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 Region Office

TOXICS CLEANUP PROGRAM

October 2016

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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).

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, 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 19980s. 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 plan 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 were 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

CONTAMINANT	SOIL CLEANUP LEVEL (mg/kg)	GROUNDWATER CLEANUP LEVEL (µg/l)[3]
Total Petroleum Hydrocarbons	2,225[1]	NA
TPH-G	200[2]	800/1,000
TPH-D	460[2]	500

Lead	220[2]	15
Benzene	0.03[3]	5
Toluene	NA	1,000
Ethylbenzene	NA	700
Xylenes	NA	1,000

Note:

1: MTCA Method B cleanup level
2: Cleanup level calculated based on the protection of ecological receptors (TEE)
3: MTCA Method A cleanup level
NA: Not Applicable

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. 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 was 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 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 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), a total of eleven wells were selected for the long term compliance groundwater monitoring. Since the implementation of the final remedial action in October 2008, a total of 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 this eight years of 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. Results of the latest round of quarterly groundwater monitoring conducted in February 2016 indicated the exceedance of TPH-G in only one monitoring well (MW-16) at a concentration of 1,800 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 varied from 3 feet to 5 feet and the approximate groundwater flow was towards southeasterly direction. 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 01, 2011 in the 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 25, 2016, the asphalt cover at the Site continue to eliminate direct exposure pathways (ingestion, contact) to contaminated soils. Additionally, the asphalt cover prevent 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.

3.1.1 Residual Saturation

WAC 173-340-747(10) provides that, "the soil concentrations must not result in the accumulation of non-aqueous phase liquid 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.

Department of Ecology, August 22, 2006. Enforcement Order No. DE 3683. Chevron U.S.A. Products Company, Jan's Lost and Found Thrift Shop, Cowlitz River Valley Historical Society, Dana and Diana Wolfe.

SAIC. March 2006. Feasibility Study, Former Chevron Bulk Terminal, 149 & 167 Main Street, Morton, Washington.

SAIC. February 2006. Remedial Investigation and Interim Action Report, Former Chevron Bulk Terminal, 149 & 167 Main Street, Morton, Washington.

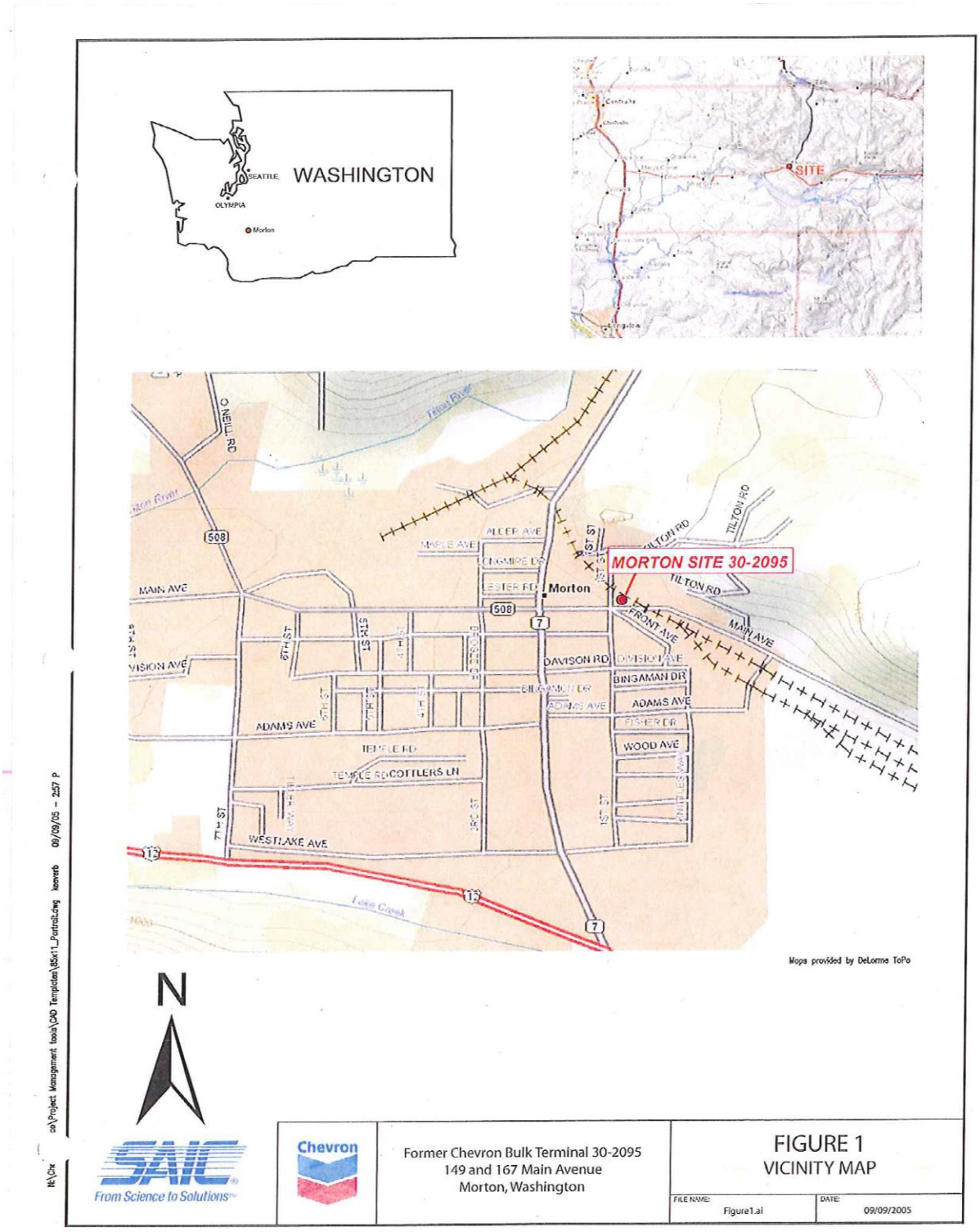
SAIC. September 2005. Interim Action Plan, Former Chevron Bulk Terminal, 149 & 167 Main Street, Morton, Washington.

Leidos. October 2008 through January 2016. Quarterly Groundwater Monitoring Reports, Former Standard Oil Bulk Plant, 149 and 167 Main Street, Morton, Washington.

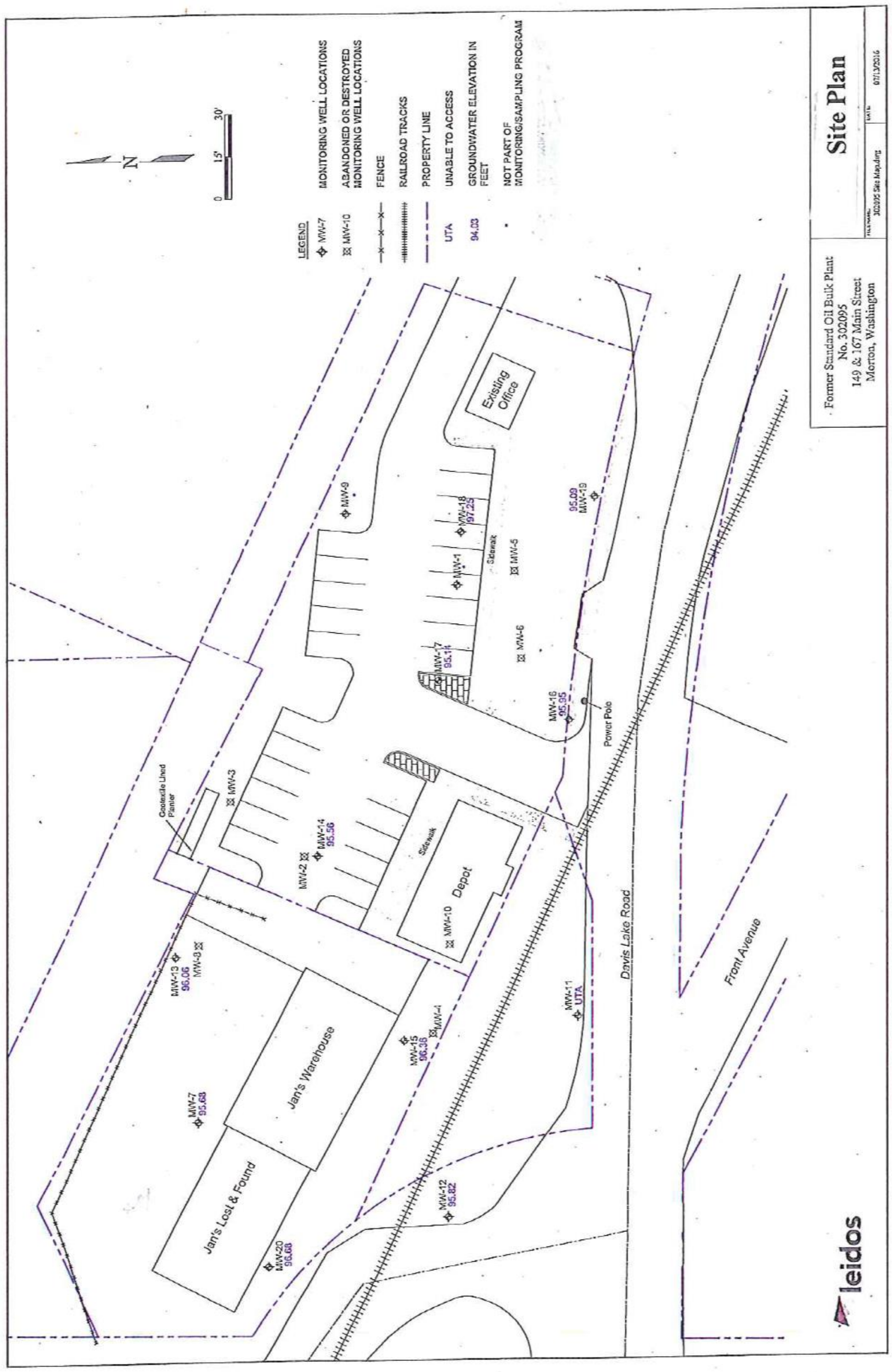
Department of Ecology. Site Visit, July 25, 2016.

6.0 APPENDICES

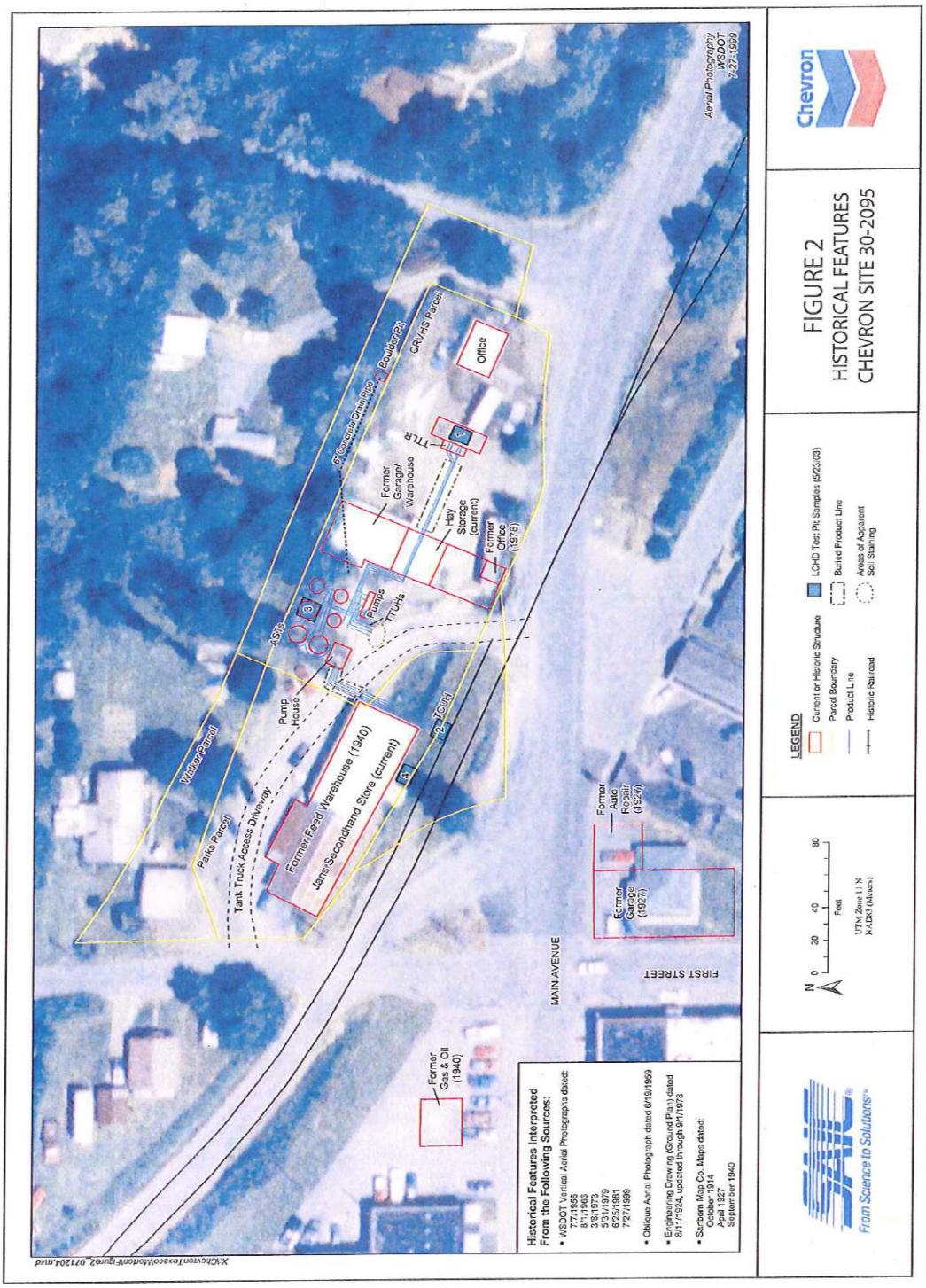
6.1 Vicinity Map



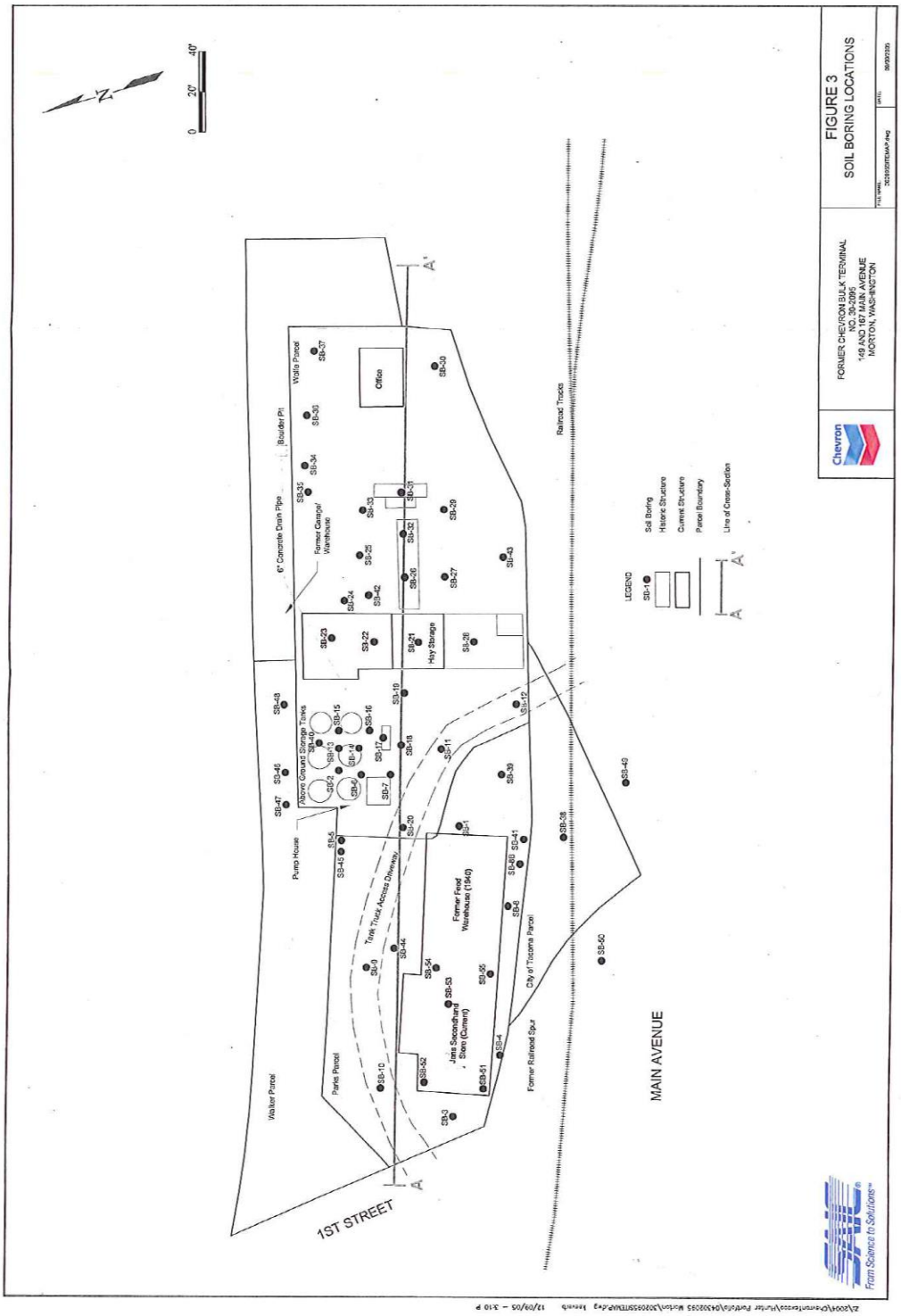
6.2 Site Plan


Site Plan
Former Standard Oil Bulk Plant
No. 302095
149 & 167 Main Street
Morton, Washington
LEGEND
MONITORING WELL LOCATIONS
ABANDONED OR DESTROYED MONITORING WELL LOCATIONS
FENCE
RAILROAD TRACKS
PROPERTY LINE
UTA
UNABLE TO ACCESS
94.03
GROUNDWATER ELEVATION IN FEET
NOT PART OF MONITORING/SAMPLING PROGRAM
N
0
15'
30'
Existing Office
Depot
Jan's Warehouse
Jan's Lost & Found
Davis Lake Road
Front Avenue
Power Pole
Sidewalk
Geotextile Lined Planter
MW-9
MW-18 97.25
MW-1
MW-5
MW-19 95.09
MW-6
MW-17 95.14
MW-16 95.95
MW-3
MW-14 95.56
MW-2
MW-10
MW-13 96.06
MW-8
MW-15 96.36
MW-4
MW-11 UTA
MW-7 95.68
MW-12 95.82
MW-20 96.68
leidos

6.3 Site Historical Features



6.3 Soil Boring and Grundwater Monitoring Well Locations



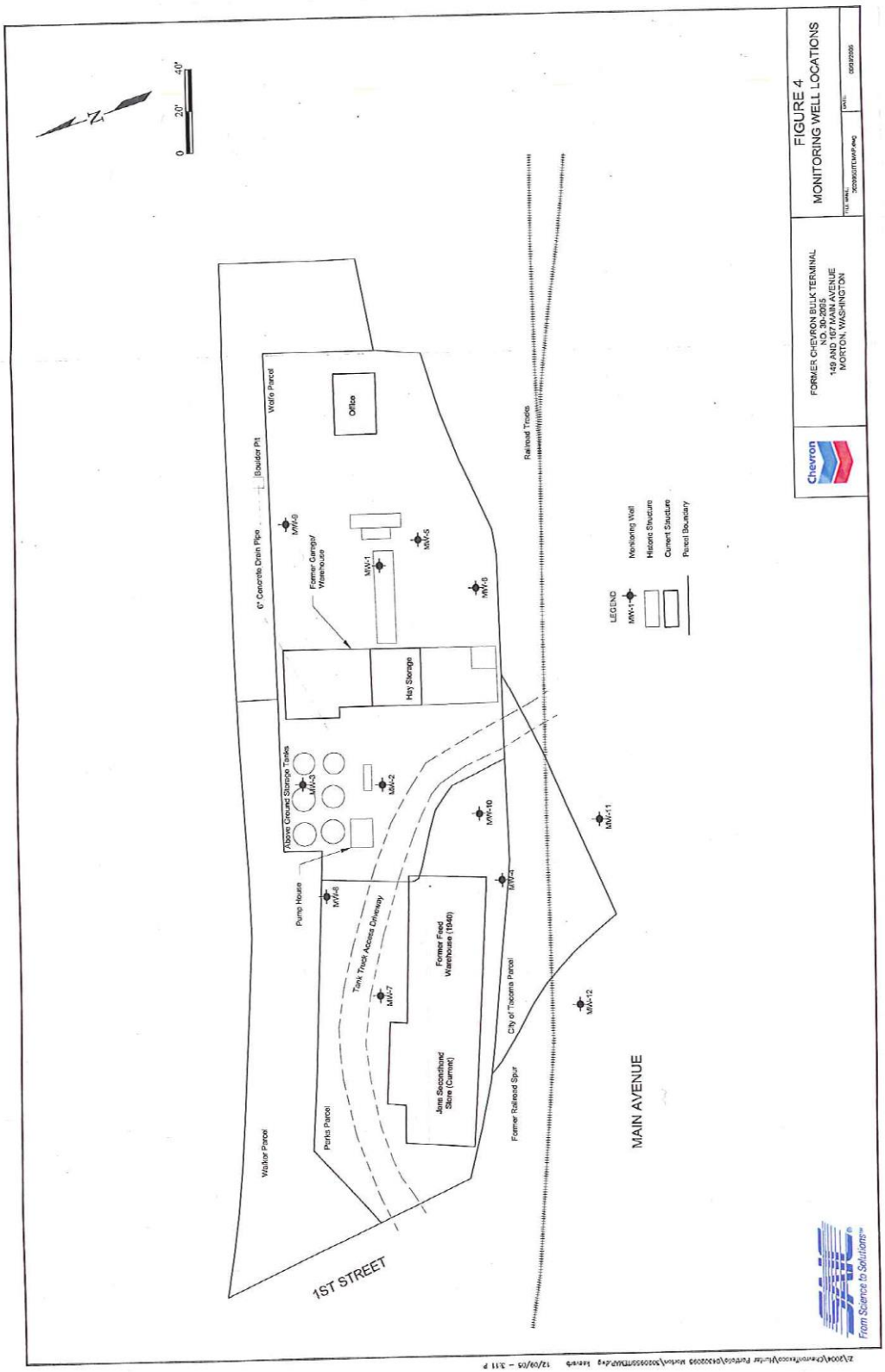
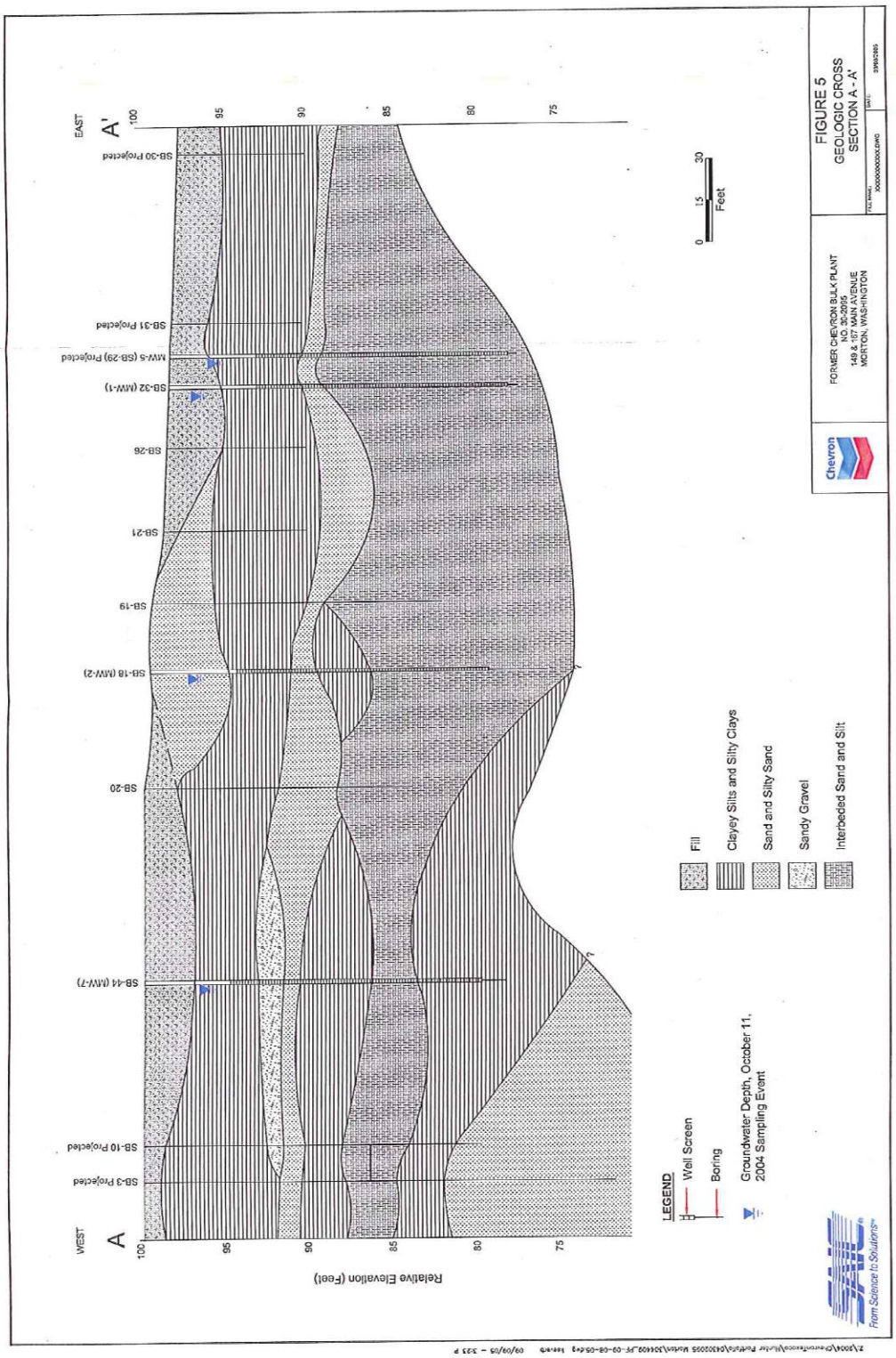


FIGURE 4
MONITORING WELL LOCATIONS
FORMER CHEVRON BULK TERMINAL
NO. 30-2005
149 AND 167 MAIN AVENUE
MORTON, WASHINGTON
Chevron
LEGEND
Monitoring Well
Historic Structure
Current Structure
Parcel Boundary
MAIN AVENUE
1ST STREET
Railroad Tracks
Former Railroad Spur
City of Tacoma Parcel
Wolfe Parcel
Parks Parcel
Walker Parcel
Boulder Pit
6" Concrete Drain Pipe
Office
Former Garage/ Warehouse
Hay Storage
Above Ground Storage Tanks
Pump House
Tank Truck Access Driveway
Former Feed Warehouse (1940)
Jans Secondhand Store (Current)
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MW-7
MW-8
MW-9
MW-10
MW-11
MW-12
0
20'
40'
From Science to Solutions

6.5 Site Eastwest Geologic Cross-Section A-A'



6.6 Soil Sample Sample Results

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	**0.16**
	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**

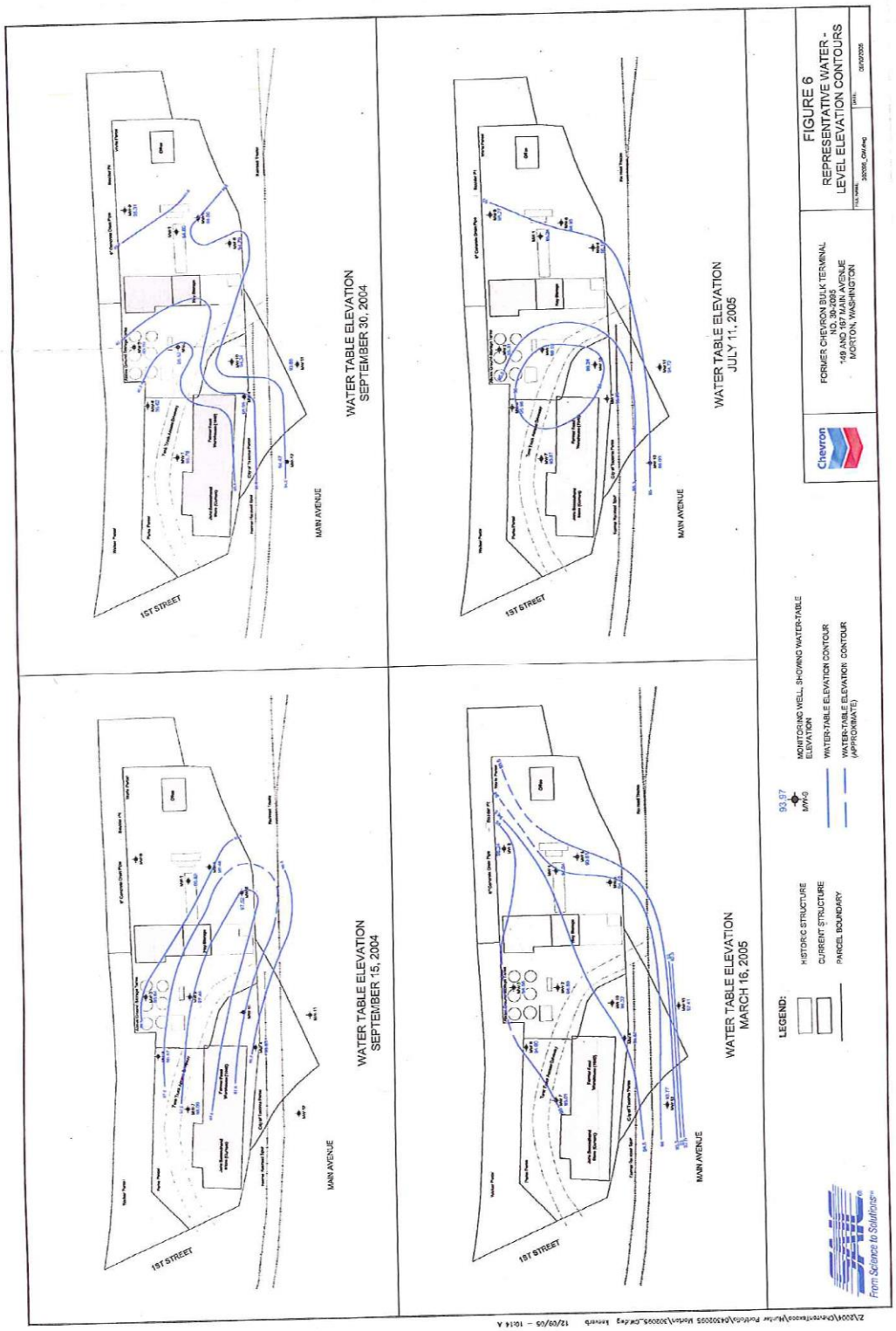
Table 1. Soil Analytical Results Summary

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	4	5/19/2004	**1200**	**2500**	**1.3**
	8	5/19/2004	**1300**	880	**2.46**
	9	5/19/2004	23	11	0.002
	15	5/19/2004	<1.0	4.6	0.006
SB-19	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

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



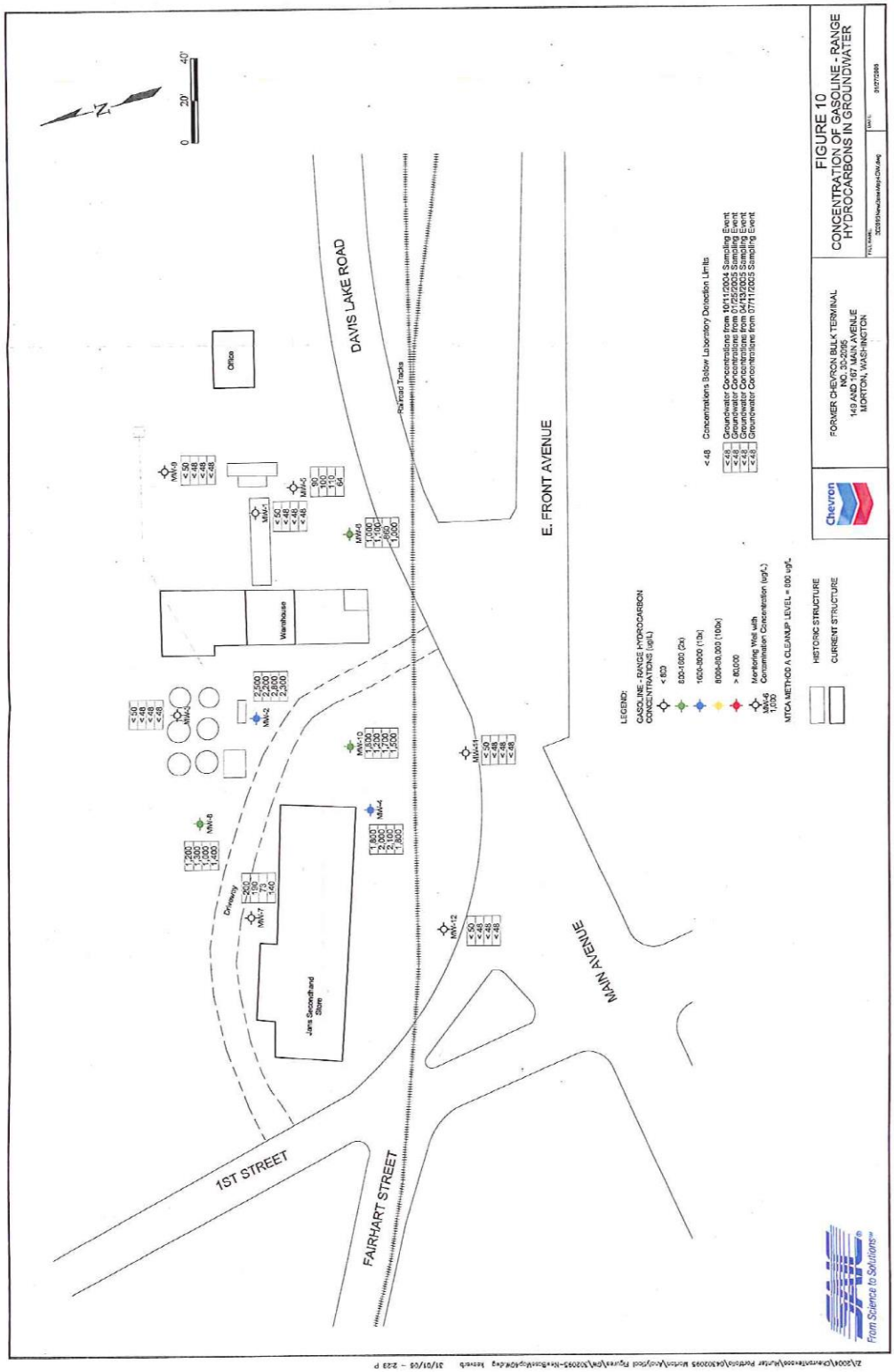


FIGURE 10
CONCENTRATION OF GASOLINE - RANGE HYDROCARBONS IN GROUNDWATER
FORMER CHEVRON BULK TERMINAL
NO. 30-2095
149 AND 167 MAIN AVENUE
MORTON, WASHINGTON
Chevron
DAVIS LAKE ROAD
E. FRONT AVENUE
MAIN AVENUE
1ST STREET
FAIRHART STREET
Railroad Tracks
Office
Warehouse
Driveway
Jans Secondhand Store
LEGEND:
GASOLINE - RANGE HYDROCARBON CONCENTRATIONS (ug/L)
< 823
823-1600 (2x)
1600-8000 (10x)
8000-80,000 (100x)
> 80,000
Monitoring Well with Contamination Concentration (ug/L)
MTCA METHOD A CLEANUP LEVEL = 800 ug/L
HISTORIC STRUCTURE
CURRENT STRUCTURE
< 48 Concentrations Below Laboratory Detection Limits
Groundwater Concentrations from 10/11/2004 Sampling Event
Groundwater Concentrations from 01/25/2005 Sampling Event
Groundwater Concentrations from 04/13/2005 Sampling Event
Groundwater Concentrations from 07/11/2005 Sampling Event
From Science to Solutions

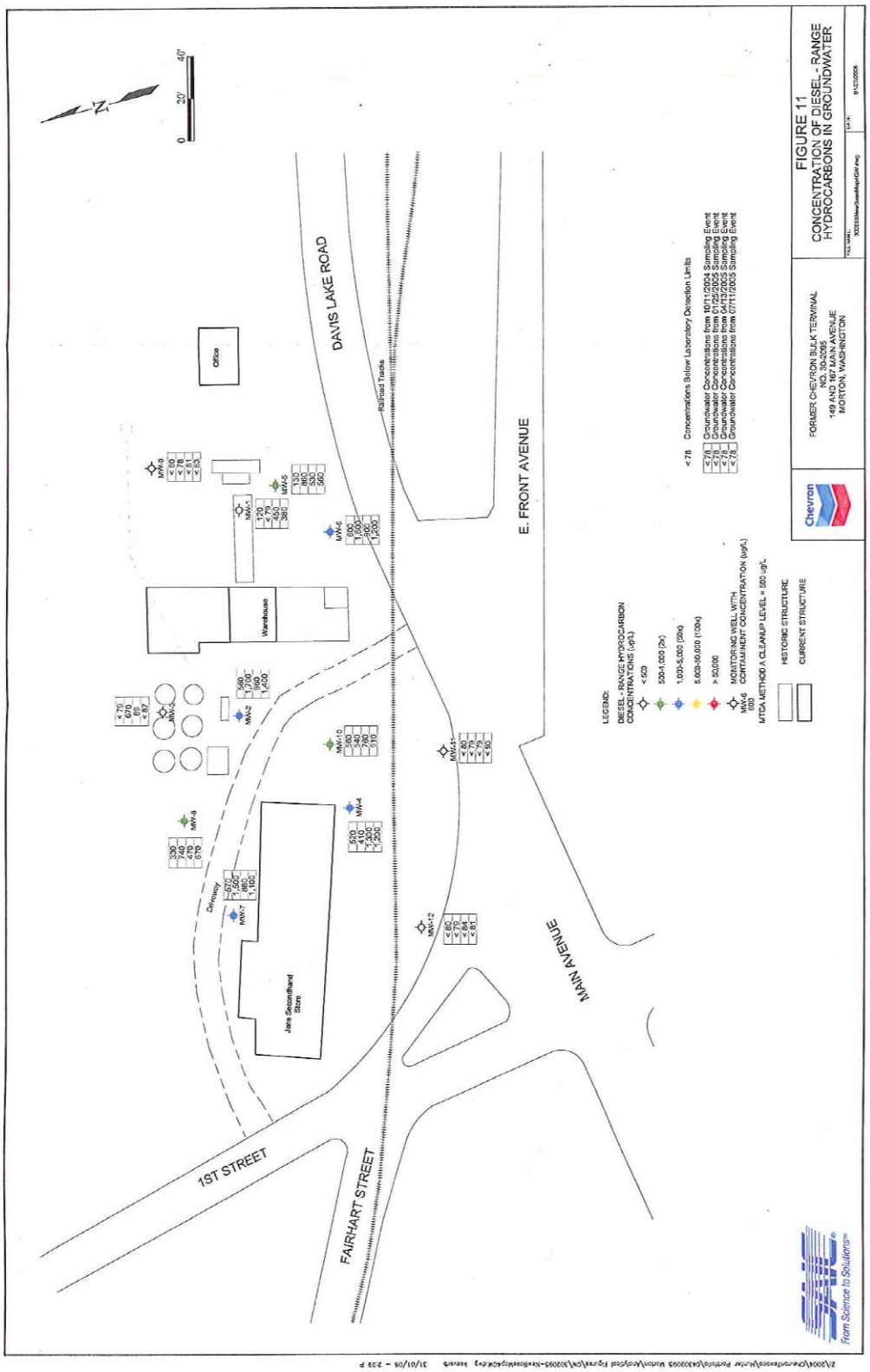


FIGURE 11
CONCENTRATION OF DIESEL - RANGE HYDROCARBONS IN GROUNDWATER
FORMER CHEVRON BULK TERMINAL
NO. 30-2095
149 AND 167 MAIN AVENUE
MORTON, WASHINGTON
Chevron
DAVIS LAKE ROAD
E. FRONT AVENUE
MAIN AVENUE
1ST STREET
FAIRHART STREET
Railroad Tracks
Office
Warehouse
Jans Secondhand Store
Driveway
LEGEND:
DIESEL - RANGE HYDROCARBON CONCENTRATIONS (ug/L)
< 629
500-1,000 (5x)
1,000-5,000 (50x)
5,000-50,000 (100x)
> 50,000
MONITORING WELL WITH CONTAMINANT CONCENTRATION (ug/L)
MTCA METHOD A CLEANUP LEVEL = 500 ug/L
HISTORIC STRUCTURE
CURRENT STRUCTURE
< 78 Concentrations Below Laboratory Detection Limits
Groundwater Concentrations from 10/11/2004 Sampling Event
Groundwater Concentrations from 01/25/2005 Sampling Event
Groundwater Concentrations from 04/13/2005 Sampling Event
Groundwater Concentrations from 07/11/2005 Sampling Event
From Science to Solutions

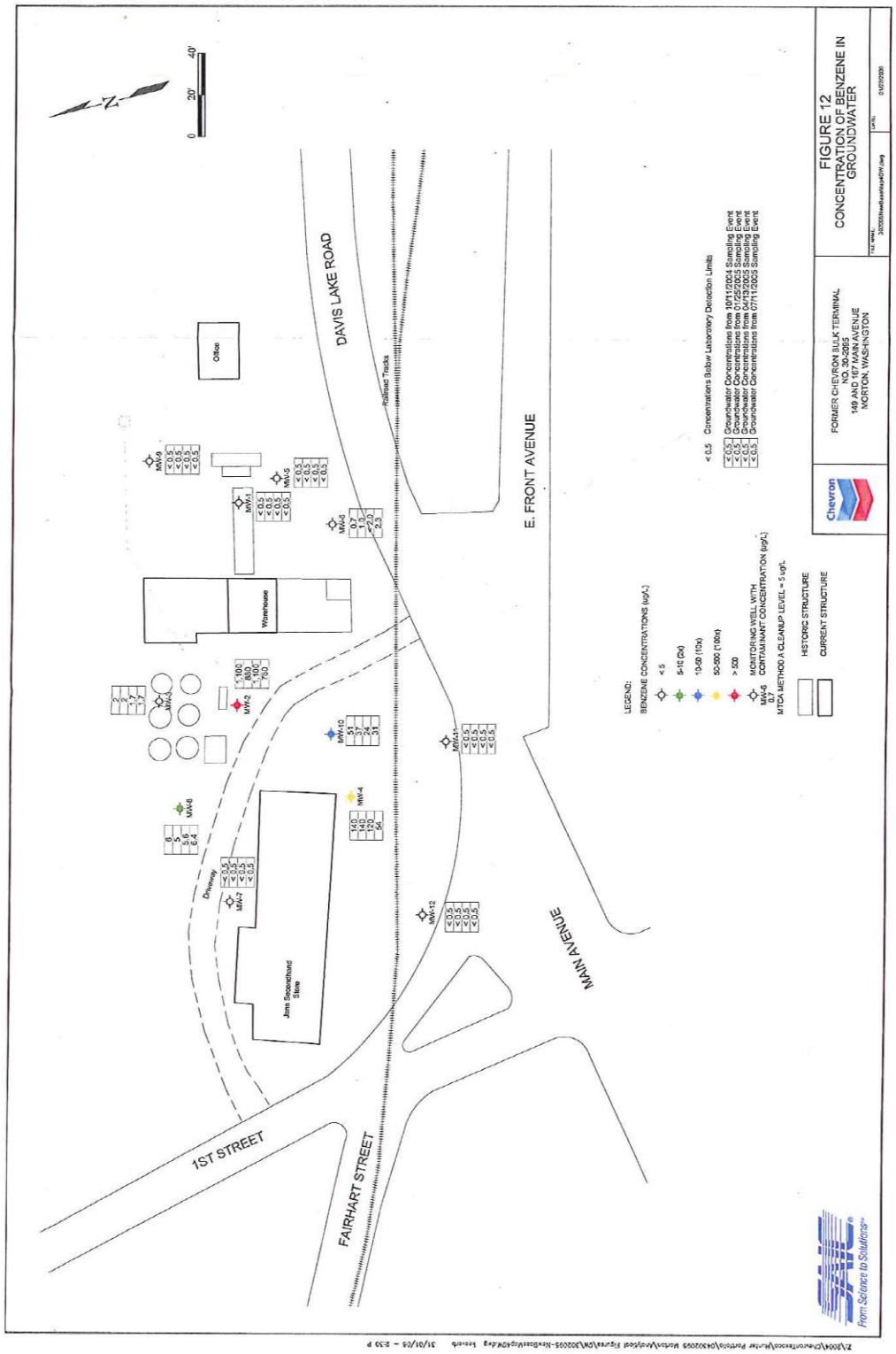


FIGURE 12
CONCENTRATION OF BENZENE IN GROUNDWATER
FORMER CHEVRON BULK TERMINAL
NO. 30-2065
149 AND 167 MAIN AVENUE
NORTON, WASHINGTON
Chevron
DAVIS LAKE ROAD
E. FRONT AVENUE
MAIN AVENUE
1ST STREET
FAIRHART STREET
Railroad Tracks
Office
Warehouse
Driveway
Jims Secondhand Store
LEGEND:
BENZENE CONCENTRATIONS (ug/L)
< 5
5-10 (2x)
10-50 (10x)
50-500 (100x)
> 500
MONITORING WELL WITH CONTAMINANT CONCENTRATION (ug/L)
MTCA METHOD A CLEANUP LEVEL = 5 ug/L
HISTORIC STRUCTURE
CURRENT STRUCTURE
< 0.5 Concentrations Below Laboratory Detection Limits
Groundwater Concentrations from 10/11/2004 Sampling Event
Groundwater Concentrations from 01/25/2003 Sampling Event
Groundwater Concentrations from 04/13/2003 Sampling Event
Groundwater Concentrations from 07/11/2003 Sampling Event
From Science to Solutions

6.8 Interim Action Remedial Excavation Area and Confirmation Soil Sample Results

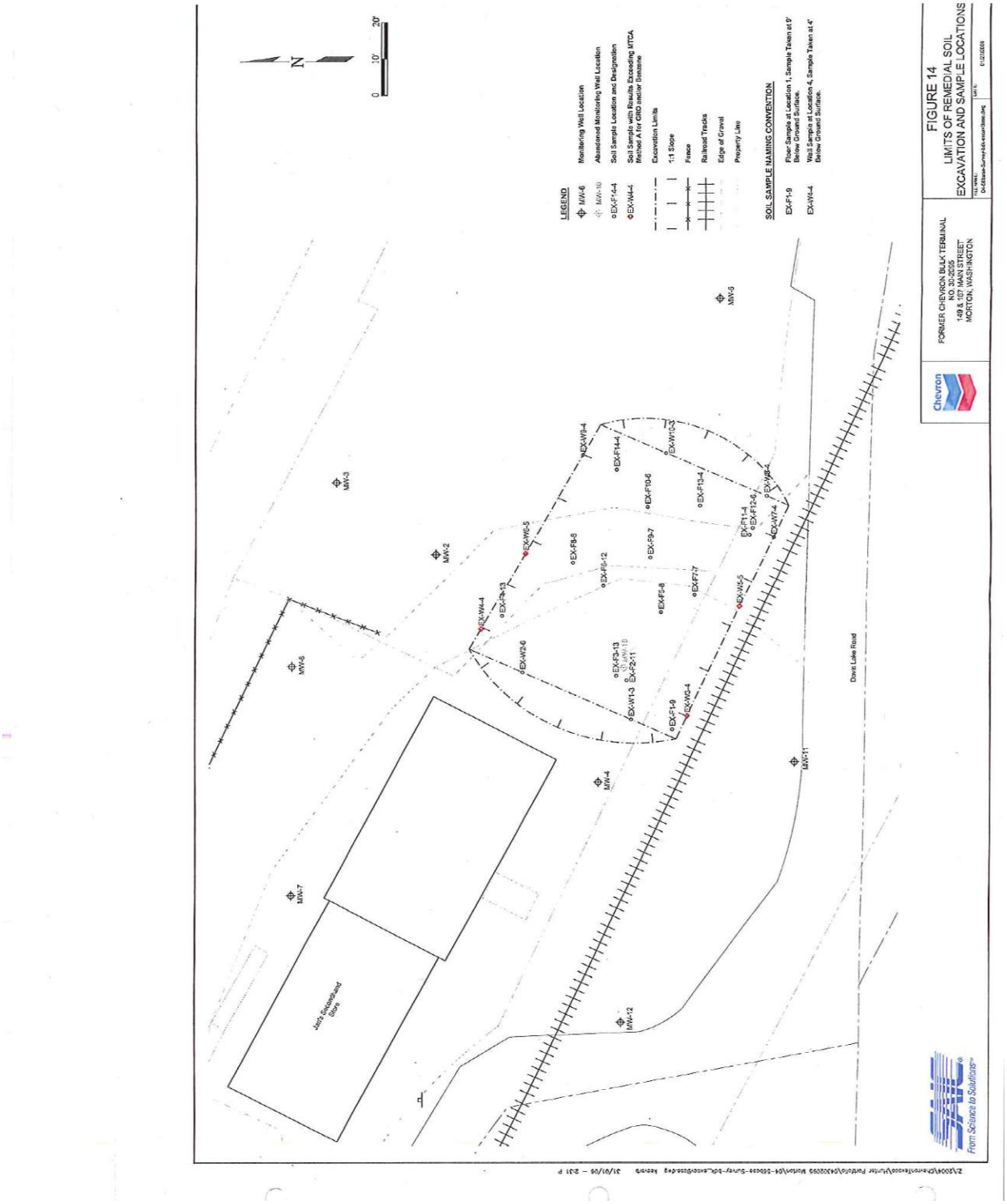


Table 4. Results of the Soil Excavation Confirmation Samples

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-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

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:

[1]Soil sample locations are shown on Figure 3.

[2]Analyzed by method 8021b

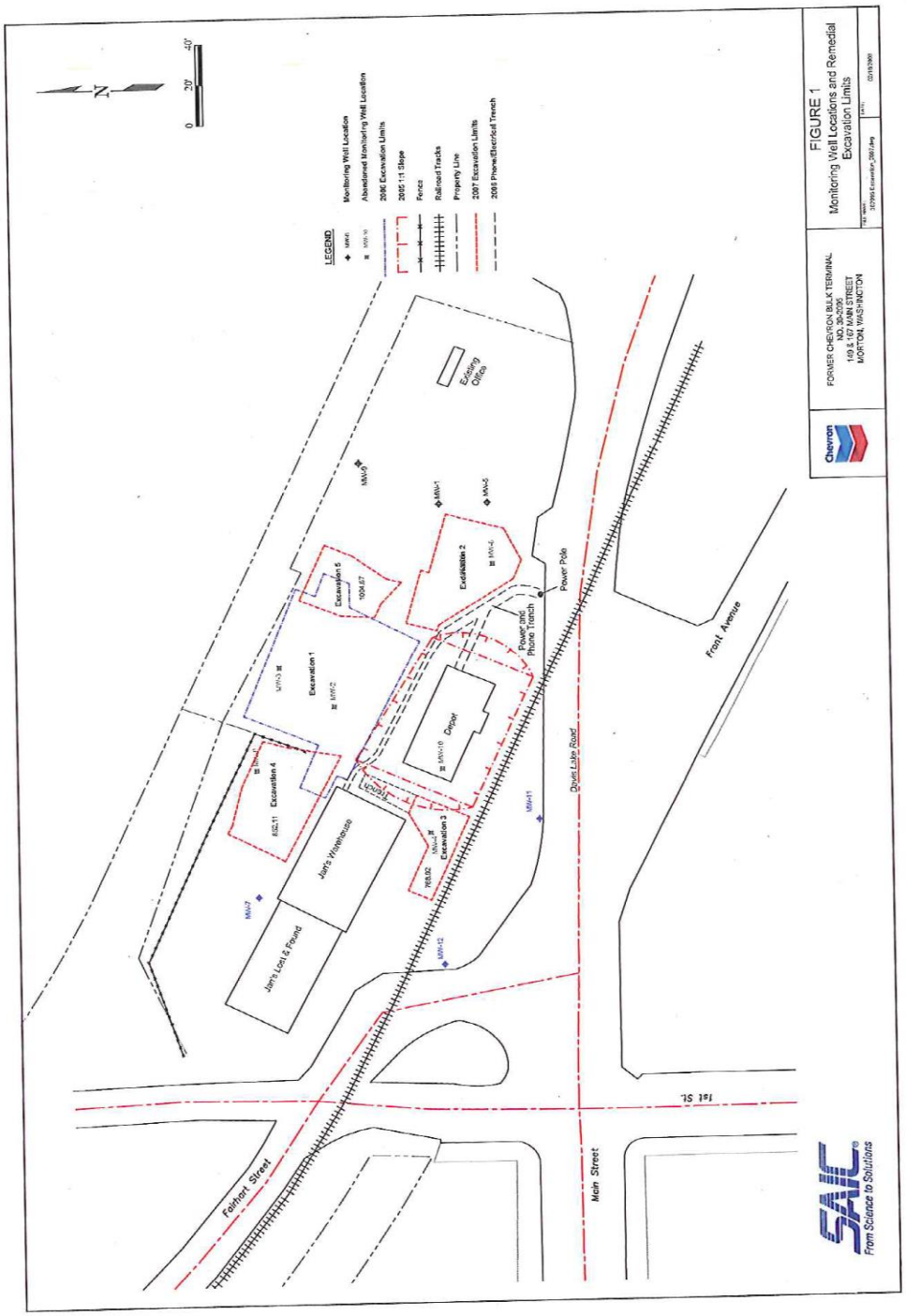
[3]Analyzed by method NWTPG-Gx

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

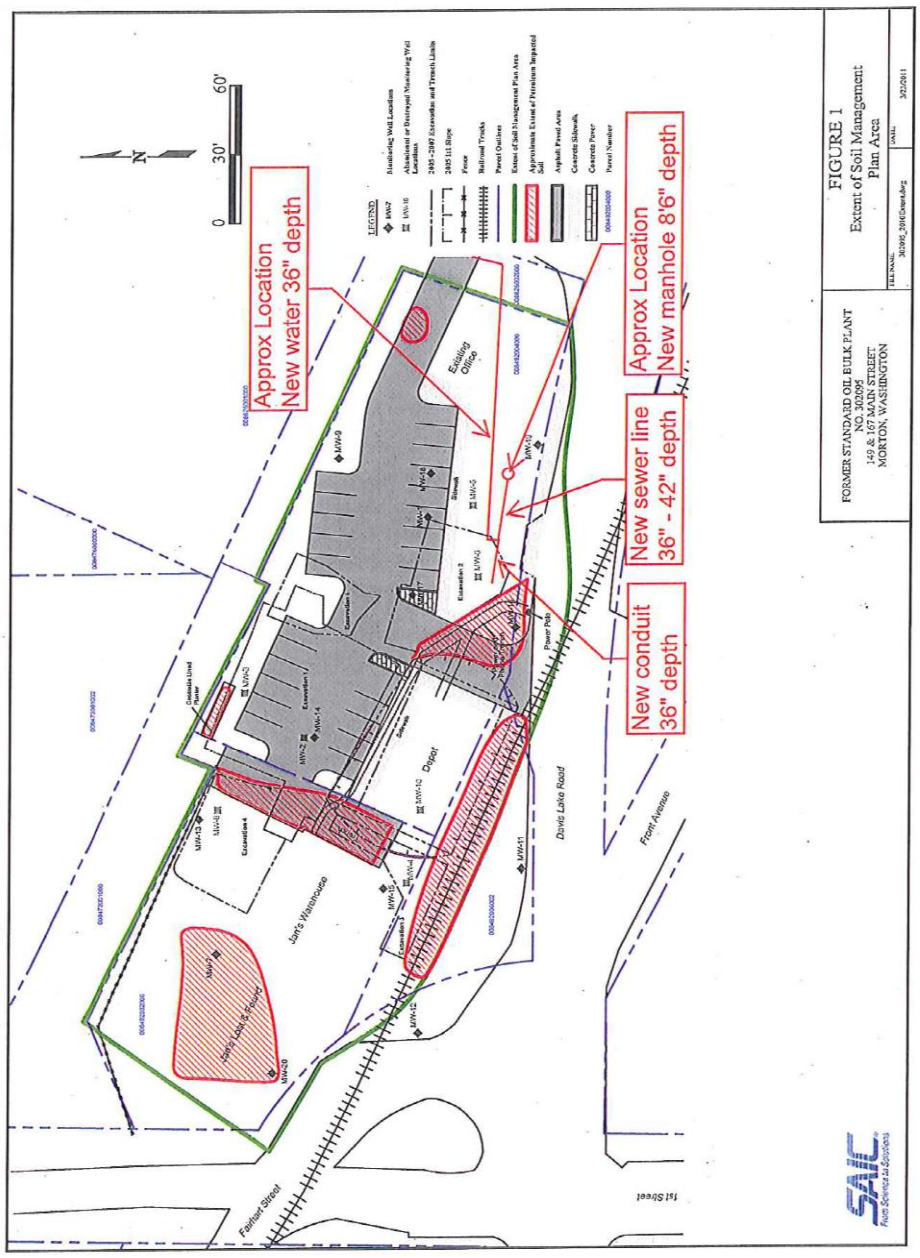
Bolded values indicate that the concentration is greater than the MTCA Method A deanup levels

nd = Not detected at or above the laboratory reporting limit

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 and Monitoring Results for Monitoring Wells MW-7, MW-15 and MW-16

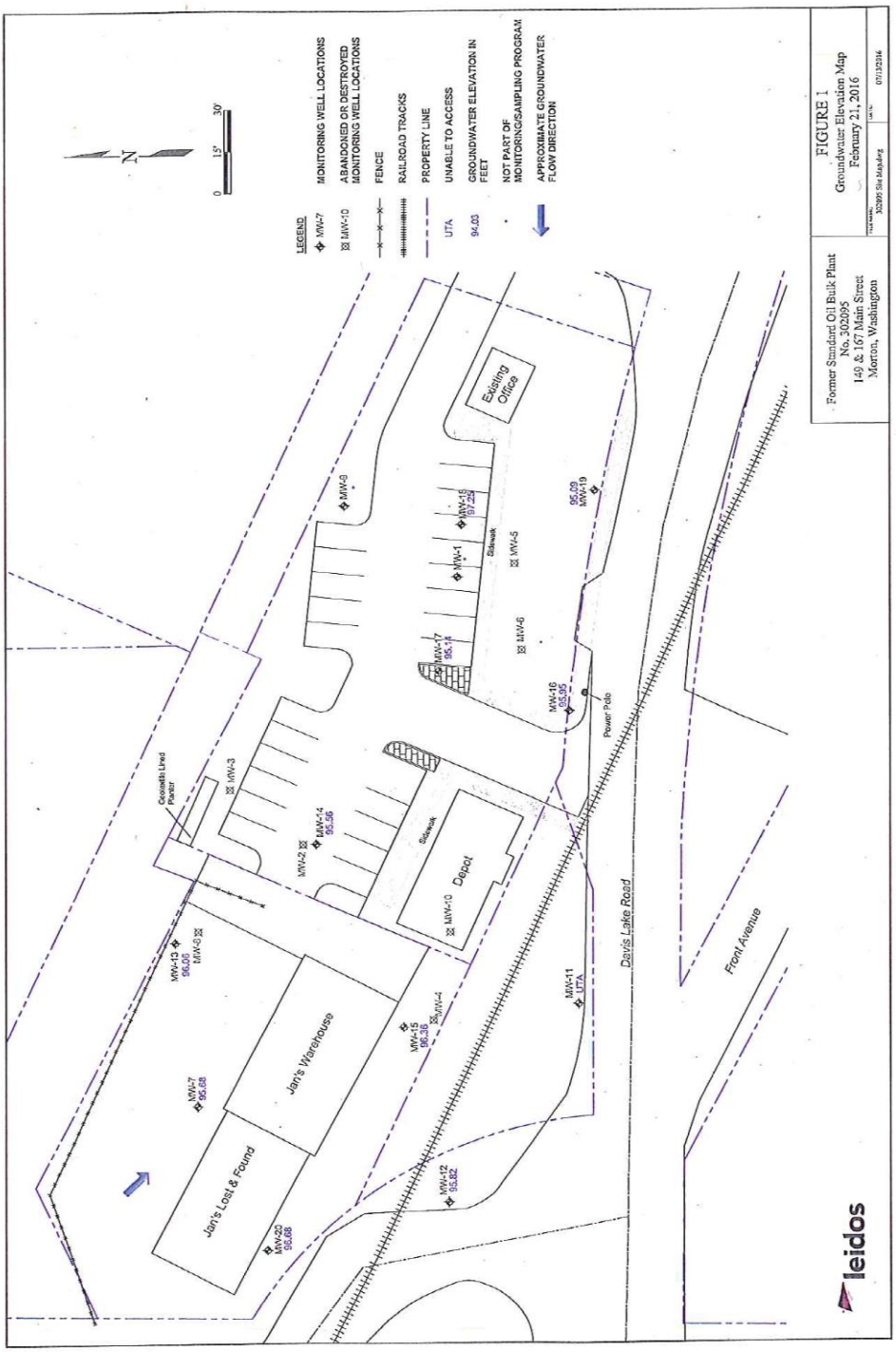


TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER STANDARD OIL BULK PLANT NO. 302095
149 and 167 Main Street
Morton, Washington
Concentrations reported in ug/L

Well ID/ Date	Purge Method	TOC[1] (ft.)	DTW (ft.)	GWE (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	D. Lead	T. Lead	Naphthalene	n-Hexane
MW-7																
10/11/04		99.89	3.79	96.10	570	<98	200	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
1/25/05		99.89	3.27	96.62	1,500	220	190	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
4/13/05		99.89	4.28	95.61	880	99	73	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
7/11/05		99.89	4.02	95.87	1,100	120	140	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
8/13/07		99.89	7.85	92.04	570	210	<50	<0.5	<0.5	<0.5	<1.5	--	<0.047	--	--	--
5/27/08	LFP	99.89	3.42	96.47	750	<97	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
12/2/08		99.90	3.59	96.31	--	--	--	--	--	--	--	--	--	--	--	--
3/18/09	LFP	99.90	3.29	96.61	360	<67	71	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
5/26-27/09	LFP	99.90	4.13	95.77	940	69	73	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
8/3-4/09	LFP	99.90	8.08	91.82	1,500	530	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
12/29-30/09	LFP	99.90	3.96	95.94	990	77	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
2/4-5/10	LFP	99.90	4.17	95.73	890	110	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
6/1/10	LFP	99.90	3.23	96.67	780	78	91	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
8/10/10	LFP	99.90	7.22	92.68	830	260	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
11/18/10	LFP	99.90	2.43	97.47	480	400	58	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
3/15/11	LFP	99.90	3.84	96.06	810	250	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
6/2/11	LFP	99.90	4.08	95.82	10,000	870	83	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
8/25/11	LFP	99.90	7.92	91.98	650	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
11/10/11	LFP	99.90	4.90	95.00	380	<69	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
2/9/12	LFP	99.90	4.25	95.65	130	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
5/31/12	LFP	99.90	4.90	95.00	430	<75	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
8/28/12	LFP	99.90	7.83	92.07	83	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
11/21/12	LFP	99.90	1.84	98.06	160	<70	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
2/8/13	LFP	99.90	3.29	96.61	310	<66	89	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
5/10/13	LFP	99.90	4.46	95.44	97	<67	60	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
8/8/13	LFP	99.90	7.23	92.67	51	<66	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
10/23/13	LFP	99.90	4.72	95.18	100	<66	65	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
2/25/14	LFP	99.90	3.23	96.67	140	<67	83	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
5/28/14	LFP	99.90	4.08	95.82	210	<66	100	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
8/26/14	LFP	99.90	7.23	92.67	110	<67	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
11/4/14	LFP	99.90	1.89	98.01	190	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
3/23-24/15	LFP	99.90	4.18	95.72	85	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
5/26-27/15	LFP	99.90	5.68	94.22	70	<68	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
8/13/15	LFP	99.90	8.78	91.12	760	<100	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
11/16-17/15	LFP	99.90	3.21	96.69	1,200	190	110	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
2/21-22/16	LFP	99.90	4.22	95.68	1,800	380	<50	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--

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Page 1 of 14

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER STANDARD OIL BULK PLANT NO. 302095
149 and 167 Main Street
Morton, Washington
Concentrations reported in µg/L

Well ID/ Date	Purge Method	TOC[1] (ft.)	DTW (ft.)	GWE (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	D. Lead	T. Lead	Naphthalene	n-Hexane
MW-15																
12/2/08		97.81	1.73	96.08	--	--	--	--	--	--	--	--	--	--	--	--
3/18/09	LFP	97.81	1.45	96.36	300	180	1,200	<0.5	<0.5	1	<0.5	<0.5	--	--	--	--
5/26-27/09	LFP	97.81	2.75	95.06	140	<69	1,500	<0.5	<0.5	1	<0.5	<0.5	--	--	--	--
8/3-4/09	LFP	97.81	5.59	92.22	190	<69	1,200	0.9	<0.5	1	<0.5	<0.5	--	--	--	--
12/29-30/09	LFP	97.81	2.48	95.33	230	<68	1,500	1.9	1.1	1.8	2.9	--	--	--	--	--
2/4-5/10	LFP	97.81	2.54	95.27	190	<69	1,600	1.7	1.1	1.9	3.2	--	--	--	--	--
6/1/10	LFP	97.81	1.67	96.14	82	<69	760	<0.5	0.7	0.9	<5.0	--	--	--	--	--
8/10/10	LFP	97.81	5.15	92.66	160	<69	1,300	1.5	0.9	1.3	<1.0	--	--	--	--	--
11/18/10	LFP	97.81	1.38	96.43	120	<66	830	1.2	0.8	0.9	<5.0	--	--	--	--	--
3/15/11	LFP	97.81	1.60	96.21	180	77	1,200	2.6	2.1	1.6	6.9	--	--	--	--	--
6/2/11	LFP	97.81	2.55	95.26	270	<71	1,300	1.6	<10	1.8	4.8	--	--	--	--	--
8/25/11	LFP	97.81	5.60	92.21	210	<69	870	1.3	<0.5	1.5	7.1	--	--	--	--	--
11/10/11	LFP	97.81	3.05	94.76	66	<69	750	<2.0	<5.0	1.3	6.7	--	--	--	--	--
2/10/12	LFP	97.81	2.50	95.31	35	160	820	<2.0	<6.0	2.1	5.8	--	--	--	--	--
5/30/12	LFP	97.81	2.50	95.31	110	<69	1,100	1.1	<8.0	2.4	7.8	--	--	--	--	--
8/28/12	LFP	97.81	5.53	92.28	190	<69	740	1.4	<5.0	1.9	5.4	--	--	--	--	--
11/21/12	LFP	97.81	1.93	95.88	57	<66	760	1.4	<5.0	2.0	5.6	--	--	--	--	--
2/7/13	LFP	97.81	1.78	96.03	47	<66	640	1.1	<6.0	1.8	<6.0	--	--	--	--	--
5/10/13	LFP	97.81	4.23	93.58	<29	<67	580	1.0	<4.0	0.9	<6.0	--	--	--	--	--
8/8/13	LFP	97.81	5.89	91.92	150	<66	630	1.3	<5.0	1.9	6.3	--	--	--	--	--
10/22/13	LFP	97.81	2.98	94.83	<30	<70	430	0.6	<3.0	0.8	2.3	--	--	--	--	--
2/25/14	LFP	97.81	1.54	96.27	38	<70	900	1	<5.0	1.6	6.8	--	--	--	--	--
5/28/14	LFP	97.81	2.32	95.49	36	<68	760	<2.0	<2.0	1.2	6.0	--	--	--	--	--
8/26/14	LFP	97.81	4.89	92.92	50	<67	870	<2.0	<2.0	1.5	<8.0	--	--	--	--	--
11/3/14	LFP	97.81	1.89	95.92	50	<69	360	0.9	<2.0	1	<5.0	--	--	--	--	--
3/23-24/15	LFP	97.81	1.91	95.90	48	<65	480	<0.5	1.2	1.1	<5.0	--	--	--	--	--
5/26-27/15	LFP	97.81	5.58	92.23	51	<68	580	<0.5	<2.0	1.6	<7.0	--	--	--	--	--
8/13/15	LFP	97.81	6.06	91.75	150	<110	900	1.0	1.1	1.7	5.4	--	--	--	--	--
11/16-17/15	LFP	97.81	1.75	96.06	78	<100	460	<0.5	<0.5	<0.5	2.6	--	--	--	--	--
2/21-22/16	LFP	97.81	1.45	96.36	69	<100	180	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
MW-16																
12/2/08		97.73	2.32	95.41	--	--	--	--	--	--	--	--	--	--	--	--
3/18/09	LFP	97.73	1.30	96.43	1,200	220	520	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
5/26-27/09	LFP	97.73	2.97	94.76	390	<69	680	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
8/3-4/09	LFP	97.73	5.36	92.37	540	<69	410	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--
12/29-30/09	LFP	97.73	2.80	94.93	710	100	500	0.6	0.6	<0.5	1.7	--	--	--	--	--
2/4-5/10	LFP	97.73	2.89	94.84	730	70	810	0.8	0.9	0.7	1.7	--	--	--	--	--
6/1/10	LFP	98.63	2.79	95.84	380	<69	1,400	<5.0	2.2	1.3	<1.5	--	--	--	--	--
8/10/10	LFP	98.63	6.33	92.30	240	<90	550	0.6	0.6	0.6	1.7	--	--	--	--	--
11/18/10	LFP	98.63	2.44	96.19	420	<68	710	0.8	1	0.9	1.8	--	--	--	--	--
3/15/11	LFP	98.63	2.71	95.92	1,500	440	890	2.6	2.2	1.1	3.8	--	--	--	--	--
6/2/11	LFP	98.63	3.60	95.03	2,400	320	490	0.5	<2.0	0.6	<5.0	--	--	--	--	--
8/25/11	LFP	98.63	6.60	92.03	230	<68	110	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
11/10/11	LFP	98.63	4.35	94.28	850	<69	510	0.5	0.6	0.8	2.9	--	--	--	--	--

TABLE 1
GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS
FORMER STANDARD OIL BULK PLANT NO. 302095
149 and 167 Main Street
Morton, Washington
Concentrations reported in ug/L

Well ID/ Date	Purge Method	TOC[1] (ft.)	DTW (ft.)	GWE (ft.)	TPH-DRO	TPH-HRO	TPH-GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	D. Lead	T. Lead	Naphthalene	n-Hexane
MW-16 (cont)																
2/10/12	LFP	98.63	3.35	95.28	71	<57	370	0.6	0.6	0.7	1.6	--	--	--	--	--
5/31/12	LFP	98.63	3.80	94.83	1,800	<70	530	0.7	0.6	1	2.7	--	--	--	--	--
8/28/12	LFP	98.63	6.39	92.24	42	<67	130	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
11/20/12	LFP	98.63	2.83	95.80	120	<66	390	0.6	0.5	0.6	<1.5	--	--	--	--	--
2/7/13	LFP	98.63	2.91	95.72	120	<66	480	0.7	0.5	0.8	<1.5	--	--	--	--	--
5/9/13	LFP	98.63	4.39	94.24	77	<68	450	0.6	<0.5	0.6	<5.0	--	--	--	--	--
8/8/13	LFP	98.63	6.23	92.40	400	<67	170	<0.5	<0.5	0.6	<1.5	--	--	--	--	--
10/23/13	LFP	98.63	4.16	94.47	99	<67	580	0.7	0.5	0.9	<5.0	--	--	--	--	--
2/25/14	LFP	98.63	2.64	95.99	120	<70	660	0.7	0.6	1	2.7	--	--	--	--	--
5/27/14	LFP	98.63	3.80	94.83	140	<67	650	0.6	0.5	0.9	2.5	--	--	--	--	--
8/25/14	LFP	98.63	5.87	92.76	57	<66	220	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
11/4/14	LFP	98.63	2.88	95.75	1,800	220	480	<2.0	0.7	1.1	<5.0	--	--	--	--	--
3/23-24/15	LFP	98.63	2.82	95.81	230	<68	220	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
5/26-27/15	LFP	98.63	4.72	93.91	93	<66	180	<0.5	<0.5	0.5	<2.0	--	--	--	--	--
8/13/15	LFP	98.63	7.13	91.50	150	<100	100	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--
11/16-17/15	LFP	98.63	2.98	95.65	1,700	250	1,700	1.3	1.2	1.5	2.1	--	--	--	--	--
2/21-22/16	LFP	98.63	2.68	95.95	760	<100	1,800	1.3	1.0	1.4	2.2	--	--	--	--	--

Explanations:
Analytical results in bold font indicate concentrations exceed MTCA Method A Cleanup levels.
1. TOC data to arbitrary 100 foot elevation surveyed by SAIC on December 2, 2008.
2. Laboratory analytical methods for historical data may not be consistent with list of current analytical methods. When necessary, consult original laboratory reports to verify methods used.
3 After October 2013, samples were analyzed without silica-gel clean up. TPH-DRO and TPH-HRO detections were also analyzed with silica-gel clean up and those results are listed.

Abbreviations:
(D) = Duplicate
D. Lead = Dissolved Lead
DTW = Depth to Water
(ft.) = Feet
GWE = Groundwater Elevation
LFP = Low Flow Purge
MTBE = Methyl Tertiary Butyl Ether
MTCA = Model Toxics Control Act
QA = Quality Assurance/Trip Blank
T. Lead = Total Lead
TOC = Top of Casing
TPH = Total Petroleum Hydrocarbons
TPH-DRO = TPH as Diesel-Range Organics
TPH-GRO = TPH as Gasoline-Range Organics
TPH-HRO = TPH as Heavy Oil-Range Organics
USEPA = United States Environmental Protection Agency
µg/L = Micrograms per liter
-- = Not Measured/Not Analyzed

6.10 Restrictive Covenant

RECEIVED RECEIVED

'11 JUL 26 A10:40 '11 MAY 23 A10:16

DEPARTMENT OF ECOLOGY
SW REGIONAL OFFICE DEPARTMENT OF ECOLOGY
SW REGIONAL OFFICE

3364699 COV
07/01/2011 08:51:16 AM Total Pages: 7 Fees: 68.00
Gary E. Zandell, 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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[INDIVIDUAL ACKNOWLEDGMENT]

STATE OF Washington
COUNTY OF Lewis

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.

SARAH E. MOORE NOTARY PUBLIC STATE OF WASHINGTON COMMISSION EXPIRES 10-09-14

RECEIVED '11 JUL 26 A10:40

RECEIVED '11 MAY 23 A10:17

[INDIVIDUAL ACKNOWLEDGMENT]

STATE OF Washington
COUNTY OF Lewis

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 THAMES
NOTARY PUBLIC
COMMISSION EXPIRES
04/28/2012
STATE OF WASHINGTON

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

RECEIVED JUL 26 AM 10

RECEIVED MAY 23 AM 10:17

Cowlitz River Valley Historical Society

Marc Fisher

DEPARTMENT OF ECOLOGY
SW REGIONAL OFFICE

Marc Fisher
President

Dated: 5-20-2011

Jan's Lost and Found Thrift Shop

Laurie Powell, Lori L.

DEPARTMENT OF ECOLOGY
SW REGIONAL OFFICE

~~Laurie~~ Powell
President

Dated: April 14, 2011

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Rebecca Lawson

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

Dated: 5/31/2011

Exhibit A
Legal Description

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: Asphalt Pavement – from the Southeast

Photo 3: Train Depot Museum and – from the South

Photo 4: Train Depot Museum and Asphalt Pavement – from the Northeast

Photo 5: Train Depot Museum and Asphalt Pavement – from the North

Photo 6: Jan's Lost & Found Thrift Shop and the Train Depot Museum-from the Southwest

Photo 7: Jan's Lost & Found Thrift Shop – from the Southeast

Photo 8: Groundwater Monitoring Well MW-09