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Subsurface Investigation Report

Nelson Petroleum Inc.
201 W. Stanley Street
Granite Falls, WA

Prepared for:

Nelson Petroleum Inc.
1125 SW 80th Street
Everett, WA 98203

Submitted by:

Slotta Design & Construction
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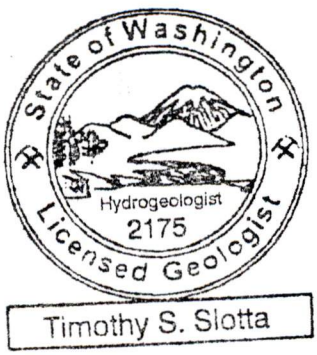

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1.0 INTRODUCTION

1.1 Project Description

This report presents the results of the subsurface investigation recently conducted by Slotta Design and Consulting (SD&C) at the Nelson Petroleum Inc. (Nelson) bulk fuel facility (Site) located at 201 W. Stanley Street in Granite Falls, WA (Figure 1). The site investigation was conducted in accordance with Nelson's request and SD&C's *Cost Estimate for Subsurface Investigation* dated October 5, 2015. The purpose of the work is to collect subsurface data in the vicinity of the Site where previous investigations indicated the presence of petroleum hydrocarbon compounds (PHCs) at concentrations exceeding the Washington Department of Ecology's (Ecology) Model Toxics Control Act (MTCA) method A cleanup levels (cleanup levels). The work was conducted in response to Ecology's Voluntary Cleanup Program (VCP), who requested that additional subsurface data prior to authorizing SD&C's *Site Decommissioning and Demolition Work Plan* dated May 1, 2015.

1.2 Scope of Work

The scope of work during this subsurface investigation included the following tasks:

- Reviewing the past investigation results for the Site.
- Observing the advancement of Eight (8) subsurface borings using a Geoprobe to a depth of 10 ft. below ground surface (bgs).
- Collecting soil samples from the borings to evaluate PHC concentrations.
- Installing monitoring wells in five of the borings, and collecting groundwater samples.
- Characterizing the geology in each boring, and screening soil samples for PHCs.
- Surveying the relative elevation of each of the monitoring wells.
- Submitting and groundwater samples for laboratory analysis.
- Preparing this report to summarize the data, document site activities, provide conclusions, and recommendations.

2.0 BACKGROUND

2.1 Site Description

The rectangular shaped Site is approximately one-acre in size and located in a commercial area of downtown Granite Falls (Lat/Long: 48.083550 N and 121.970680 W) as illustrated in Figure 1. The Site is situated at an elevation of 402 feet above mean sea level, and the natural slope of the topography trends downward toward the Pilchuck River located approximately 0.5 miles to the southwest.

The Site includes a warehouse and former operations distribution building (1,500 sq ft), a small pump monitoring shed building associated with an aboveground storage tank (AST) compound, and three fuel distribution pump islands as illustrated in Figure 2. The northern portion of the site is undeveloped, and is surfaced by deciduous trees and blackberry vines. The warehouse and shed buildings are constructed of wood framing and steel roofing and siding. The warehouse is

constructed on a pier and grade beam foundations that form a crawl space (west), and slab on grade concrete (east).

The four ASTs include one 12,955-gallon Unleaded Gasoline tank, one 19,430-gallon Low Sulfur Diesel tank, and two 4,970-gallon Hi-Sulfur Diesel tanks that are interconnected. Underground piping connects the ASTs to the vehicle fueling pumps. The tanks are enclosed by a gated cyclone fence on top of a concrete wall. The AST compound is paved with concrete which slopes to an oil/water separator and storm water collection system that drains to the southwest along Stanley Street. The site is served by the municipal power, water, and sewer.

The property is bordered to by:

- A vacant, flat graded, undeveloped property to the north.
- Stanley Street, residential and commercial properties further to the south.
- An unpaved lot and an equipment rental company to the west
- A Shell gasoline distribution station, and mini-mart convenience store to the east.

2.2 Physical Setting

The US Department of Agriculture's Soil Conservation Service characterizes the site as underlain by Everett Soil gravelly-sandy loam, and Bellingham Soil silty clayey loam. The soil has poor drainage and has saturated zones of low hydraulic conductivity with shallow groundwater less than 2 ft. bgs. as illustrated in Figure 3.

Review of historical maps indicate the northern portion of the Site was previously occupied by a railroad spur for the Northern Pacific Railroad, and a passenger station bordered the Site further north. A building located on the eastern portion of the Site was a lumber warehouse.

Title records indicate the Site has been leased as a bulk fuel facility since 1938. Nelson reportedly acquired the lease from Chevron in 1980. The property has remained in the general condition as exists today with the AST compound being reconfigured with various changes of the storage tanks. The warehouse has been used to store petroleum products in drums.

2.3 Past Site Investigations

Past environmental investigations conducted at the site include: Environmental Associates (EA) *Preliminary Subsurface Exploration Report* dated December 9, 2003, and SD&C's *Phase I and II Environmental Site Assessment* dated April 3, 2008. Soil and groundwater sampling results from the earlier investigations are summarized in Tables 1 and 2.

On December 9, 2003, EA conducted seven subsurface soil borings using a hollow stem auger with a limited access rig. The borings were advanced to a depth of approximately 5 to 6 ft. bgs at 7 locations at the Site and western adjacent property (formerly Glen's Equipment Rentals). Soil and groundwater samples were collected directly from the augers. Results of the soil samples collected by EA exceeded the MTCA cleanup level for PHCs as Diesel in one boring (B-7). The

groundwater samples exceeded the MTCA cleanup levels for Diesel in four locations (B3, 4, 6 and 7). The locations of the samples collected and EA's results are illustrated in Figures 3 and 4.

On February 22, 2008, SD&C a conducted subsurface investigation of the Site using a Geoprobe. Seven subsurface borings were conducted adjacent to the EA sample locations, and their results are illustrated in Figures 3 and 4. The borings were conducted in the following locations:

SB-1	5 ft. south of the central gasoline pump distribution island;
SB-2	10ft. east of the warehouse building, adjacent to the eastern Shell Station;
SB-3	5 ft. west of the AST compound on the western adjacent property;
SB-4	25 ft. west on the south central portion of the western adjacent property;
SB-5	5 ft. northwest of the AST compound on the western adjacent property;
SB-6	southeast corner of the AST compound;
SB-7	5 ft. south of the northeast property corner on undeveloped land

Soil in the borings was uniform in consistency with a dense sandy silt underlain at a depth of 6 ft. by water-bearing sand, underlain by a very dense Glacial Till material at approximately 16 ft. bgs. Field observation of the borings indicated that PHC impacted soil was encountered only at shallow depths (3-4 ft.) and appeared to be associated with isolated surficial releases.

Only one soil sample collected (SB-2) contained Diesel and Oil range PHCs at concentrations which exceeded the MTCA cleanup levels. The soil sample from SB-2 was additionally analyzed for total lead, and other volatile compounds (including MTBE) which did not exceed the MTCA cleanup levels. The groundwater samples from SB-2 and SB-6 exceeded the MTCA cleanup level for gasoline, Diesel and benzene. The groundwater sample collected from SB-6 was additionally analyzed for volatile compounds (EDC, EDB, and MTBE), all results were below the laboratory reporting limits.

3.0 SUBSURFACE INVESTIGATION

On November 11, 2015 SD&C conducted a sub-surface investigation of the Site using Holocene Drilling of Puyallup, Washington, to conduct the borings and install monitoring wells to collect groundwater samples. The test borings were conducted under the supervision of a Washington Licensed Hydrogeologist (LHG) who prepared boring logs, and submitted selected samples for laboratory analysis. The logs of the soil lithology for the borings are included in Appendix I.

The soil boring and monitoring well sampling locations were selected to provide additional data prior to decommissioning and demolition activities planned for the Site. The locations of the borings and monitoring wells are illustrated in Figures 4 and 5 were situated as follows:

MW-1	15ft. east of the warehouse building, adjacent to the eastern Shell Station;
MW-2	5 ft. west of the southeast property corner;
MW-3	10 ft. west of the central gasoline pump island;
MW-4	5 ft. south of the southwest corner of the AST compound;
MW-5	10 ft. northeast of the AST compound;

SB-8 10 ft. east of the central gasoline pump island;
SB-9 Beneath the canopy for the pump island (refusal because of the concrete);
SB-10 10 ft. north of the Diesel pump island.

The soil samples were collected from the initial Geoprobe interval (3-3.5 ft. bgs) because of the shallow depth that groundwater was encountered. The depth of the borings were limited to 10 ft. bgs to install a well screen which spanned the seasonal fluctuations (5-10 ft.). The well monuments were surveyed by David R. Downing & Associates of Marysville, WA on December 14, 2015. An electronic water level indicator was used to measure the depth to water in each of the wells on November 12, 2015. The depth to water measurements are summarized in Table 3 and illustrated in Figure 6. The groundwater measurements indicate the depth is generally less than 2 ft. bgs and flows to the southwest at a gradient of 0.013 ft. /ft. There was no sheen or PHC odor identified in any of the monitoring wells during the water sampling event.

4.0 CHEMICAL ANALYSIS AND RESULTS

4.1 Soil and Groundwater Sampling

Soil samples were collected in accordance with EPA method 5035 for volatile organic compounds. Groundwater samples were collected from the wells in accordance with EPA approved protocol using a low flow pump directly into laboratory prepared vials. The samples were iced, and delivered under chain-of-custody to ALS Laboratory of Everett, WA for analysis.

4.2 Laboratory Analyses of Samples

Copies of the original laboratory reports for the sample analyses are included as Appendix II. The samples were analyzed for the following constituents:

- Total Petroleum Hydrocarbons (TPH) as gasoline using Ecology Method WTPH-Gx and Diesel, using Ecology Method WTPH Dx.

- Benzene, Toluene, Ethyl Benzene, Xylenes (BTEX), using EPA Method 8020 modified.

4.3 Results of Sample Analyses

The laboratory results of soil samples collected from the borings are summarized in Table 1, the results of groundwater samples from the monitoring wells are summarized in Table 2, and the soil and groundwater sample results are illustrated on Figures 4 and 5.

The results of soil samples contained detectable concentrations PHCs as gasoline, and Diesel in four of the seven sampling locations (MW-3, 4, SB-8 and 10). The gasoline concentrations exceeded the MTCA method A cleanup level in three samples from MW-3, 4 and SB-10. None of the Diesel concentrations in the soil samples exceeded the MTCA cleanup levels, and no heavy oil was detected exceeding the laboratory detection limits.

The results of groundwater samples contained PHCs as Diesel in all of the sampling locations (MW-1 through 5) at concentrations that exceeded the MTCA cleanup levels. The groundwater sample collected from MW-4 also contained gasoline, and benzene at concentrations that exceeded the MTCA cleanup levels and low level concentrations of toluene, ethyl benzene, and xylenes.

5.0 SUMMARY and CONCLUSIONS

SD&C was contracted to conduct a subsurface investigation at the Site. The purpose of the work was to collect subsurface data where previous investigations indicated the presence of PHCs. The work was conducted in response to Ecology's VCP, who requested additional subsurface data prior to decommissioning and demolition activities at the Site.

5.1 Extent of PHC Impact to Soil

In 2003 results of the soil samples collected by EA exceeded the MTCA cleanup levels for Diesel in one boring (B-7). In 2008, SD&C collected soil samples from locations previously investigated by EA. Only one soil sample (SB-2) exceeded the MTCA method A cleanup level for Diesel. Neither of the previous soil sampling events indicated gasoline exceeding the cleanup levels. The 2015 investigation results did not contain Diesel at concentrations exceeding the MTCA cleanup levels, but contained gasoline exceeding cleanup levels in three locations (MW-3, 4 and SB-10).

The PHC impact to soil appears to be isolated to shallow depth between 3-6 ft. bgs, primarily on the southwest portion of the site. The boring locations containing PHCs are near the pump islands and AST compound, and a hot spot located east of the warehouse. The investigation results indicates the PHC impact to the shallow subsurface soil are the result of releases from the fuel distribution systems and surficial spills.

5.2 Extent of PHC Impact to Groundwater

Groundwater was encountered at a shallow depth (< 5 ft. bgs) in all of the borings conducted at the Site to date. The November 2015 measurement of the depth to water in the monitoring wells indicated that the water flows to the southwest with a moderate gradient (0.013 ft. /ft.). The water appears to be confined to the shallow silts and sands which overlay a dense impervious glacial till (encountered during previous investigations at 16 ft. bgs).

The groundwater is broadly and historically impacted by Diesel. In 2003 Diesel concentrations in groundwater exceeding MTCA method A cleanup levels were identified in five out of the seven borings, and two of seven borings in 2008. The 2015 sample results indicate that Diesel was encountered in each of the monitoring wells (MW-1 through 5) at concentrations exceeding the cleanup levels. MW-4 also contained gasoline and benzene at concentrations which exceeded the cleanup levels.

Historical records indicate that the source area of PHCs impacting the groundwater at the site are the ASTs, fuel distribution pumps, and occasional surficial spills. The presence of Diesel at up-gradient groundwater sample locations (MW-1, MW-5 and EA's B6) suggests that either seasonal fluctuations spread the release, or isolated surface spills have impacted the groundwater up-gradient of the facility operations.

5.3 Remediation Plan

On May 1, 2015 SD&C prepared a *Site Decommissioning and Demolition Work Plan* which outlined proposed remediation by excavating the impacted soil. The buildings and structures will be demolished and removed from the Site, and PHC impacted soil is proposed to be excavated in the vicinity of the garage building, AST compound, and fueling areas to a depth of 5 ft. bgs. The PHC impacted soil will placed directly into transport trucks for direct disposal off-site. Non-PCH impacted soil will be stockpiled separately from materials and reused as backfill during regrading of the Site. During the excavation activities, groundwater containing PHC is proposed to be treated using activated carbon. Continued groundwater monitoring will be conducted to evaluate seasonal flow changes, and samples will be collected until four consecutive quarters of PHC data indicate the site has been remediated below the MTCA cleanup levels.

6.0 LIMITATIONS

SD&C's conclusions are based on conditions encountered at the time of field activities, information provided, and the results of qualitative sampling. The opinions expressed in this report are based on an evaluation of the subsurface conditions encountered, and the assumption that the subsurface conditions in proximity to the sample sites do not deviate appreciably from those examined. Any unusual conditions not identified during this subsurface investigation should be identified for SD&C so that modifications may be made to this report if necessary.

SD&C's work was performed in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the area. No other warranty, expressed or implied, is made.

7.0 REFERENCES

Ecology. October 1992. *Guidance for Site Checks and Site Assessments for Underground Storage Tanks.* Washington State Department of Ecology, Olympia, Washington. 35 pp.

Environmental Associates (EA). December 9, 2003 *Preliminary Subsurface Exploration Report*

SD&C. April 3, 2008 *Phase 1 and 2 Environmental Site Assessment Report*

SD&C. May 1, 2015 *Site Decommissioning and Demolition Plan*

Table 1
Laboratory Chemical Analyses Results for Soil Samples
Nelson Petroleum Facility, Granite Falls, WA

Sample ID	Sample Date	WTPH-G (mg/kg, ppm)	WTPH-D (mg/kg, ppm)	WTPH-O (mg/kg, ppm)	Benzene (mg/kg, ppm)	Toluene (mg/kg, ppm)	Ethyl Benzene (mg/kg, ppm)	Xylenes (mg/kg, ppm)	Total Lead (mg/kg, ppm)
EA Soil Borings									
B1 2-3'	12/9/03	8	820	230	<0.02	0.08	0.11	0.43	N/A
B3 2-3' B3 4-5' Comp	12/9/03	3	970	<50	0.04	<0.02	<0.02	0.08	N/A
B4 2-3' B4 4-5' Comp	12/9/03	5	870	<50	<0.02	<0.02	<0.02	0.07	N/A
B6 4-5'	12/9/03	4	890	<50	<0.02	<0.02	<0.02	0.04	N/A
B7 2-3' B7 4-5' Comp	12/9/03	44	**11,000**	<500	0.04	<0.02	2.60	2.40	N/A
SD&C Soil Borings									
SB-1@ 4'	2/22/08	N/A	270	<250	N/A	N/A	N/A	N/A	N/A
SB-2 @ 4'*	2/22/08	N/A	**2,600**	**3,200**	<0.03	<0.05	0.32	0.72	3.03
SB-3 @ 4'	2/22/08	N/A	450	510	N/A	N/A	N/A	N/A	N/A
SB-4 @ 3'	2/22/08	N/A	110	<250	N/A	N/A	N/A	N/A	N/A
SB-5 @ 4'	2/22/08	N/A	240	<250	N/A	N/A	N/A	N/A	N/A
SB-6 @ 4'	2/22/08	N/A	160	<250	N/A	N/A	N/A	N/A	N/A
SB-7 @ 4'	2/22/08	N/A	<50	<250	N/A	N/A	N/A	N/A	N/A
MW-1@3.5'	11/11/15	<3	<25	<50	<0.03	<0.05	<0.05	<0.05	N/A
MW-2@3'	11/11/15	<3	<25	<50	<0.03	<0.05	<0.05	<0.05	N/A
MW-3@3'	11/11/15	**480**	840	<50	<0.03	<0.05	<0.05	<0.05	N/A
MW-4@3'	11/11/15	**120**	870	<50	<0.03	<0.05	<0.05	<0.05	N/A
MW-5@3'	11/11/15	<3	<25	<50	<0.03	<0.05	<0.05	<0.05	N/A
SB-8@3'	11/11/15	<3	430	<50	<0.03	<0.05	<0.05	<0.05	N/A
SB-10@3'	11/11/15	**140**	<25	<50	<0.03	<0.05	0.19	<0.05	N/A
MTCA Method A cleanup level		**100**	**2,000**	**2,000**	**0.03**	**7**	**6**	**9**	**250**
Method Reporting Limit		3	25-50	50-250	0.02	0.05	0.05	0.05	1.0

Notes: Milligrams per kilogram (mg/kg) parts per million (ppm). <1.0 = not detected at or above the method reporting limit. N/A= not analyzed
MTCA Method A cleanup levels for soil are from Washington Administrative Code (WAC) chapter 173-340 revised 2-12-01.
Soil samples were analyzed for Diesel and Heavy Oil by Ecology method NWTPH-Dx, Gasoline by Ecology method NWTPH-Gx.
SB-2@4'* Soil sample was additionally analyzed for Total Lead by EPA method 7010, Dichloroethane (EDC), Dibromoethane (EDB), Naphthalene and MTBE using EPA Method 8260B. (Napthalene was detected at 0.63 ppm all other results did not exceed the method reporting limit).
Acenapthene, Flourene, and Phenanthrene were also detected at low levels in B-2 @ 4' using EPA Method 8270C.

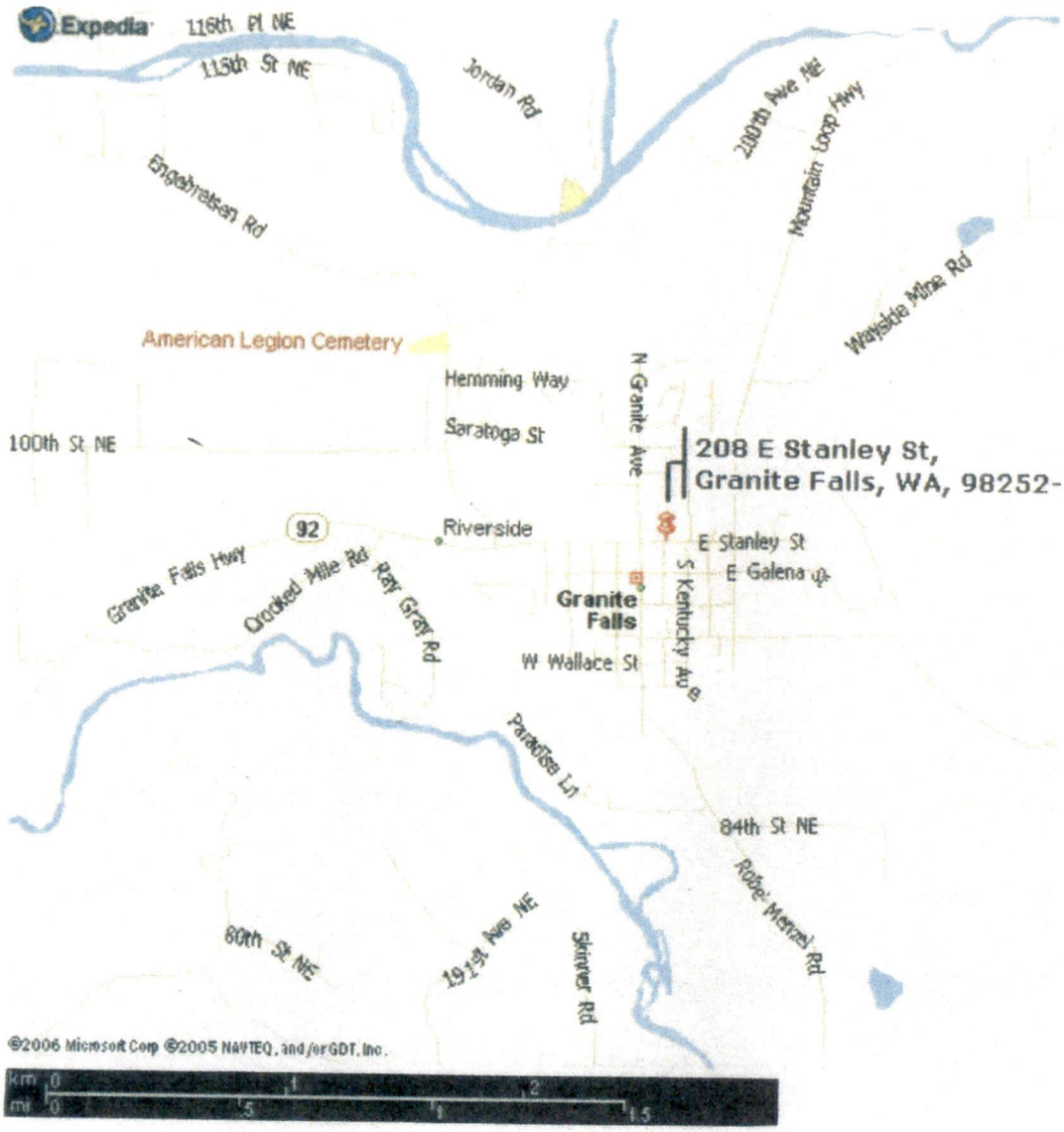
Table 2
Laboratory Chemical Analyses Results - Groundwater Samples
Nelson Petroleum Facility, Granite Falls, WA

Sample ID	Sample Date	WTPH-G (ug/L, ppb)	WTPH-D (ug/L, ppb)	WTPH-O (ug/L, ppb)	Benzene (ug/L, ppb)	Toluene (ug/L, ppb)	Ethyl Benzene (ug/L, ppb)	Xylenes (ug/L, ppb)
EA Samples								
B1	12/03	N/A	**1,400**	N/A	N/A	N/A	N/A	N/A
B2	12/03	N/A	99	N/A	N/A	N/A	N/A	N/A
B3	12/03	N/A	**8,000**	N/A	N/A	N/A	N/A	N/A
B4	12/03	N/A	**24,000**	N/A	N/A	N/A	N/A	N/A
B5	12/03	N/A	97	N/A	N/A	N/A	N/A	N/A
B6	12/03	N/A	**5,500**	N/A	N/A	N/A	N/A	N/A
B7	12/03	N/A	**210,000**	N/A	N/A	N/A	N/A	N/A
Probe Sample								
SB-1	2/22/08	220	<310	<560	<1	<1	1	<3
SB-2	2/22/08	<100	**570**	<510	**5**	<1	<1	<3
SB-3	2/22/08	<100	<290	<510	<1	<1	<1	<3
SB-4	2/22/08	<100	<310	<560	<1	<1	<1	<3
SB-5	2/22/08	<100	<310	<560	<1	<1	<1	<3
SB-6 *	2/22/08	**800**	**2,500**	<560	**50**	4	2	**8**
SB-7	2/22/08	<100	<290	<510	<1	<1	<1	<3
Monitoring Wells								
MW-1	11/12/15	<50	**650**	<1200	<1	<1	<1	<3
MW-2	11/12/15	<50	**640**	<1200	<1	<1	<1	<3
MW-3	11/12/15	<50	**1600**	<1200	<1	<1	<1	<3
MW-4	11/12/15	**250**	**2200**	<1200	**33**	1.2	1.6	7.2
MW-5	11/12/15	<50	**830**	<1200	<1	<1	<1	<3
MTCA Method A cleanup level		**800**	**500**	**500**	**5**	**1,000**	**700**	**1,000**
Method Reporting Limit		50-100	290-550	510-1200	1	1	1	3

Notes:
micrograms per liter (µg/L), parts per billion (ppb). <1.0 = not detected at or above the method reporting limit. N/A = Not Analyzed
MTCA Method A cleanup levels for groundwater are from Washington Administrative Code (WAC) chapter 173-340 revised 2-12-01.
Groundwater samples were analyzed using the following methods:

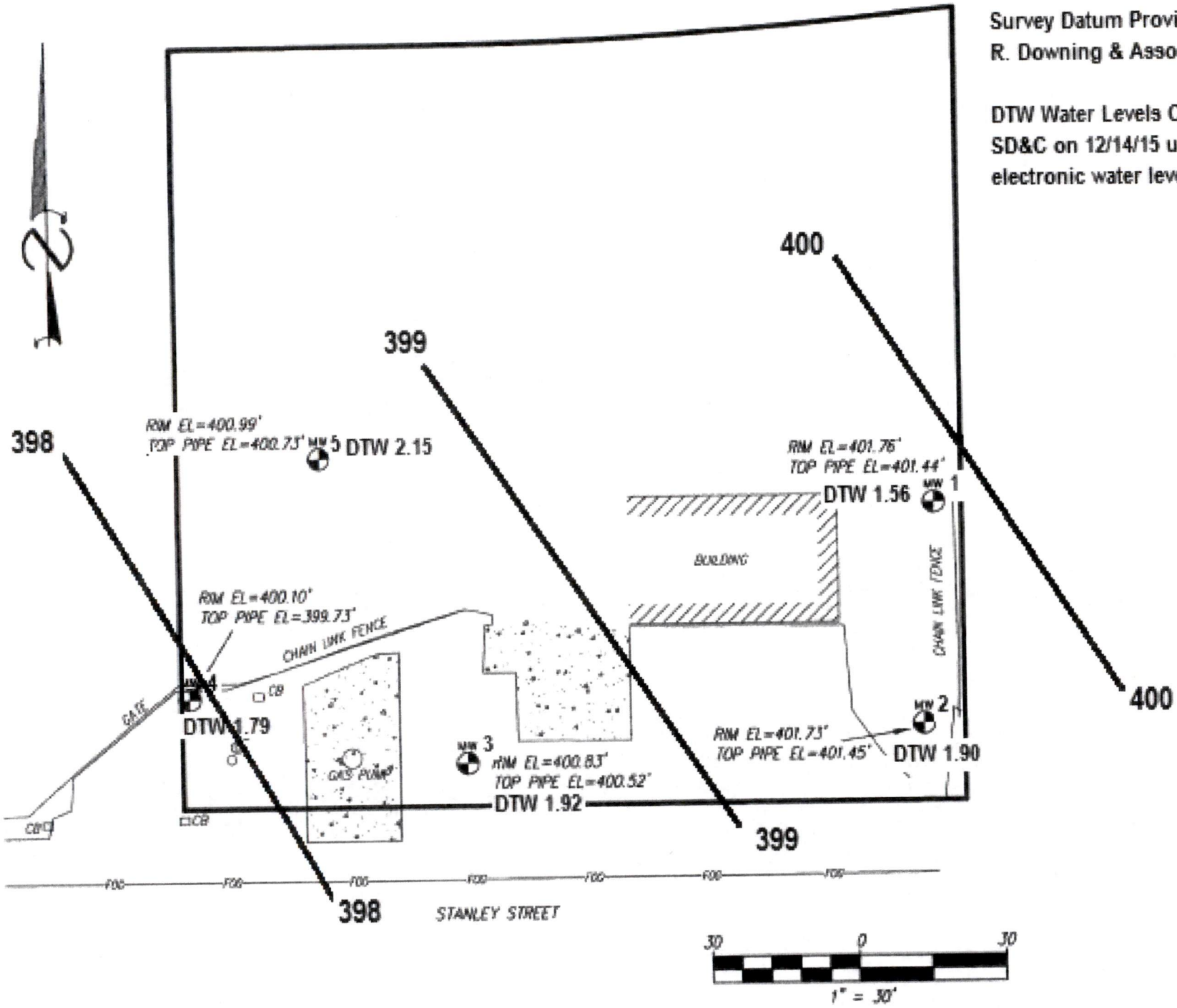
- Gasoline by Ecology method NWTPH-Gx, and BTEX by EPA method 8020
- Diesel and Heavy Oil by Ecology method NWTPH-D ext.

SB-6* Groundwater sample was additionally analyzed for: Dichloroethane (EDC), Dibromoethane (EDB), Naphthalene and MTBE using EPA Method 8260B – Results were all below the method reporting limit.



SD&C **Granite Falls Vicinity Map** **Figure 1**

SD&C **Granite Falls Site Map** **Figure 2**



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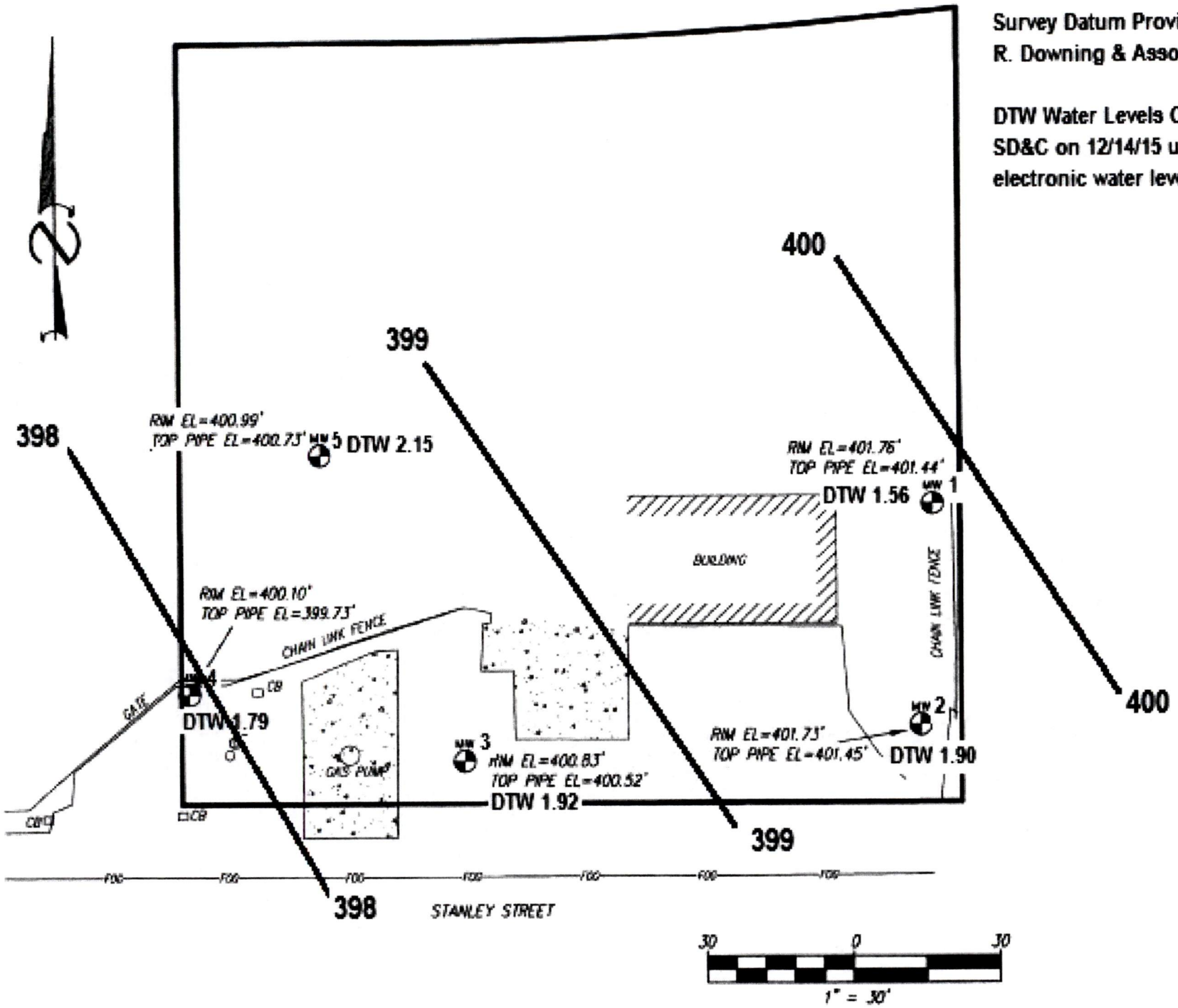
Groundwater Contour Map

Figure 3



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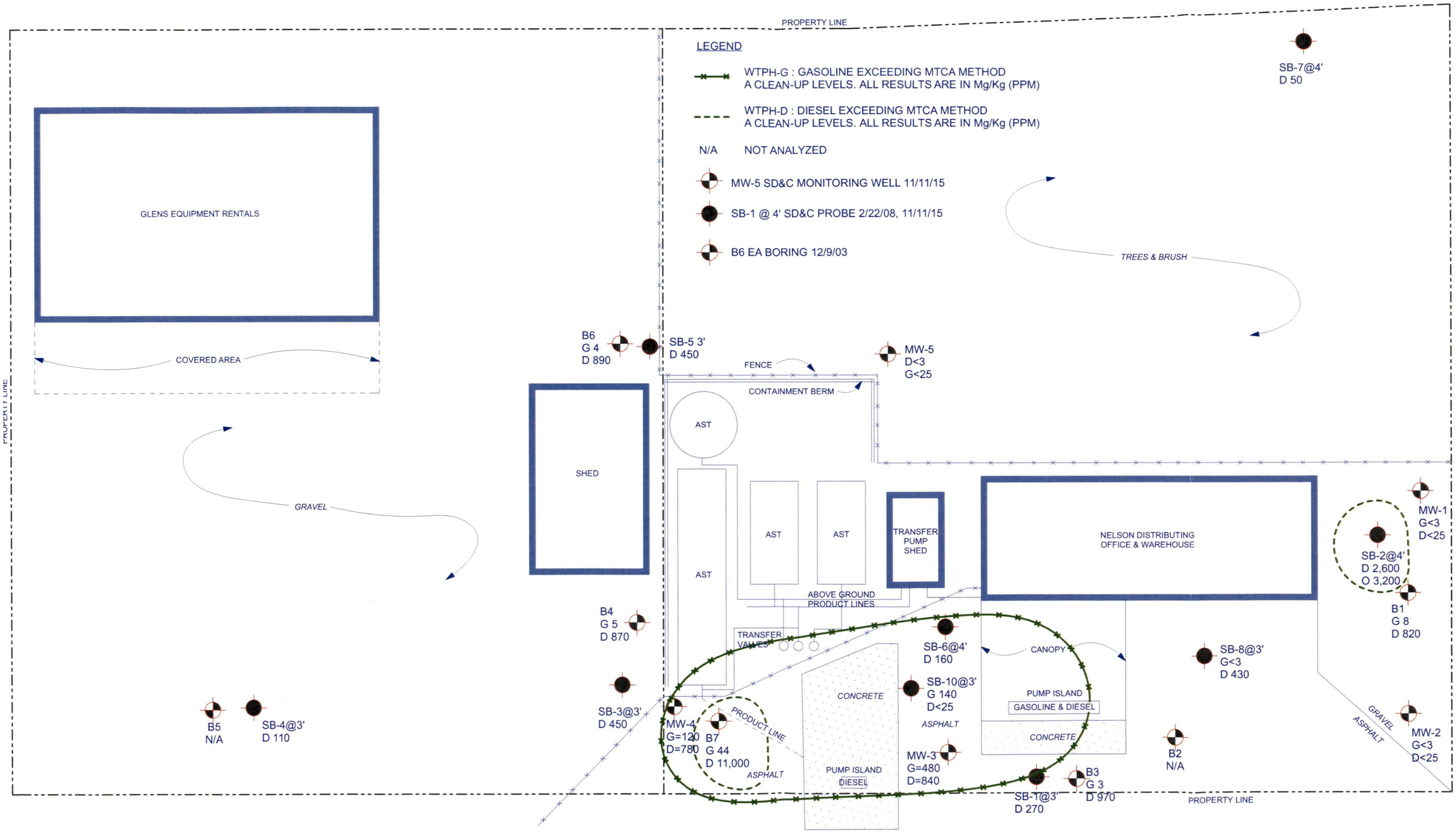
Groundwater Contour Map

Figure 3



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SITE PLAN

SCALE: 1" = 20'

0 10' 20' 40'

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NELSON DISTRIBUTING
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SOIL ANALYTICAL RESULTS

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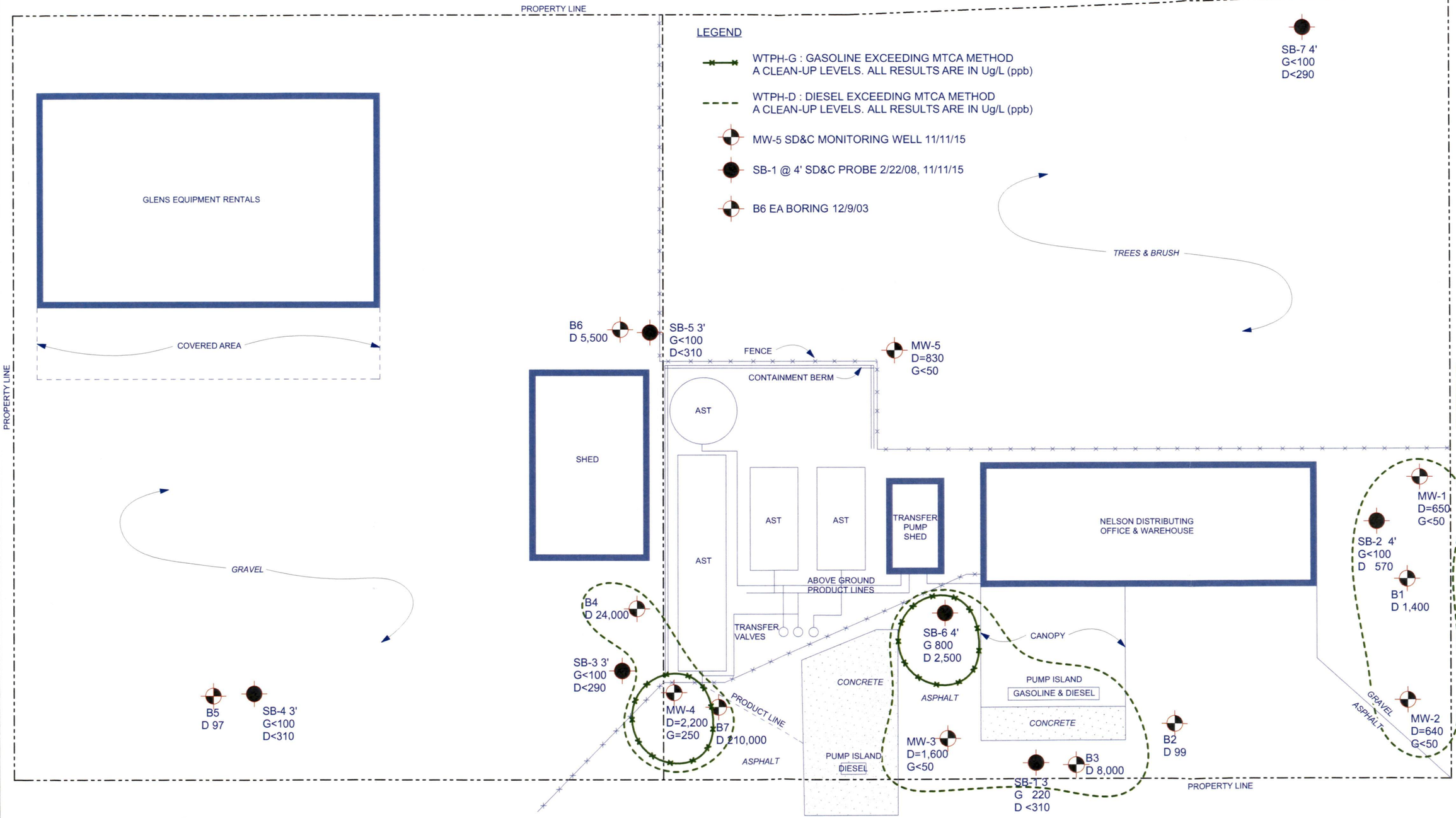

SITE PLAN
SCALE: 1" = 20'

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Granite Falls, WA

GROUNDWATER ANALYTICAL RESULTS

5

APPENDIX I

BORING LOGS

Project Nelson Petroleum Inc. **Location 201 West Stanley Street, Granite Falls, WA**
Date: 11-11-15 **Subcontractor and Equipment Holoscene Drilling, Geoprobe**

Penetration Results	Sample Depth (feet)	PID (ppm)	Depth (feet)	Lithologic Description	Soil Classification
			0	MW-1 15' NE of Building Corner	Grass
				Fine to coarse silty SAND	SM
				dark brown with fine-to coarse	
		None	1	-grained sand with roots and gravel (topsoil)	
				Damp Dense No odor.	
				Fine to Medium grained Sandy SILT	SM/ML
			2	brown with decaying organics,	
				Moist, Medium Dense	
				No Hydrocarbon Odor.	
	MW-1@3'	None	3		
				Becomes Saturated – Groundwater @ 3.5'	
			4		
				Fine-to coarse-grained Silty SAND.	SM
				Gray, Moist, Dense	
			5		
		None			
				Interbeds of Fine-grained SILT and	SM
			6	Fine-to-Coarse Grained SAND brown	
				Saturated, Dense, No Odor	
			7		
		None	8		
			9		
Casing 10 slot 5 to 10'					
			10		
		None	11		
			12		
			13		
		None			
			14		
				END OF BORING	

Project Nelson Petroleum Inc. Location 201 West Stanley Street, Granite Falls, WA
Date: 11-11-15 Subcontractor and Equipment Holoscene Drilling, Geoprobe

Penetration Results	Sample Depth (feet)	PID (ppm)	Depth (feet)	Lithologic Description	Soil Classification
			0	MW-2 5' W of Shell Sign on SE Corner Gravel	
				Fine to coarse silty SAND	SM
				dark-grey to brown with fine-to coarse	
		None	1	-grained sand with roots and gravel (Topsoil)	
				Damp Dense No odor.	
				Fine to Medium grained Sandy SILT	SM/ML
			2	brown with decaying organics,	
				Moist, Medium Dense	
				No Hydrocarbon Odor.	
	MW-2@3'	None	3		
				Becomes Saturated – Groundwater @ 3.5'	
			4		
				Fine-to coarse-grained Silty SAND.	SM
				Gray, Moist, Dense	
		None	5		
				Interbeds of Fine-grained SILT and	SM
			6	Fine-to-Coarse Grained SAND brown	
				Saturated, Dense, No Odor	
	Casing 10 slot 5 to 10'				
			7		
		None			
			8		
			9		
		None			
			10		
				END OF BORING	

Project Nelson Petroleum Inc. **Location** 201 West Stanley Street, Granite Falls, WA
Date: 11-11-15 **Subcontractor and Equipment** Holoscene Drilling, Geoprobe

Penetration Results	Sample Depth (feet)	PID (ppm)	Depth	Lithologic Description (feet)	Soil Classification
			0	MW-3 5' 15' SW of Pump Island	Asphalt
				Fine to coarse silty GRAVEL dark-grey to brown with fine-to coarse	GW
			1	-grained sand (Road FILL) Damp,	
		None		Dense No odor.	
				Fine to Medium grained Sandy SILT	SM/ML
			2	brown with decaying organics,	
				Wet, Medium Dense	
				Moderate Hydrocarbon Odor.	
	MW-3@ 3'	100	3	Becomes Saturated – Groundwater @ 3.5' with a sheen	
			4		
				Fine-to coarse-grained Silty SAND.	SM
				Gray, Saturated, Dense, Moderate	
		120	5	Odor	
				Interbeds of Fine-grained SILT and	SM/ML
			6	Fine-to-Coarse Grained SAND gray	
				Saturated, Dense, No Odor	
	Casing 10 slot 5 to 10'				
			7		
		None			
			8		
			9		
			10		
				END OF BORING	

Project Nelson Petroleum Inc. Location 201 West Stanley Street, Granite Falls, WA
Date: 11-11-15 Subcontractor and Equipment Holoscene Drilling, Geoprobe

Penetration Results	Sample Depth (feet)	PID (ppm)	Depth	Lithologic Description (feet)	Soil Classification
			0	MW-4 5' 5' SW of AST Compound Fine to coarse silty GRAVEL Dark-grey to brown with fine-to coarse	Asphalt GW
		None	1	-grained sand (Road FILL) Damp, Dense No odor.	
			2	Fine to Medium grained Sandy SILT brown with decaying organics, Wet, Medium Dense Moderate Hydrocarbon Odor.	SM/ML
	MW-4@ 3'	98	3	Becomes Saturated – Groundwater @ 3.5' with a sheen	
			4		
			5	Fine-to coarse-grained Silty SAND. Gray, Saturated, Dense, Moderate Odor	SM
		130			
			6	Interbeds of Fine-grained SILT and Fine-to-Coarse Grained SAND gray Saturated, Dense, No Odor	SM/ML
	Casing 10 slot 5 to 10'		7		
		None	8		
			9		
			10	END OF BORING	

Project Nelson Petroleum Inc. **Location 201 West Stanley Street, Granite Falls, WA**
Date: 11-11-15 **Subcontractor and Equipment Holoscene Limited Access Rig**

Penetration Results	Sample Depth (feet)	PID (ppm)	Depth	Lithologic Description (feet)	Soil Classification
			0	MW-5 5' NE of AST Compound	Grass
				Fine to coarse silty GRAVEL	GW
				Dark-grey to brown with fine-to coarse	
			1	-grained sand (FILL) Damp,	
				Dense No odor.	
				Fine to Medium grained Sandy SILT	SM/ML
			2	brown with decaying organics, (Peat)	
				Wet, Medium Dense	
				No Hydrocarbon Odor.	
	MW-5@ 3'	None	3	Becomes Saturated – Groundwater @ 3.5'	
			4		
				Fine-to coarse-grained Silty SAND.	SM
				Gray, Saturated, Dense,	
			5	No Odor	
				Interbeds of Fine-grained SILT and	SM/ML
			6	Fine-to-Coarse Grained SAND gray	
				Saturated, Dense, No Odor	
	Casing 10 slot 3 to 8'				
			7		
			8		
				END OF BORING - Refusal	

Project Nelson Petroleum Inc. **Location** 201 West Stanley Street, Granite Falls, WA
Date: 11-11-15 **Subcontractor and Equipment** Holoscene Drilling, Geoprobe

Penetration Results	Sample Depth (feet)	PID (ppm)	Depth	Lithologic Description (feet)	Soil Classification
			0	SB-8' 10' S of Garage Doors	Asphalt
				Fine to coarse silty GRAVEL	GW
				Dark-grey to brown with fine-to coarse	
		None	1	-grained sand (Road FILL) Damp,	
				Dense No odor.	
				Fine to Medium grained Sandy SILT	SM/ML
			2	brown with decaying organics,	
				Wet, Medium Dense	
				no Hydrocarbon Odor.	
	SB-8@ 3'	None	3	Becomes Saturated – Groundwater @ 3.5'	
			4		
				Fine-to coarse-grained Silty SAND.	SM
				Gray, Saturated, Dense, No Odor	
		None	5		
				END OF BORING	

Project Nelson Petroleum Inc. **Location** 201 West Stanley Street, Granite Falls, WA
Date: 11-11-15 **Subcontractor and Equipment** Holoscene Drilling, Geoprobe

Penetration Results	Sample Depth (feet)	PID (ppm)	Depth	Lithologic Description (feet)	Soil Classification
			0	SB-9' central pump island	Concrete
				Could not penetrate concrete	
		None	1	too much rebar	
				END OF BORING	

Project Nelson Petroleum Inc. **Location** 201 West Stanley Street, Granite Falls, WA
Date: 11-11-15 **Subcontractor and Equipment** Holoscene Drilling, Geoprobe

Penetration Results	Sample Depth (feet)	PID (ppm)	Depth	Lithologic Description (feet)	Soil Classification
			0	SB-8' 10' S of Garage Doors	Asphalt
				Fine to coarse silty GRAVEL	GW
				Dark-grey to brown with fine-to coarse	
		None	1	-grained sand (Road FILL) Damp,	
				Dense No odor.	
				Fine to Medium grained Sandy SILT	SM/ML
			2	brown with decaying organics,	
				Wet, Medium Dense	
				Strong Hydrocarbon Odor.	
	SB-10@ 3'	145	3	Becomes Saturated – Groundwater @ 3.5'	
				Water has a sheen	
			4		
				Fine-to coarse-grained Silty SAND.	SM
				Gray, Saturated, Dense, Moderate	
		131	5	Odor	
				END OF BORING	

APPENDIX II

LABORATORY ANALYTICAL DATA

November 18, 2015

Mr. Tim Slotta
SD & C
PO Box 2071
Kirkland, WA 98083

Dear Mr. Slotta,

On November 12th, 12 samples were received by our laboratory and assigned our laboratory project number EV15110090. The project was identified as your Nelson - Granite Falls. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	SD & C PO Box 2071 Kirkland, WA 98083	DATE:	11/18/2015
		ALS JOB#:	EV15110090
		ALS SAMPLE#:	EV15110090-01
CLIENT CONTACT:	Tim Slotta	DATE RECEIVED:	11/12/2015
CLIENT PROJECT:	Nelson - Granite Falls	COLLECTION DATE:	11/11/2015 8:00:00 AM
CLIENT SAMPLE ID	MW-1@3.5'	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	11/13/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	11/13/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	11/13/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	11/13/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	11/13/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	11/13/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	11/13/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**91.3**	11/13/2015	PAB
TFT	EPA-8021	**80.2**	11/13/2015	PAB
C25	NWTPH-DX	**107**	11/13/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Group USA, Corp dba ALS Environmental

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CERTIFICATE OF ANALYSIS

CLIENT:	SD & C PO Box 2071 Kirkland, WA 98083	DATE: ALS JOB#: ALS SAMPLE#:	11/18/2015 EV15110090 EV15110090-02
CLIENT CONTACT:	Tim Slotta	DATE RECEIVED:	11/12/2015
CLIENT PROJECT:	Nelson - Granite Falls	COLLECTION DATE:	11/11/2015 9:00:00 AM
CLIENT SAMPLE ID	MW-2 @ 3'	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	11/13/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	11/13/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	11/13/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	11/13/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	11/13/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	11/13/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	11/13/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**83.4**	11/13/2015	PAB
TFT	EPA-8021	**76.2**	11/13/2015	PAB
C25	NWTPH-DX	**106**	11/13/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	SD & C PO Box 2071 Kirkland, WA 98083	DATE: ALS JOB#: ALS SAMPLE#:	11/18/2015 EV15110090 EV15110090-03
CLIENT CONTACT:	Tim Slotta	DATE RECEIVED:	11/12/2015
CLIENT PROJECT:	Nelson - Granite Falls	COLLECTION DATE:	11/11/2015 10:00:00 AM
CLIENT SAMPLE ID	MW-3 @ 3'	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**480**	30	10	MG/KG	11/16/2015	PAB
Benzene	EPA-8021	U	0.30	10	MG/KG	11/16/2015	PAB
Toluene	EPA-8021	U	0.50	10	MG/KG	11/16/2015	PAB
Ethylbenzene	EPA-8021	U	0.50	10	MG/KG	11/16/2015	PAB
Xylenes	EPA-8021	U	2.0	10	MG/KG	11/16/2015	PAB
TPH-Diesel Range	NWTPH-DX	**840**	25	1	MG/KG	11/13/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	11/13/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 10X Dilution	NWTPH-GX	**63.5**	11/16/2015	PAB
TFT 10X Dilution	EPA-8021	**64.1**	11/16/2015	PAB
C25	NWTPH-DX	**116**	11/13/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline and weathered diesel.
Gasoline range product results biased high due to semivolatile range product overlap.

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CERTIFICATE OF ANALYSIS

CLIENT:	SD & C PO Box 2071 Kirkland, WA 98083	DATE: ALS JOB#: ALS SAMPLE#:	11/18/2015 EV15110090 EV15110090-04
CLIENT CONTACT:	Tim Slotta	DATE RECEIVED:	11/12/2015
CLIENT PROJECT:	Nelson - Granite Falls	COLLECTION DATE:	11/11/2015 11:00:00 AM
CLIENT SAMPLE ID	MW-4 @ 3'	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**120**	15	5	MG/KG	11/16/2015	PAB
Benzene	EPA-8021	U	0.15	5	MG/KG	11/16/2015	PAB
Toluene	EPA-8021	U	0.25	5	MG/KG	11/16/2015	PAB
Ethylbenzene	EPA-8021	U	0.25	5	MG/KG	11/16/2015	PAB
Xylenes	EPA-8021	U	1.0	5	MG/KG	11/16/2015	PAB
TPH-Diesel Range	NWTPH-DX	**870**	25	1	MG/KG	11/13/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	11/13/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 5X Dilution	NWTPH-GX	**103**	11/16/2015	PAB
TFT 5X Dilution	EPA-8021	**86.5**	11/16/2015	PAB
C25	NWTPH-DX	**120**	11/13/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline and weathered diesel.
Gasoline range product results biased high due to semivolatile range product overlap.

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CERTIFICATE OF ANALYSIS

CLIENT:	SD & C PO Box 2071 Kirkland, WA 98083	DATE: ALS JOB#: ALS SAMPLE#:	11/18/2015 EV15110090 EV15110090-05
CLIENT CONTACT:	Tim Slotta	DATE RECEIVED:	11/12/2015
CLIENT PROJECT:	Nelson - Granite Falls	COLLECTION DATE:	11/11/2015 12:00:00 PM
CLIENT SAMPLE ID	MW-5 @ 3'	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	11/14/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	11/14/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	11/14/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	11/14/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	11/14/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	11/13/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	11/13/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**86.9**	11/14/2015	PAB
TFT	EPA-8021	**81.2**	11/14/2015	PAB
C25	NWTPH-DX	**105**	11/13/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

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CERTIFICATE OF ANALYSIS

CLIENT:	SD & C PO Box 2071 Kirkland, WA 98083	DATE: ALS JOB#: ALS SAMPLE#:	11/18/2015 EV15110090 EV15110090-06
CLIENT CONTACT:	Tim Slotta	DATE RECEIVED:	11/12/2015
CLIENT PROJECT:	Nelson - Granite Falls	COLLECTION DATE:	11/11/2015 6:00:00 PM
CLIENT SAMPLE ID	SB-8	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	11/14/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	11/14/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	11/14/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	11/14/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	11/14/2015	PAB
TPH-Diesel Range	NWTPH-DX	**430**	25	1	MG/KG	11/13/2015	EBS
TPH-Oil Range	NWTPH-DX	U	52	1	MG/KG	11/13/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**86.5**	11/14/2015	PAB
TFT	EPA-8021	**81.8**	11/14/2015	PAB
C25	NWTPH-DX	**113**	11/13/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains weathered diesel.

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CERTIFICATE OF ANALYSIS

CLIENT:	SD & C PO Box 2071 Kirkland, WA 98083	DATE: ALS JOB#: ALS SAMPLE#:	11/18/2015 EV15110090 EV15110090-07
CLIENT CONTACT:	Tim Slotta	DATE RECEIVED:	11/12/2015
CLIENT PROJECT:	Nelson - Granite Falls	COLLECTION DATE:	11/11/2015 6:30:00 PM
CLIENT SAMPLE ID	SB-10	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**140**	6.0	2	MG/KG	11/16/2015	PAB
Benzene	EPA-8021	U	0.060	2	MG/KG	11/16/2015	PAB
Toluene	EPA-8021	U	0.10	2	MG/KG	11/16/2015	PAB
Ethylbenzene	EPA-8021	**0.19**	0.10	2	MG/KG	11/16/2015	PAB
Xylenes	EPA-8021	U	0.40	2	MG/KG	11/16/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	11/13/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	11/13/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 2X Dilution	NWTPH-GX	**81.4**	11/16/2015	PAB
TFT 2X Dilution	EPA-8021	**73.6**	11/16/2015	PAB
C25	NWTPH-DX	**97.0**	11/13/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline.

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CERTIFICATE OF ANALYSIS

CLIENT:	SD & C PO Box 2071 Kirkland, WA 98083	DATE: ALS JOB#: ALS SAMPLE#:	11/18/2015 EV15110090 EV15110090-08
CLIENT CONTACT:	Tim Slotta	DATE RECEIVED:	11/12/2015
CLIENT PROJECT:	Nelson - Granite Falls	COLLECTION DATE:	11/11/2015 1:00:00 PM
CLIENT SAMPLE ID	MW-1	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/13/2015	PAB
Benzene	EPA-8021	U	1.0	1	UG/L	11/13/2015	PAB
Toluene	EPA-8021	U	1.0	1	UG/L	11/13/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/13/2015	PAB
Xylenes	EPA-8021	U	3.0	1	UG/L	11/13/2015	PAB
TPH-Diesel Range	NWTPH-DX	**650**	550	1	UG/L	11/13/2015	EBS
TPH-Oil Range	NWTPH-DX	U	1200	1	UG/L	11/13/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**93.3**	11/13/2015	PAB
TFT	EPA-8021	**91.7**	11/13/2015	PAB
C25	NWTPH-DX	**92.1**	11/13/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains weathered diesel.

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CERTIFICATE OF ANALYSIS

CLIENT:	SD & C PO Box 2071 Kirkland, WA 98083	DATE: ALS JOB#: ALS SAMPLE#:	11/18/2015 EV15110090 EV15110090-09
CLIENT CONTACT:	Tim Slotta	DATE RECEIVED:	11/12/2015
CLIENT PROJECT:	Nelson - Granite Falls	COLLECTION DATE:	11/11/2015 2:00:00 PM
CLIENT SAMPLE ID	MW-2	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/13/2015	PAB
Benzene	EPA-8021	U	1.0	1	UG/L	11/13/2015	PAB
Toluene	EPA-8021	U	1.0	1	UG/L	11/13/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/13/2015	PAB
Xylenes	EPA-8021	U	3.0	1	UG/L	11/13/2015	PAB
TPH-Diesel Range	NWTPH-DX	**640**	550	1	UG/L	11/13/2015	EBS
TPH-Oil Range	NWTPH-DX	U	1200	1	UG/L	11/13/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**88.6**	11/13/2015	PAB
TFT	EPA-8021	**94.3**	11/13/2015	PAB
C25	NWTPH-DX	**90.2**	11/13/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains weathered diesel.

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	SD & C PO Box 2071 Kirkland, WA 98083	DATE: ALS JOB#: ALS SAMPLE#:	11/18/2015 EV15110090 EV15110090-10
CLIENT CONTACT:	Tim Slotta	DATE RECEIVED:	11/12/2015
CLIENT PROJECT:	Nelson - Granite Falls	COLLECTION DATE:	11/11/2015 3:00:00 PM
CLIENT SAMPLE ID	MW-3	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**83**	50	1	UG/L	11/13/2015	PAB
Benzene	EPA-8021	U	1.0	1	UG/L	11/13/2015	PAB
Toluene	EPA-8021	U	1.0	1	UG/L	11/13/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/13/2015	PAB
Xylenes	EPA-8021	U	3.0	1	UG/L	11/13/2015	PAB
TPH-Diesel Range	NWTPH-DX	**1600**	550	1	UG/L	11/13/2015	EBS
TPH-Oil Range	NWTPH-DX	U	1200	1	UG/L	11/13/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**82.8**	11/13/2015	PAB
TFT	EPA-8021	**88.3**	11/13/2015	PAB
C25	NWTPH-DX	**95.3**	11/13/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline and weathered diesel.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT:	SD & C PO Box 2071 Kirkland, WA 98083	DATE: ALS JOB#: ALS SAMPLE#:	11/18/2015 EV15110090 EV15110090-11
CLIENT CONTACT:	Tim Slotta	DATE RECEIVED:	11/12/2015
CLIENT PROJECT:	Nelson - Granite Falls	COLLECTION DATE:	11/11/2015 4:00:00 PM
CLIENT SAMPLE ID	MW-4	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**250**	50	1	UG/L	11/13/2015	PAB
Benzene	EPA-8021	**33**	1.0	1	UG/L	11/13/2015	PAB
Toluene	EPA-8021	**1.2**	1.0	1	UG/L	11/13/2015	PAB
Ethylbenzene	EPA-8021	**1.6**	1.0	1	UG/L	11/13/2015	PAB
Xylenes	EPA-8021	**7.2**	3.0	1	UG/L	11/13/2015	PAB
TPH-Diesel Range	NWTPH-DX	**2200**	550	1	UG/L	11/13/2015	EBS
TPH-Oil Range	NWTPH-DX	U	1200	1	UG/L	11/13/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**98.6**	11/13/2015	PAB
TFT	EPA-8021	**101**	11/13/2015	PAB
C25	NWTPH-DX	**89.0**	11/13/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains weathered gasoline and weathered diesel.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	SD & C PO Box 2071 Kirkland, WA 98083	DATE: ALS JOB#: ALS SAMPLE#:	11/18/2015 EV15110090 EV15110090-12
CLIENT CONTACT:	Tim Slotta	DATE RECEIVED:	11/12/2015
CLIENT PROJECT:	Nelson - Granite Falls	COLLECTION DATE:	11/11/2015 5:00:00 PM
CLIENT SAMPLE ID	MW-5	WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/13/2015	PAB
Benzene	EPA-8021	U	1.0	1	UG/L	11/13/2015	PAB
Toluene	EPA-8021	U	1.0	1	UG/L	11/13/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/13/2015	PAB
Xylenes	EPA-8021	U	3.0	1	UG/L	11/13/2015	PAB
TPH-Diesel Range	NWTPH-DX	**830**	550	1	UG/L	11/13/2015	EBS
TPH-Oil Range	NWTPH-DX	U	510	1	UG/L	11/13/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**88.2**	11/13/2015	PAB
TFT	EPA-8021	**90.2**	11/13/2015	PAB
C25	NWTPH-DX	**91.1**	11/13/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains weathered diesel and an unidentified oil range product.

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
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CERTIFICATE OF ANALYSIS

CLIENT: SD & C
PO Box 2071
Kirkland, WA 98083

CLIENT CONTACT: Tim Slotta
CLIENT PROJECT: Nelson - Granite Falls

DATE: 11/18/2015
ALS SDG#: EV15110090
WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MBG-111215S - Batch 98915 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U		MG/KG	3.0	11/12/2015	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

MBG-111315W - Batch 99036 - Water by NWTPH-GX

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U		UG/L	50	11/13/2015	PAB

U - Analyte analyzed for but not detected at level above reporting limit.

MB-111215S - Batch 98915 - Soil by EPA-8021

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U		MG/KG	0.030	11/12/2015	DLC
Toluene	EPA-8021	U		MG/KG	0.050	11/12/2015	DLC
Ethylbenzene	EPA-8021	U		MG/KG	0.050	11/12/2015	DLC
Xylenes	EPA-8021	U		MG/KG	0.20	11/12/2015	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

MB-111315W - Batch 99036 - Water by EPA-8021

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U		UG/L	1.0	11/13/2015	PAB
Toluene	EPA-8021	U		UG/L	1.0	11/13/2015	PAB
Ethylbenzene	EPA-8021	U		UG/L	1.0	11/13/2015	PAB
Xylenes	EPA-8021	U		UG/L	3.0	11/13/2015	PAB

U - Analyte analyzed for but not detected at level above reporting limit.

MB-111215S - Batch 98912 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U		MG/KG	25	11/12/2015	EBS
TPH-Oil Range	NWTPH-DX	U		MG/KG	50	11/12/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-111315W - Batch 99016 - Water by NWTPH-DX

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U		UG/L	130	11/13/2015	EBS

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CERTIFICATE OF ANALYSIS

CLIENT:	SD & C PO Box 2071 Kirkland, WA 98083	DATE: ALS SDG#: WDOE ACCREDITATION:	11/18/2015 EV15110090 C601
CLIENT CONTACT:	Tim Slotta		
CLIENT PROJECT:	Nelson - Granite Falls		

LABORATORY BLANK RESULTS

MB-111315W - Batch 99016 - Water by NWTPH-DX

TPH-Oil Range	NWTPH-DX	U	UG/L	250	11/13/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

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ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT: SD & C
PO Box 2071
Kirkland, WA 98083

CLIENT CONTACT: Tim Slotta
CLIENT PROJECT: Nelson - Granite Falls

DATE: 11/18/2015
ALS SDG#: EV15110090
WDOE ACCREDITATION: C601

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 98915 - Soil by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	101			11/12/2015	DLC
TPH-Volatile Range - BSD	NWTPH-GX	102	1		11/12/2015	DLC

ALS Test Batch ID: 99036 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	81.5			11/13/2015	PAB
TPH-Volatile Range - BSD	NWTPH-GX	85.6	5		11/13/2015	PAB

ALS Test Batch ID: 98915 - Soil by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	93.7			11/12/2015	DLC
Benzene - BSD	EPA-8021	94.1	0		11/12/2015	DLC
Toluene - BS	EPA-8021	96.1			11/12/2015	DLC
Toluene - BSD	EPA-8021	96.8	1		11/12/2015	DLC
Ethylbenzene - BS	EPA-8021	98.7			11/12/2015	DLC
Ethylbenzene - BSD	EPA-8021	99.7	1		11/12/2015	DLC
Xylenes - BS	EPA-8021	103			11/12/2015	DLC
Xylenes - BSD	EPA-8021	103	0		11/12/2015	DLC

ALS Test Batch ID: 99036 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	95.0			11/13/2015	PAB
Benzene - BSD	EPA-8021	95.6	1		11/13/2015	PAB
Toluene - BS	EPA-8021	95.0			11/13/2015	PAB
Toluene - BSD	EPA-8021	96.1	1		11/13/2015	PAB
Ethylbenzene - BS	EPA-8021	96.1			11/13/2015	PAB
Ethylbenzene - BSD	EPA-8021	97.9	2		11/13/2015	PAB
Xylenes - BS	EPA-8021	99.9			11/13/2015	PAB
Xylenes - BSD	EPA-8021	102	2		11/13/2015	PAB

ALS Test Batch ID: 98912 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	97.5			11/12/2015	EBS
TPH-Diesel Range - BSD	NWTPH-DX	97.5	0		11/12/2015	EBS

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	SD & C PO Box 2071 Kirkland, WA 98083	DATE: ALS SDG#: WDOE ACCREDITATION:	11/18/2015 EV15110090 C601
CLIENT CONTACT:	Tim Slotta		
CLIENT PROJECT:	Nelson - Granite Falls		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 99016 - Water by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	88.1			11/13/2015	EBS
TPH-Diesel Range - BSD	NWTPH-DX	88.7	1		11/13/2015	EBS

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Group USA, Corp dba ALS Environmental

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): EVS110090

Date 11-12-15 Page 1 Of 2

PROJECT ID:	NELSON - GRANITE FALLS
REPORT TO COMPANY:	SD&C
PROJECT MANAGER:	T. SLOTA
ADDRESS:	P.O. BOX 2071
	KIRKLAND, WA 98083
PHONE:	(206) 459-5775 FAX:
P.O. #:	E-MAIL: TS4SDC@HOTMAIL.
INVOICE TO COMPANY:	SD&C
ATTENTION:	
ADDRESS:	

	SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1	MW-1 @ 3,5'	11-11-15	8:00	SOIL	1		X	X	X													
2	MW-2 @ 3'	11-11	9:00	"	2		X	X	X													
3	MW-3 @ 3'	"	10:00	"	3		X	X	X													
4	MW-4 @ 3'	"	11:00	"	4		X	X	X													
5	MW-5 @ 3'	"	12:00	"	5		X	X	X													
6	SB-8	"	18:00	"	6		X	X	X													
7	SB-10	"	18:30	"	7		X	X	X													
8	MW-1	"	13:00	H_2O	8		X	X	X													
9	MW-2	"	14:00	"	9		X	X	X													
10	MW-3	"	15:00	"	10		X	X	X													

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Tim Slota SD&C 11-12-15
   Received By: ALS 11/12/15 3:20
2. Relinquished By:
   Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER:

Specify:

ALS Environmental
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
Fax (425) 356-2626
http://www.alsglobal.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): 1511090

Date 11-12-15 Page 2 Of 2

PROJECT ID: NELSON - GRANITE FALLS
REPORT TO COMPANY: SDgC
PROJECT MANAGER: T. SLOTTA
ADDRESS: P.O. Box 2071
KIRKLAND, WA 98083
PHONE (206) 459-5775 FAX:
P.O. #: E-MAIL: TS4SDC@HOTMAIL.COM
INVOICE TO COMPANY: SDgC
ATTENTION:
ADDRESS:

ANALYSIS REQUESTED

	SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1.	MW-4	11-11-15	16:00	H_2O	11		X	X	X														
2.	MW-5	11-11-15	17:00	"	12		X	X	X														
3.																							
4.																							
5.																							
6.																							
7.																							
8.																							
9.																							
10.																							

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: TIM SLOTTA, SDgC 11-12-15
   Received By: 11/12/15 ALS 3:20
2. Relinquished By:
   Received By:

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY

OTHER:

Specify: