

## MONITORING WELL INSTALLATION REPORT

Lake Chelan Boat Company  
Colony Insurance Claim #208188  
1418 West Woodin Ave  
Chelan, WA 98816

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Antea® Group Project No. STCG-4222  
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# Monitoring Well Installation Report

*Lake Chelan Boat Company  
Colony Insurance Claim #208188  
1418 West Woodin Avenue, Chelan, WA 98816*

Antea®Group (Antea Group) has prepared this report to summarize groundwater monitoring and well installation activities performed at the Lake Chelan Boat Company facility, located at 1418 West Woodin Avenue in Chelan, Washington (Figures 1 & 2A). The facility will be hereinafter referred to as the Site. The assessment was performed on August 3 and 4, 2015 to further investigate soil and groundwater conditions to the east of the project Site and to determine if migrating contamination may be impacting the Site. The scope of work was requested by the Washington State Department of Ecology (Ecology) during a meeting on March 30, 2015. On the Site, diesel concentrations remain above the Model Toxic Control Act (MTCA) Method A cleanup level in groundwater from monitoring well MW-4.

## 1.0 EXECUTIVE SUMMARY

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Between August 3 and 4, 2015, Antea Group personnel directed Holocene Drilling Inc. (Holocene) of Puyallup, Washington, in the installation of two groundwater monitoring wells, MW-5 and MW-6. The following is a summary of the drilling activities and the subsequent groundwater sampling event:

- On August 3, 2015 Holocene pre-cleared the locations for MW-5 and MW-6. Each location was cleared to a minimum of 5 feet below grade surface (bgs) using an air-knife and vacuum truck rig.
- Between August 3 and 4, 2015, Holocene installed monitoring wells MW-5 and MW-6 using a sonic drill rig.
- Well MW-5 was installed to 30 feet bgs with 25 feet of 0.010-inch slotted screen from 5 to 30 feet bgs.
- Well MW-6 was installed to 30 feet bgs with 20 feet of 0.010-inch slotted screen from 10 to 30 feet bgs.
- Petroleum hydrocarbons were not detected in soil above respective Washington State MTCA Method A cleanup levels for benzene, toluene, ethylbenzene, and xylenes (BTEX), and total petroleum hydrocarbons as diesel (TPH-D) and oil (TPH-O) from both monitoring well locations between 5 and 30 feet bgs.
- On September 15, 2015, Antea Group personnel collected groundwater samples from monitoring wells MW-1 through MW-6. Laboratory analytical results indicated that concentrations of petroleum hydrocarbons exceeded MTCA Method A cleanup levels for TPH-D in monitoring well MW-4 at a concentration of 2,300 micrograms per liter (ug/L). All other analytes were below MTCA Method A cleanup levels and/or laboratory method reporting limits (MRL) in all other wells, including newly installed monitoring wells MW-5 and MW-6.

## **2.0 BACKGROUND**

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The Lake Chelan Boat Company (the Site) is an operating business located at 1418 West Woodin Avenue in Chelan, Washington (Figure 2A). The Site consists of an office building, workshop, docks/dry dock, and gravel parking areas. One diesel above ground storage tank (AST) is present east of the office building and workshop.

On February 6, 2012, Antea Group was informed that a 10,000-gallon diesel UST was removed from the Site on November 7, 2011. Environmental Associates, Inc. oversaw the removal of the tank and noted that the tank was moderately rusted and pitted, but did not contain obvious holes. The site owner reported previous problems with the turbine at the north end of the tank. Environmental Associates, Inc. collected soil samples from the bottom and sidewalls of the excavation. Laboratory analytical results indicated that TPH-D concentrations exceeded MTCA Method A cleanup levels in the samples collected from the north and south bottom samples and from the north sidewall. Concentrations ranged from less than the laboratory MRL of 50 milligrams per kilograms (mg/kg) to 24,000 mg/kg. The volume of diesel released from the tank is not known.

On March 6 and 7, 2012, Antea Group personnel directed the advancement of four soil borings with the purpose of defining the limits of a proposed excavation to remove the impacted soil. Soil samples were collected during the advancement of each soil boring at approximate 5-foot intervals. Laboratory analytical results for soil indicated that petroleum hydrocarbons were not detected above MTCA Method A cleanup levels. All four soil borings were completed as 2-inch groundwater monitoring wells MW-1 through MW-4. Results of this investigation were presented to The Lake Chelan Boat Company and the Department of Ecology in a report titled, "Well Installation Report", dated April 27, 2012.

On March 26 and 27, 2012, Antea Group personnel oversaw the over-excavation of impacted soil from the area of the former diesel UST. Results from well installation activities on March 6 and 7, 2012 indicated that significantly expanding the excavation laterally was not necessary. The property owner secured licensed contractors to excavate and transport soil off-site for proper disposal. Approximately 372.06 tons of soil was disposed at the Greater Wenatchee Landfill in East Wenatchee Washington. Limits of the excavation were determined by field-screening and visual observations. Laboratory analytical results indicated that all of the confirmation soil samples collected were below MTCA Method A cleanup levels for TPH-D and BTEX compounds.

### **3.0 SCOPE OF WORK**

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The scope of work performed by Antea Group included the following tasks:

- Develop a site-specific Health and Safety Plan;
- Contract the One-Call underground utility locator to delineate the location and marking of underground utilities and other potential subsurface obstructions in the vicinity of the proposed monitoring well locations;
- Clear for utilities to a minimum depth of 5 feet bgs using an air knife/vacuum rig;
- Collected soil samples continuously from 5 feet bgs to the maximum depth explored in both monitoring wells using a 4-inch diameter sample barrel;
- Oversee the installation of MW-5 and MW-6 as 2-inch diameter groundwater monitoring wells;
- Perform examination and description of each sample using the Unified Soil Classification System (USCS) and standard geologic techniques;
- Submit soil samples for quantitative chemical analysis from each 5 foot boring interval;
- Develop newly installed groundwater monitoring wells MW-5 and MW-6 following well construction;
- Survey monitoring wells MW-5 and MW-6 based on the elevation established for preexisting well MW-4;
- Perform profiling, removal, and proper disposal of investigation derived waste;
- Conduct a groundwater gauging and monitoring event;
- Submit groundwater samples for quantitative chemical analysis from each monitoring well;
- Interpret the data obtained; and
- Prepare this report summarizing the findings of the subsurface investigation and subsequent groundwater monitoring event.

### **4.0 GROUNDWATER MONITORING WELL INSTALLATION**

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On August 3 and 4, 2015, Antea Group personnel directed the drilling and installation of groundwater monitoring wells, MW-5 and MW-6. The purpose of the monitoring well installations was to investigate soil and groundwater conditions to the east of the Site and to determine if migrating contamination may be impacting the property. The property to the east was formerly a Unocal Bulk Plant that has historically reported diesel contamination in Unocal wells MW-3A and MW-5A. It was theorized that contamination from the bulk plant could be impacting the Site due to continued diesel concentrations in MW-3 and MW-4.

Prior to the drilling activities, Antea Group coordinated the marking of underground utilities in the vicinity of the proposed well locations by submitting a one-call request. City of Chelan officials and a one-call locating representative met field personnel onsite and verified the utility locations in the work area. The proposed locations had to be adjusted due to buried utilities in the area. Both soil boring locations were cleared to a depth of at least

5 feet bgs with an airknife/vacuum truck. Following utility clearing, both borings were advanced using a sonic drill rig operated by Holocene to a total depth of 30 feet bgs. Soil samples were collected at every 5 foot interval using a 4-inch diameter sample barrel. No soil sample could be collected from the five foot sample in the boring for well MW-5 due to high gravel content and minimal sample recovery. Collected soil samples were submitted to ALS Laboratory (ALS) of Everett, Washington for quantitative chemical analysis. Both borings were completed as groundwater monitoring wells. Well MW-5 was set at 30 feet bgs with 25 feet of 0.010" slotted screen, and well MW-6 was set at 30 feet bgs with 20 feet of 0.010 inch slotted screen. All wells were constructed of 2 inch diameter schedule 40 (sch 40) polyvinyl chloride (PVC) casing. Annular space consisted of #2/12 filter sand 2 to 3 feet above the screen followed with a seal of bentonite chips placed from the top of the filter pack to within approximately 2 feet of the ground surface. A flush-mount monument was then cemented in place over the well head.

It should be noted that the locations of monitoring wells MW-5 and MW-6 had to be adjusted to the south due to underground utilities in the originally proposed boring locations. A third well location to the north was considered during this event, however, all locations were ultimately deemed too hazardous to attempt or exhibited access issues. Antea Group will investigate whether an additional well installation is necessary to assess the potential contamination off site.

On August 4, 2015, wells MW-5 and MW-6 were developed after installation was complete. Development activities were completed by purging the wells with a whale pump until the amount of suspended sediment in the purge water decreased significantly and the water appeared clear. Approximately 15 gallons of groundwater was extracted from each well during development. Additionally, on August 4, 2015, Antea Group personnel surveyed the top of casing (TOC) elevations for wells MW-5 and MW-6, relative to the previously surveyed groundwater monitoring wells on the Site.

A site map indicating the cross section line A-A' is included as Figure 2A. Geologic cross section A-A' is included as Figure 2A. Boring logs with soil sampling intervals, lithology descriptions, and well completion details are included as Appendix A.

## **5.0 WASTE MANAGEMENT**

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Soil cuttings, decontamination fluids and development water generated during drilling activities were temporarily stored in properly labeled 55-gallon DOT drums. Analytical data for soil and water samples were used for disposal profiling. The drums were removed by PSC Environmental and properly disposed of by Burlington Environmental in Kent, Washington. Waste manifest documentation is included as Appendix B.

## **6.0 SAMPLE COLLECTION AND ANALYSIS**

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### **6.1 Soil Sampling**

Soil samples from each monitoring well location were collected at five foot intervals to the terminal depth explored. There was no sample recovery in the five foot sample from MW-5. A total of 11 soil samples were submitted for laboratory analysis. Each sample collected was individually labeled, registered on a Chain-of-Custody form, and placed in a chilled cooler pending delivery to a certified analytical laboratory. A soil analytical data table is presented in Table 1. A soil analytical data map is presented in Figure 3.

### **6.2 Groundwater Monitoring**

On September 15, 2015, Antea Group personnel collected groundwater samples from monitoring wells MW-1 through MW-6. Tasks performed and associated with groundwater monitoring included:

- Water level measurement;
- Geochemical parameter collection;
- Groundwater sample collection; and
- Submittal of collected samples to ALS.

Low flow techniques were used to collect the groundwater samples. New, dedicated, polyethylene tubing was used at each new monitoring well location. Geochemical parameters were collected with a YSI multi-meter. Groundwater samples were collected in laboratory-supplied containers and individually labeled, registered on a Chain-of-Custody form, and placed in chilled coolers pending delivery to a certified analytical laboratory. The approximate groundwater flow direction observed at the property on September 15, 2015 was to the southwest at a gradient of approximately 0.08 foot per linear foot. A summary of current and historical groundwater results is presented in Tables 2 and 3. A groundwater hydrocarbon distribution map and groundwater elevation contour map are included on Figures 4 and 5, respectively.

### **6.3 Laboratory Analysis**

Soil and groundwater samples were submitted to ALS, for quantitative chemical analysis. All samples collected on September 15, 2015 were analyzed for the following parameters:

- TPH-D and TPH-O using Northwest Method NWTPH-Dx;
- BTEX using EPA Method 8021.

## **7.0 ANALYTICAL RESULTS**

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### **7.1 Soil**

No concentrations of TPH-D, TPH-O, or BTEX compounds were detected above the respective MTCA Method A cleanup levels and/or laboratory MRLs in samples collected during installation of monitoring wells MW-5 and MW-6. Soil analytical results are presented in Table 1 and on Figure 3. Soil analytical reports are included as Appendix C.

### **7.2 Groundwater**

The laboratory analytical results indicate that concentrations of TPH-D exceeded MTCA Method A cleanup levels in the sample collected from MW-4 at a concentration of 2,300 ug/L. All other analytes were below MTCA Method A cleanup levels and/or laboratory MRLs. Groundwater analytical results are presented in Tables 2 and 3, and on Figure 4. Groundwater analytical reports are included as Appendix C.

## **8.0 CONCLUSIONS AND RECOMMENDATIONS**

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Antea Group directed the drilling and installation of two groundwater monitoring wells (MW-5 and MW-6) at the Site on August 3 and August 4, 2015. The monitoring well installation was designed to investigate up gradient soil and groundwater conditions to the east of the Site and to determine whether or not contamination was migrating from an unaffiliated off-site source. Laboratory analytical results for soil and groundwater indicated that no concentrations of TPH-Dx or BTEX compounds were detected above MTCA Method A Cleanup Levels in monitoring wells MW-5 or MW-6.

Soils encountered during drilling consisted of sandy gravel to approximately 12 feet bgs in the boring for well MW-5, underlain by gravelly sand and sand to 28 feet bgs, underlain by silty sand to the total explored depth of 30 feet bgs. The boring for well MW-6 encountered gravelly sand and sand to approximately 17 feet bgs, silty sand from 17 feet to 22 feet bgs, and was underlain by sand to the total depth explored of 30 feet bgs. It should be noted that the original proposed well locations had to be moved to the south because of underground utility obstructions.

Antea Group plans to continue conducting quarterly groundwater monitoring and sampling and will investigate whether or not to install another groundwater monitoring well north of the newly installed wells. Current groundwater conditions indicated residual petroleum impacts remain in the vicinity of well MW-4. Antea Group is exploring remedial options to treat this residual contamination, and will prepare and submit a workplan to address these conditions as a follow-up to this report.

Please call Matthew Miller at (425) 498-7722 if you have any questions regarding the contents of this report.

## 9.0 REMARKS

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The recommendations contained in this report represent Antea USA, Inc.'s professional opinions based upon the currently available information and are arrived at in accordance with currently accepted professional standards. This report is based upon a specific scope of work requested by the client. The contract between Antea USA, Inc. and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Antea USA, Inc.'s client and anyone else specifically identified in writing by Antea USA, Inc. as a user of this report. Antea USA, Inc. will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Antea USA, Inc. makes no express or implied warranty as to the contents of this report.

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Date: February 5, 2016



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## ***Tables***

Table 1	Soil Sample Analytical Results
Table 2	Groundwater Analytical Results – Natural Attenuation Parameters
Table 3	Groundwater Analytical Results and Groundwater Elevation Measurements

**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 LAKE CHELAN BOAT COMPANY  
 1418 WEST WOODIN AVENUE  
 CHELAN, WASHINGTON

Sample ID	Date Sampled	TPH Diesel (mg/kg)	TPH Oil (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)
MW-5-10	08/04/15	<25	<50	<0.030	<0.050	<0.050	<0.20
MW-5-15	08/04/15	<25	<20	<0.030	<0.050	<0.050	<0.20
MW-5-20	08/04/15	<25	<20	<0.030	<0.050	<0.050	<0.20
MW-5-25	08/04/15	<25	<20	<0.030	<0.050	<0.050	<0.20
MW-5-30	08/04/15	<25	<20	<0.030	<0.050	<0.050	<0.20
MW-6-5	08/03/15	<25	<50	<0.030	<0.050	<0.050	<0.20
MW-6-10	08/03/15	<25	<20	<0.030	<0.050	<0.050	<0.20
MW-6-15	08/03/15	<25	<20	<0.030	<0.050	<0.050	<0.20
MW-6-20	08/03/15	<25	<20	<0.030	<0.050	<0.050	<0.20
MW-6-25	08/03/15	<25	<20	<0.030	<0.050	<0.050	<0.20
MW-6-30	08/03/15	<25	<20	<0.030	<0.050	<0.050	<0.20

**Notes:**  
 mg/kg= milligrams per kilogram  
 < = Less than reporting limit  
 TPH = Total petroleum hydrocarbons  
 TPH as diesel and oil by Method NWTPH-Dx  
 BTEX - Analysis by EPA Method 8021

**TABLE 2**  
**GROUNDWATER ANALYTICAL RESULTS**  
**NATURAL ATTENUATION PARAMETERS**  
 LAKE CHELAN BOAT COMPANY  
 1418 WEST WOODIN AVENUE  
 CHELAN, WASHINGTON

Sample I.D.	Date	Dissolved Oxygen (mg/L)	pH (0 to 14 units)	ORP (mV)	TDS (g/L)	Conductivity (mS/cm <sup>3</sup> )	Temp. (Celsius)	Methane (µg/L)	Nitrate (µg/L)	Sulfate (µg/L)	Iron (µg/L)	Manganese (µg/L)	Carbon Dioxide (µg/L)	
MW-1	03/04/13	1.25	6.89	60	0.8	1.18	14.1	--	--	--	--	--	--	
MW-1	06/05/13	2.31	8.95	246.3	0.510	0.617	14.30	--	--	--	--	--	--	
MW-1	09/09/13	3.10	10.78	175.1	0.516	0.656	16.04	--	--	--	--	--	--	
MW-1	12/09/13	2.74	6.83	413.2	0.762	0.914	13.44	--	--	--	--	--	--	
MW-1	03/05/14	1.07	6.78	248.8	0.725	0.825	11.38	--	--	--	--	--	--	
MW-1	06/19/14	3.70	6.69	109.8	0.560	0.672	13.47	--	--	--	--	--	--	
MW-1	09/20/14	1.91	6.91	16.0	0.666	0.898	18.47	--	--	--	--	--	--	
MW-1	12/15/14	0.08	6.44	-15.2	0.381	0.459	13.57	--	--	--	--	--	--	
MW-1	03/17/15	3.58	6.03	298	2.42	3.79	13.04	--	--	--	--	--	--	
MW-1	05/21/15	1.36	6.65	-10.9	0.801	0.963	13.55	<0.010	23	19	<50	<2.0	79,000	
MW-1	06/22/15	0.77	6.77	258.0	0.582	0.733	15.54	--	--	--	--	--	--	
<b>MW-1</b>	<b>09/15/15</b>	<b>0.62</b>	<b>6.74</b>	<b>17.0</b>	<b>0.603</b>	<b>0.803</b>	<b>18.00</b>	--	--	--	--	--	--	
MW-2	03/04/13	1.69	6.82	91	0.8	1.18	14.0	--	--	--	--	--	--	
MW-2	06/05/13	1.37	8.61	218.9	0.489	0.579	12.88	--	--	--	--	--	--	
MW-2	09/09/13	0.78	10.92	192.8	0.566	0.697	14.56	--	--	--	--	--	--	
MW-2	12/09/13	0.91	6.79	387.8	0.633	0.746	12.60	--	--	--	--	--	--	
MW-2	03/05/14	1.21	6.65	267.4	0.718	0.815	11.28	--	--	--	--	--	--	
MW-2	06/19/14	3.75	7.06	58.3	0.560	0.681	14.05	--	--	--	--	--	--	
MW-2	09/20/14	1.90	6.38	51.2	0.478	0.611	16.15	--	--	--	--	--	--	
MW-2	12/15/14	0.08	6.64	45.0	0.599	0.737	14.53	--	--	--	--	--	--	
MW-2	03/17/15	0.59	6.05	293	1.42	2.22	12.98	--	--	--	--	--	--	
MW-2	05/21/15	Not Sampled - Gauge Only						--	--	--	--	--	--	--
MW-2	06/22/15	0.91	6.69	240.6	0.351	0.425	13.84	--	--	--	--	--	--	
<b>MW-2</b>	<b>09/15/15</b>	<b>0.26</b>	<b>6.74</b>	<b>21.1</b>	<b>0.493</b>	<b>0.628</b>	<b>16.01</b>	--	--	--	--	--	--	
MW-3	03/04/13	1.50	6.65	-88.0	0.8	1.250	13.5	--	--	--	--	--	--	
MW-3	06/05/13	1.42	8.61	186.3	0.496	0.582	12.58	--	--	--	--	--	--	
MW-3	09/09/13	1.40	10.30	257.1	0.405	0.499	14.58	--	--	--	--	--	--	
MW-3	12/09/13	1.39	6.80	367.7	0.633	0.744	12.65	--	--	--	--	--	--	

**TABLE 2**  
**GROUNDWATER ANALYTICAL RESULTS**  
**NATURAL ATTENUATION PARAMETERS**  
 LAKE CHELAN BOAT COMPANY  
 1418 WEST WOODIN AVENUE  
 CHELAN, WASHINGTON

Sample I.D.	Date	Dissolved Oxygen (mg/L)	pH (0 to 14 units)	ORP (mV)	TDS (g/L)	Conductivity (mS/cm <sup>3</sup> )	Temp. (Celsius)	Methane (µg/L)	Nitrate (µg/L)	Sulfate (µg/L)	Iron (µg/L)	Manganese (µg/L)	Carbon Dioxide (µg/L)
MW-3	03/05/14	0.60	6.53	-41.3	0.707	0.817	11.97	--	--	--	--	--	--
MW-3	06/19/14	3.37	7.25	81.3	0.497	0.594	13.30	--	--	--	--	--	--
MW-3	09/20/14	5.60	6.89	9.6	0.441	0.572	16.80	--	--	--	--	--	--
MW-3	12/15/14	0.13	6.77	-43.0	0.641	0.765	13.30	--	--	--	--	--	--
MW-3	03/17/15	2.44	6.48	291	1.71	2.68	12.03	--	--	--	--	--	--
MW-3	05/21/15	2.39	6.80	-50.3	0.843	0.989	12.56	<0.010	38	19	1,200	280	71,000
MW-3	06/22/15	2.80	5.84	304.8	0.403	0.486	13.68	--	--	--	--	--	--
<b>MW-3</b>	<b>09/15/15</b>	<b>1.39</b>	<b>6.91</b>	<b>17.7</b>	<b>0.428</b>	<b>0.573</b>	<b>18.24</b>	--	--	--	--	--	--
MW-4	03/04/13	1.66	6.8	38	0.9	1.34	14.8	--	--	--	--	--	--
MW-4	06/05/13	3.27	--	310.0	0.746	0.914	14.30	--	--	--	--	--	--
MW-4	09/09/13	0.56	10.66	222.4	0.596	0.765	16.47	--	--	--	--	--	--
MW-4	12/09/13	1.32	6.71	426.4	0.747	0.912	14.15	--	--	--	--	--	--
MW-4	03/05/14	1.33	6.64	266.8	0.755	0.881	12.24	--	--	--	--	--	--
MW-4	06/19/14	4.80	6.27	146.9	0.846	1.052	14.96	--	--	--	--	--	--
MW-4	09/20/14	1.10	6.87	122.8	0.830	1.119	18.52	--	--	--	--	--	--
MW-4	12/15/14	0.02	6.55	-35.0	0.826	1.032	15.12	--	--	--	--	--	--
MW-4	03/17/15	0.62	6.39	296	1.98	3.09	13.48	--	--	--	--	--	--
MW-4	05/21/15	0.52	6.62	-23.4	1.054	1.281	14.03	<0.010	74	23	<50	290	97,000
MW-4	06/22/15	0.81	6.56	270.1	0.761	0.964	15.78	--	--	--	--	--	--
<b>MW-4</b>	<b>09/15/15</b>	<b>0.43</b>	<b>6.60</b>	<b>44.8</b>	<b>0.807</b>	<b>1.111</b>	<b>19.51</b>	--	--	--	--	--	--
<b>MW-5</b>	<b>09/15/15</b>	<b>0.80</b>	<b>6.97</b>	<b>-69.9</b>	<b>0.984</b>	<b>1.266</b>	<b>16.46</b>	--	--	--	--	--	--
<b>MW-6</b>	<b>09/15/15</b>	<b>0.68</b>	<b>7.22</b>	<b>-108.2</b>	<b>0.800</b>	<b>1.038</b>	<b>16.71</b>	--	--	--	--	--	--

Notes:  
 Dissolved Oxygen, pH, ORP, TDS, Conductivity and Temperature measurements taken with a Y-SI 556 water quality field instrument

**TABLE 3**  
**GROUNDWATER ANALYTICAL RESULTS AND GROUNDWATER ELEVATION MEASUREMENTS**  
 LAKE CHELAN BOAT COMPANY  
 1418 WEST WOODIN AVENUE  
 CHELAN, WASHINGTON

Sample ID	Date Sampled	TPH Diesel (µg/L)	TPH Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TOC (feet)	DTW (feet)	SPH Thickness (feet)	GWE (feet)
MW-1	03/21/12	<130	<250	<1.0	<1.0	<1.0	<3.0	--	99.50	19.63	0.00	79.87
MW-1	06/21/12	<130	<250	<1.0	<1.0	<1.0	<3.0	--	99.50	9.75	0.00	89.75
MW-1	09/17/12	<130	<250	<1.0	<1.0	<1.0	<3.0	<3.0	99.50	7.86	0.00	91.64
MW-1	12/10/12	<130	<250	<1.0	<1.0	<1.0	<3.0	--	99.50	12.85	0.00	86.65
MW-1	03/04/13	<130	<250	<1.0	<1.0	<1.0	<3.0	--	99.50	19.89	0.00	79.61
MW-1	06/05/13	150	<250	<1.0	<1.0	<1.0	<3.0	--	99.50	10.82	0.00	88.68
MW-1	09/09/13	<130	<250	<1.0	<1.0	<1.0	<3.0	--	99.50	6.99	0.00	92.51
MW-1	12/09/13	<130	<250	<1.0	<1.0	<1.0	<3.0	--	99.50	15.46	0.00	84.04
MW-1	03/05/14	<130	<250	<1.0	<1.0	<1.0	<3.0	--	99.50	20.00	0.00	79.50
MW-1	06/19/14	<130	<250		<1.0	<1.0	<3.0	--	99.50	8.75	0.00	90.75
MW-1	09/20/14	<130	<250	<1.0	<1.0	<1.0	<3.0	--	99.50	7.97	0.00	91.53
MW-1	12/15/14	150	<250	<1.0	<1.0	<1.0	<3.0	--	99.50	12.00	0.00	87.50
MW-1	03/17/15	<130	<250	<1.0	<1.0	<1.0	<3.0	--	99.50	14.38	0.00	85.12
MW-1	05/21/15	--	--	--	--	--	--	--	99.50	11.22	0.00	88.28
MW-1	06/22/15	230	<250	<1.0	<1.0	<1.0	<3.0	--	99.50	6.60	0.00	92.90
<b>MW-1</b>	<b>09/15/15</b>	<b>&lt;130</b>	<b>&lt;250</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;3.0</b>	<b>--</b>	<b>99.50</b>	<b>7.80</b>	<b>0.00</b>	<b>91.70</b>
MW-2	03/21/12	260	<250	<1.0	<1.0	<1.0	<3.0	--	99.22	19.38	0.00	79.84
MW-2	06/21/12	300	<250	<1.0	<1.0	<1.0	<3.0	--	99.22	9.84	0.00	89.38
MW-2	09/17/12	270	<250	<1.0	<1.0	<1.0	<3.0	<3.0	99.22	8.54	0.00	90.68
MW-2	12/10/12	310	<250	<1.0	<1.0	<1.0	<3.0	--	99.22	13.15	0.00	86.07
MW-2	03/04/13	<130	280	<1.0	<1.0	<1.0	<3.0	--	99.22	20.02	0.00	79.20
MW-2	06/05/13	280	<250	<1.0	<1.0	<1.0	<3.0	--	99.22	10.90	0.00	88.32
MW-2	09/09/13	<130	<250	<1.0	<1.0	<1.0	<3.0	--	99.22	7.10	0.00	92.12
MW-2	12/09/13	140	<250	<1.0	<1.0	<1.0	<3.0	--	99.22	15.62	0.00	83.60
MW-2	03/05/14	<130	<250	<1.0	<1.0	<1.0	<3.0	--	99.22	20.15	0.00	79.07
MW-2	06/19/14	<130	<250	<1.0	<1.0	<1.0	<3.0	--	99.22	8.83	0.00	90.39
MW-2	09/20/14	460	<250	<1.0	<1.0	<1.0	<3.0	--	99.22	8.10	0.00	91.12

**TABLE 3**  
**GROUNDWATER ANALYTICAL RESULTS AND GROUNDWATER ELEVATION MEASUREMENTS**  
 LAKE CHELAN BOAT COMPANY  
 1418 WEST WOODIN AVENUE  
 CHELAN, WASHINGTON

Sample ID	Date Sampled	TPH Diesel (µg/L)	TPH Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TOC (feet)	DTW (feet)	SPH Thickness (feet)	GWE (feet)
MW-2	12/15/14	420	<250	<1.0	<1.0	<1.0	<3.0	--	99.22	12.12	0.00	87.10
MW-2	03/17/15	430	<250	<1.0	<1.0	<1.0	<3.0	--	99.22	14.49	0.00	84.73
MW-2	05/21/15	--	--	--	--	--	--	--	99.22	11.26	0.00	87.96
MW-2	06/22/15	140	<250	<1.0	<1.0	<1.0	<3.0	--	99.22	6.73	0.00	92.49
<b>MW-2</b>	<b>09/15/15</b>	<b>290</b>	<b>&lt;250</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;3.0</b>	<b>--</b>	<b>99.22</b>	<b>7.91</b>	<b>0.00</b>	<b>91.31</b>
MW-3	03/21/12	1,300	<250	<1.0	<1.0	9.3	44	--	100.00	20.10	0.00	79.90
MW-3	06/21/12	1,100	<250	<1.0	<1.0	<1.0	<3.0	--	100.00	8.15	0.00	91.85
MW-3	09/17/12	340	<250	<1.0	<1.0	<1.0	3.3	<3.0	100.00	6.41	0.00	93.59
MW-3	12/10/12	140	<250	<1.0	<1.0	<1.0	<3.0	--	100.00	11.30	0.00	88.70
MW-3	03/04/13	1,600	<250	<1.0	<1.0	<1.0	<3.0	--	100.00	19.26	0.00	80.74
MW-3	06/05/13	620	<250	<1.0	<1.0	<1.0	<3.0	--	100.00	9.25	0.00	90.75
MW-3	09/09/13	<130	<250	<1.0	<1.0	<1.0	<3.0	--	100.00	5.38	0.00	94.62
MW-3	12/09/13	190	<250	<1.0	<1.0	<1.0	<3.0	--	100.00	13.92	0.00	86.08
MW-3	03/05/14	1,900	<250	<1.0	<1.0	<1.0	<3.0	--	100.00	18.45	0.00	81.55
MW-3	06/19/14	180	<250	<1.0	<1.0	<1.0	<3.0	--	100.00	7.20	0.00	92.80
MW-3	09/20/14	<130	<250	<1.0	<1.0	<1.0	<3.0	--	100.00	6.41	0.00	93.59
MW-3	12/15/14	140	<250	<1.0	<1.0	<1.0	<3.0	--	100.00	10.45	0.00	89.55
MW-3	03/17/15	250	<250	<1.0	<1.0	<1.0	<3.0	--	100.00	12.81	0.00	87.19
MW-3	05/21/15	--	--	--	--	--	--	--	100.00	9.63	0.00	90.37
MW-3	06/22/15	<130	<250	<1.0	<1.0	<1.0	<3.0	--	100.00	5.04	0.00	94.96
<b>MW-3</b>	<b>09/15/15</b>	<b>&lt;130</b>	<b>&lt;250</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;3.0</b>	<b>--</b>	<b>100.00</b>	<b>6.26</b>	<b>0.00</b>	<b>93.74</b>
MW-4	03/21/12	320	<250	<1.0	<1.0	<1.0	<3.0	--	102.25	22.44	0.00	79.81
MW-4	06/21/12	880	<250	<1.0	<1.0	<1.0	<3.0	--	102.25	10.40	0.00	91.85
MW-4	09/17/12	1,800	<250	<1.0	<1.0	<1.0	<3.0	<3.0	102.25	8.00	0.00	94.25
MW-4	12/10/12	390	<250	<1.0	<1.0	<1.0	<3.0	--	102.25	13.45	0.00	88.80
MW-4	03/04/13	160	<250	<1.0	<1.0	<1.0	<3.0	--	102.25	23.72	0.00	78.53

**TABLE 3**  
**GROUNDWATER ANALYTICAL RESULTS AND GROUNDWATER ELEVATION MEASUREMENTS**  
 LAKE CHELAN BOAT COMPANY  
 1418 WEST WOODIN AVENUE  
 CHELAN, WASHINGTON

Sample ID	Date Sampled	TPH Diesel (µg/L)	TPH Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TOC (feet)	DTW (feet)	SPH Thickness (feet)	GWE (feet)
MW-4	06/05/13	2,900	520	<1.0	<1.0	<1.0	<3.0	--	102.25	11.48	0.00	90.77
MW-4	09/09/13	1,300	260	<1.0	<1.0	<1.0	<3.0	--	102.25	7.62	0.00	94.63
MW-4	12/09/13	190	<250	<1.0	<1.0	<1.0	<3.0	--	102.25	16.09	0.00	86.16
MW-4	03/05/14	<130	<250	<1.0	<1.0	<1.0	<3.0	--	102.25	20.61	0.00	81.64
MW-4	06/19/14	580	<250	<1.0	<1.0	<1.0	<3.0	--	102.25	10.42	0.00	91.83
MW-4	09/20/14	1,800	<250	<1.0	<1.0	<1.0	<3.0	--	102.25	8.61	0.00	93.64
MW-4	12/15/14	2,000	<250	<1.0	<1.0	<1.0	<3.0	--	102.25	12.64	0.00	89.61
MW-4	03/17/15	620	<250	<1.0	<1.0	<1.0	<3.0	--	102.25	15.00	0.00	87.25
MW-4	05/21/15	--	--	--	--	--	--	--	102.25	11.89	0.00	90.36
MW-4	06/22/15	1,800	410	<1.0	<1.0	<1.0	<3.0	--	102.25	7.25	0.00	95.00
<b>MW-4</b>	<b>09/15/15</b>	<b>2,300</b>	<b>&lt;250</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;3.0</b>	<b>--</b>	<b>102.25</b>	<b>8.45</b>	<b>0.00</b>	<b>93.80</b>
<b>MW-5</b>	<b>09/15/15</b>	<b>&lt;130</b>	<b>&lt;250</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;3.0</b>	<b>--</b>	<b>102.29</b>	<b>8.51</b>	<b>0.00</b>	<b>93.78</b>
<b>MW-6</b>	<b>09/15/15</b>	<b>&lt;130</b>	<b>&lt;250</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;3.0</b>	<b>--</b>	<b>106.73</b>	<b>12.89</b>	<b>0.00</b>	<b>93.84</b>
<b>MTCA Method A Cleanup Levels:</b>		<b>500</b>	<b>500</b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>1,000</b>	<b>20</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

**TABLE 3**  
**GROUNDWATER ANALYTICAL RESULTS AND GROUNDWATER ELEVATION MEASUREMENTS**  
 LAKE CHELAN BOAT COMPANY  
 1418 WEST WOODIN AVENUE  
 CHELAN, WASHINGTON

Sample ID	Date Sampled	TPH Diesel (µg/L)	TPH Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TOC (feet)	DTW (feet)	SPH Thickness (feet)	GWE (feet)
<p><b>Notes:</b>                      µg/L= micrograms per liter                      &lt; = Less than reporting limit                      TOC - Top of casing elevation (feet)                      DTW - Depth to groundwater (feet)                      SPH Thickness - Separate-phase hydrocarbon thickness (feet)                      GWE - Groundwater table elevation (feet)                      TPH = Total petroleum hydrocarbons                      MTBE = Methyl t-butyl ether                      TPH as diesel and oil by Method NWTPH-Dx                      BTEX - Analysis by EPA Method 8021                      MTBE - Analysis by EPA Method 8021</p>												

## ***Figures***

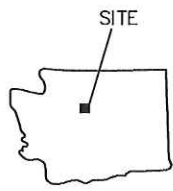
Figure 1	Site Location Map
Figure 2A	Site Map with Geologic Cross Section Line A-A'
Figure 2B	Geologic Cross Section A-A'
Figure 3	Soil Analytical Data Map
Figure 4	Groundwater Hydrocarbon Distribution Map
Figure 5	Groundwater Elevation Contour Map

PROJECT NUMBER STCG-422

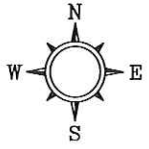
APPROVED BY

CHECKED BY

DRAWN BY ICD 04/24/2013



LATITUDE 47D 50M 09S NORTH  
LONGITUDE 120D 02M 16S WEST  
U.S. GEOLOGICAL SURVEY-2004  
7.5 MINUTE QUADRANGLE MAP  
CHELAN, WASHINGTON



LAKE CHELAN BOAT COMPANY

FIGURE 1

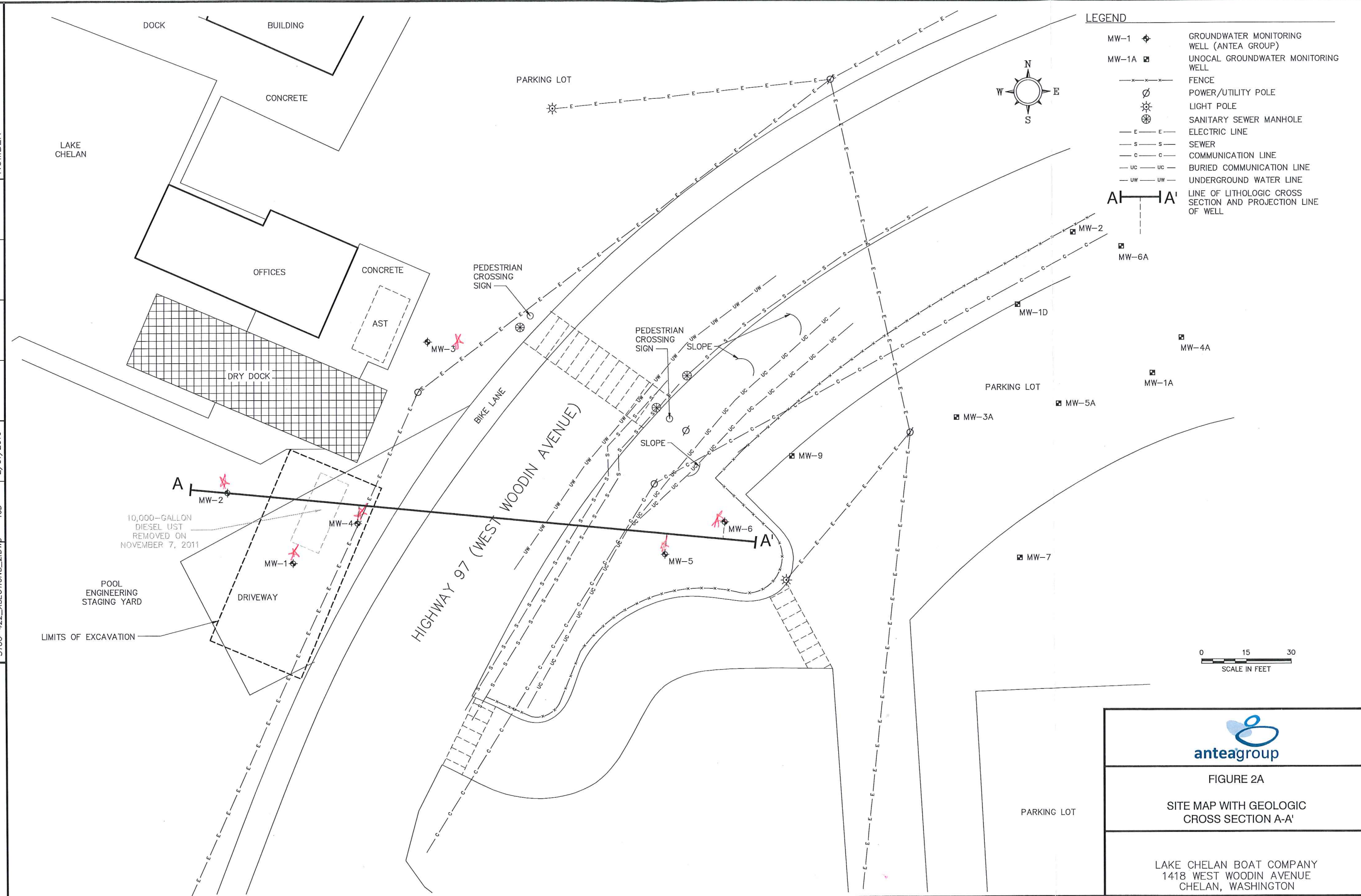
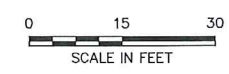
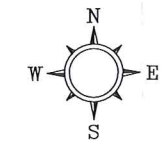
SITE LOCATION MAP

1418 WEST WOODIN AVENUE  
CHELAN, WASHINGTON

PROJECT NUMBER STCG-422  
 APPROVED BY  
 CHECKED BY  
 DRAWN BY ICD 2/01/2016  
 FILENAME STCG-422\_XSECTIONS\_2.DWG

**LEGEND**


- MW-1 GROUNDWATER MONITORING WELL (ANTEA GROUP)
- MW-1A UNOCAL GROUNDWATER MONITORING WELL
- FENCE
- POWER/UTILITY POLE
- LIGHT POLE
- SANITARY SEWER MANHOLE
- ELECTRIC LINE
- SEWER
- COMMUNICATION LINE
- BURIED COMMUNICATION LINE
- UNDERGROUND WATER LINE
- LINE OF LITHOLOGIC CROSS SECTION AND PROJECTION LINE OF WELL



10,000-GALLON DIESEL UST REMOVED ON NOVEMBER 7, 2011

POOL ENGINEERING STAGING YARD

LIMITS OF EXCAVATION

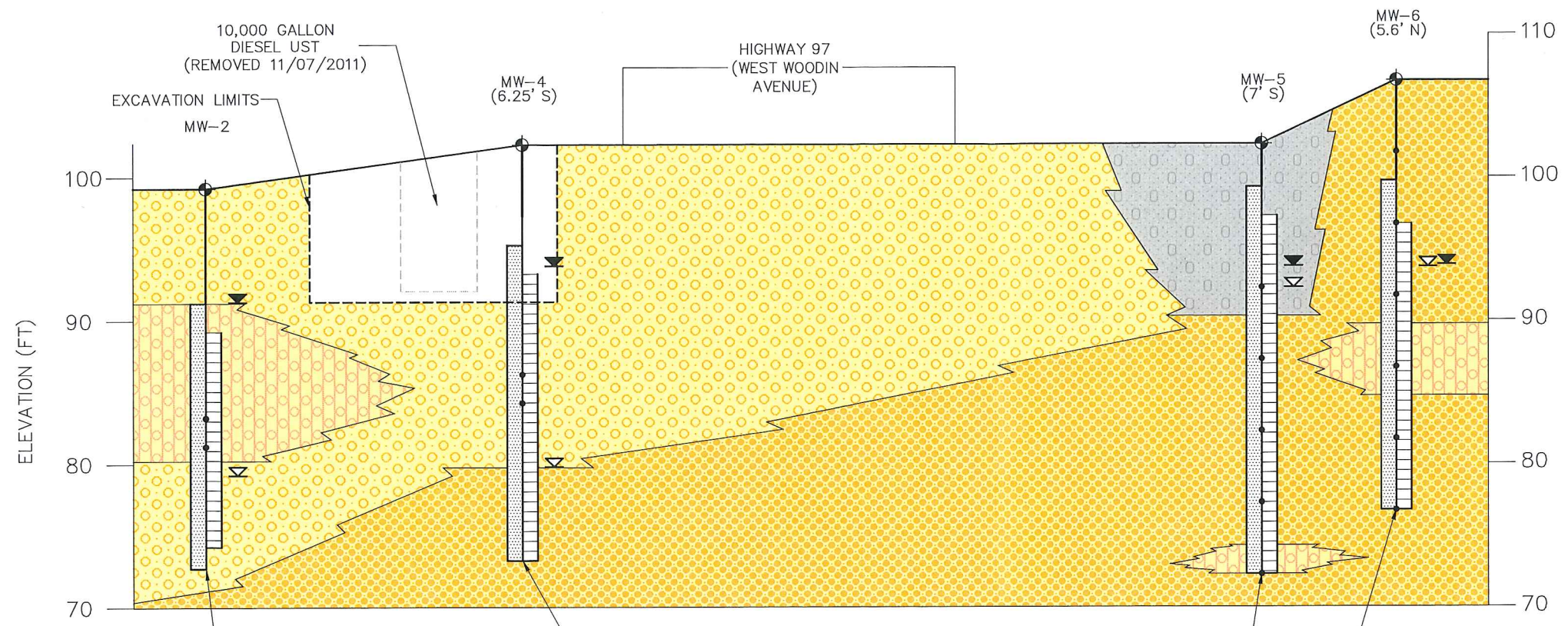


**FIGURE 2A**  
 SITE MAP WITH GEOLOGIC CROSS SECTION A-A'

LAKE CHELAN BOAT COMPANY  
 1418 WEST WOODIN AVENUE  
 CHELAN, WASHINGTON

PROJECT NUMBER: STCG-422  
 APPROVED BY: [Blank]  
 CHECKED BY: [Blank]  
 DRAWN BY: ICD 2/01/2016  
 FILENAME: STCG-422\_XSECTIONS\_2.DWG

WEST A EAST A'



**LEGEND**

- - WELL
- - SAMPLE INTERVAL TOP
- ▬ - FILTER PACK INTERVAL
- ▬ - FIRST GROUNDWATER ELEVATION
- ▬ - GROUNDWATER ELEVATION (09/15/2015)
- ▬ - SCREENED INTERVAL
- ▬ - MAXIMUM DEPTH EXPLORED
- SOIL CONTACT
- FEET PROJECTED ONTO LINE OF CROSS SECTION

(12')

- SP= POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
- SM= SILTY-SANDS, SAND-SILT MIXTURES
- SW= WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
- GW= WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES

**SOIL ANALYTICAL PARAMETERS**

- D TPH-D - TOTAL PETROLEUM HYDROCARBONS AS DIESEL (mg/kg)
- O TPH-O - TOTAL PETROLEUM HYDROCARBONS AS OIL (mg/kg)
- B BENZENE (mg/kg)
- T TOLUENE (mg/kg)
- E ETHYLBENZENE (mg/kg)
- X TOTAL XYLENES (mg/kg)
- mg/kg MILLIGRAMS PER KILOGRAM
- <25 LESS THAN THE LABORATORY REPORTING LIMIT
- NA NOT ANALYZED

0 10 20  
HORIZONTAL SCALE

0 5 10  
VERTICAL SCALE

MW-2		03/06/2012					
DEPTH (ft)	D (mg/kg)	O (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	
16	61	<50	<0.030	<0.050	<0.050	<0.20	
18	NA	NA	<0.030	<0.050	<0.050	<0.20	

MW-4		03/06/2012					
DEPTH (ft)	D (mg/kg)	O (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	
16	<25	<50	<0.030	<0.050	<0.050	<0.20	
18	<25	<50	<0.030	<0.050	<0.050	<0.20	

MW-5		08/04/2015					
DEPTH (ft)	D (mg/kg)	O (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	
10	<25	<50	<0.030	<0.050	<0.050	<0.20	
15	<25	<20	<0.030	<0.050	<0.050	<0.20	
20	<25	<20	<0.030	<0.050	<0.050	<0.20	
25	<25	<20	<0.030	<0.050	<0.050	<0.20	
30	<25	<20	<0.030	<0.050	<0.050	<0.20	

MW-6		08/03/2015					
DEPTH (ft)	D (mg/kg)	O (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	
5	<25	<50	<0.030	<0.050	<0.050	<0.20	
10	<25	<20	<0.030	<0.050	<0.050	<0.20	
15	<25	<20	<0.030	<0.050	<0.050	<0.20	
20	<25	<20	<0.030	<0.050	<0.050	<0.20	
25	<25	<20	<0.030	<0.050	<0.050	<0.20	
30	<25	<20	<0.030	<0.050	<0.050	<0.20	

**FIGURE 2B**

**GEOLOGIC CROSS SECTION A-A'**

LAKE CHELAN BOAT COMPANY  
1418 WEST WOODIN AVENUE  
CHELAN, WASHINGTON

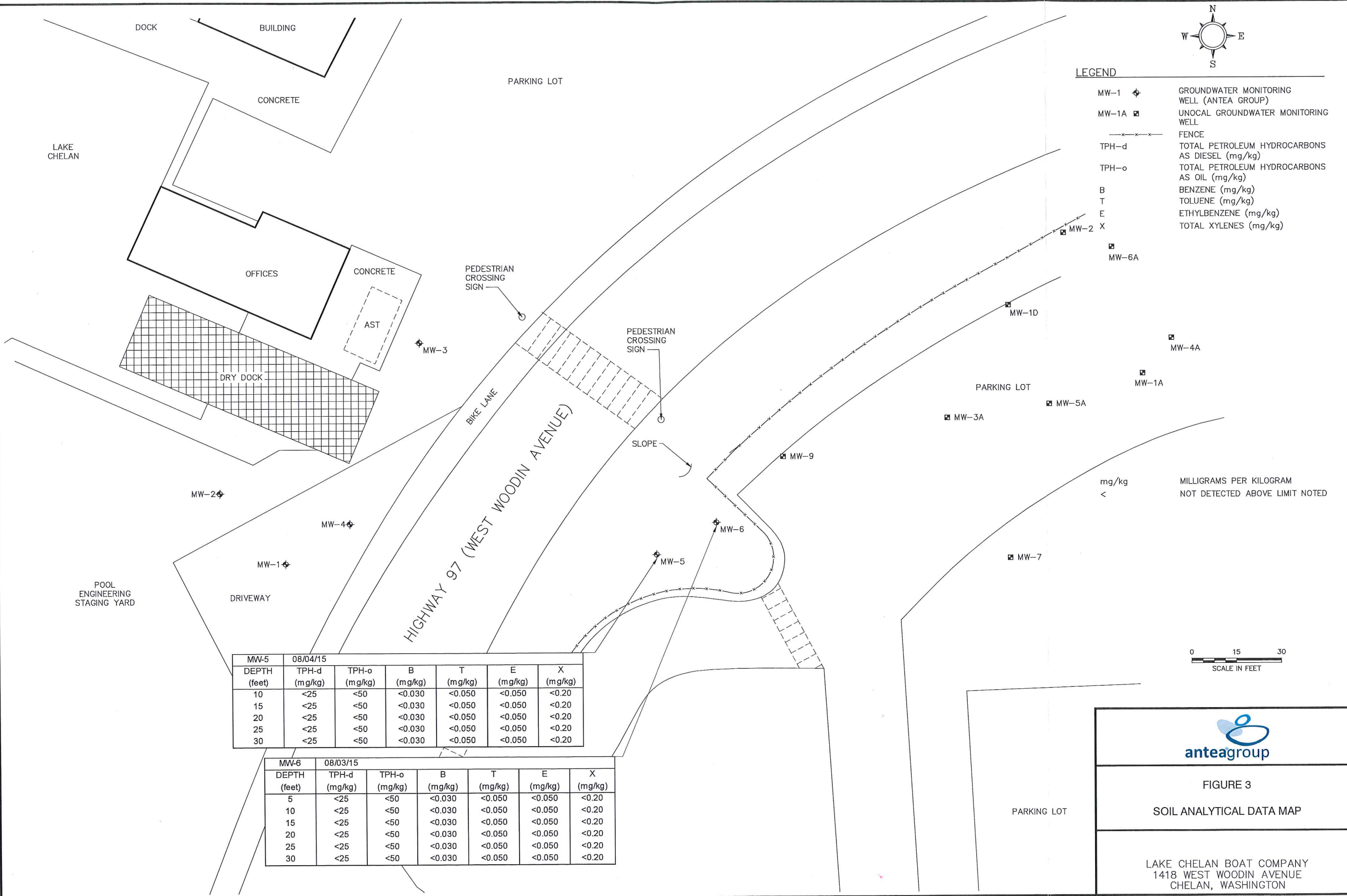
PROJECT NUMBER STCG-422

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CHECKED BY

DRAWN BY ICD 11/20/2015

FILENAME STCG-422\_1503\_2.DWG

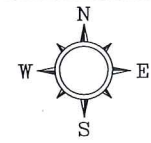


MW-5		08/04/15				
DEPTH (feet)	TPH-d (mg/kg)	TPH-o (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
10	<25	<50	<0.030	<0.050	<0.050	<0.20
15	<25	<50	<0.030	<0.050	<0.050	<0.20
20	<25	<50	<0.030	<0.050	<0.050	<0.20
25	<25	<50	<0.030	<0.050	<0.050	<0.20
30	<25	<50	<0.030	<0.050	<0.050	<0.20

MW-6		08/03/15				
DEPTH (feet)	TPH-d (mg/kg)	TPH-o (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
5	<25	<50	<0.030	<0.050	<0.050	<0.20
10	<25	<50	<0.030	<0.050	<0.050	<0.20
15	<25	<50	<0.030	<0.050	<0.050	<0.20
20	<25	<50	<0.030	<0.050	<0.050	<0.20
25	<25	<50	<0.030	<0.050	<0.050	<0.20
30	<25	<50	<0.030	<0.050	<0.050	<0.20

LEGEND

- MW-1 GROUNDWATER MONITORING WELL (ANTEA GROUP)
- MW-1A UNOCAL GROUNDWATER MONITORING WELL
- FENCE
- TPH-d TOTAL PETROLEUM HYDROCARBONS AS DIESEL (mg/kg)
- TPH-o TOTAL PETROLEUM HYDROCARBONS AS OIL (mg/kg)
- B BENZENE (mg/kg)
- T TOLUENE (mg/kg)
- E ETHYLBENZENE (mg/kg)
- X TOTAL XYLENES (mg/kg)



mg/kg  
< MILLIGRAMS PER KILOGRAM  
NOT DETECTED ABOVE LIMIT NOTED



FIGURE 3  
SOIL ANALYTICAL DATA MAP

LAKE CHELAN BOAT COMPANY  
1418 WEST WOODIN AVENUE  
CHELAN, WASHINGTON

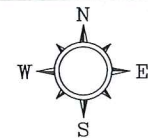
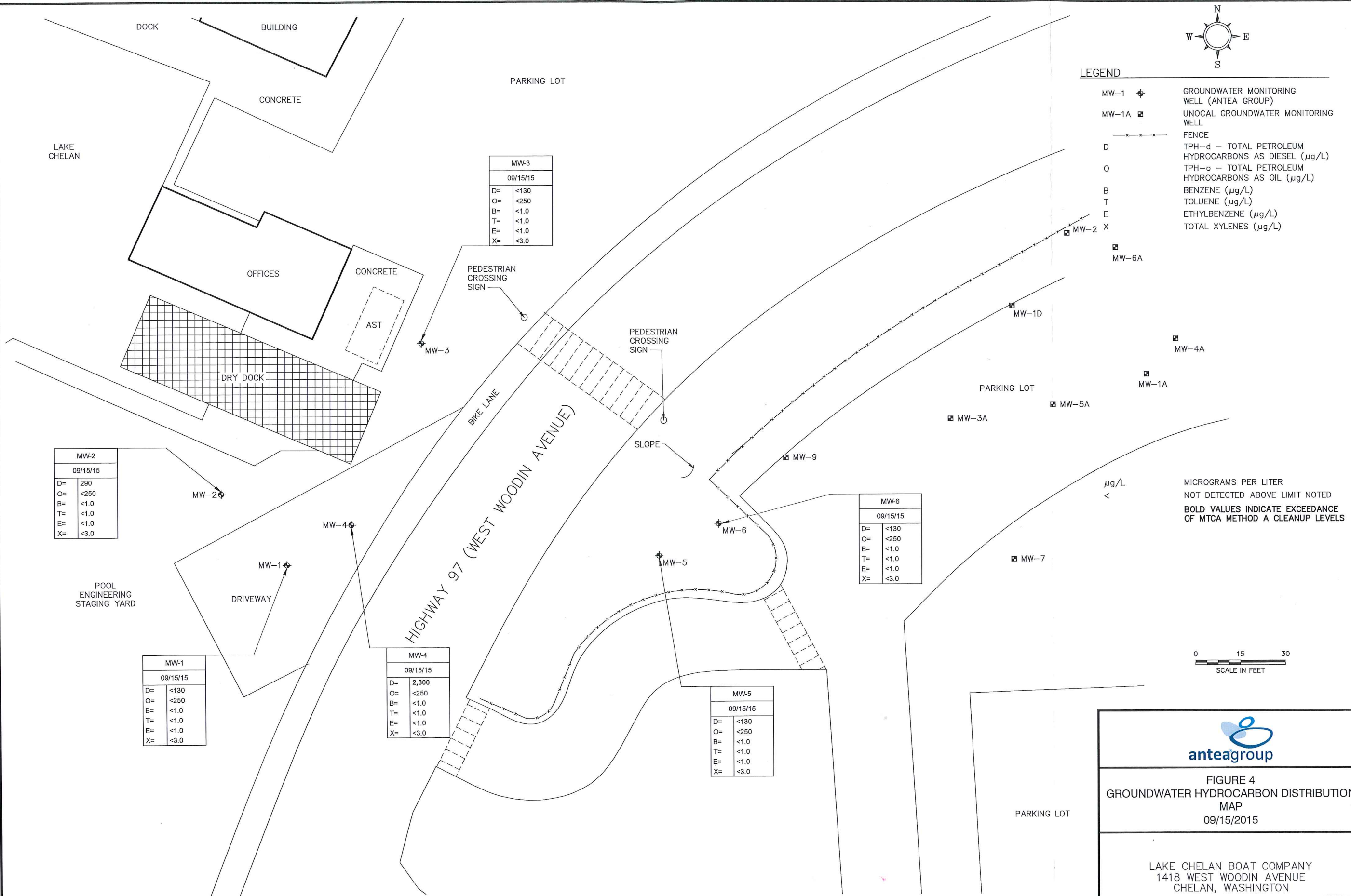
PROJECT NUMBER STCG-422

APPROVED BY

CHECKED BY

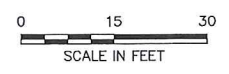
DRAWN BY 11/20/2015

FILENAME STCG-422\_1503\_2.DWG



- LEGEND**
- MW-1 GROUNDWATER MONITORING WELL (ANTEA GROUP)
  - MW-1A UNOCAL GROUNDWATER MONITORING WELL
  - FENCE
  - D TPH-d - TOTAL PETROLEUM HYDROCARBONS AS DIESEL (µg/L)
  - O TPH-o - TOTAL PETROLEUM HYDROCARBONS AS OIL (µg/L)
  - B BENZENE (µg/L)
  - T TOLUENE (µg/L)
  - E ETHYLBENZENE (µg/L)
  - X TOTAL XYLENES (µg/L)

µg/L  
 < NOT DETECTED ABOVE LIMIT NOTED  
 BOLD VALUES INDICATE EXCEEDANCE OF MTCA METHOD A CLEANUP LEVELS



**FIGURE 4**  
 GROUNDWATER HYDROCARBON DISTRIBUTION MAP  
 09/15/2015

LAKE CHELAN BOAT COMPANY  
 1418 WEST WOODIN AVENUE  
 CHELAN, WASHINGTON

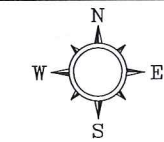
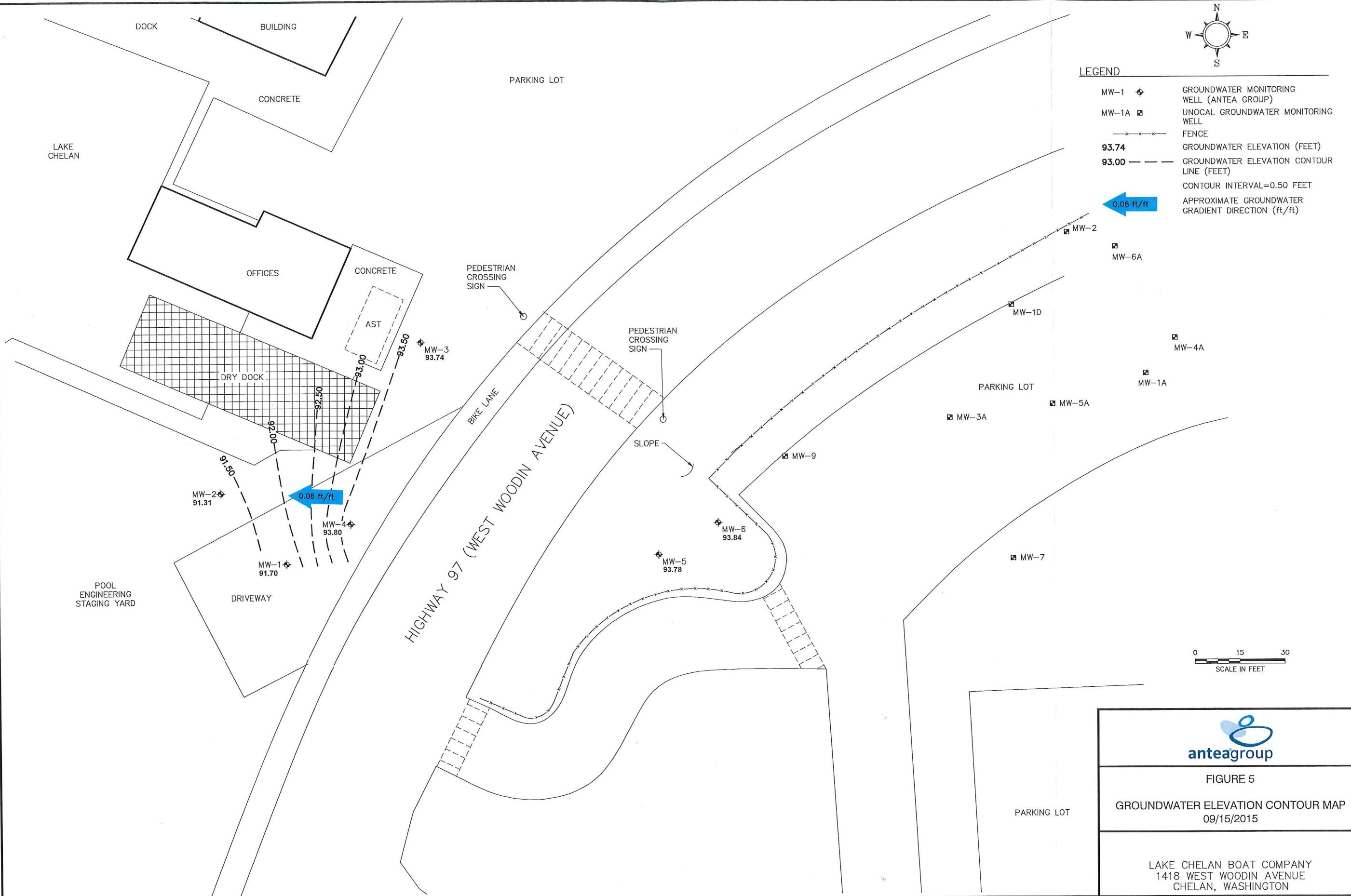
PROJECT NUMBER STCG-422

APPROVED BY

CHECKED BY

DRAWN BY ICD 11/20/2015

FILENAME STCG-422\_1503\_2.DWG



**LEGEND**

MW-1	⊕	GROUNDWATER MONITORING WELL (ANTEA GROUP)
MW-1A	■	UNOCAL GROUNDWATER MONITORING WELL
	-x-x-x-	FENCE
93.74	- - -	GROUNDWATER ELEVATION (FEET)
93.00	— — —	GROUNDWATER ELEVATION CONTOUR LINE (FEET)
		CONTOUR INTERVAL=0.50 FEET
0.08 ft/ft	←	APPROXIMATE GROUNDWATER GRADIENT DIRECTION (ft/ft)



FIGURE 5  
GROUNDWATER ELEVATION CONTOUR MAP  
09/15/2015

LAKE CHELAN BOAT COMPANY  
1418 WEST WOODIN AVENUE  
CHELAN, WASHINGTON

*Monitoring Well Installation Report  
Lake Chelan Boat Company  
1418 West Woodin Avenue, Chelan, Washington*



## ***Appendix A***

Boring Logs



WELL/BORING: MW-5	Unique Ecology Well ID: BJB 919
INSTALLATION DATE: 8/4/2015	DRILLING METHOD: Sonic
PROJECT: STCG-4222	SAMPLING METHOD: Core
CLIENT: Lake Chelan Boat Company	BORING DIAMETER: 6"
LOCATION: 1418 West Woodin Avenue	BORING DEPTH: 30'
CITY: Chelan	WELL CASING: SCH 40 PVC 2"
STATE: WA	WELL SCREEN: 5-30' (0.010)
DRILLER: Holocene Drilling Inc.	SAND PACK: 3-30' (2x12)

WELL/BORING COMPLETION	FIRST	STABILIZED	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	102.29
	▽	▼									SURVEY DATE:	8/4/2015
											DTW:	-
DESCRIPTION/LOGGED BY: Taylor Roberts												
						1				Surface = dirt/vegetation		
						2						
						3				Sandy GRAVEL: brown.		
						4						
						5				Driller Notes: pushed through 5-10' for interval.		
						6						
						7						
			DRY	0.6	-	8				Driller Notes: 8-10' recovery is sluff.		
						9						
			WET	0.4	-	10			GW	Sandy GRAVEL: brown; 20% very fine to very coarse sand; 80% gravel.		
						11						
						12				Grades to less gravel, more sand.		
						13						
			WET	0.9	-	14			SP	Gravelly SAND: 80% medium to coarse grained sand; 20% gravel.		
						15						
						16						
						17			SP	Grades to SAND: 90% fine to coarse sand; trace gravel.		
						18						
						19						
			MST	0.3	-	20			SP	SAND: brown; trace silt; 90% fine to medium sand; trace gravel.		
						21						
						22						



WELL/BORING: MW-5

Unique Ecology Well ID: BJB 919

INSTALLATION DATE: 8/4/2015

DRILLING METHOD: Sonic

PROJECT: STCG-4222

SAMPLING METHOD: Core

CLIENT: Lake Chelan Boat Company

BORING DIAMETER: 6"

LOCATION: 1418 West Woodin Avenue

BORING DEPTH: 30'

CITY: Chelan

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 5-30' (0.010)

DRILLER: Holocene Drilling Inc.

SAND PACK: 3-30' (2x12)

WELL/BORING COMPLETION	FIRST	STABILIZED	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	102.29
	∇	▼									SURVEY DATE:	8/4/2015
											DTW:	-
DESCRIPTION/LOGGED BY: Taylor Roberts												
			MST	1.4	-	23			SP		SAND: 100% very fine to fine sand.	
						24						
						25			SP		SAND: brown; 100% medium to coarse sand.	
						26					Grades to very coarse sand.	
						27						
			MST	1.5	-	28			SM		Silty SAND: brown; 25% silt; 75% very fine to fine sand with interbedded medium sand.	
						29						
						30			SM		Same as Above.	
						31						
						32						
						33						
						34						
						35						
						36						
						37						
						38						
						39						
						40						
						41						
						42						
						43						
						44						



WELL/BORING: MW-6

Unique Ecology Well ID: BJF 918

INSTALLATION DATE: 8/3/2015

DRILLING METHOD: Sonic

PROJECT: STCG-4222

SAMPLING METHOD: Core

CLIENT: Lake Chelan Boat Company

BORING DIAMETER: 6"

LOCATION: 1418 West Woodin Avenue

BORING DEPTH: 30'

CITY: Chelan

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 10-30' (0.010)

DRILLER: Holocene Drilling Inc.

SAND PACK: 7-30' (2x12)

WELL/BORING COMPLETION	FIRST	STABILIZED	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	106.73
	▽	▼									SURVEY DATE:	8/4/2015
											DTW:	-
DESCRIPTION/LOGGED BY: Taylor Roberts												
Concrete						1						Surface = dirt/vegetation
Benchtite						2						
						3						
						4						Vac Crew Notes: Large boulders near 5' bgs.
			DRY	0.4	-	5			SP			Gravelly SAND: dark brown; trace silt; 70% very fine to fine sand; 20% subrounded gravel.
						6						
						7			SP			Gravelly SAND: light brown; trace silt; 60% very fine to fine sand; 30% subrounded to subangular gravel.
						8						
			DRY	1.0	-	10			SP			Same as Above.
						11						
						12						
						13						Driller Notes: Groundwater @13-14' interval.
						14						
			WET	0.8	-	15			SP			SAND: gray/brown; trace silt; 80% coarse sand; trace gravel.
						16						
						17			SM			Silty SAND: brown; 30% silt; 60% very fine sand; 10% medium sand.
						18						
						19						
			MST	1.3	-	20			SM			Same as Above.
						21						
						22			SP			SAND: brown; 100% medium to coarse sand.



WELL/BORING: MW-6

Unique Ecology Well ID: BJF 918

INSTALLATION DATE: 8/3/2015

DRILLING METHOD: Sonic

PROJECT: STCG-4222

SAMPLING METHOD: Core

CLIENT: Lake Chelan Boat Company

BORING DIAMETER: 6"

LOCATION: 1418 West Woodin Avenue

BORING DEPTH: 30'

CITY: Chelan

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 10-30' (0.010)

DRILLER: Holocene Drilling Inc.

SAND PACK: 7-30' (2x12)

WELL/BORING COMPLETION	FIRST	STABILIZED	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	106.73
											SURVEY DATE:	8/4/2015
											DTW:	-
											DESCRIPTION/LOGGED BY: Taylor Roberts	
Sand			WET	1.3	-	23					SAND: brown; trace silt; 90% fine to coarse sand.	
				1.6		24						
				1.4		25			SP		SAND: grayish brown; trace silt; 75% very fine sand; 25% coarse sand.	
						26						
			WET	2.2	-	27			SP		SAND: grayish brown; trace silt; 95% fine to coarse sand.	
						28						
						29						
						30						
						31						
						32						
						33						
						34						
						35						
						36						
						37						
						38						
						39						
						40						
						41						
						42						
						43						
						44						

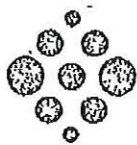
*Monitoring Well Installation Report  
Lake Chelan Boat Company  
1418 West Woodin Avenue, Chelan, Washington*



## ***Appendix B***

Waste Manifest Documentation

\*\*\*24 HOUR EMERGENCY RESPONSE, CALL (877) 577-2669\*\*\*



**Stericycle**  
Environmental Solutions

**SHIPPING PAPER**

Lading Manifest: 700539-15

SHIPPER/CUSTOMER Lady of the Lake		DELIVERY DATE	JOB # 2175803
ADDRESS 1418 W Woodin Ave		POINT OF CONTACT MATT MILLER	
CITY, STATE, ZIP Chelan WA 98816		PHONE # (949) 460-3200 425.498.7722	
CARRIER/TRANSPORTER BURLINGTON ENVIRONMENTAL, LLC		PHONE # (253) 383-3044	
CONSIGNEE/FACILITY BURLINGTON ENVIRONMENTAL, LLC.		POINT OF CONTACT	
ADDRESS 20245 77TH AVENUE SOUTH		PHONE # (253) 872-8030	
CITY, STATE, ZIP KENT, WA 98032			

U.S. DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	Containers		Total Quantity	UOM
	(No.)	Type		
A MATERIAL NOT REGULATED BY DOT	2	DM	100.0	P
B MATERIAL NOT REGULATED BY DOT	4	DM	195.0	P
C				
D				

Special Handling Instruction and Additional Information:

a) 2692B5DIL.05-00 - IDW SOIL - STAB01 (4) b) 2692DWAIR.11-00 - IDW WATER - WAT05 (5) FSO-258167

Placards Provided YES \_\_\_\_\_ NO \_\_\_\_\_

SHIPPER'S CERTIFICATION: "I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations." I also certify that all times listed above are true and correct.

(SHIPPER) PRINT OR TYPE NAME X TAYLOR ROBERTS <i>as authorized Agent of Property Owner</i>	SIGNATURE <i>[Signature]</i>	MONTH 9	DAY 1	YEAR 15
(CARRIER/TRANSPORTER) PRINT OR TYPE NAME X JAMES ASLO	SIGNATURE <i>[Signature]</i>	MONTH 9	DAY 16	YEAR 15
(CONSIGNEE/FACILITY) PRINT OR TYPE NAME X BREITNEY BOURNS	SIGNATURE <i>[Signature]</i>	MONTH 9	DAY 29	YEAR 15

CONSIGNEE

15 SEP 29 PM 11:15

## ***Appendix C***

Analytical Laboratory Reports and Chain-of-Custody Documentation



August 12, 2015

Mr. Matt Miller  
Antea Group  
4006 - 148th Ave NE  
Redmond, WA 98052

Dear Mr. Miller,

On August 5th, 13 samples were received by our laboratory and assigned our laboratory project number EV15080023. The project was identified as your STCG-422. 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



**CERTIFICATE OF ANALYSIS**

CLIENT:	Antea Group	DATE:	8/12/2015
	4006 - 148th Ave NE	ALS JOB#:	EV15080023
	Redmond, WA 98052	ALS SAMPLE#:	EV15080023-01
CLIENT CONTACT:	Matt Miller	DATE RECEIVED:	08/05/2015
CLIENT PROJECT:	STCG-422	COLLECTION DATE:	8/3/2015 2:25:00 PM
CLIENT SAMPLE ID	MW-6-5	WDOE ACCREDITATION:	C601

**SAMPLE DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene /	EPA-8021	U	0.030	1	MG/KG	08/05/2015	PAB
Toluene /	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Ethylbenzene /	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Xylenes /	EPA-8021	U	0.20	1	MG/KG	08/05/2015	PAB
TPH-Diesel Range /	NWTPH-DX	U	25	1	MG/KG	08/05/2015	EBS
*TPH-Oil Range /	NWTPH-DX	U	50	1	MG/KG	08/05/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	123	08/05/2015	PAB
C25	NWTPH-DX	93.7	08/05/2015	EBS

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



**CERTIFICATE OF ANALYSIS**

<b>CLIENT:</b>	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	<b>DATE:</b>	8/12/2015
<b>CLIENT CONTACT:</b>	Matt Miller	<b>ALS JOB#:</b>	EV15080023
<b>CLIENT PROJECT:</b>	STCG-422	<b>ALS SAMPLE#:</b>	EV15080023-02
<b>CLIENT SAMPLE ID</b>	MW-6-10	<b>DATE RECEIVED:</b>	08/05/2015
		<b>COLLECTION DATE:</b>	8/3/2015 2:35:00 PM
		<b>WDOE ACCREDITATION:</b>	C601

**SAMPLE DATA RESULTS**

<b>ANALYTE</b>	<b>METHOD</b>	<b>RESULTS</b>	<b>REPORTING LIMITS</b>	<b>DILUTION FACTOR</b>	<b>UNITS</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
Benzene	EPA-8021	U	0.030	1	MG/KG	08/05/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	08/05/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	08/05/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	08/05/2015	EBS

<b>SURROGATE</b>	<b>METHOD</b>	<b>%REC</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TFT	EPA-8021	124	08/05/2015	PAB
C25	NWTPH-DX	101	08/05/2015	EBS

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



**CERTIFICATE OF ANALYSIS**

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	8/12/2015
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV15080023
CLIENT PROJECT:	STCG-422	ALS SAMPLE#:	EV15080023-03
CLIENT SAMPLE ID:	MW-6-15	DATE RECEIVED:	08/05/2015
		COLLECTION DATE:	8/3/2015 3:10:00 PM
		WDOE ACCREDITATION:	C601

**SAMPLE DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	0.030	1	MG/KG	08/05/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	08/05/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	08/05/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	08/05/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	105	08/05/2015	PAB
C25	NWTPH-DX	99.9	08/05/2015	EBS

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



**CERTIFICATE OF ANALYSIS**

CLIENT: Antea Group  
 4006 - 148th Ave NE  
 Redmond, WA 98052

CLIENT CONTACT: Matt Miller  
 CLIENT PROJECT: STCG-422  
 CLIENT SAMPLE ID: MW-6-20

DATE: 8/12/2015  
 ALS JOB#: EV15080023  
 ALS SAMPLE#: EV15080023-04  
 DATE RECEIVED: 08/05/2015  
 COLLECTION DATE: 8/3/2015 3:15:00 PM  
 WDOE ACCREDITATION: C601

**SAMPLE DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	0.030	1	MG/KG	08/05/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	08/05/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	08/05/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	08/05/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	93.1	08/05/2015	PAB
C25	NWTPH-DX	81.5	08/05/2015	EBS

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



**CERTIFICATE OF ANALYSIS**

<b>CLIENT:</b>	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	<b>DATE:</b>	8/12/2015
<b>CLIENT CONTACT:</b>	Matt Miller	<b>ALS JOB#:</b>	EV15080023
<b>CLIENT PROJECT:</b>	STCG-422	<b>ALS SAMPLE#:</b>	EV15080023-05
<b>CLIENT SAMPLE ID</b>	MW-6-25	<b>DATE RECEIVED:</b>	08/05/2015
		<b>COLLECTION DATE:</b>	8/3/2015 3:50:00 PM
		<b>WDOE ACCREDITATION:</b>	C601

**SAMPLE DATA RESULTS**

<b>ANALYTE</b>	<b>METHOD</b>	<b>RESULTS</b>	<b>REPORTING LIMITS</b>	<b>DILUTION FACTOR</b>	<b>UNITS</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
Benzene	EPA-8021	U	0.030	1	MG/KG	08/05/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	08/05/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	08/05/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	08/05/2015	EBS

<b>SURROGATE</b>	<b>METHOD</b>	<b>%REC</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TFT	EPA-8021	107	08/05/2015	PAB
C25	NWTPH-DX	88.6	08/05/2015	EBS

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



**CERTIFICATE OF ANALYSIS**

CLIENT: Antea Group  
 4006 - 148th Ave NE  
 Redmond, WA 98052

CLIENT CONTACT: Matt Miller  
 CLIENT PROJECT: STCG-422  
 CLIENT SAMPLE ID MW-6-30

DATE: 8/12/2015  
 ALS JOB#: EV15080023  
 ALS SAMPLE#: EV15080023-06  
 DATE RECEIVED: 08/05/2015  
 COLLECTION DATE: 8/3/2015 4:00:00 PM  
 WDOE ACCREDITATION: C601

**SAMPLE DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	0.030	1	MG/KG	08/05/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	08/05/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	08/05/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	08/05/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	101	08/05/2015	PAB
C25	NWTPH-DX	97.6	08/05/2015	EBS

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



**CERTIFICATE OF ANALYSIS**

CLIENT: Antea Group  
 4006 - 148th Ave NE  
 Redmond, WA 98052

CLIENT CONTACT: Matt Miller  
 CLIENT PROJECT: STCG-422  
 CLIENT SAMPLE ID: MW-5-10

DATE: 8/12/2015  
 ALS JOB#: EV15080023  
 ALS SAMPLE#: EV15080023-07  
 DATE RECEIVED: 08/05/2015  
 COLLECTION DATE: 8/4/2015 7:20:00 AM  
 WDOE ACCREDITATION: C601

**SAMPLE DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	0.030	1	MG/KG	08/05/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	08/05/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	08/05/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	08/05/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	90.5	08/05/2015	PAB
C25	NWTPH-DX	92.3	08/05/2015	EBS

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



**CERTIFICATE OF ANALYSIS**

CLIENT: Antea Group  
 4006 - 148th Ave NE  
 Redmond, WA 98052

DATE: 8/12/2015

ALS JOB#: EV15080023

ALS SAMPLE#: EV15080023-08

CLIENT CONTACT: Matt Miller

DATE RECEIVED: 08/05/2015

CLIENT PROJECT: STCG-422

COLLECTION DATE: 8/4/2015 7:45:00 AM

CLIENT SAMPLE ID MW-5-15

WDOE ACCREDITATION: C601

**SAMPLE DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	0.030	1	MG/KG	08/05/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	08/05/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	08/05/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	08/05/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	94.2	08/05/2015	PAB
C25	NWTPH-DX	80.2	08/05/2015	EBS

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



**CERTIFICATE OF ANALYSIS**

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	8/12/2015
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV15080023
CLIENT PROJECT:	STCG-422	ALS SAMPLE#:	EV15080023-09
CLIENT SAMPLE ID	MW-5-20	DATE RECEIVED:	08/05/2015
		COLLECTION DATE:	8/4/2015 8:00:00 AM
		WDOE ACCREDITATION:	C601

**SAMPLE DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	0.030	1	MG/KG	08/05/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	08/05/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	08/05/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	08/05/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	86.3	08/05/2015	PAB
C25	NWTPH-DX	97.4	08/05/2015	EBS

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



**CERTIFICATE OF ANALYSIS**

CLIENT: Antea Group  
 4006 - 148th Ave NE  
 Redmond, WA 98052

DATE: 8/12/2015

ALS JOB#: EV15080023

ALS SAMPLE#: EV15080023-10

CLIENT CONTACT: Matt Miller

DATE RECEIVED: 08/05/2015

CLIENT PROJECT: STCG-422

COLLECTION DATE: 8/4/2015 8:20:00 AM

CLIENT SAMPLE ID MW-5-25

WDOE ACCREDITATION: C601

**SAMPLE DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	0.030	1	MG/KG	08/05/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	08/05/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	08/05/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	08/05/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	96.4	08/05/2015	PAB
C25	NWTPH-DX	107	08/05/2015	EBS

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



**CERTIFICATE OF ANALYSIS**

<b>CLIENT:</b>	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	<b>DATE:</b>	8/12/2015
<b>CLIENT CONTACT:</b>	Matt Miller	<b>ALS JOB#:</b>	EV15080023
<b>CLIENT PROJECT:</b>	STCG-422	<b>ALS SAMPLE#:</b>	EV15080023-11
<b>CLIENT SAMPLE ID</b>	MW-5-30	<b>DATE RECEIVED:</b>	08/05/2015
		<b>COLLECTION DATE:</b>	8/4/2015 8:50:00 AM
		<b>WDOE ACCREDITATION:</b>	C601

**SAMPLE DATA RESULTS**

<b>ANALYTE</b>	<b>METHOD</b>	<b>RESULTS</b>	<b>REPORTING LIMITS</b>	<b>DILUTION FACTOR</b>	<b>UNITS</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
Benzene	EPA-8021	U	0.030	1	MG/KG	08/05/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	08/05/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	08/05/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	08/05/2015	EBS

<b>SURROGATE</b>	<b>METHOD</b>	<b>%REC</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TFT	EPA-8021	90.6	08/05/2015	PAB
C25	NWTPH-DX	100	08/05/2015	EBS

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



**CERTIFICATE OF ANALYSIS**

CLIENT: Antea Group  
 4006 - 148th Ave NE  
 Redmond, WA 98052

CLIENT CONTACT: Matt Miller  
 CLIENT PROJECT: STCG-422  
 CLIENT SAMPLE ID: DISPOSAL-1

DATE: 8/12/2015  
 ALS JOB#: EV15080023  
 ALS SAMPLE#: EV15080023-12  
 DATE RECEIVED: 08/05/2015  
 COLLECTION DATE: 8/4/2015 9:50:00 AM  
 WDOE ACCREDITATION: C601

**SAMPLE DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Mercury	EPA-7471	U	0.020	1	MG/KG	08/10/2015	RAL
Arsenic	EPA-6020	1.4	1.0	5	MG/KG	08/10/2015	RAL
Barium	EPA-6020	59	0.50	5	MG/KG	08/10/2015	RAL
Cadmium	EPA-6020	U	0.50	5	MG/KG	08/10/2015	RAL
Chromium	EPA-6020	16	2.5	5	MG/KG	08/10/2015	RAL
Lead	EPA-6020	1.6	0.50	5	MG/KG	08/10/2015	RAL
Selenium	EPA-6020	U	5.0	5	MG/KG	08/10/2015	RAL
Silver	EPA-6020	U	0.50	5	MG/KG	08/10/2015	RAL

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



**CERTIFICATE OF ANALYSIS**

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	8/12/2015
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV15080023
CLIENT PROJECT:	STCG-422	ALS SAMPLE#:	EV15080023-13
CLIENT SAMPLE ID	DISPOSAL-2	DATE RECEIVED:	08/05/2015
		COLLECTION DATE:	8/4/2015 10:00:00 AM
		WDOE ACCREDITATION:	C601

**SAMPLE DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Mercury	EPA-7470	U	0.20	1	UG/L	08/06/2015	RAL
Arsenic	EPA-200.8	2.5	1.0	1	UG/L	08/07/2015	RAL
Barium	EPA-200.8	250	1.0	1	UG/L	08/07/2015	RAL
Cadmium	EPA-200.8	U	1.0	1	UG/L	08/07/2015	RAL
Chromium	EPA-200.8	25	2.0	1	UG/L	08/07/2015	RAL
Lead	EPA-200.8	3.2	1.0	1	UG/L	08/07/2015	RAL
Selenium	EPA-200.8	4.4	4.0	1	UG/L	08/07/2015	RAL
Silver	EPA-200.8	U	1.0	1	UG/L	08/07/2015	RAL

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



**CERTIFICATE OF ANALYSIS**

CLIENT: Antea Group  
 4006 - 148th Ave NE  
 Redmond, WA 98052

CLIENT CONTACT: Matt Miller  
 CLIENT PROJECT: STCG-422

DATE: 8/12/2015  
 ALS SDG#: EV15080023  
 WDOE ACCREDITATION: C601

**LABORATORY BLANK RESULTS**

**MB-080515S2 - Batch 95903 - Soil by EPA-8021**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	0.030	1	MG/KG	08/05/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	08/05/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	08/05/2015	PAB

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

**MB-080515S - Batch 95948 - Soil by NWTPH-DX**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	08/05/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	08/05/2015	EBS

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

**MBLK-8102015 - Batch R259458 - Soil by EPA-7471**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Mercury	EPA-7471	U	0.020	1	MG/KG	08/10/2015	RAL

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

**MBLK-259239 - Batch R259239 - Water by EPA-7470**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Mercury	EPA-7470	U	0.20	1	UG/L	08/06/2015	RAL

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

**MB-081015S - Batch 96058 - Soil by EPA-6020**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-6020	U	0.20	1	MG/KG	08/10/2015	RAL
Barium	EPA-6020	U	0.10	1	MG/KG	08/10/2015	RAL
Cadmium	EPA-6020	U	0.10	1	MG/KG	08/10/2015	RAL
Chromium	EPA-6020	U	0.50	1	MG/KG	08/10/2015	RAL
Lead	EPA-6020	U	0.10	1	MG/KG	08/10/2015	RAL
Selenium	EPA-6020	U	1.0	1	MG/KG	08/10/2015	RAL
Silver	EPA-6020	U	0.10	1	MG/KG	08/10/2015	RAL

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



CERTIFICATE OF ANALYSIS

CLIENT: Antea Group DATE: 8/12/2015  
4006 - 148th Ave NE ALS SDG#: EV15080023  
Redmond, WA 98052 WDOE ACCREDITATION: C601  
CLIENT CONTACT: Matt Miller  
CLIENT PROJECT: STCG-422

LABORATORY BLANK RESULTS

MB1-080715W - Batch 95995 - Water by EPA-200.8

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS	ANALYSIS
						DATE	BY
Arsenic	EPA-200.8	U	1.0	1	UG/L	08/07/2015	RAL
Barium	EPA-200.8	U	1.0	1	UG/L	08/07/2015	RAL
Cadmium	EPA-200.8	U	1.0	1	UG/L	08/07/2015	RAL
Chromium	EPA-200.8	U	2.0	1	UG/L	08/07/2015	RAL
Lead	EPA-200.8	U	1.0	1	UG/L	08/07/2015	RAL
Selenium	EPA-200.8	U	4.0	1	UG/L	08/07/2015	RAL
Silver	EPA-200.8	U	1.0	1	UG/L	08/07/2015	RAL

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



**CERTIFICATE OF ANALYSIS**

CLIENT: Antea Group  
 4006 - 148th Ave NE  
 Redmond, WA 98052

CLIENT CONTACT: Matt Miller  
 CLIENT PROJECT: STCG-422

DATE: 8/12/2015  
 ALS SDG#: EV15080023  
 WDOE ACCREDITATION: C601

**LABORATORY CONTROL SAMPLE RESULTS**

**ALS Test Batch ID: 95903 - Soil by EPA-8021**

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	97.0			08/05/2015	PAB
Benzene - BSD	EPA-8021	93.5	4		08/05/2015	PAB
Toluene - BS	EPA-8021	99.6			08/05/2015	PAB
Toluene - BSD	EPA-8021	95.8	4		08/05/2015	PAB
Ethylbenzene - BS	EPA-8021	99.2			08/05/2015	PAB
Ethylbenzene - BSD	EPA-8021	96.0	3		08/05/2015	PAB
Xylenes - BS	EPA-8021	99.5			08/05/2015	PAB
Xylenes - BSD	EPA-8021	96.1	4		08/05/2015	PAB

**ALS Test Batch ID: 95948 - Soil by NWTPH-DX**

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	96.8			08/05/2015	EBS
TPH-Diesel Range - BSD	NWTPH-DX	99.5	3		08/05/2015	EBS

**ALS Test Batch ID: R259458 - Soil by EPA-7471**

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Mercury - BS	EPA-7471	107			08/10/2015	RAL
Mercury - BSD	EPA-7471	106	1		08/10/2015	RAL

**ALS Test Batch ID: R259239 - Water by EPA-7470**

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Mercury - BS	EPA-7470	97.0			08/06/2015	RAL
Mercury - BSD	EPA-7470	98.0	1		08/06/2015	RAL

**ALS Test Batch ID: 96058 - Soil by EPA-6020**

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-6020	95.6			08/10/2015	RAL
Arsenic - BSD	EPA-6020	96.2	1		08/10/2015	RAL
Barium - BS	EPA-6020	100			08/10/2015	RAL
Barium - BSD	EPA-6020	101	1		08/10/2015	RAL
Cadmium - BS	EPA-6020	99.8			08/10/2015	RAL
Cadmium - BSD	EPA-6020	99.6	0		08/10/2015	RAL
Chromium - BS	EPA-6020	102			08/10/2015	RAL
Chromium - BSD	EPA-6020	102	0		08/10/2015	RAL
Lead - BS	EPA-6020	99.5			08/10/2015	RAL



**CERTIFICATE OF ANALYSIS**

CLIENT: Antea Group  
 4006 - 148th Ave NE  
 Redmond, WA 98052

CLIENT CONTACT: Matt Miller  
 CLIENT PROJECT: STCG-422

DATE: 8/12/2015  
 ALS SDG#: EV15080023  
 WDOE ACCREDITATION: C601

**LABORATORY CONTROL SAMPLE RESULTS**

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Lead - BSD	EPA-6020	98.5	1		08/10/2015	RAL
Selenium - BS	EPA-6020	97.2			08/10/2015	RAL
Selenium - BSD	EPA-6020	97.7	0		08/10/2015	RAL
Silver - BS	EPA-6020	101			08/10/2015	RAL
Silver - BSD	EPA-6020	100	0		08/10/2015	RAL

**ALS Test Batch ID: 95995 - Water by EPA-200.8**

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-200.8	99.4			08/07/2015	RAL
Arsenic - BSD	EPA-200.8	95.8	4		08/07/2015	RAL
Barium - BS	EPA-200.8	99.0			08/07/2015	RAL
Barium - BSD	EPA-200.8	98.1	1		08/07/2015	RAL
Cadmium - BS	EPA-200.8	99.2			08/07/2015	RAL
Cadmium - BSD	EPA-200.8	98.2	1		08/07/2015	RAL
Chromium - BS	EPA-200.8	98.8			08/07/2015	RAL
Chromium - BSD	EPA-200.8	96.1	3		08/07/2015	RAL
Lead - BS	EPA-200.8	97.7			08/07/2015	RAL
Lead - BSD	EPA-200.8	96.6	1		08/07/2015	RAL
Selenium - BS	EPA-200.8	101			08/07/2015	RAL
Selenium - BSD	EPA-200.8	100	1		08/07/2015	RAL
Silver - BS	EPA-200.8	99.0			08/07/2015	RAL
Silver - BSD	EPA-200.8	96.3	3		08/07/2015	RAL

APPROVED BY

Laboratory Director



**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)

EV15080023

Date 8.5.15 Page 1 Of 2

PROJECT ID: <u>STC61-422</u>					ANALYSIS REQUESTED										OTHER (Specify)							
REPORT TO COMPANY: <u>ANTRA Group</u>					NWTPH-HCID NWTPH-DX NWTPH-GX BTEX by EPA-8021 MTBE by EPA-8021 <input type="checkbox"/> EPA-8260 <input type="checkbox"/> 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 <input type="checkbox"/> PCB <input type="checkbox"/> Pesticides <input type="checkbox"/> by EPA 8081/8082 Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> Pri Pol <input type="checkbox"/> TAL <input type="checkbox"/> Metals Other (Specify) TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input type="checkbox"/>																	
PROJECT MANAGER: <u>MATT MILLER</u>																						
ADDRESS: <u>4006 148th Ave NE</u>																						
<u>REDMOND, WA 98052</u>																						
PHONE: <u>425.498.7722</u> FAX:																						
P.O. #: <u>STC61-422-0000</u> E-MAIL: <u>Matt.Miller@antragroup.com</u>																						
INVOICE TO COMPANY: <u>Card Syber</u>																						
ATTENTION: <u>Colony Ops</u>																						
ADDRESS: <u>CLAIM# 208188</u>																						
SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 <input type="checkbox"/> EPA-8260 <input type="checkbox"/>	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 <input type="checkbox"/>	PCB <input type="checkbox"/> Pesticides <input type="checkbox"/> by EPA 8081/8082	Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> Pri Pol <input type="checkbox"/> TAL <input type="checkbox"/>	Metals Other (Specify)	TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input type="checkbox"/>	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?	
1. MW-6-5	8.3.15	1425	S	1		X		X													2	
2. MW-6-10	8.3.15	1435	S	2		X		X													2	
* 3. MW-6-15	8.3.15	1510	S	3		X		X													2	
* 4. MW-6-20	8.3.15	1515	S	4		X		X													2	
* 5. MW-6-25	8.3.15	1550	S	5		X		X													2	
* 6. MW-6-30	8.3.15	1600	S	6		X		X													2	
7. MW-5-10	8.4.15	0720	S	7		X		X													2	
* 8. MW-5-15	8.4.15	0745	S	8		X		X													2	
* 9. MW-5-20	8.4.15	0800	S	9		X		X													2	
* 10. MW-5-25	8.4.15	0820	S	10		X		X													2	

SPECIAL INSTRUCTIONS HOLD all "\*" samples.

SIGNATURES (Name, Company, Date, Time):  
 1. Relinquished By: ANTRA / 8.5.15 / 12:52  
 Received By: [Signature], ALS, 8.5.15, 12:52  
 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: 8/5/15 - Per email from Taylor - run all samples, OK

\*Turnaround request less than standard may incur Rush Charges



**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)

**E/15080023**

Date **8-5-15** Page **2** Of **2**

PROJECT ID: <b>STC61-422</b>					ANALYSIS REQUESTED										OTHER (Specify)															
REPORT TO COMPANY: <b>Anteu Group</b>					NWTPH-HCID NWTPH-DX NWTPH-GX BTEX by EPA-8021 MTBE by EPA-8021 <input type="checkbox"/> EPA-8260 <input type="checkbox"/> 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 <input type="checkbox"/> PCB <input type="checkbox"/> Pesticides <input type="checkbox"/> by EPA 8081/8082 Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input checked="" type="checkbox"/> Pp Pol <input type="checkbox"/> TAL <input type="checkbox"/> Metals Other (Specify) TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs <input type="checkbox"/>	PROJECT MANAGER: <b>Matt Miller</b>					NUMBER OF CONTAINERS RECEIVED IN GOOD CONDITION?																			
ADDRESS: <b>HODD 140<sup>th</sup> Ave NE          REDMOND WA 98052</b>																														
PHONE: <b>425-498-7722</b> FAX:																														
P.O. #: <b>STC61-422-0000</b> E-MAIL: <b>Matt.Miller@anteugroup.com</b>																														
INVOICE TO COMPANY: <b>Colony Insurance</b>																														
ATTENTION: <b>Carol Lybeer</b>																														
ADDRESS: <b>Claim # 208188</b>																														
SAMPLE I.D.						DATE										TIME					TYPE					LAB#				
1. <b>MW-5-30</b>						8-4-15										0850					S					11				
2. <b>DISPOSAL-1</b>						8-4-15										0950					S					12				
3. <b>DISPOSAL-2</b>					8-4-15					1000					W					13										
4.																														
5.																														
6.																														
7.																														
8.																														
9.																														
10.																														

SPECIAL INSTRUCTIONS **~~Hold all "A" samples~~**

SIGNATURES (Name, Company, Date, Time):  
 1. Relinquished By: **[Signature]** **8-5-15**  
 Received By: **[Signature]**, **ALS**, **8-5-15**, **12:52**  
 2. Relinquished By: \_\_\_\_\_  
 Received By: \_\_\_\_\_

TURNAROUND REQUESTED in Business Days\*  
 Organic, Metals & Inorganic Analysis  
 OTHER: \_\_\_\_\_  
 Specify: \_\_\_\_\_  
 Fuels & Hydrocarbon Analysis  
 \_\_\_\_\_  
 \_\_\_\_\_

\*Turnaround request less than standard may incur Rush Charges



September 22, 2015

Mr. Matt Miller  
Antea Group  
4006 - 148th Ave NE  
Redmond, WA 98052

Dear Mr. Miller,

On September 16th, 6 samples were received by our laboratory and assigned our laboratory project number EV15090094. The project was identified as your STCG-4222\_0100; Chelan. 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



**CERTIFICATE OF ANALYSIS**

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	9/22/2015
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV15090094
CLIENT PROJECT:	STCG-4222_0100; Chelan	ALS SAMPLE#:	EV15090094-01
CLIENT SAMPLE ID	MW-1-7.80	DATE RECEIVED:	09/16/2015
		COLLECTION DATE:	9/15/2015 10:40:00 AM
		WDOE ACCREDITATION:	C601

**SAMPLE DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	09/16/2015	PAB
Toluene	EPA-8021	U	1.0	1	UG/L	09/16/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/16/2015	PAB
Xylenes	EPA-8021	U	3.0	1	UG/L	09/16/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	09/18/2015	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	09/18/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	92.4	09/16/2015	PAB
C25	NWTPH-DX	91.8	09/18/2015	EBS

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



**CERTIFICATE OF ANALYSIS**

<b>CLIENT:</b>	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	<b>DATE:</b>	9/22/2015
<b>CLIENT CONTACT:</b>	Matt Miller	<b>ALS JOB#:</b>	EV15090094
<b>CLIENT PROJECT:</b>	STCG-4222_0100; Chelan	<b>ALS SAMPLE#:</b>	EV15090094-02
<b>CLIENT SAMPLE ID</b>	MW-2-7.91	<b>DATE RECEIVED:</b>	09/16/2015
		<b>COLLECTION DATE:</b>	9/15/2015 11:00:00 AM
		<b>WDOE ACCREDITATION:</b>	C601

**SAMPLE DATA RESULTS**

<b>ANALYTE</b>	<b>METHOD</b>	<b>RESULTS</b>	<b>REPORTING LIMITS</b>	<b>DILUTION FACTOR</b>	<b>UNITS</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
Benzene	EPA-8021	U	1.0	1	UG/L	09/16/2015	PAB
Toluene	EPA-8021	U	1.0	1	UG/L	09/16/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/16/2015	PAB
Xylenes	EPA-8021	U	3.0	1	UG/L	09/16/2015	PAB
TPH-Diesel Range	NWTPH-DX	290	130	1	UG/L	09/18/2015	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	09/18/2015	EBS

<b>SURROGATE</b>	<b>METHOD</b>	<b>%REC</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TFT	EPA-8021	91.5	09/16/2015	PAB
C25	NWTPH-DX	93.6	09/18/2015	EBS

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



**CERTIFICATE OF ANALYSIS**

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	9/22/2015
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV15090094
CLIENT PROJECT:	STCG-4222_0100; Chelan	ALS SAMPLE#:	EV15090094-03
CLIENT SAMPLE ID	MW-3-6.26	DATE RECEIVED:	09/16/2015
		COLLECTION DATE:	9/15/2015 11:15:00 AM
		WDOE ACCREDITATION:	C601

**SAMPLE DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	09/16/2015	PAB
Toluene	EPA-8021	U	1.0	1	UG/L	09/16/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/16/2015	PAB
Xylenes	EPA-8021	U	3.0	1	UG/L	09/16/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	09/18/2015	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	09/18/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	91.4	09/16/2015	PAB
C25	NWTPH-DX	92.8	09/18/2015	EBS

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



**CERTIFICATE OF ANALYSIS**

<b>CLIENT:</b>	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	<b>DATE:</b>	9/22/2015
<b>CLIENT CONTACT:</b>	Matt Miller	<b>ALS JOB#:</b>	EV15090094
<b>CLIENT PROJECT:</b>	STCG-4222_0100; Chelan	<b>ALS SAMPLE#:</b>	EV15090094-04
<b>CLIENT SAMPLE ID</b>	MW-4-8.45	<b>DATE RECEIVED:</b>	09/16/2015
		<b>COLLECTION DATE:</b>	9/15/2015 10:20:00 AM
		<b>WDOE ACCREDITATION:</b>	C601

**SAMPLE DATA RESULTS**

<b>ANALYTE</b>	<b>METHOD</b>	<b>RESULTS</b>	<b>REPORTING LIMITS</b>	<b>DILUTION FACTOR</b>	<b>UNITS</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
Benzene	EPA-8021	U	1.0	1	UG/L	09/16/2015	PAB
Toluene	EPA-8021	U	1.0	1	UG/L	09/16/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/16/2015	PAB
Xylenes	EPA-8021	U	3.0	1	UG/L	09/16/2015	PAB
TPH-Diesel Range	NWTPH-DX	2300	130	1	UG/L	09/18/2015	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	09/18/2015	EBS

<b>SURROGATE</b>	<b>METHOD</b>	<b>%REC</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TFT	EPA-8021	94.6	09/16/2015	PAB
C25	NWTPH-DX	93.6	09/18/2015	EBS

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



**CERTIFICATE OF ANALYSIS**

CLIENT:	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	DATE:	9/22/2015
CLIENT CONTACT:	Matt Miller	ALS JOB#:	EV15090094
CLIENT PROJECT:	STCG-4222_0100; Chelan	ALS SAMPLE#:	EV15090094-05
CLIENT SAMPLE ID	MW-5-8.51	DATE RECEIVED:	09/16/2015
		COLLECTION DATE:	9/15/2015 11:35:00 AM
		WDOE ACCREDITATION:	C601

**SAMPLE DATA RESULTS**

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	09/16/2015	PAB
Toluene	EPA-8021	U	1.0	1	UG/L	09/16/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/16/2015	PAB
Xylenes	EPA-8021	U	3.0	1	UG/L	09/16/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	09/18/2015	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	09/18/2015	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	EPA-8021	94.5	09/16/2015	PAB
C25	NWTPH-DX	84.7	09/18/2015	EBS

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



**CERTIFICATE OF ANALYSIS**

<b>CLIENT:</b>	Antea Group 4006 - 148th Ave NE Redmond, WA 98052	<b>DATE:</b>	9/22/2015
<b>CLIENT CONTACT:</b>	Matt Miller	<b>ALS JOB#:</b>	EV15090094
<b>CLIENT PROJECT:</b>	STCG-4222_0100; Chelan	<b>ALS SAMPLE#:</b>	EV15090094-06
<b>CLIENT SAMPLE ID</b>	MW-6-12.89	<b>DATE RECEIVED:</b>	09/16/2015
		<b>COLLECTION DATE:</b>	9/15/2015 12:00:00 PM
		<b>WDOE ACCREDITATION:</b>	C601

**SAMPLE DATA RESULTS**

<b>ANALYTE</b>	<b>METHOD</b>	<b>RESULTS</b>	<b>REPORTING LIMITS</b>	<b>DILUTION FACTOR</b>	<b>UNITS</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
Benzene	EPA-8021	U	1.0	1	UG/L	09/17/2015	PAB
Toluene	EPA-8021	U	1.0	1	UG/L	09/17/2015	PAB
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	09/17/2015	PAB
Xylenes	EPA-8021	U	3.0	1	UG/L	09/17/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	09/21/2015	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	09/21/2015	EBS

<b>SURROGATE</b>	<b>METHOD</b>	<b>%REC</b>	<b>ANALYSIS DATE</b>	<b>ANALYSIS BY</b>
TFT	EPA-8021	94.4	09/17/2015	PAB
C25	NWTPH-DX	93.4	09/21/2015	EBS

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



CERTIFICATE OF ANALYSIS

CLIENT: Antea Group DATE: 9/22/2015
4006 - 148th Ave NE ALS SDG#: EV15090094
Redmond, WA 98052 WDOE ACCREDITATION: C601
CLIENT CONTACT: Matt Miller
CLIENT PROJECT: STCG-4222\_0100; Chelan

LABORATORY BLANK RESULTS

MB-091615W2 - Batch 97177 - Water by EPA-8021

Table with 9 columns: ANALYTE, METHOD, RESULTS, QUAL, UNITS, REPORTING LIMITS, ANALYSIS DATE, ANALYSIS BY. Rows include Benzene, Toluene, Ethylbenzene, and Xylenes.

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

MB-091815W - Batch 97280 - Water by NWTPH-DX

Table with 9 columns: ANALYTE, METHOD, RESULTS, QUAL, UNITS, REPORTING LIMITS, ANALYSIS DATE, ANALYSIS BY. Rows include TPH-Diesel Range and TPH-Oil Range.

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



CERTIFICATE OF ANALYSIS

CLIENT: Antea Group DATE: 9/22/2015  
4006 - 148th Ave NE ALS SDG#: EV15090094  
Redmond, WA 98052 WDOE ACCREDITATION: C601  
CLIENT CONTACT: Matt Miller  
CLIENT PROJECT: STCG-4222\_0100; Chelan

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 97177 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	96.9			09/16/2015	PAB
Benzene - BSD	EPA-8021	97.8	1		09/16/2015	PAB
Toluene - BS	EPA-8021	96.5			09/16/2015	PAB
Toluene - BSD	EPA-8021	97.0	0		09/16/2015	PAB
Ethylbenzene - BS	EPA-8021	96.5			09/16/2015	PAB
Ethylbenzene - BSD	EPA-8021	97.6	1		09/16/2015	PAB
Xylenes - BS	EPA-8021	98.4			09/16/2015	PAB
Xylenes - BSD	EPA-8021	99.3	1		09/16/2015	PAB

ALS Test Batch ID: 97280 - Water by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	95.7			09/18/2015	EBS
TPH-Diesel Range - BSD	NWTPH-DX	92.2	4		09/18/2015	EBS

APPROVED BY

Laboratory Director

