

March 5, 2014

Cardno ERI 03122701L.R07

Cardno ERI  
License ENVIRRI044JD

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**SUBJECT      System Installation Design Report**

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Grant County Airport  
Former Fueling Facilities  
7810 Andrews Street Northeast  
Moses Lake, Washington

Mr. Thom:

At the request of ExxonMobil Environmental Services (EMES), on behalf of ExxonMobil Oil Corporation (ExxonMobil), Cardno ERI prepared this system installation design report for the subject site. The proposed work consists of the installation of NAPL skimmers, filters, product piping, and secondary containment for NAPL recovery and storage.

**SITE DESCRIPTION**

Grant County Airport is located immediately north of the City of Moses Lake in Grant County, Washington. The site lies at an elevation of approximately 1,170 feet above msl (Plate 1). Former ExxonMobil-leased facilities include fueling hydrants located in the southern portion of the airport, two aboveground storage tanks (ASTs) (Storage Tank #38 and #24, with capacities of 54,390 barrels (bbl) and 27,426 bbl, respectively) located south of the airport, and associated product piping runs, all of which have historically been used to dispense jet fuel. The generalized site plan for Pumphouse #1 is shown on Plate 2.

March 5, 2014  
Cardno ERI 03122701L.R07 Grant County Airport, Moses Lake, Washington

## PREVIOUS WORK

Environmental investigation and remediation activities have been conducted at the site by various consultants since 1992. Previous assessment and remedial work has included the advancement of soil borings, well installation, well destruction, UST decommissioning, and NAPL recovery. Cumulative soil analytical results are summarized in Table 1. Cumulative groundwater analytical results are summarized in Table 2. Based on a review of current and historical data, JP-4/diesel #1 (Jet A Fuel) has been observed in the water-bearing zone at approximately 90 feet bgs in the vicinity of Pumphouse #1.

Previous consultants indicate that periodic groundwater monitoring and sampling activities were initiated on January 28, 1993. Periodic NAPL removal has occurred on the site beginning in 1993. Remedial activities have included hand-bailing, passive skimmers, and the installation of NAPL recovery systems. A total of approximately 140 gallons of hydrocarbons had reportedly been recovered from the site through 2006. Semiannual groundwater monitoring and sampling activities conducted in 2010 and 2011 indicate measurable NAPL in 7 of 17 wells installed in the vicinity of Pumphouse #1 ranging from 0.11 to 2.69 feet in thickness (Cardno ERI, 2012).

Cardno ERI conducted a bailedown test at the subject site in 2010 to determine the conductivity of the NAPL through the site and the recoverability of the NAPL (Cardno ERI, 2011). Results of the bailedown test indicated that NAPL conductivity and NAPL recharge in the wells on the site is very low, in the range of 0.0023 ft/day. Based on these results, it was determined that an intermittent recovery system would be a feasible NAPL recovery approach.

## PROPOSED SYSTEM INSTALLATION

Cardno ERI proposes the installation of NAPL recovery skimmers with hydrophobic floating filters, specified for Jet A Fuel, in up to five wells at a time to remove NAPL. Continuous NAPL recovery systems will not be employed in favor of intermittent recovery systems which require less maintenance and lower NAPL recharge rates. In addition, assumed variability in NAPL recharge rates will require that each well be controlled separately. Proposed recovery wells were chosen based upon the continual presence of measurable NAPL, as indicated in the cumulative groundwater analytical results (Table 2).

The proposed NAPL recovery system will consist of a pneumatic ADJ200 Smart Skimmer and a programmable XiTech Instruments, Inc. (XiTech) Controller Model 5010E which operates the skimmer intermittently, records run time, and will be provided with two high level tank sensors (one High for high level alarm and a High-High level alarm that will shut the system down). The 5010E controller has the ability to control up to 8 wells independently, which will allow each of the wells to be pumped separately for the pre-determined amount of time to account for the

March 5, 2014  
Cardno ERI 03122701L.R07 Grant County Airport, Moses Lake, Washington

variable NAPL recharge rates and thicknesses in each well. The electrical connection for the air compressor and the pump controller will be pulled from an existing connection outside Pumphouse No. 1. The electrical line will be run underground from the pump house to the XiTech controller box with a toning wire and warning strip placed 6" above the electrical conduit.

The control system will monitor the system's alarm conditions and provide fault notification through cellular communications (autodialer). The telemetry system will provide alarm notification via voice message and/or text message. The system will allow for a tiered notification list, with a user-defined delay before notifying the next tier if an alarm condition is not acknowledged by the previous tier. The telemetry system will have battery backup and be able to provide notification that a power failure has occurred. The control system will also activate system status lights (green for "OK", red for "Alarm") visible near the pump control box. The monitoring system will be supplied by the contractor.

The vapor sensors for the secondary containment piping will be Omntec BX-VS solid state sensors, or engineer approved equal, and placed inside the piping near the end of the run as the piping comes out of the ground. The secondary containment piping will increase in diameter to 3" approximately 3 feet prior to exiting the ground, as shown on Plate 3. All of the sensors will be connected to an Omntec OEL8000II automatic tank-gauging and leak-detection system or engineer approved equal, for system monitoring. The leak detection system will have an alarm output to the autodialer and to the XiTech pump controller to shut off the pumping system.

Trenches will be dug from the controller to each well that will be used for NAPL recovery, as depicted on Plate 3. Each secondary containment pipe will include piping for NAPL recovery and air supply for each pneumatic skimmer. Vapor sensors will be installed in the interstitial space of each of the secondary containment pipes surrounding the product recovery lines that will stop system operation if the concentration reaches 20 ppm. The vapor sensors and wiring will be supplied by the contractor and must be compatible with the telemetry system. All piping trenches will have toning wire and warning strip placed 6" above piping.

Recovered NAPL will be stored in an on-site double-walled aboveground storage tank (AST). The AST will be constructed of mild carbon steel and will hold up to 1,000 gallons, but no more than 1,100 gallons. The AST will be painted using urethane based paint. A palette of available colors will be sent to the project manager prior to painting the tank for client review and color selection. The tank will be equipped with a vent open to the atmosphere appropriate for hydrocarbon storage. The secondary containment will be designed to hold a minimum of 110% of the holding tank capacity and will be installed with a liquid sensor and a vapor sensor in the interstitial space between the tank walls that will shut the system down to prevent release of any liquid to the environment in the event of a failure of the AST. The proposed system setup and critical equipment is shown on the Piping &

March 5, 2014  
Cardno ERI 03122701L.R07 Grant County Airport, Moses Lake, Washington

Instrumentation Diagram (Plate 4). The fieldwork will be conducted under the advisement of a professional engineer and in accordance with applicable regulatory guidelines.

The gravel pad will be a minimum of 10' by 30' and a minimum of 6" deep. The gravel will consist of granular material either naturally occurring or processed. It will be essentially free from various types of wood waste or other extraneous or objectionable materials. The pad will be compacted to 95% of the maximum density.

Sieve Size	Percent Passing
2"	75-100
No. 4	22-100
No. 200	0-10
Dust Ratio:	% max.
Sand Equivalent	30 min.

All percentages are by weight.

## Report

After completion of the proposed system installation, a report summarizing field activities will be submitted to EMES and the Washington State Department of Ecology (Ecology). The report will be signed by a State of Washington professional engineer.

## LIMITATIONS

For any documents cited that were not generated by Cardno ERI, the data taken from those documents is used "as is" and is assumed to be accurate. Cardno ERI does not guarantee the accuracy of this data and makes no warranties for the referenced work performed nor the inferences or conclusions stated in these documents.

This report and the works performed have been undertaken in good faith, with due diligence and with the expertise, experience capability and specialized knowledge necessary to perform the Work in a good and workmanlike manner and within all accepted standards pertaining to providers of environmental services, in Washington at the time of investigation. No soil engineering or geotechnical references are implied or should be inferred. The evaluation of the geologic conditions at the site for this investigation is made from a limited number of data points. Subsurface conditions may vary away from these data points.

March 5, 2014  
Cardno ERI 03122701L.R07 Grant County Airport, Moses Lake, Washington

Cardno ERI appreciates the opportunity to provide assistance on this project. Please contact Michael J. Miller, Cardno ERI's project manager for the site, at 206 767 2360, if you have any questions.

Sincerely,



Michael J. Miller  
Project Manager  
for Cardno ERI  
Direct Line 206 767 2360  
Email: [michael.miller@cardno.com](mailto:michael.miller@cardno.com)



Ryan Pozzuto  
Program Manager  
for Cardno ERI  
Direct Line 206 575 1527  
Email: [ryan.pozzuto@cardno.com](mailto:ryan.pozzuto@cardno.com)

## ENCLOSURES

References

Acronym List

Plate 1	Site Location Map
Plate 2	Generalized Site Plan (Pumphouse #1)
Plate 3	Proposed Remediation System Trenching Map
Plate 4	Piping & Instrumentation Diagram

Table 1	Cumulative Soil Analytical Results
Table 2	Cumulative Groundwater Analytical Results

March 5, 2014  
Cardno ERI 03122701L.R07 Grant County Airport, Moses Lake, Washington

## REFERENCES

Cardno ERI. January 6, 2011. *Baildown Test Report, Grant County Airport, Former Fueling Facilities, 7810 Andrews Street Northeast, Moses Lake, Washington.*

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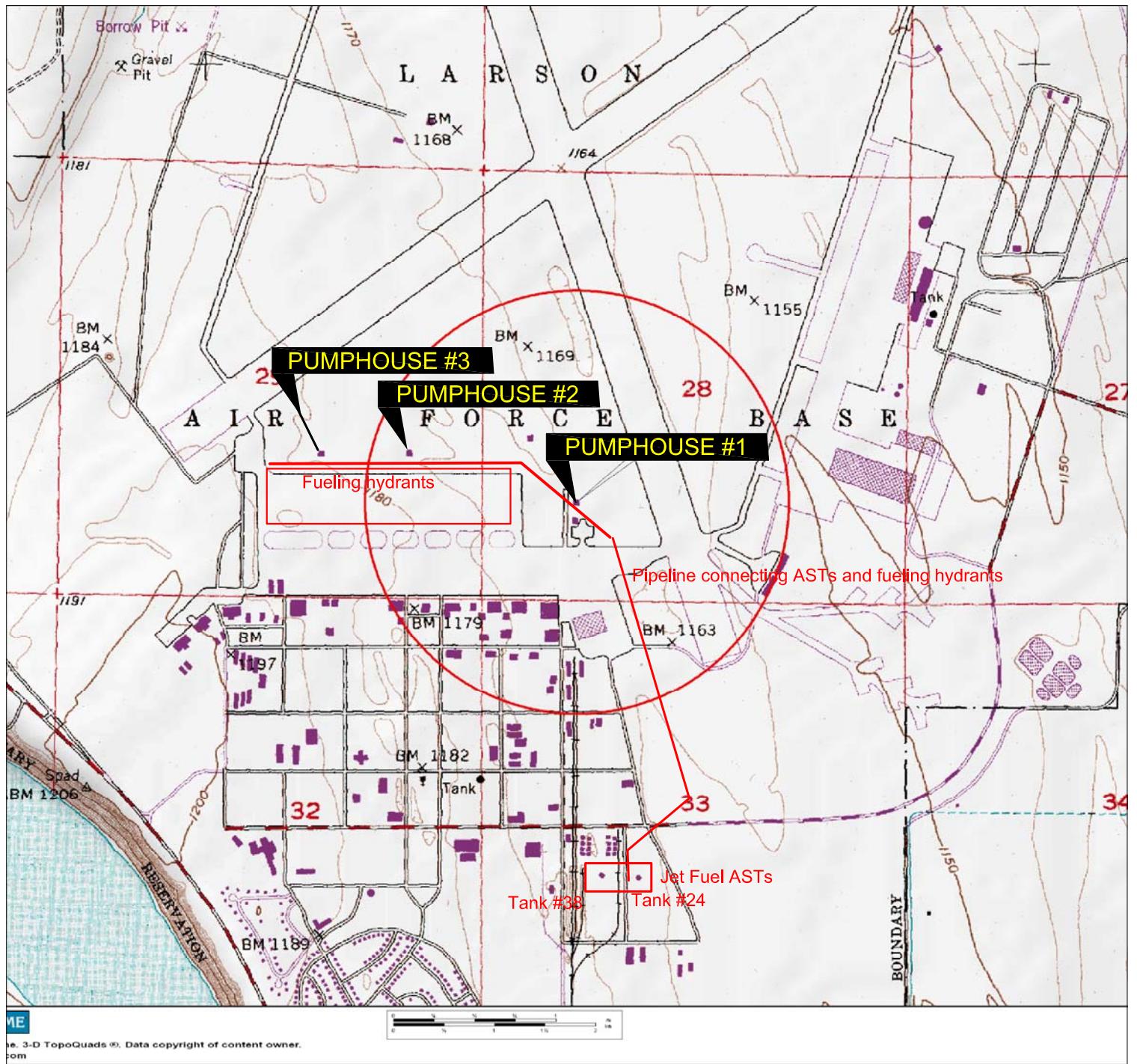
March 5, 2014  
Cardno ERI 03122701L.R07 Grant County Airport, Moses Lake, Washington

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March 5, 2014  
Cardno ERI 03122701L.R07 Grant County Airport, Moses Lake, Washington

## ACRONYM LIST

$\mu\text{g/L}$	Micrograms per liter	NEPA	National Environmental Policy Act
$\mu\text{s}$	Microsiemens	NGVD	National Geodetic Vertical Datum
1,2-DCA	1,2-dichloroethane	NPDES	National Pollutant Discharge Elimination System
acf m	Actual cubic feet per minute	O&M	Operations and Maintenance
AS	Air sparge	ORP	Oxidation-reduction potential
bgs	Below ground surface	OSHA	Occupational Safety and Health Administration
BTEX	Benzene, toluene, ethylbenzene, and total xylenes	OVA	Organic vapor analyzer
CEQA	California Environmental Quality Act	P&ID	Process & Instrumentation Diagram
cfm	Cubic feet per minute	PAH	Polycyclic aromatic hydrocarbon
COC	Chain of Custody	PCB	Polychlorinated biphenyl
CPT	Cone Penetration (Penetrometer) Test	PCE	Tetrachloroethene or perchloroethylene
DIPE	Di-isopropyl ether	PID	Photo-ionization detector
DO	Dissolved oxygen	PLC	Programmable logic control
DOT	Department of Transportation	POTW	Publicly owned treatment works
DPE	Dual-phase extraction	ppmv	Parts per million by volume
DTW	Depth to water	PQL	Practical quantitation limit
EDB	1,2-dibromoethane	psi	Pounds per square inch
EPA	Environmental Protection Agency	PVC	Polyvinyl chloride
ESL	Environmental screening level	QA/QC	Quality assurance/quality control
ETBE	Ethyl tertiary butyl ether	RBSL	Risk-based screening levels
FID	Flame-ionization detector	RCRA	Resource Conservation and Recovery Act
fpm	Feet per minute	RL	Reporting limit
GAC	Granular activated carbon	scfm	Standard cubic feet per minute
gpd	Gallons per day	SSTL	Site-specific target level
gpm	Gallons per minute	STLC	Soluble threshold limit concentration
GWPTS	Groundwater pump and treat system	SVE	Soil vapor extraction
HVOC	Halogenated volatile organic compound	SVOC	Semivolatile organic compound
J	Estimated value between MDL and PQL (RL)	TAME	Tertiary amyl methyl ether
LEL	Lower explosive limit	TBA	Tertiary butyl alcohol
LPC	Liquid-phase carbon	TCE	Trichloroethene
LRP	Liquid-ring pump	TOC	Top of well casing elevation; datum is msl
LUFT	Leaking underground fuel tank	TOG	Total oil and grease
LUST	Leaking underground storage tank	TPHd	Total petroleum hydrocarbons as diesel
MCL	Maximum contaminant level	TPHg	Total petroleum hydrocarbons as gasoline
MDL	Method detection limit	TPHmo	Total petroleum hydrocarbons as motor oil
mg/kg	Milligrams per kilogram	TPHs	Total petroleum hydrocarbons as stoddard solvent
mg/L	Milligrams per liter	TRPH	Total recoverable petroleum hydrocarbons
mg/m <sup>3</sup>	Milligrams per cubic meter	UCL	Upper confidence level
MPE	Multi-phase extraction	USCS	Unified Soil Classification System
MRL	Method reporting limit	USGS	United States Geologic Survey
msl	Mean sea level	UST	Underground storage tank
MTBE	Methyl tertiary butyl ether	VCP	Voluntary Cleanup Program
MTCA	Model Toxics Control Act	VOC	Volatile organic compound
NAI	Natural attenuation indicators	VPC	Vapor-phase carbon
NAPL	Non-aqueous phase liquid		



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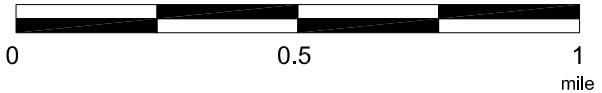
## EXPLANATION



1/2-mile Radius Circle From Pumphouse #1

**DRAFT**

## APPROXIMATE SCALE



SOURCE:  
Modified from a map  
provided by  
DeLorme 3-D TopoQuads



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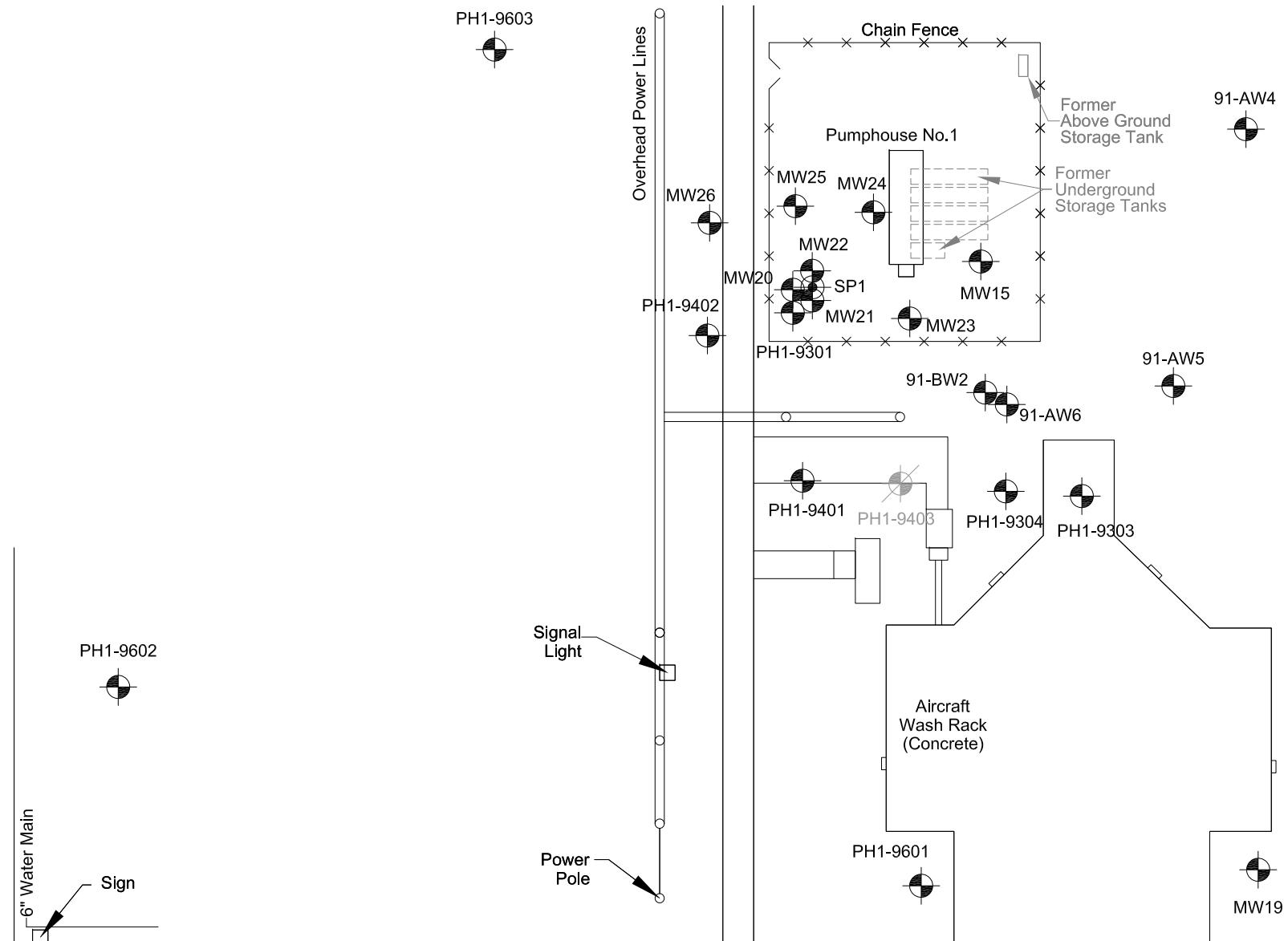
Shaping the Future

## SITE LOCATION MAP

GRANT COUNTY AIRPORT  
FORMER FUELING FACILITIES  
7810 Andrews Street Northeast  
Moses Lake, Washington

PROJECT NO.  
031227

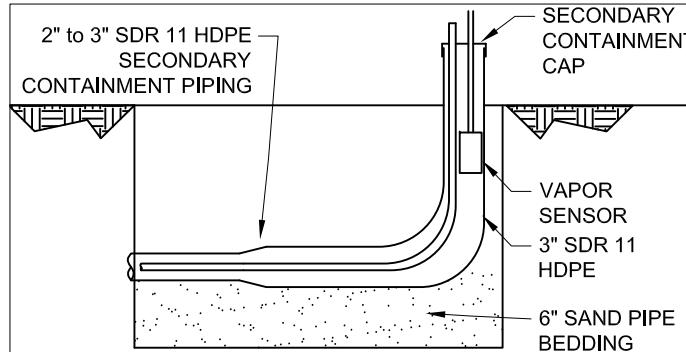
PLATE  
1  
NAG: 01/12/12



APPROXIMATE SCALE  
0 100 200  
Feet

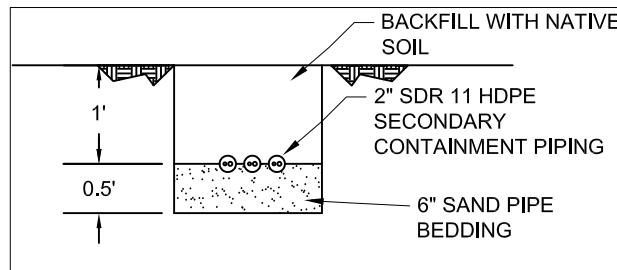
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Secor International Inc.

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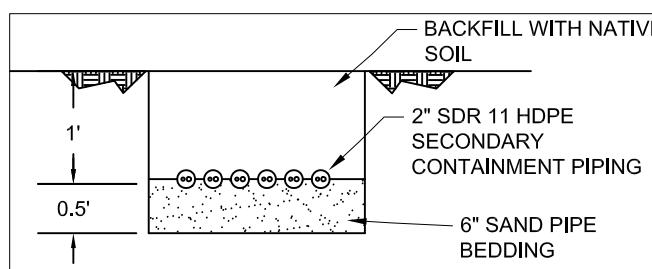


PH1-9603

VAPOR SENSOR INSTALLATION DETAIL



A TRENCH CROSS-SECTION



B TRENCH CROSS-SECTION

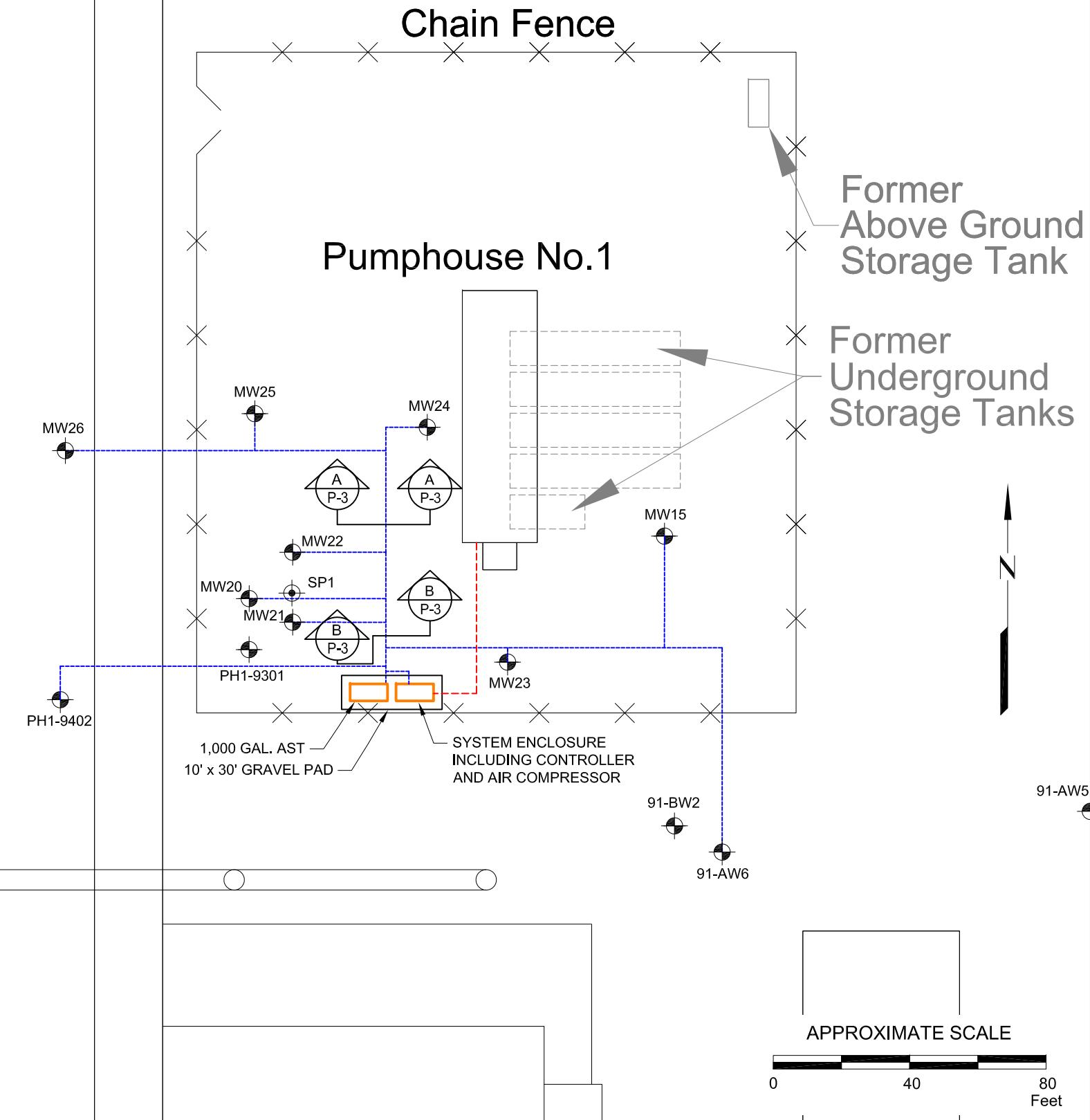
PIPING SCHEDULE

SERVICE	UNDERGROUND / ABOVEGROUND	PIPE MATERIAL	INSULATION REQUIRED
AIR	UNDERGROUND	WHITE NYLON	NO
AIR	ABOVEGROUND	WHITE NYLON	NO
PRODUCT	UNDERGROUND	NITRILE (BUNA N)	NO
PRODUCT	ABOVEGROUND	NITRILE (BUNA N)	YES
SECONDARY CONTAINMENT	UNDERGROUND	SDR 11 HDPE	NO
SECONDARY CONTAINMENT	ABOVEGROUND	SDR 11 HDPE	NO

SOURCE:  
Modified from a map provided by  
Secor International Inc.

FN 0312270002

Overhead Power Lines



**EXPLANATION**

- PH1-9603 Groundwater Monitoring Well
- SP1 Steam Injection Well
- Proposed Remediation System Trenching
- Proposed Remediation System Electrical

Proposed Remediation Compound

**DRAFT**

**PROJECT NO.**  
031227

**PLATE**  
3

EJB: 10/11/13

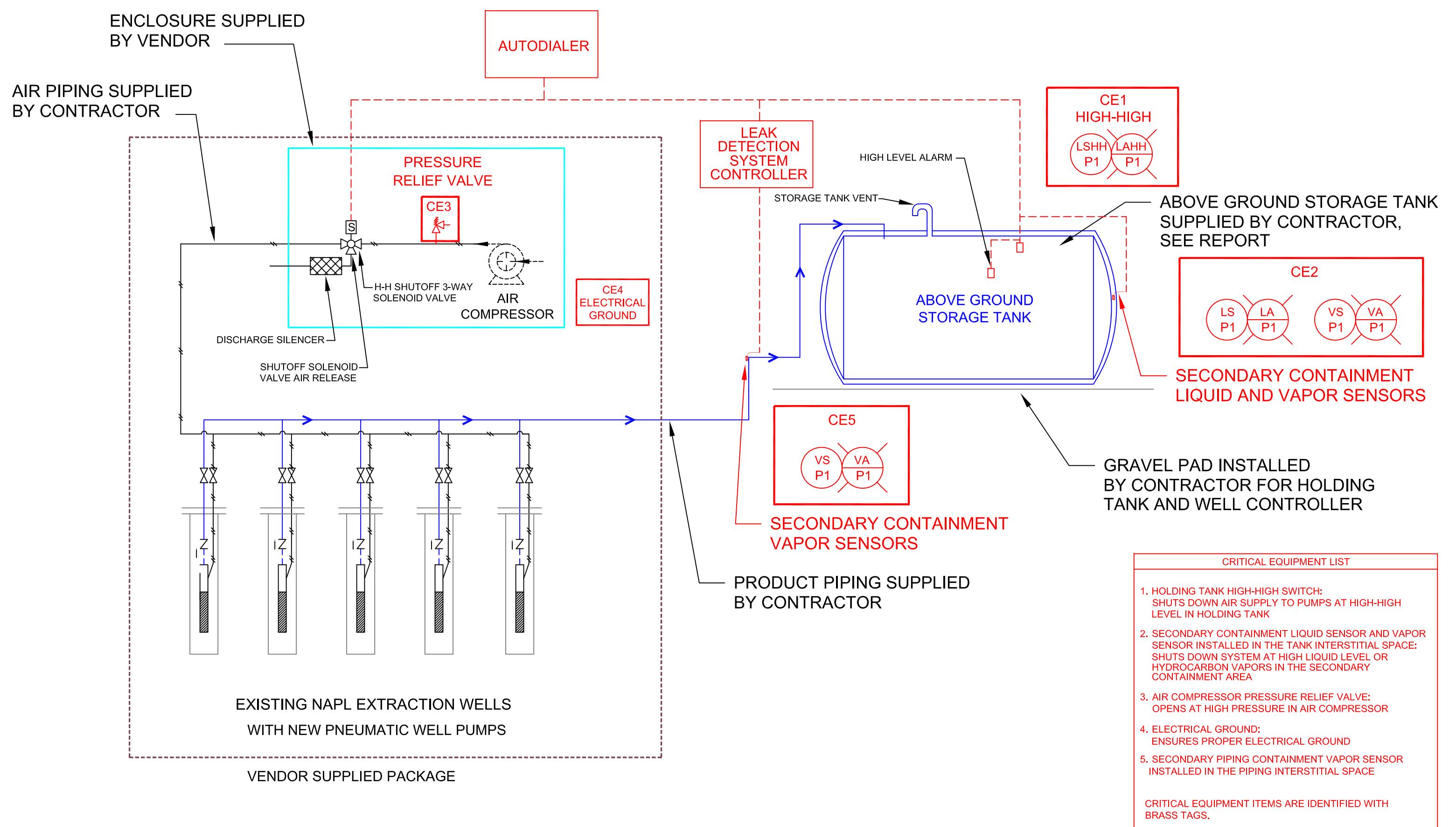






TABLE 1  
CUMULATIVE SOIL ANALYTICAL RESULTS  
Grant County Airport  
Former Fueling Facilities  
7810 Andrews Street Northeast  
Moses Lake, Washington  
Page 3 of 3

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EXPLANATION:

mg/kg = milligram per kilogram

ft bgs = feet below ground surface

TPH as Jet A Fuel = Total Petroleum Hydrocarbons in the Jet A Fuel Range (C9-C15) in accordance with EPA Method 8015

TPHg = Total Petroleum Hydrocarbons as Gasoline in accordance with Ecology Method NWTPH-Gx

TPHd, TPHmo = Total Petroleum Hydrocarbons as Diesel and as Motor Oil, respectively, in accordance with Ecology Method NWTPH-Dx

B = Benzene; T = Toluene; E = Ethylbenzene; X = Total Xylenes

BTEX = Aromatic compounds in accordance with EPA Method 8260B

Total Lead in accordance with EPA Method 6010B

TOC = Total Organic Carbon in accordance with EPA Method 9060

Total Heterotroph = Enumeration of total microbial plate count, refer to laboratory reports for description of analytical method. Plate count results represent the mean value and standard deviation of triplicate platings.

Diesel Degraders = Enumeration of diesel degraders, refer to laboratory reports for description of analytical method. Diesel degraders represent cell growth in the presence of diesel as the sole carbon sources.

CFU/g = Colony forming units per gram of soil sample on an as received basis

Shaded values equal or exceed MTCA Method A Cleanup Levels

NA = Not applicable

ND = Non-detect

-- = Not analyzed

< = Less than the stated laboratory reporting limit

a = TPHg soil cleanup level is 30 mg/kg, unless benzene is not detected in the sample, or if toluene, ethylbenzene, and total xylenes constitute < 1% of the TPHg present in the sample. If these conditions are met, the cleanup level for TPHg may be elevated to 100 mg/kg.

b = Sample S-20-B3 results are reported on a wet weight basis

**TABLE 2**  
**CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Grant County Airport  
Former Fueling Facilities

7810 Andrews Street Northeast  
Moses Lake, Washington

Page 1 of 15

Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	2-Methylnaphthalene (µg/L)
Screen Interval 79-99 ft bgs / Total Well Depth 99 ft bgs													
91-AW4	05/25/04	1,169.47	91.69	0.00	1,077.78	--	--	--	--	--	--	--	--
91-AW4	09/09/04	1,169.47	91.80	0.00	1,077.67	--	0.15	--	--	--	--	--	--
91-AW4	11/11/04	1,169.47	91.10	0.00	1,078.37	--	ND/NDc	--	--	--	--	--	--
91-AW4	03/22/05	1,169.47	91.88	0.00	1,077.59	--	ND	--	--	--	--	--	--
91-AW4	06/02/05	1,169.47	91.99	0.00	1,077.48	--	ND	--	--	--	--	--	--
91-AW4	09/27/05	1,169.47	92.11	0.00	1,077.36	--	0.132	--	--	--	--	--	--
91-AW4	12/02/05	1,169.47	91.94	0.00	1,077.53	--	ND	--	--	--	--	--	--
91-AW4	03/28/06	1,169.47	90.81	0.00	1,078.66	--	ND	--	--	--	--	--	--
91-AW4	06/06/06	1,169.47	90.49	0.00	1,078.98	--	ND	--	--	--	--	--	--
91-AW4	10/19/07 d	1,169.47	90.34	0.00	1,079.13	<250	136	<118	<1.00	<1.00	<1.00	<3.00	<2.05
91-AW4	05/12/08	1,169.47	90.70	0.00	1,078.77	--	--	--	--	--	--	--	--
91-AW4	05/13/08	1,169.47	NM	--	--	--	--	--	--	--	--	--	--
91-AW4	05/14/08	1,169.47	90.66	0.00	1,078.81	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	--
91-AW4	12/30/08	1,169.47	91.76	0.00	1,077.71	--	--	--	--	--	--	--	--
91-AW4	12/31/08	1,169.47	91.74	0.00	1,077.73	<100	<100	<100	<1.00	<1.00	<1.00	<3.00	--
91-AW4	06/22/09	1,169.47	90.94	0.00	1,078.53	--	--	--	--	--	--	--	--
91-AW4	06/23/09	1,169.47	91.03	0.00	1,078.44	<100	<97.1	<97.1	<1.00	<1.00	<1.00	<3.00	--
91-AW4	11/04/09	1,169.47	90.56	0.00	1,078.91	--	--	--	--	--	--	--	--
91-AW4	11/05/09	1,169.47	90.67	0.00	1,078.80	<100	<99.0	<99.0	<1.00	<1.00	<1.00	<3.00	--
91-AW4	05/19/10	1,169.47	91.79	0.00	1,077.68	--	--	--	--	--	--	--	--
91-AW4	05/20/10	1,169.47	92.83	0.00	1,076.64	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	--
91-AW4	11/08/10	1,169.47	90.27	0.00	1,079.20	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	--
91-AW4	11/09/10	1,169.47	NM	--	--	--	--	--	--	--	--	--	--
91-AW4	05/17/11	1,169.47	90.76	0.00	1,078.71	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	--
91-AW4	05/18/11	1,169.47	NM	--	--	--	--	--	--	--	--	--	--
91-AW4	12/14/11	1,169.47	90.63	0.00	1,078.84	--	--	--	--	--	--	--	--
91-AW4	12/15/11	1,169.47	90.79	0.00	1,078.68	<100	<99.0	<248	<1.00	<1.00	<1.00	<3.00	--
Screen Interval 79-99 ft bgs / Total Well Depth 99 ft bgs													
91-AW5	10/19/07	1,170.25	NM	--	--	--	--	--	--	--	--	--	--
91-AW5	05/12/08	1,170.25	91.85	0.00	1,078.40	--	--	--	--	--	--	--	--
91-AW5	05/13/08	1,170.25	NM	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels						800/1,000 <sup>a</sup>	500	500	5	1,000	700	1,000	NA



**TABLE 2**  
**CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**  
Grant County Airport  
Former Fueling Facilities  
7810 Andrews Street Northeast  
Moses Lake, Washington  
Page 3 of 15

Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	2-Methylnaphthalene (µg/L)
91-AW6	06/23/09	1,170.38	Inaccessible	--	--	--	--	--	--	--	--	--	--
91-AW6	05/19/10	1,170.38	95.03	<b>2.56</b>	1,077.40	<b>NAPL Present</b>							
91-AW6	05/20/10	1,170.38	NM	--	--	--	--	--	--	--	--	--	--
91-AW6	11/08/10	1,170.38	94.64	<b>1.62</b>	1,077.04	<b>NAPL Present</b>							
91-AW6	11/09/10	1,170.38	NM	--	--	--	--	--	--	--	--	--	--
91-AW6	05/17/11	1,170.38	92.58	<b>0.24</b>	1,077.99	<b>NAPL Present</b>							
91-AW6	05/18/11	1,170.38	NM	--	--	--	--	--	--	--	--	--	--
91-AW6	12/14/11	1,170.38	92.54	<b>0.16</b>	1,077.97	<b>NAPL Present</b>							
91-AW6	12/15/11	1,170.38	NM	--	--	--	--	--	--	--	--	--	
Screen Interval 137-147 ft bgs / Total Well Depth 147 ft bgs													
91-BW2	10/19/07 d	NE	95.08	0.00	--	<250	<b>701</b>	<96.2	<1.00	<1.00	<1.00	<3.00	<2.50
91-BW2	05/12/08	NE	92.33	0.00	--	--	--	--	--	--	--	--	--
91-BW2	05/13/08	NE	NM	--	--	--	--	--	--	--	--	--	--
91-BW2	05/14/08	NE	94.64	0.00	--	<100	<b>607</b>	<b>908</b>	<1.00	<1.00	<1.00	<3.00	--
91-BW2	12/30/08	NE	96.34	0.00	--	--	--	--	--	--	--	--	--
91-BW2	12/31/08	NE	93.27	0.00	--	<100	165	<95.2	<1.00	<1.00	<1.00	<3.00	--
91-BW2	06/22/09	NE	93.95	0.00	--	--	--	--	--	--	--	--	--
91-BW2	06/23/09	NE	93.39	0.00	--	<100	<100	<100	<1.00	<1.00	<1.00	<3.00	--
91-BW2	11/04/09	NE	93.41	0.00	--	--	--	--	--	--	--	--	--
91-BW2	11/05/09	NE	93.61	0.00	--	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	--
91-BW2	05/19/10	NE	95.95	0.00	--	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	--
91-BW2	05/20/10	NE	NM	--	--	--	--	--	--	--	--	--	--
91-BW2	11/08/10	NE	93.05	0.00	--	<100	<100	<100	<1.00	<1.00	<1.00	<3.00	--
91-BW2	11/09/10	NE	NM	--	--	--	--	--	--	--	--	--	--
91-BW2	05/17/11	NE	92.04	0.00	--	--	--	--	--	--	--	--	--
91-BW2	05/18/11	NE	92.33	0.00	--	<100	220	<105	<1.00	<1.00	<1.00	<3.00	--
91-BW2	12/14/11	NE	92.91	0.00	--	--	--	--	--	--	--	--	--
91-BW2	12/15/11	NE	93.11	0.00	--	<100	370	<240	<1.00	<1.00	<1.00	<3.00	--
Screen Interval Unknown ft bgs / Total Well Depth Unknown ft bgs													
PH1-9301	05/25/04 b	1,167.07	91.15	<b>0.79</b>	1,076.55	<b>NAPL Present</b>	ND						
PH1-9301	09/09/04	1,167.07	91.35	<b>0.70</b>	1,076.28	<b>NAPL Present</b>							
MTCA Method A Cleanup Levels													
						800/1,000 <sup>a</sup>	500	500	5	1,000	700	1,000	NA







**TABLE 2**  
**CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Grant County Airport  
Former Fueling Facilities

7810 Andrews Street Northeast  
Moses Lake, Washington

Page 7 of 15

Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	2-Methylnaphthalene (µg/L)
PH1-9401	12/31/08	1,163.77	NM	--	--	--	--	--	--	--	--	--	--
PH1-9401	06/22/09	1,163.77	87.89	0.00	1,075.88	--	--	--	--	--	--	--	--
PH1-9401	06/23/09	1,163.77	87.91	0.00	1,075.86	<100	<105	<105	<1.00	<1.00	<1.00	<3.00	--
PH1-9401	11/04/09	1,163.77	87.62	0.00	1,076.15	--	--	--	--	--	--	--	--
PH1-9401	11/05/09	1,163.77	87.71	0.00	1,076.06	<100	<97.1	<97.1	<1.00	<1.00	<1.00	<3.00	--
PH1-9401	05/19/10	1,163.77	87.61	0.00	1,076.16	<100	<111	<111	<1.00	<1.00	<1.00	<3.00	--
PH1-9401	05/20/10	1,163.77	NM	--	--	--	--	--	--	--	--	--	--
PH1-9401	11/08/10	1,163.77	87.64	0.00	1,076.13	--	--	--	--	--	--	--	--
PH1-9401	11/09/10	1,163.77	87.46	0.00	1,076.31	<100	<99.0	<99.0	<1.00	<1.00	<1.00	<3.00	--
PH1-9401	05/17/11	1,163.77	86.67	0.00	1,077.10	--	--	--	--	--	--	--	--
PH1-9401	05/18/11	1,163.77	86.42	0.00	1,077.35	<100	538	<99.0	<1.00	<1.00	<1.00	<3.00	--
PH1-9401	12/14/11	1,163.77	86.69	0.00	1,077.08	<100	<94.3	<236	<1.00	<1.00	<1.00	<3.00	--
PH1-9401	12/15/11	1,163.77	NM	--	--	--	--	--	--	--	--	--	--
Screen Interval 75.5-95.5 ft bgs / Total Well Depth 95.5 ft bgs													
PH1-9402	05/25/04 b	1,167.09	91.90	1.62	1,076.49	NAPL Present	ND						
PH1-9402	09/09/04	1,167.09	92.00	1.44	1,076.24	NAPL Present							
PH1-9402	11/11/04	1,167.09	92.38	1.76	1,076.12	NAPL Present							
PH1-9402	03/22/05	1,167.09	92.28	1.62	1,076.11	NAPL Present							
PH1-9402	06/02/05	1,167.09	92.14	1.34	1,076.02	NAPL Present							
PH1-9402	09/27/05	1,167.09	92.14	1.38	1,076.05	NAPL Present							
PH1-9402	12/02/05	1,167.09	91.75	0.93	1,076.08	NAPL Present							
PH1-9402	03/28/06	1,167.09	90.20	0.30	1,077.13	NAPL Present							
PH1-9402	06/06/06	1,167.09	90.71	0.21	1,076.55	NAPL Present							
PH1-9402	10/19/07	1,167.09	89.95	0.57	1,077.60	NAPL Present							
PH1-9402	05/12/08	1,167.09	90.35	0.68	1,077.28	NAPL Present							
PH1-9402	05/13/08	1,167.09	NM	--	--	--	--	--	--	--	--	--	--
PH1-9402	05/14/08	1,167.09	NM	--	--	--	--	--	--	--	--	--	--
PH1-9402	12/30/08	1,167.09	91.65	0.96	1,076.21	NAPL Present							
PH1-9402	12/31/08	1,167.09	NM	--	--	--	--	--	--	--	--	--	--
PH1-9402	06/22/09	1,167.09	90.57	0.69	1,077.07	NAPL Present							
PH1-9402	06/23/09	1,167.09	NM	--	--	--	--	--	--	--	--	--	--
PH1-9402	11/04/09	1,167.09	90.23	0.49	1,077.25	NAPL Present							

MTCA Method A Cleanup Levels

800/1,000<sup>a</sup> 500 500 5 1,000 700 1,000 NA





**TABLE 2**  
**CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Grant County Airport  
Former Fueling Facilities

7810 Andrews Street Northeast  
Moses Lake, Washington

Page 10 of 15

Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	2-Methylnaphthalene (µg/L)
PH1-9602	12/15/11	1,167.66	91.77	0.00	1,075.89	<100	<94.3	<236	<1.00	<1.00	<1.00	<3.00	--
Screen Interval 80-100 ft bgs / Total Well Depth 100 ft bgs													
PH1-9603	05/25/04 b	1,170.29	93.54	0.00	1,076.75	--	ND	--	--	--	--	--	--
PH1-9603	09/09/04	1,170.29	93.91	0.00	1,076.38	--	ND/NDc	--	--	--	--	--	--
PH1-9603	11/11/04	1,170.29	94.03	0.00	1,076.26	--	ND	--	--	--	--	--	--
PH1-9603	03/22/05	1,170.29	94.03	0.00	1,076.26	--	ND	--	--	--	--	--	--
PH1-9603	06/02/05	1,170.29	94.09	0.00	1,076.20	--	ND	--	--	--	--	--	--
PH1-9603	09/27/05	1,170.29	94.21	0.00	1,076.08	--	0.201	--	--	--	--	--	--
PH1-9603	12/02/05	1,170.29	94.09	0.00	1,076.20	--	ND	--	--	--	--	--	--
PH1-9603	03/28/06	1,170.29	93.03	0.00	1,077.26	--	ND/NDc	--	--	--	--	--	--
PH1-9603	06/06/06	1,170.29	92.62	0.00	1,077.67	--	ND/NDc	--	--	--	--	--	--
PH1-9603	10/19/07 d	1,170.29	92.54	0.00	1,077.75	<250	113	<95.2	<1.00	<1.00	<1.00	<3.00	<2.22
PH1-9603	05/12/08	1,170.29	92.73	0.00	1,077.56	--	--	--	--	--	--	--	--
PH1-9603	05/13/08	1,170.29	92.72	0.00	1,077.57	<100	<97.1	<97.1	<1.00	<1.00	<1.00	<3.00	--
PH1-9603	05/14/08	1,170.29	NM	--	--	--	--	--	--	--	--	--	--
PH1-9603	12/30/08	1,170.29	93.93	0.00	1,076.36	--	--	--	--	--	--	--	--
PH1-9603	12/31/08	1,170.29	93.91	0.00	1,076.38	<100	<105	<105	<1.00	<1.00	<1.00	<3.00	--
PH1-9603	06/22/09	1,170.29	93.18	0.00	1,077.11	--	--	--	--	--	--	--	--
PH1-9603	06/23/09	1,170.29	93.22	0.00	1,077.07	<100	<100	<100	<1.00	<1.00	<1.00	<3.00	--
PH1-9603	11/04/09	1,170.29	92.11	0.00	1,078.18	--	--	--	--	--	--	--	--
PH1-9603	11/05/09	1,170.29	92.24	0.00	1,078.05	<100	<99.0	<99.0	<1.00	<1.00	<1.00	<3.00	--
PH1-9603	05/19/10	1,170.29	92.56	0.00	1,077.73	--	--	--	--	--	--	--	--
PH1-9603	05/20/10	1,170.29	92.83	0.00	1,077.46	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	--
PH1-9603	11/08/10	1,170.29	92.21	0.00	1,078.08	--	--	--	--	--	--	--	--
PH1-9603	11/09/10	1,170.29	92.29	0.00	1,078.00	<100	<99.0	<99.0	<1.00	<1.00	<1.00	<3.00	--
PH1-9603	05/17/11	1,170.29	92.61	0.00	1,077.68	<100	<100	<100	<1.00	<1.00	<1.00	<3.00	--
PH1-9603	05/18/11	1,170.29	NM	--	--	--	--	--	--	--	--	--	--
PH1-9603	12/14/11	1,170.29	92.76	0.00	1,077.53	--	--	--	--	--	--	--	--
PH1-9603	12/15/11	1,170.29	92.84	0.00	1,077.45	<100	<95.2	<238	<1.00	<1.00	<1.00	<3.00	--
Screen Interval 88-108 ft bgs / Total Well Depth 108 ft bgs													
MW13	05/12/08	1,160.84	90.12	0.00	1,070.72	<100	<97.1	118	<1.00	<1.00	<1.00	<3.00	--
MTCA Method A Cleanup Levels						800/1,000 <sup>a</sup>	500	500	5	1,000	700	1,000	NA

**TABLE 2**  
**CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**  
 Grant County Airport  
 Former Fueling Facilities  
 7810 Andrews Street Northeast  
 Moses Lake, Washington  
 Page 11 of 15

Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	2-Methylnaphthalene (µg/L)
MW13	05/13/08	1,160.84	NM	--	--	--	--	--	--	--	--	--	--
MW13	05/14/08	1,160.84	NM	--	--	--	--	--	--	--	--	--	--
MW13	12/30/08	1,160.84	88.41	0.00	1,072.43	<100	<99.0	<99.0	<1.00	<1.00	<1.00	<3.00	--
MW13	12/31/08	1,160.84	NM	--	--	--	--	--	--	--	--	--	--
MW13	06/22/09	1,160.84	91.14	0.00	1,069.70	<100	<100	<100	<1.00	<1.00	<1.00	<3.00	--
MW13	06/23/09	1,160.84	NM	--	--	--	--	--	--	--	--	--	--
MW13	11/04/09	1,160.84	90.74	0.00	1,070.10	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	--
MW13	11/05/09	1,160.84	NM	--	--	--	--	--	--	--	--	--	--
MW13	05/19/10	1,160.84	91.29	0.00	1,069.55	--	--	--	--	--	--	--	--
MW13	05/20/10	1,160.84	91.36	0.00	1,069.48	<100	<97.1	<97.1	<1.00	<1.00	<1.00	<3.00	--
MW13	11/08/10	1,160.84	91.04	0.00	1,069.80	--	--	--	--	--	--	--	--
MW13	11/09/10	1,160.84	NM	--	--	--	--	--	--	--	--	--	--
Destroyed													
Screen Interval 90-110 ft bgs / Total Well Depth 110 ft bgs													
MW14	05/12/08	1,164.23	93.53	0.00	1,070.70	<100	126	286	<1.00	<1.00	<1.00	<3.00	--
MW14	05/13/08	1,164.23	NM	--	--	--	--	--	--	--	--	--	--
MW14	05/14/08	1,164.23	NM	--	--	--	--	--	--	--	--	--	--
MW14	12/30/08	1,164.23	91.85	0.00	1,072.38	--	--	--	--	--	--	--	--
MW14	12/31/08	1,164.23	91.83	0.00	1,072.40	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	--
MW14	06/22/09	1,164.23	93.36	0.00	1,070.87	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	--
MW14	06/23/09	1,164.23	NM	--	--	--	--	--	--	--	--	--	--
MW14	11/04/09	1,164.23	92.05	0.00	1,072.18	<100	<99.0	<99.0	<1.00	<1.00	<1.00	<3.00	--
MW14	11/05/09	1,164.23	NM	--	--	--	--	--	--	--	--	--	--
MW14	05/19/10	1,164.23	93.67	0.00	1,070.56	--	--	--	--	--	--	--	--
MW14	05/20/10	1,164.23	94.39	0.00	1,069.84	--	--	--	--	--	--	--	--
MW14	11/08/10	1,164.23	Inaccessible	--	--	--	--	--	--	--	--	--	--
MW14	11/09/10	1,164.23	NM	--	--	--	--	--	--	--	--	--	--
Destroyed													
Screen Interval 88.5-108.5 ft bgs / Total Well Depth 108.5 ft bgs													
MW15	05/12/08	1,164.08	86.67	0.00	1,077.41	--	--	--	--	--	--	--	--
MW15	05/13/08	1,164.08	NM	--	--	--	--	--	--	--	--	--	--
MW15	05/14/08	1,164.08	86.71	0.00	1,077.37	794	<b>14,100</b>	<952	<1.00	<1.00	<1.00	<3.00	--
MW15	12/30/08	1,164.08	Could not locate	--	#Type!	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels						800/1,000 <sup>a</sup>	500	500	5	1,000	700	1,000	NA

**TABLE 2**  
**CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**  
Grant County Airport  
Former Fueling Facilities  
7810 Andrews Street Northeast  
Moses Lake, Washington  
Page 12 of 15

Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	2-Methylnaphthalene (µg/L)
MW15	12/31/08	1,164.08	NM	--	--	--	--	--	--	--	--	--	--
MW15	06/22/09	1,164.08	88.43	0.00	1,075.65	--	--	--	--	--	--	--	--
MW15	06/23/09	1,164.08	88.46	0.00	1,075.62	<100	<96.2	<96.2	<1.00	<1.00	<1.00	<3.00	--
MW15	11/04/09	1,164.08	88.26	0.00	1,075.82	--	--	--	--	--	--	--	--
MW15	11/05/09	1,164.08	88.39	0.00	1,075.69	<100	<99.0	<99.0	<1.00	<1.00	<1.00	<3.00	--
MW15	05/19/10	1,164.08	88.24	<b>0.73</b>	1,076.42	<b>NAPL Present</b>							
MW15	05/20/10	1,164.08	NM	--	--	--	--	--	--	--	--	--	--
MW15	11/08/10	1,164.08	88.37	<b>0.91</b>	1,076.44	<b>NAPL Present</b>							
MW15	11/09/10	1,164.08	NM	--	--	--	--	--	--	--	--	--	--
MW15	05/17/11	1,164.08	86.74	<b>0.18</b>	1,077.48	<b>NAPL Present</b>							
MW15	05/18/11	1,164.08	NM	--	--	--	--	--	--	--	--	--	--
MW15	12/14/11	1,164.08	86.86	<b>0.19</b>	1,077.37	<b>NAPL Present</b>							
MW15	12/15/11	1,164.08	NM	--	--	--	--	--	--	--	--	--	--
Screen Interval 90-130 ft bgs / Total Well Depth 130 ft bgs													
MW16	05/12/08	1,174.95	107.38	0.00	1,067.57	--	--	--	--	--	--	--	--
MW16	05/13/08	1,174.95	107.39	0.00	1,067.56	<100	411	<100	<1.00	<1.00	<1.00	<1.00	<3.00
MW16	05/14/08	1,174.95	NM	--	--	--	--	--	--	--	--	--	--
MW16	12/30/08	1,174.95	109.47	0.00	1,065.48	<100	<104	<104	<1.00	<1.00	<1.00	<1.00	<3.00
MW16	12/31/08	1,174.95	NM	--	--	--	--	--	--	--	--	--	--
MW16	06/22/09	1,174.95	106.99	0.00	1,067.96	--	--	--	--	--	--	--	--
MW16	06/23/09	1,174.95	106.92	0.00	1,068.03	<100	<98.0	<98.0	<1.00	<1.00	<1.00	<1.00	<3.00
MW16	11/04/09	1,174.95	105.42	0.00	1,069.53	--	--	--	--	--	--	--	--
MW16	11/05/09	1,174.95	105.51	0.00	1,069.44	<100	<97.1	<97.1	<1.00	<1.00	<1.00	<1.00	<3.00
MW16	05/19/10	1,174.95	104.63	0.00	1,070.32	--	--	--	--	--	--	--	--
MW16	05/20/10	1,174.95	104.85	0.00	1,070.10	<100	<105	<105	<1.00	<1.00	<1.00	<1.00	<3.00
MW16	11/08/10	1,174.95	103.27	0.00	1,071.68	--	--	--	--	--	--	--	--
MW16	11/09/10	1,174.95	NM	--	--	--	--	--	--	--	--	--	--
Destroyed													
Screen Interval 100-130 ft bgs / Total Well Depth 130 ft bgs													
MW17	05/12/08	1,181.31	116.67	0.00	1,064.64	--	--	--	--	--	--	--	--
MW17	05/13/08	1,181.31	116.68	0.00	1,064.63	<100	<97.1	<97.1	<1.00	<1.00	<1.00	<1.00	<3.00
MW17	05/14/08	1,181.31	NM	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels						800/1,000 <sup>a</sup>	500	500	5	1,000	700	1,000	NA

**TABLE 2**  
**CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Grant County Airport  
Former Fueling Facilities

7810 Andrews Street Northeast  
Moses Lake, Washington

Page 13 of 15

Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	2-Methylnaphthalene (µg/L)
MW17	12/30/08	1,181.31	Could not locate	--	#Type!	--	--	--	--	--	--	--	--
MW17	12/31/08	1,181.31	NM	--	--	--	--	--	--	--	--	--	--
MW17	06/22/09	1,181.31	116.69	0.00	1,064.62	--	--	--	--	--	--	--	--
MW17	06/23/09	1,181.31	116.70	0.00	1,064.61	<100	<98.0	<98.0	<1.00	<1.00	<1.00	<3.00	--
MW17	11/04/09	1,181.31	116.23	0.00	1,065.08	--	--	--	--	--	--	--	--
MW17	11/05/09	1,181.31	116.31	0.00	1,065.00	<100	<98.0	<98.0	<1.00	<1.00	<1.00	<3.00	--
MW17	05/19/10	1,181.31	115.39	0.00	1,065.92	--	--	--	--	--	--	--	--
MW17	05/20/10	1,181.31	116.02	0.00	1,065.29	<100	<95.2	<95.2	<1.00	<1.00	<1.00	<3.00	--
MW17	11/08/10	1,181.31	114.33	0.00	1,066.98	--	--	--	--	--	--	--	--
MW17	11/09/10	1,181.31	NM	--	--	--	--	--	--	--	--	--	--
Destroyed													
Screen Interval 110-150 ft bgs / Total Well Depth 150 ft bgs													
MW18	05/12/08	1,186.10	124.39	0.00	1,061.71	--	--	--	--	--	--	--	--
MW18	05/13/08	1,186.10	124.34	0.00	1,061.76	150	<b>320</b>	<b>662</b>	<1.00	<1.00	<1.00	<3.00	--
MW18	05/14/08	1,186.10	NM	--	--	--	--	--	--	--	--	--	--
MW18	12/30/08	1,186.10	126.80	0.00	1,059.30	<100	<104	400	<1.00	<1.00	<1.00	<3.00	--
MW18	12/31/08	1,186.10	NM	--	--	--	--	--	--	--	--	--	--
MW18	06/22/09	1,186.10	127.55	0.00	1,058.55	<100	<111	<111	<1.00	<1.00	<1.00	<3.00	--
MW18	06/23/09	1,186.10	NM	--	--	--	--	--	--	--	--	--	--
MW18	11/04/09	1,186.10	128.41	0.00	1,057.69	--	--	--	--	--	--	--	--
MW18	11/05/09	1,186.10	128.46	0.00	1,057.64	<100	<98.0	<98.0	<1.00	<1.00	<1.00	<3.00	--
MW18	05/19/10	1,186.10	126.75	0.00	1,059.35	<100	<b>289</b>	<b>619</b>	<1.00	<1.00	<1.00	<3.00	<0.0952
MW18	05/20/10	1,186.10	NM	--	--	--	--	--	--	--	--	--	--
MW18	11/08/10	1,186.10	125.88	0.00	1,060.22	--	--	--	--	--	--	--	--
MW18	11/09/10	1,186.10	NM	--	--	--	--	--	--	--	--	--	--
Destroyed													
Screen Interval ft bgs / Total Well Depth ft bgs													
MW19	05/17/11	NE	88.71	0.00	--	--	--	--	--	--	--	--	--
MW19	05/18/11	NE	88.36	0.00	--	<100	<96.2	<96.2	<1.00	<1.00	<1.00	<3.00	--
MW19	12/14/11	NE	88.83	0.00	--	--	--	--	--	--	--	--	--
MW19	12/15/11	NE	88.68	0.00	--	<100	<111	<278	<1.00	<1.00	<1.00	<3.00	--

MTCA Method A Cleanup Levels

800/1,000<sup>a</sup> 500 500 5 1,000 700 1,000 NA

31227.01L.T07

Table 2

**TABLE 2**  
**CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Grant County Airport  
Former Fueling Facilities

7810 Andrews Street Northeast  
Moses Lake, Washington

Page 14 of 15

Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet)	NAPL	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	2-Methylnaphthalene (µg/L)
Screen Interval ft bgs / Total Well Depth ft bgs													
MW20	05/17/11	NE	90.41	0.00	--	255	<b>1,410</b>	180	<1.00	<1.00	<1.00	<3.00	--
MW20	05/18/11	NE	NM	--	--	--	--	--	--	--	--	--	--
MW20	12/14/11	NE	90.42	0.00	--	--	--	--	--	--	--	--	--
MW20	12/15/11	NE	90.76	0.00	--	139	<b>2,850</b>	<312	<1.00	<1.00	<1.00	<3.00	--
Screen Interval ft bgs / Total Well Depth ft bgs													
MW21	05/17/11	NE	92.35	<b>2.69</b>	--	<b>NAPL Present</b>							
MW21	05/18/11	NE	NM	--	--	--	--	--	--	--	--	--	--
MW21	12/14/11	NE	92.09	<b>2.27</b>	--	<b>NAPL Present</b>							
MW21	12/15/11	NE	NM	--	--	--	--	--	--	--	--	--	--
Screen Interval ft bgs / Total Well Depth ft bgs													
MW22	05/17/11	NE	91.21	<b>1.22</b>	--	<b>NAPL Present</b>							
MW22	05/18/11	NE	NM	--	--	--	--	--	--	--	--	--	--
MW22	12/14/11	NE	91.79	<b>1.85</b>	--	<b>NAPL Present</b>							
MW22	12/15/11	NE	NM	--	--	--	--	--	--	--	--	--	--
Screen Interval ft bgs / Total Well Depth ft bgs													
SP1	05/17/11	NE	86.41	0.00	--	--	--	--	--	--	--	--	--
SP1	05/18/11	NE	NM	--	--	--	--	--	--	--	--	--	--
SP1	12/14/11	NE	86.91	0.00	--	--	--	--	--	--	--	--	--
SP1	12/15/11	NE	NM	--	--	--	--	--	--	--	--	--	--

MTCA Method A Cleanup Levels

800/1,000<sup>a</sup> 500 500 5 1,000 700 1,000 NA

31227.01L.T07

Table 2

**TABLE 2**  
**CUMULATIVE GROUNDWATER ANALYTICAL RESULTS**

Grant County Airport  
Former Fueling Facilities  
7810 Andrews Street Northeast  
Moses Lake, Washington  
Page 15 of 15

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**EXPLANATION:**

ft bgs = Feet below ground surface

µg/L = Micrograms per Liter

Wellhead elevations were taken from prior consultant reports

DTW = Depth to water in feet below top of casing

GW Elev = Groundwater elevation relative to top of casing elevations

TPHg = Total Petroleum Hydrocarbons as Gasoline in accordance with Ecology Method NWTPH-Gx

TPHd and TPHmo = Total Petroleum Hydrocarbons as Diesel and Oil, respectively, in accordance with Ecology Method NWTPH-Dx

B = Benzene; T = Toluene; E = Ethylbenzene; X = Total Xylenes

BTEX = Aromatic compounds in accordance with EPA Method 8021B or 8260B, refer to laboratory reports

NAPL = Non-aqueous phase liquid thickness in feet

< = Less than the stated laboratory reporting limit

NE = Not Established; NM = Not Measured; ND = Not Detected; -- = Not Analyzed or Sampled

Shaded values equal or exceed MTCA Method A Cleanup Levels

Data collected before 10/19/07 were taken from prior consultants

GW Elevation has been corrected for NAPL using the formula: (Reference Elevation - DTW + (NAPL\*0.8))

a = TPHg cleanup level for groundwater is 800 µg/L if benzene is present, or 1,000 µg/L if benzene is not present

b = Samples analyzed for polycyclic aromatic hydrocarbons (PAHs) and additional volatile organic compounds (VOCs)

c = Duplicate sample collected, laboratory results indicate sample and field duplicate contained the listed concentration

d = Samples were analyzed for PAHs in accordance with EPA Method 8270C. Results indicate concentrations of dissolved PAHs were below the laboratory method reporting limit.

e = Samples were analyzed for PAHs in accordance with EPA Method 8270C. Results indicate concentrations of dissolved 2-Methylnaphthalene were above the laboratory method reporting limit.