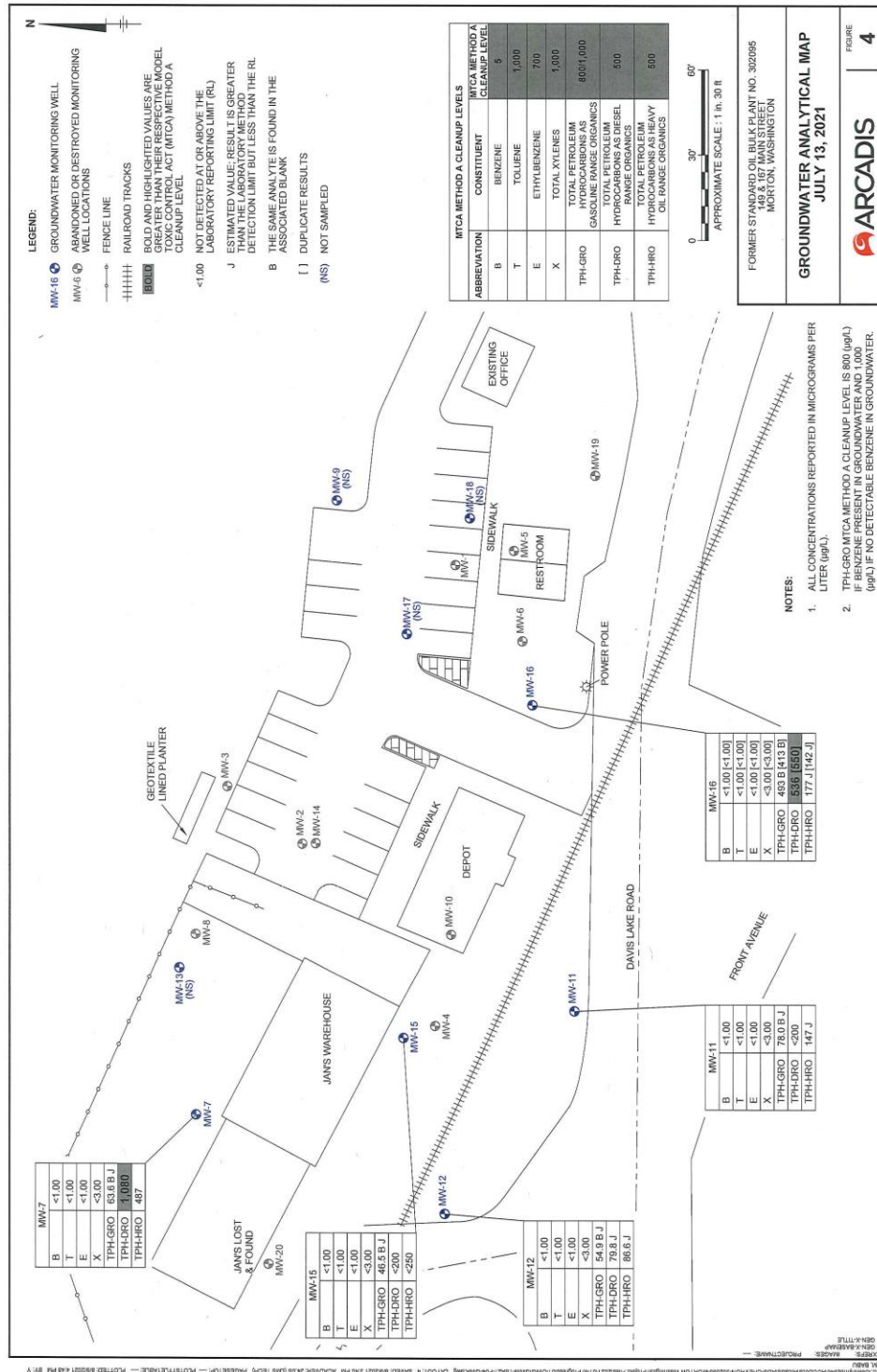




Table 1. Groundwater Gauging Data and Analytical Results
Former Standard Oil Bulk Plant No. 302095
149 and 167 Main Street
Morton, Washington

Unit	Date	Service	Top of Cable (in feet)	Top of Conductor (in feet)	Conductor Extension (in feet)	TPH-ABO	TPH-BBO	TPH-CBO	Recline	Tolerance	Eligibility	Total System	Money Int. (\$/ft)	Disallowed Lead	Total Lead	Surplus	Comments
MILWAUKEE AREA																	
MAN-11	10/11/2004	5-20	99.89	3.79	96.10	190	154.00	35	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	1/25/2005	5-20	99.89	3.27	96.62	190	154.00	36	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	4/19/2005	5-20	99.89	4.28	95.61	77	18.00	19	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	8/13/2007	5-20	99.89	7.85	92.04	-450	27.00	210	-0.5	-0.5	-0.5	-0.5	-	-0.047	-	-	-
MAN-7	1/27/2008	5-20	99.89	3.42	96.47	-450	27.00	210	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	3/16/2008	5-20	99.89	3.68	96.21	71	360	467	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	6/1-2/2009	5-20	99.89	3.23	96.66	77	18.00	19	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	12/29/2009	5-20	99.89	3.95	95.94	-450	530	200	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	8/10/2010	5-20	99.89	7.22	92.68	-450	91	782	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	6/12/2010	5-20	99.89	5.22	94.67	91	782	78	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	3/15/2011	5-20	99.89	3.84	96.06	-450	815	250	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	8/25/2011	5-20	99.89	7.82	92.08	-450	190	467	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	11/10/2011	5-20	99.89	4.68	95.20	-450	320	49	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	5/17/2012	5-20	99.89	4.65	95.25	-450	430	75	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	8/20/2012	5-20	99.89	7.83	92.07	-450	80	-48	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	2/26/2013	5-20	99.89	3.26	96.63	89	310	-48	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	8/10/2013	5-20	99.89	7.25	92.64	-450	31	77	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	10/23/2013	5-20	99.89	4.72	95.18	65	100	-48	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	5/28/2014	5-20	99.89	4.68	95.22	100	210	-48	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	11/26/2014	5-20	99.89	7.83	92.07	-450	110	-48	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	3/23-2-2015	5-20	99.89	4.18	95.72	-450	35	-48	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	8/19/2015	5-20	99.89	8.75	91.12	-450	78	109	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	11/6-12/2015	5-20	99.89	3.21	96.69	110	1,200	180	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	5/15-16/2016	5-20	99.89	5.20	94.70	110	1,400	100	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	11/15/2016	5-20	99.89	5.20	94.70	110	1,400	100	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	1/10/2019	5-20	99.89	2.52	97.38	-410	710	100	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-7	2/25/2020	5-20	99.11	0.22	98.89	277	781	2	-1.00	-1.00	-1.00	-1.00	-	-	-	-	-
MAN-7	8/25/2021	5-20	99.11	-	98.89	54.818 J	3.31	341	-1.00	-1.00	-1.00	-1.00	-	-	-	-	-
MAN-7	2/25/2021	5-20	99.11	-	98.89	54.818 J	3.31	341	-1.00	-1.00	-1.00	-1.00	-	-	-	-	-
MAN-7	7/15/2021	5-20	99.11	4.89	94.22	1,000	487	-	-1.00	-1.00	-1.00	-1.00	-	-	-	-	-
MAN-11	10/11/2004	5-20	99.82	2.52	97.30	-450	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	4/15/2005	5-20	97.82	2.25	95.57	-448	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	7/11/2005	5-20	97.82	3.30	94.52	-448	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	7/11/2005	5-20	97.82	3.30	94.52	-448	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	5/15/2007	5-20	97.82	6.96	90.86	-450	-	-	-0.5	-0.5	-0.5	-0.5	-	-0.091	-	-	-
MAN-11	12/22/2008	5-20	97.82	3.19	94.63	-450	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	3/16/2009	5-20	97.82	2.70	95.12	-450	85	480	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	8/14-1/2009	5-20	97.82	6.39	91.43	-450	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	12/29-3/2009	5-20	97.82	97.82	97.82	-450	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	6/12/2010	5-20	97.82	97.82	97.82	-450	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	11/10/2010	5-20	97.82	97.82	97.82	-450	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	3/15/2011	5-20	97.82	97.82	97.82	-450	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	8/25/2011	5-20	97.82	97.82	97.82	-450	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	2/1/2020	5-20	97.82	3.50	94.32	-450	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	5/25/2012	5-20	97.82	3.50	94.32	-450	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	11/29/2012	5-20	97.82	2.27	95.55	-450	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	2/7/2013	5-20	97.82	2.46	95.36	-450	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	8/22/2013	5-20	97.82	2.46	95.36	-450	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	3/1/2014	5-20	97.82	1.81	96.01	-450	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	2/26/2014	5-20	97.82	1.81	96.01	-450	-	-	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-
MAN-11	5/26/2014	5-20	97.82	4.13	93.71	-450	220	230	-0.5	-0.5	-0.5	-0.5	-	-	-	-	-

WELL REMAINEED



**Table 1. Groundwater Gauging Data and Analytical Results
Former Standard Oil Bulk Plant No. 30295
149 and 167 Main Street
Morton, Washington**

[illegible]



Table 1. Groundwater Sampling Data and Analytical Results
Former Standard Oil Bulk Plant No. 332095
148 and 197 Bain Street
Houston, Washington

Well	Date	Sample Interval (ft TOFT)	Top of Casing (ft above BGS)	Groundwater Elevation (ft above BGS)	TPH-GRO (mg/L)	TPH-BRO (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Range of Heavy Metals (mg/L)	Discharged Lead (mg/L)	Total Lead (mg/L)	Negative Signature	Comments
WW-13	8/10/2013	3-18	61.02	4.33	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	---	
WW-13	12/20/2013	3-18	61.02	4.17	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	---	
WW-13	2/25/2014	3-18	61.02	3.02	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	---	
WW-13	4/26/2014	3-18	61.02	6.83	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	---	
WW-13	11/4/2014	3-18	61.02	2.22	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	---	
WW-13	5/26-27/2015	3-18	61.02	4.72	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	---	
WW-13	8/15/2015	3-18	61.02	2.80	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	---	
WW-13	2/21-22/2016	3-18	61.02	2.86	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	---	
WW-13	11/16/2016	3-18	61.02	2.72	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	---	
WW-13	11/16/2016	3-18	61.02	2.72	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	---	
WW-13	7/2/2019	3-18	60.32	3.95	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	---	
WW-13	2/12/2020	3-18	60.32	4.11	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	---	
WW-13	2/18/2021	3-18	60.32	3.73	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	---	
WW-14	12/20/2013	3-18	60.50	2.78	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	5/25-27/2014	3-18	60.50	3.43	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	8/10-12/2014	3-18	60.50	5.98	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	2/4-20/2015	3-18	60.50	3.88	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	8/10/2016	3-18	60.50	2.90	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	11/16/2016	3-18	60.50	2.71	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	5/25/2017	3-18	60.50	2.83	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	8/25/2017	3-18	60.50	6.55	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	11/16/2018	3-18	60.50	3.50	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	2/10/2019	3-18	60.50	3.40	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	5/17/2019	3-18	60.50	2.86	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	11/21/2019	3-18	60.50	3.99	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	2/10/2020	3-18	60.50	6.44	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	8/10/2021	3-18	60.50	3.46	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	12/20/2021	3-18	60.50	2.94	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	5/25/2022	3-18	60.50	3.92	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	8/25/2022	3-18	60.50	2.77	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	11/16/2023	3-18	60.50	3.00	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	3/23-4/20/23	3-18	60.50	3.00	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	8/17/2023	3-18	60.50	7.19	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	11/16-12/20/23	3-18	60.50	3.32	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	5/15-6/20/24	3-18	60.50	4.87	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	8/17/2024	3-18	60.50	2.70	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-14	11/16/2024	3-18	60.50	2.85	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	93.74	---	
WW-15	12/20/2013	3-18	97.81	1.72	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	
WW-15	5/25-27/2014	3-18	97.81	2.75	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	
WW-15	8/10-12/2014	3-18	97.81	2.59	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	
WW-15	2/4-20/2015	3-18	97.81	2.54	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	
WW-15	8/10/2016	3-18	97.81	3.15	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	
WW-15	11/16/2016	3-18	97.81	1.38	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	
WW-15	5/25/2017	3-18	97.81	2.59	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	
WW-15	8/25/2017	3-18	97.81	3.60	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	
WW-15	11/16/2018	3-18	97.81	2.40	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	
WW-15	2/10/2019	3-18	97.81	2.50	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	
WW-15	5/17/2019	3-18	97.81	2.50	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	
WW-15	11/16/2019	3-18	97.81	1.53	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	
WW-15	3/23-4/20/23	3-18	97.81	2.59	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	
WW-15	8/17/2023	3-18	97.81	2.59	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	
WW-15	11/16-12/20/23	3-18	97.81	2.59	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	
WW-15	5/15-6/20/24	3-18	97.81	2.59	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	
WW-15	8/17/2024	3-18	97.81	2.59	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	
WW-15	11/16/2024	3-18	97.81	2.59	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	98.08	---	



Table 1. Groundwater Gauging Data and Analytical Results
Former Standard Oil Bulk Plant No. 302995
49 and 107 Main Street
Porton, Washington

[illegible]



Table 1. Groundwater Sampling Data and Analytical Results
Farmed Standard Oil Bulk Plant No. 30265
140 and 167 Main Street
Burien, Washington

Well	Date	Sample Type	Top of Casing (ft. above MSL)	Depth to Water (ft. below MSL)	Groundwater Elevation (ft. above MSL)	TPH-010 BOD-010	TPH-020 BOD-020	TPH-030 BOD-030	Benzene	Toluene	Ethylbenzene	Total Xylenes	Isopropyl Alcohol	Desired Lead	Total Lead	Barophones	Comments
WV-17	5/2/2013	3-18	97.75	4.13	93.62	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-17	6/2/2013	3-18	97.75	4.13	93.62	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-17	10/23/2013	3-18	97.75	4.13	93.62	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-17	2/25/2014	3-18	97.75	2.48	95.28	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-17	6/25/2014	3-18	97.75	5.77	91.98	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-17	11/4/2014	3-18	97.75	2.61	95.15	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-17	5/28/2015	3-18	97.75	4.71	93.05	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-17	5/28/2015	3-18	97.75	4.71	93.05	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-17	11/15/2015	3-18	97.75	2.20	95.55	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-17	2/14/2016	3-18	97.75	2.82	95.14	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-17	2/14/2016	3-18	97.75	2.82	95.14	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-17	8/15/2016	3-18	97.75	5.73	92.03	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-17	11/15/2016	3-18	97.75	2.41	95.35	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-17	7/15/2018	3-18	97.75	3.54	94.22	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-17	7/15/2020	3-18	97.75	2.00	96.75	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-17	5/2/2021	3-18	97.75	3.08	94.77	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-17	7/15/2021	3-18	97.75	3.08	94.77	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	12/2/2008	3-18	96.44	3.41	93.03	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	12/2/2008	3-18	96.44	3.41	93.03	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	8/34/2009	3-18	96.44	3.03	94.41	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	2/14/2010	3-18	96.44	6.51	91.93	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	2/14/2010	3-18	96.44	2.77	95.67	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	6/1/2010	3-18	96.44	5.02	92.52	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	11/18/2010	3-18	96.44	0.85	97.55	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	6/22/2011	3-18	96.44	1.46	95.95	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	8/25/2011	3-18	96.44	6.10	92.34	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	5/17/2012	3-18	96.44	2.40	95.04	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	5/17/2012	3-18	96.44	1.30	97.24	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	11/20/2012	3-18	96.44	1.23	97.21	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	8/2/2013	3-18	96.44	3.74	92.71	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	8/2/2013	3-18	96.44	5.65	92.71	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	5/27/2014	3-18	96.44	2.68	96.78	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	11/6/2014	3-18	96.44	1.31	97.13	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	3/23/2015	3-18	96.44	1.01	97.43	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	8/15/2015	3-18	96.44	6.62	91.62	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	5/15/2016	3-18	96.44	1.98	97.26	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	5/15/2016	3-18	96.44	3.22	96.22	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	11/20/2016	3-18	96.44	0.44	98.03	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	11/20/2016	3-18	96.44	0.44	98.03	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-18	2/2/2023	3-18	96.44	0.54	98.15	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-19	12/2/2008	3-18	96.54	3.78	94.75	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-19	3/16/2009	3-18	96.54	2.50	96.64	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-19	8/4/2009	3-18	96.54	5.86	91.86	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-19	10/28/2009	3-18	96.54	3.02	96.52	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-19	8/7/2010	3-18	96.54	3.14	96.42	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-19	8/15/2010	3-18	96.54	0.41	97.13	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-19	3/15/2011	3-18	96.54	2.78	96.75	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-19	8/22/2011	3-18	96.54	8.84	91.65	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-19	11/7/2011	3-18	96.54	4.70	93.84	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-19	5/3/2012	3-18	96.54	4.30	94.24	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-19	8/27/2012	3-18	96.54	6.90	91.64	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-19	5/6/2013	3-18	96.54	3.74	94.80	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-19	5/6/2013	3-18	96.54	5.03	93.51	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	
WV-19	8/6/2013	3-18	96.54	0.89	97.05	-50	-50	-50	-0.5	-0.5	-0.5	-0.5	-0.5	-	-	-	



Table 1. Groundwater Gauging Data and Analytical Results
Former Standard Oil Bulk Plant No. 302995
149 and 167 Main Street
Morton, Washington

Well	Date	Screen Interval (ft. above MB)	Top of Cement (ft. above MB)	Depth to Water (ft. above MB)	Compass Rose (ft. above MB)	TH-GRD	TH-GRD	TH-GRD	TH-GRD	Buttons	Traverse	EB photo	Total Yr/m	Total Yr/m	Yr/m from last entry	Discarded Lead	Total Lead	Yr/m	Comments
WV-19	1/23/2013	3-8	18.54	4.3	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	
WV-19	2/24/2014	3-8	18.54	3.8	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	
WV-19	3/24/2014	3-8	18.54	3.8	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	
WV-19	4/24/2014	3-8	18.54	3.8	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	65.71	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	67.64	
WV-19	5/24/2015	3-8	18.54	1.20	67.64	67.64													



Table 1. Groundwater Gauging Data and Analytical Results
Former Standard Oil Bulk Plant No. 30295
49 and 167 Main Street
Porton, Washington

Unit	Date	Scale Interval	Total Closures		Concentration (# Above) (# Below)	TPH-BOD (# Above) (# Below)	TPH-BOD	TPH-BOD	TPH-BOD	Bacteria	Toxins	Bryophytes	Total Algae	Mayfly Index	Dissolved Lead	Total Lead	Comments
			(# Above)	(# Below)													
WW4	7/6/2004	5-15	97.81	1.66	95.53	14,000	620	503	100	1,000	200	100	100	0.5	0.5	10	
WW4	10/11/2004	5-15	97.81	1.48	98.22	1,400	220	497	140	10	78	10	10	0	0	10	
WW4	4/15/2005	5-15	97.81	1.48	98.43	2,100	1,300	110	125	15	41	15	15	0	0	15	
WW4	7/11/2005	5-15	97.81	2.18	95.70	1,900	1,200	170	54	8	43	7	7	0	0	7	
ABANDONED IN OCTOBER 2006																	
WW4	10/1/2004	5-15	98.31	2.79	95.52	90	300	668	<0.5	<0.5	<0.5	<0.5	<0.5	0	0	0	
WW4	4/1/2005	5-15	98.31	2.23	95.04	110	530	497	<0.5	<0.5	<0.5	<0.5	<0.5	0	0	0	
WW4	4/1/2005	5-15	98.31	2.23	95.04	110	530	497	<0.5	<0.5	<0.5	<0.5	<0.5	0	0	0	
WW4	8/1/2007	5-15	98.31	2.18	95.52	64	590	140	<0.5	<0.5	<0.5	<0.5	<0.5	0	0	0	
ABANDONED/DESTROYED																	
WW4	10/1/2004	5-20	96.3	2.26	95.04	1,500	1,300	497	1	0.700	<0.5	1	1	0	0	1	
WW4	10/2/2005	5-20	96.3	2.46	95.84	1,100	1,400	300	1	0.700	<0.5	1	1	0	0	1	
WW4	4/1/2005	5-20	96.3	1.78	95.52	800	900	120	<2.0	1	0.800	<0.5	2	0	0	2	
WW4	7/11/2005	5-20	96.3	3.16	95.14	1,200	1,200	150	2	1	1	1	1	0	0	1	
ABANDONED IN MARCH 2007																	
WW4	10/1/2004	5-20	99.21	2.51	95.04	1,500	1,300	497	6	<0.5	2	1	1	0	0	1	
WW4	10/2/2005	5-20	99.21	2.51	95.04	1,300	1,700	170	6	<0.5	1	1	1	0	0	1	
WW4	4/1/2005	5-20	99.21	2.44	95.77	1,000	1,100	4100	6	0.700	3	4	0	0	0	3	
WW4	7/11/2005	5-20	99.21	3.23	95.85	1,400	970	<110	1	0.700	3	4	0	0	0	3	
ABANDONED IN MARCH 2007																	
WW4	10/1/2004	5-20	97.52	1.88	95.63	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0	0	0	
WW4	10/2/2005	5-20	97.52	1.88	95.63	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0	0	0	
WW4	4/1/2005	5-20	97.52	1.88	95.63	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0	0	0	
WW4	7/11/2005	5-20	97.52	2.25	95.27	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0	0	0	
WW4	8/1/2007	5-21	95.52	--	--	--	--	--	--	--	--	--	--	--	--	--	
WW4	2/2/2020	5-20	84.39	3.15	94.37	--	--	--	--	--	--	--	--	--	--	--	
NOT PART OF MONITORING PROGRAM																	
WW4	10/11/2004	5-20	98.76	2.09	96.63	1,800	650	<95	51	7	25	7	7	0	0	7	
WW4	10/11/2004	5-20	98.76	2.09	96.63	1,800	650	<95	51	7	25	7	7	0	0	7	
WW4	4/1/2005	5-20	98.76	1.84	97.14	1,700	750	<100	24	4	19	7	7	0	0	7	
WW4	7/11/2005	5-20	98.76	2.54	96.24	1,500	910	<110	31	4	17	6	6	0	0	6	
NOT PART OF MONITORING PROGRAM																	
UNABLE TO LOCATE SINCE REVERSAL EXCAVATION ACTIVITIES WELL REMOVED																	



Page 8/8

Table 1. Groundwater Gauging Data and Analytical Results
Former Standard Oil Bulk Plant No. 302935
149 and 167 Main Street
Morton, Washington

Results: Reported in micrograms per litre ($\mu\text{g/L}$).
 Red and light blue dyes are greater than the respective MCA method at almost all pH values and are not detectable above the background level. The RGA method is more accurate than the MCA method at a chloride level of 1000 mg/L . The RGA method for historical data may not be consistent with current analytical reports for historical analytical methods used.
 The majority of Cytex methods for historical data may not be consistent with current analytical reports for historical analytical methods used.
 The majority of Cytex data after the first sampling (2002/2003/2004/2005) are not relative to a 10-fold dilution.
 The treatment for pH reduction at the time of analysis was not used. The estimate used for this setting was based on the data of 1988 (NAUO, 88).
 2007: 0.00 = 0.00 MCA Method; Cytex with benzene present is 600 $\mu\text{g/L}$ and without is 100 $\mu\text{g/L}$.
 2007: 0.00 = 0.00 MCA Method; Cytex with benzene present is 600 $\mu\text{g/L}$ and without is 100 $\mu\text{g/L}$.

[illegible]

Current Analytical Methods:
 PH-GRO analyzed by Method NWTPH-Gx
 PH-TEX analyzed by the United States Environmental Protection Agency Method 826.00
 PH-ORO analyzed by NWTPH-Dx-NC SGT
 PH-IRO analyzed by NWTPH-Dx-NC SGT

6.10 Restrictive Covenant

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DEPARTMENT OF ECOLOGY
SW REGIONAL OFFICE

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Gary E. Zandall, Lewis County Auditor, Chehalis, Washington

Model Restrictive (Environmental) Covenant

After Recording Return to:
Guy Barrett
Department of Ecology
Southwest Regional Office
POB 47775
Olympia, Washington 98504-7775

Environmental Covenant

Grantor: Cowlitz River Valley Historical Society, Jan's Lost and Found Thrift Shop
Grantee: State of Washington, Department of Ecology
Legal: Section 02, Township 12N, Range 04E, PT Pt NW4 NE4, B Bla 3329234
Section 02, Township 12N, Range 04E, Pt NW4 NE4, A Bla 3329234
Tax Parcel Nos.: 008492002000, 008492004000
Cross Reference: N/A

Grantor, Cowlitz River Valley Historical Society and Jan's Lost and Found Thrift Shop, hereby binds Grantor, its successors and assigns to the land use restrictions identified herein and grants such other rights under this environmental covenant (hereafter "Covenant") made this _____ day of _____, 2010 in favor of the State of Washington Department of Ecology (hereinafter "Ecology"). Ecology shall have full right of enforcement of the rights conveyed under this Covenant pursuant to the Model Toxics Control Act, RCW 70.105D.030(1)(g), and the Uniform Environmental Covenants Act, RCW 64.70.

This Declaration of Covenant is made pursuant to RCW 70.105D.030(1)(f) and (g) and WAC 173-340-440 by Cowlitz River Valley Historical Society, Jan's Lost and Found Thrift Shop, its successors and assigns, and the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology").

A remedial action (hereafter "Remedial Action") occurred at the property that is the subject of this Covenant. The Remedial Action conducted at the property is described in the following document[s]:

Cleanup Action Plan, Chevron Site No. 30-2095, Former Chevron Bulk Terminal, 149 and 167 Main Avenue, Morton, Washington, July 2006.

Soil Management Plan, Wolfe & Parks Site, Former Chevron Bulk Plant No. 30-2095, 149 & 167 Main Street, Morton, Washington, February 28, 2011.
These documents are on file at Ecology's Southwest Regional Office.

SCENARIO 1:

This Covenant is required because the Remedial Action resulted in residual concentrations of gasoline, diesel, and benzene which exceed the Model Toxics Control Act Method A Cleanup Level(s) for SOIL and GROUNDWATER established under WAC 173-340-704.

+++++

The undersigned, **Cowlitz River Valley Historical Society, Jan's Lost and Found Thrift Shop**, is the fee owner of real property (hereafter "Property") in the County of Lewis, State of Washington, that is subject to this Covenant. The Property is legally described IN ATTACHMENT A OF THIS COVENANT AND MADE A PART HEREOF BY REFERENCE.

Cowlitz River Valley Historical Society, Jan's Lost and Found Thrift Shop

makes the following declaration 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 (hereafter "Owner").

Section 1.

1. No groundwater may be taken for DOMESTIC, AGRICULTURAL, OR ANY USE from the Property.
2. If the soil contains hazardous substances above cleanup levels, then describe prohibited activities as follows:
 - a. A portion of the Property contains gasoline, diesel, and benzene contaminated soil located under part or all of Cowlitz River Valley Historical Society, Jan's Lost and Found Thrift Shop. On Jan's Lost and Found Thrift Shop parcel, contaminated soil exists beneath and adjacent to the existing building, and under asphalt pavement. On the Cowlitz River Valley Historical Society parcel, contaminated soil exists beneath asphalt and a planter box located in the northwest corner of the

parcel. The Owner shall not alter, modify, or remove the existing structure[s] in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology (Figure 1).

- b. Any activity on the Property that may result in the release or exposure to the environment of the contaminated soil that was contained as part of the Remedial Action, or create a new exposure pathway, is prohibited. Some examples of activities that are prohibited in the capped areas include: drilling, digging, placement of any objects or use of any equipment which deforms or stresses the surface beyond its load bearing capability, piercing the surface with a rod, spike or similar item, bulldozing or earthwork.

Section 2. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.

Section 3. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.

Section 4. The Owner of the property must give thirty (30) day advance 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 shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.

Section 5. The Owner must restrict leases to uses and activities consistent with the Covenant and notify all lessees of the restrictions on the use of the Property.

Section 6. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Covenant. Ecology may approve any inconsistent use only after public notice and comment.

Section 7. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the property, to determine compliance with this Covenant, and to inspect records that are related to the Remedial Action.

Section 8. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this 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 if Ecology, after public notice and opportunity for comment, concurs.

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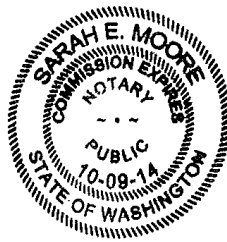
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STATE OF Washington
COUNTY OF Lewis

[INDIVIDUAL ACKNOWLEDGMENT]

On this 14th day of April, 2011, I certify that Lori Powell personally appeared before me, and acknowledged that he/she is the individual described herein and who executed the within and foregoing instrument and signed the same at his/her free and voluntary act and deed for the uses and purposes therein mentioned.



Sarah E. Moore
Notary Public in and for the State of
Washington,
residing at Morton, WA.
My appointment
Expires: 10/09/2014.

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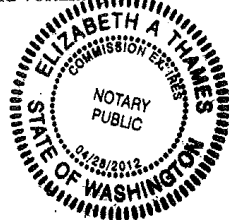
'11 JUL 26 AIO:40

'11 MAY 23 AIO:17

[INDIVIDUAL ACKNOWLEDGMENT]

STATE OF Washington
COUNTY OF Grays

On this 20th day of May, 2011, I certify that MARC FISHER personally appeared before me, and acknowledged that he/she is the individual described herein and who executed the within and foregoing instrument and signed the same at his/her free and voluntary act and deed for the uses and purposes therein mentioned.



Elizabeth A. Thomas
Notary Public in and for the State of
Washington,
residing at 4 Norton
My appointment
Expires: 4.28.11

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Cowlitz River Valley Historical Society JUL 26 Jan's Lost and Found Thrift Shop MAY 23 AIO:17



Marc Fisher
President

Dated: 5-20-2011

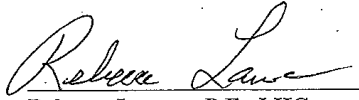
DEPARTMENT OF ECOLOGY
SW REGIONAL OFFICE



Laurie Powell, Lori L.
President

Dated: April 14, 2011

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY



Rebecca Lawson, P.E., LHG
SWRO Section Manager

Dated: 5/31/2011

Exhibit A
Legal Description

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DEPARTMENT OF ECOLOGY
SW REGIONAL OFFICE

Section 02, Township 12N, Range 04E, PT Pt NW4 NE4, B Bla 3329234
Section 02, Township 12N, Range 04E, Pt NW4 NE4, A Bla 3329234

6.11 Photo Log



Photo 1. Asphalt pavement, Train Depot Museum and Jan's Lost & Found Thrift Shop – from the East.



Photo 2. Jan's Lost & Found Thrift Shop and contaminated soil left on-site below the asphalt and gravel Area– from the Southeast.



Photo 3. Train Depot Museum – from the South.



Photo 4. Train Depot Museum and the Main Street – from the Southeast.



Photo 5. Residual contaminated soil left below the deck and Jan's Lost & Found Thriftway Shop building and Monitoring Well MW-15 – from the Southeast.



Photo 6: Jan's Lost & Found Thrift Shop, Train Depot Museum, and contaminated soil left below the railroad tracks and asphalt pavement – from the Southwest.



Photo 7. Jan's Lost & Found Thrift Shop and Train Depot Museum – from the Southeast.



Photo 8. Groundwater Monitoring Well MW-16.