Supplemental Limited Site Investigation

Former Jim's BP/ Mini Mart
13 East Main Street
Battle Ground, Washington

January 14, 2015
Project No. 81127006

Prepared for:
CLMG Corporation
Plano, Texas

Prepared by:
Terracon Consultants, Inc.
Mountlake Terrace, Washington

Terracon

January 14, 2015

CLMG Corporation
7195 Dallas Parkway
Plano, Texas75024

Attn: Mr. Richard Brown

Re: Supplemental Limited Site Investigation
Former Jim's BP/Mini Mart
13 East Main Street
Battle Ground, Clark County, Washington
Terracon Project No. 81127006

Dear Mr. Brown:

Terracon is pleased to submit this Supplemental Limited Site Investigation (LSI) for the above referenced site. This assessment was performed in accordance with Terracon's Proposal No. P81140130, dated May 20, 2014, and additional task order Proposal No. P81140181, dated July 29, 2014.

We appreciate the opportunity to perform these services for CLMG Corporation. Please contact either of the undersigned at (425) 771-3304 if you have questions regarding the information provided in the report.

Sincerely,

Terracon

For Michael D. Noll, L.G., L.H.G.
Senior Project Manager

Matt Wheaton, E.I.T., L.G.
Department Manager

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APPENDICES

1.0 INTRODUCTION

1.1 Site Description

Site Location/Address	13 East Main Street Battle Ground, Clark County, Washington 98604
General Site Description	The site consists of Clark County Tax parcel 9110110. The subject site is an approximately 0.23-acre tract of land improved with a convenience store and associated asphalt paved parked and landscaped areas. The site was a former gas station.

The subject site was developed as a gasoline station in the early 1980s. The site most recently operated as a Union 76-branded gasoline station/convenience store with a fueling island, dispenser canopy, asphalt paved parking areas, and landscaped areas. Three underground storage tanks (USTs) are located at the site, consisting of a single wall steel 6,000-gallon gasoline tank, a single wall steel 4,000-gallon diesel tank, and a fiberglass reinforced plastic (FRP) double wall 8,000-gallon gasoline tank. The tanks were permanently closed-in-place in June 2014 and the dispenser island and canopy were demolished and the former dispenser island area was paved with asphalt at that time. The associated convenience store is currently occupied by a retail liquor store tenant.

The site location is depicted on Figure 1, a portion of the 1990 Battle Ground, Washington USGS Topographic map (Appendix A). The site layout and surrounding properties are shown on Figure 2, including the location of the site building, USTs, former dispenser island and canopy, and groundwater monitoring wells. Figure 3 is a Sample Location Map indicating the approximate locations of the subsurface explorations in relation to general site boundaries. Figure 4 is a Groundwater Contour Map depicting the groundwater flow direction at the site in November 2014 (Appendix A). Summary tables of soil and groundwater sample analytical results are included as Table 1 and Table 2, respectively (Appendix B). Table 3 is a summary of historical measured depth to groundwater at the site monitoring wells.

1.2 Previous Investigations

A confirmed release of petroleum hydrocarbons to site soil and groundwater was discovered during the installation of the 8,000-gallon FRP tank in 1991 (Ecology, *Feasibility Studies and Remedial Activities Conducted at Jim's BP*, June 30, 2000). The site owner/operator entered into a Consent Decree with Ecology, and Ecology conducted a site characterization and remedial action at the site between 1992 and 1999. Ecology oversaw the installation of four groundwater monitoring wells (MW-1, MW-3, MW-5, and MW-6) on the site, and in the inferred downgradient direction on the adjacent property to the east (Figure 2). Ecology directed soil

sampling at several locations on the site (see borings SP-7 and SP-8 on Figure 3), and selected injections of oxygen release compound (ORC) as the remedial alternative at the site. Those injections of ORC were performed by Ecology's contractor in 1999. After those injections were performed, and although soil and groundwater impacts still exceeded the Washington Model Toxics Control Act (MTCA) Method A cleanup levels for petroleum hydrocarbons in 1999, Ecology issued a No Further Action (NFA) determination for the site in 2000, presumably basing its determination on the limited extent of remaining soil contamination at the site, the unpotable nature of the perched groundwater, and lack of potential for direct contact with soils because of the paved nature of the site

Terracon conducted an LSI at the site on behalf of CLMG in 2011 (*Limited Site Investigation, Union 76 Mini Mart*, October 4, 2011). Soil and groundwater samples were collected from direct-push soil borings B-1 through B-4 in the vicinity of the USTs and fuel dispensers (Figure 3). With the exception of one location, all soil and groundwater analytical results were below the laboratory reporting limit and/or respective MTCA Method A cleanup levels for benzene, toluene, ethylbenzene, and xylenes (BTEX) and diesel- and oil-range total petroleum hydrocarbons (TPH). Elevated concentrations of gasoline-range TPH exceeding the MTCA Method A cleanup levels were identified in site soil and groundwater at the location of boring B-3. Based on the similarity with the concentrations observed by Ecology in 1999, the lack of BTEX compounds, and the weathered nature of the chromatograms for this location, these impacts appeared to be associated with the previous documented release that Ecology was aware of and had issued an NFA letter for, dated April 6, 2000. Based on this information, additional investigation did not appear to be warranted.

When CLMG acquired the property, it was no longer an operational service station. However, the previous owner had failed to close the USTs at the property in accordance with Ecology regulations. As a result, Terracon and Anderson Environmental Contracting, LLC (AEC), on behalf of CLMG, completed a temporary closure of the site USTs in April 2012 (*Underground Storage Tank Assessment, Union 76 Mini Mart*, July 31, 2012). Terracon oversaw the completion of the product cleanout, triple rinsing of the three onsite USTs, and flushing of the associated product piping. These activities were completed in preparation for placing the site into Temporary Closure per Ecology Chapter 173-360 Washington Administrative Code (WAC).

In early 2014, CLMG identified a buyer for the property, who was not going to utilize the property as a service station. As a result, the decision was made to permanently close the USTs in place. Terracon and 3 Kings Environmental, on behalf of CLMG, permanently closed the tanks in place, accomplishing this closure in a series of visits to the site between April and June2014 (*UST Decommissioning Report, Union 76 Mini Mart*, July 9, 2014).

Samples taken during the permanent closure of the USTs revealed no soil or groundwater contamination, confirming that there had been no releases from the USTs since Ecology's

remedial activities in the late 1990s. Terracon collected soil samples from the north, east, south, and west sides of the tank basin (THN-6, THE-6.5, THS-6, and THW-5, respectively; Figure 3) in April 2014. Soil samples were collected from the UST area at 5 to 6.5 feet below the ground surface (bgs), just above the top of the groundwater table. Groundwater samples were also collected at this time from site monitoring wells MW-1, MW-3, MW-5, and MW-6 to evaluate groundwater quality for the UST closure investigation. In addition, three soil samples were collected from beneath the west, central, and east fuel dispensers (DIW-2.5, DIC-2.5, and DIE-2.5, respectively) at depths of approximately 2.5 feet bgs. All soil and groundwater sample analytical results were below the laboratory reporting limit and/or respective MTCA Method A cleanup levels for gasoline-range TPH, BTEX, and diesel- and oil-range TPH.

After reviewing the initial soil sample locations and laboratory results, Ecology requested that additional soil samples be collected from the UST area as part of the UST system closure evaluation. Terracon collected additional compliance soil samples from borings B-5 through B-8 in May 2014 (Figure 3). The borings were advanced to 8 feet bgs and compliance soil samples were collected from the borings at 6 to 7 feet bgs (top of the groundwater table). All soil sample results were below the laboratory reporting limit and/or respective MTCA Method A cleanup levels for gasoline-range TPH, BTEX, and diesel- and oil-range TPH.

During the tank closure process, Ecology expressed concern regarding the limited soil and groundwater impacts at boring B-3 identified by Terracon as part of the LSI in 2011. After a series of conversation with Ecology, CLMG made the decision to perform additional soil and groundwater sampling in the vicinity of B-3 to confirm that the soil impacts in that area were associated with the earlier, known, releases at the site that were the subject of Ecology's April 6, 2000 NFA determination.

Terracon prepared and submitted a Voluntary Cleanup Program (VCP) application to Ecology in August 2014. In response to that VCP application, Ecology confirmed that additional delineation of the impacts found in boring B-3 were required in order to confirm that the soil and groundwater impacts at B-3 were indeed associated with historic releases covered by the April 6, 2000 NFA.

Terracon prepared a *Work Plan for Supplemental Limited Subsurface Investigation*, dated September 3, 2014, to evaluate the site groundwater gradient, and to evaluate and further delineate the documented soil and groundwater impacts in the vicinity of soil boring B-3. The objective of the scope of services presented below is to evaluate the site groundwater gradient, and to evaluate and further delineate the documented soil and groundwater impacts in the vicinity of soil boring B-3. The work plan was submitted to Ecology for review and comment, and Ecology approved the work plan on October 29, 2014.

1.3 Scope of Work

Our scope of services included completion of the following tasks:

Task 1 Prepared a VCP application and work plan and submitted the application and work plan to Ecology for review and comment.

Task 2 Completed five borings and collected a maximum of two soil samples from each boring. Installed a groundwater monitoring well in boring MW-7.

Task 3 Measured depth to groundwater in the site wells and collected groundwater samples from groundwater monitoring wells MW-5 and MW-7.

Task 4. Completed laboratory analyses of soil and groundwater samples.

Task 5. Prepared this Supplemental LSI report summarizing the results of our findings.

1.4 Project Objectives

The objectives of this project were to complete an evaluation of soil and groundwater conditions in the vicinity of Terracon boring B-3, advanced between the closed-in-place UST tank hold and the former dispenser islands in September 2011. Subsurface petroleum hydrocarbon impacts to soil and groundwater were previously documented for the boring B-3 location, as shown in Table 1 and Table 2 in Appendix B.

1.5 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. Terracon makes no warranties, either express or implied, regarding the findings, conclusions or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of this report. These Supplemental LSI services were performed in accordance with the scope of work agreed with you, our client, as reflected in our proposals and were not restricted by American Society for Testing and Materials (ASTM) Practice E1903-97.

1.6 Additional Scope Limitations

This report was intended to reduce, but not eliminate, uncertainty regarding the existence of recognized environmental conditions in connection with the subject site. Findings, conclusions,

and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable, or not present during these services, and we cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this Supplemental LSI. Subsurface conditions may vary from those encountered at the time of construction or at specific borings or wells or during other surveys, tests, assessments, investigations, or exploratory services. The data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services. If, during future site development, different subsurface conditions from those encountered during our explorations are observed or appear to be present, we must be advised promptly so that we can review these conditions and reconsider or modify our conclusions and recommendations where necessary.

1.7 Reliance

This Supplemental Limited Site Investigation is certified to, can be relied upon by, and has been prepared for the exclusive use of the following entities: CLMG Corporation and their respective successors, assigns, affiliates, and subsidiaries.

Use or reliance by any other party is prohibited without the written authorization of CLMG Corporation and Terracon.

Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposals and this report. The limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to the client and all relying parties unless otherwise agreed in writing.

2.0 METHODOLOGY

Methods used to complete this report were developed based on information derived via review of our previously completed Phase I Environmental Site Assessment, LSI, and UST decommissioning investigation, and our experience on similar projects.

A conceptual model of hydrogeologic and environmental conditions was developed based on results of the previously completed assessment. The conceptual model included the following key elements:

- Subsurface conditions consist of loam and native alluvial soils;
- The location of onsite impaired media is in the area of former boring B-3, located between the UST tank hold and former dispenser island.
- Potential contaminants consist of gasoline- and diesel-range TPH, and BTEX.

Based on these conceptual subsurface conditions, direct-push drilling methods were selected for completion of subsurface exploration activities. Subsurface investigation activities included the following tasks:

1. Advancing five direct-push borings and installing one groundwater monitoring well;
2. Limited soil and groundwater sampling;
3. Collection of groundwater samples from one newly-installed and on existing onsite monitor wells; and
4. Analytical laboratory testing.

Each of these investigation activities is summarized below.

2.1 Subsurface Exploration

A private utility locator was contracted to locate onsite utilities and conduct a ground penetrating radar (GPR) survey to locate the buried water supply line and other utilities at the planned boring location.

Soil borings B-9 through B-12 and MW-7 were advanced on the site on November 7, 2014, using a truck-mounted direct-push drilling rig owned and operated by Cascade Drilling, L.P., a Washington-licensed driller. The device utilized a direct-push sampler equipped with disposable acetate sample sleeves. Throughout the drilling operation, soil samples were obtained continuously (to the extent practical) from five-foot long pushes. The steel sampling tube was extracted from the hole and the liners were removed and split open for soil sample recovery.

Direct-push explorations B-9 through B-12 were advanced to a depth of approximately 5 feet bgs (top of the groundwater table), and direct-push boring MW-7 was advanced to approximately 20 feet bgs. A field log of each exploration was maintained, including the approximate thickness and depth of each soil unit encountered and the approximate depth to the uppermost water table. Soil samples were observed to document soil lithology, color, and moisture content. Soils were logged in general accordance with ASTM Practice Designation D-2488, *Standard Practice for Description of Soils (Visual-Manual Procedure)*. Exploration logs are included in Appendix C of this report.

Sampling equipment was cleaned using an Alconox® wash and potable water prior to the beginning of the project and before collecting each soil sample.

2.2 Soil Sampling

A total of 11 soil samples were collected from the borings and submitted to the contract analytical laboratory (ESC Lab Sciences of Mt. Juliet, TN). Soil samples from borings B-9 through B-12 retained for chemical analysis were collected at depths ranging from approximately 4 to 4.5 feet bgs, just above the top of the groundwater table. Soil samples from boring MW-7 retained for chemical analysis were collected at depths of approximately 4.5 and 7.5 feet bgs.

Soil samples were extracted by hand from the disposable sampler using disposable nitrile gloves and placed directly into laboratory supplied glassware. Soil samples collected for volatile constituents were collected in general accordance with EPA Method 5035.

Each sample container was labeled with the site name, date, time, exploration number, and sample number. Sample containers were placed in a chilled cooler immediately after sampling, and subsequently shipped to the analytical laboratory by Terracon under strict chain-of-custody procedures.

2.3 Groundwater Monitoring Well Installation

A 2-inch diameter polyvinyl chloride (PVC) groundwater monitoring well was installed in boring MW-7. A pre-packed well screen with 0.010-inch machine-cut slots was set from 5 to 20 feet bgs, and blank well casing was installed from the top of the well screen to the approximate ground surface. A threaded well cap was installed at the bottom of the well screen, and a compression well plug was installed at the top of the well casing. A supplemental sand pack of #12 Monterey sand was added to 4 feet bgs. A well seal of bentonite chips hydrated with potable water was added from 1 to 4 feet bgs. An 8-inch diameter flush-mount well monument was set above the well and secured in place with cement.

Terracon surveyed the top of the PVC well casing (TOC) elevation at MW-7 relative to adjacent well MW-5 on November 7, 2014. The TOC elevation at monitoring well MW-7 is 292.21 feet (Table 3).

Well MW-7 was dry immediately after installation and was not developed. Measured depth to groundwater at MW-7 at the end of the day was 18.47 feet below TOC.

2.4 Groundwater Monitoring Well Sampling

Terracon collected groundwater samples from newly-installed monitoring well MW-7 and existing well MW-5 on November 10, 2014. Prior to sampling, the static water level was measured in all five site monitoring wells (MW-1, MW-3, and MW-5 through MW-7) using an electric water well sounder. The measured depth to groundwater ranged from 3.78 feet below TOC at monitoring well MW-6 to 21.32 feet below TOC at monitoring well MW-3 (Table 3). The highest depth to water measurements were at monitoring wells MW-5 through MW-7, located closest to the UST backfill area. Monitoring wells MW-1 and MW-3 have historically exhibited a much lower depth to groundwater, as shown in Table 3. The TOC elevations and measured depth to groundwater data were used to calculate the groundwater elevation at the site monitoring wells. Groundwater elevations ranged from 271.76 feet at MW-3 to 288.08 feet at MW-6 (Table 3 and Figure 4). Based on the calculated groundwater elevations at the wells on November 10, 2014, the inferred groundwater flow direction was mainly toward the east and southeast (Figure 4).

Groundwater samples were collected and analyzed from monitoring wells MW-5 and MW-7 on November 10, 2014. Prior to sample collection, the monitoring wells were purged of approximately one to three gallons of water using a portable peristaltic pump equipped with clean silicon and polyethylene tubing. The monitoring wells were purged and sampled using a low-flow sampling technique. Groundwater parameters (pH, temperature, conductivity, and dissolved oxygen) were measured on the purged groundwater using a multi-parameter meter and a flow-through cell. Groundwater samples were collected when measurements were within 10 percent of previous measurements. Discharge from the peristaltic pump was directed into laboratory supplied glassware and preserved as required for the individual testing methods.

Each sample container was labeled with the site name, date, time, and well/sample number. Sample containers were placed in a chilled cooler immediately after sampling, and subsequently shipped to the analytical laboratory by Terracon under strict chain-of-custody procedures.

2.5 Analytical Laboratory Testing

Six soil samples (one from each soil boring and two from the MW-7 boring) and two groundwater samples (one each from monitoring wells MW-5 and MW-7) were submitted for chemical analysis. All samples were analyzed by ESC Lab Sciences, a Washington State-accredited laboratory. All soil and groundwater samples were analyzed for the following:

- Gasoline-range TPH using Northwest Method NWTPH-Gx;
- Diesel- and oil-range TPH using Northwest Method NWTPH-Dx; and
- BTEX using EPA Method 8260B.

The executed chain-of-custody forms and laboratory analytical certificates are provided in Appendix D. All analyses were completed using standard turnaround times.

Data packages were checked for completeness immediately upon receipt from the laboratory to ensure that data and quality assurance/quality control (QA/QC) information requested were present. Data quality was assessed by considering holding times, surrogate recovery, method blanks, matrix spike and matrix spike duplicate recovery, and detection limits.

3.0 SUPPLEMENTAL LIMITED SITE INVESTIGATION RESULTS

3.1 Subsurface Conditions

Detailed lithologic descriptions are presented on the soil boring logs included in Appendix C. In general, subsurface soil conditions generally consisted of brownish gray silty gravel (fill material) from the surface to a depth of approximately 2 feet bgs, underlain by tan to gray silt and sandy silt, grading to tan and orange-brown lean clay with gravel to the maximum depths explored in the borings 20 feet bgs. The uppermost water table was encountered at depths of approximately 4 to 4.5 feet bgs.

3.2 Analytical Laboratory Results

Soil quality summary results are presented in Table 1. Groundwater results are presented in Table 2. The complete laboratory reports and chain-of-custodies are included in Appendix D. Additional discussion and interpretation of analytical results relative to applicable cleanup levels is included in Section 4.

Soil Quality

Sample MW-7 S-3 7.5 collected at a depth of approximately 7.5 feet bgs contained a concentration of gasoline-range TPH at 69 milligrams per kilogram (mg/kg), which is above the MTCA Method A cleanup level of 30 mg/kg. All other soil sample results were either below the analytical laboratory method reporting limit (MRL) or below the MTCA Method A cleanup level.

Sample MW-7 S-3 7.5 contained a concentration of benzene at 0.15 mg/kg, which is above the MTCA Method A cleanup level of 0.03 mg/kg. All other soil sample results were either below the analytical laboratory MRLs or below the MTCA Method A cleanup levels for BTEX.

Diesel- and oil-range TPH soil sample results were either below the analytical laboratory MRLs or below the MTCA Method A cleanup levels.

Groundwater Quality

Gasoline-range TPH was either below the analytical laboratory MRL or below the MTCA Method A cleanup level in the groundwater samples collected from monitoring wells MW-5 and MW-7.

BTEX was either below the analytical laboratory MRLs or below the MTCA Method A cleanup levels in the groundwater samples collected from monitoring wells MW-5 and MW-7.

Diesel-range TPH was reported at concentrations of 560 micrograms per liter (µg/L) and 980 µg/L in the groundwater samples collected from monitoring wells MW-5 and MW-7, respectively, which exceed the MTCA Method A cleanup level (500 µg/L). Oil-range TPH concentrations in the groundwater samples were either below the analytical laboratory MRLs or below the MTCA Method A cleanup level.

3.3 Quality Assurance/Quality Control Results

The analytical results for the current investigation were checked for completeness immediately upon receipt from the laboratory to ensure that data and QA/QC information requested were present. Data quality was assessed by considering hold times, surrogate recovery, method blanks, matrix spike and matrix spike duplicate (MS/MSD) recovery, and detection limits. QA/QC review was completed using guidance described in *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (Draft Final, USEPA, 2005). Our evaluation assumes that the QA/QC is correct as reported by the laboratory, and merely provides an interpretation of the QA/QC results.

Hold Times. All analyses were completed within specified hold times.

Surrogate Recoveries. All surrogate recoveries were within laboratory limits.

Method Blanks. Analytes were not detected in any of the laboratory method blanks.

MS/MSD Results. MS and MSD recoveries were all within laboratory limits, and Relative Percent Differences (RPDs) between MS and MSD recoveries were all within laboratory limits.

Laboratory Reporting Limits. The laboratory reported the analytical results with respect to both the method detection limit (MDL) and the reporting detection limit (RDL). The MDL is defined as the lowest concentration that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The presence of the analyte is confirmed, but the precise concentration cannot be reliably measured. The RDL is the lowest concentration that can be reliably measured within specified limits of precision and accuracy. Analytical results reported between the MDL and the RDL are flagged with a “J”.

Based upon our interpretation of quality control information provided by the laboratories, it is our opinion that the overall dataset is useable as qualified for the purposes of this Limited Site Investigation.

4.0 FINDINGS AND DISCUSSION

Terracon completed a Supplemental LSI for the above-referenced site. A total of five soil borings were advanced in the area of former boring B-3, located between the closed-in-place USTs and the former dispenser island. Two to three soil samples were collected from each boring. Groundwater samples were also collected from a newly-installed monitoring well and a nearby existing monitoring well. Five soil samples (one from each boring and two from the MW-7 boring) and both groundwater samples collected were submitted for laboratory analyses.

The findings of this report are as follows:

- Five soil samples and two groundwater samples associated with the borings advanced onsite and an existing onsite monitor well were submitted for laboratory analyses.
- Gasoline-range TPH and benzene were detected above the MTCA Method A cleanup levels for soil collected from the MW-7 boring at approximately 7.5 feet bgs, below the top of the groundwater table. As discussed above in Section 1.2, the site had previous assessment and remediation work conducted, which Ecology relied on as the basis to issue a No Further Action (NFA) letter, dated April 6, 2000. The concentrations identified in the soil sample collected from the MW-7 boring at approximately 7.5 feet bgs appear to reflect similar concentrations which were identified onsite in 2000, when the NFA was issued. Based on the results of this investigation, it does not appear that the site soil in the area of former boring B-3 contains contaminant concentrations above MTCA cleanup levels which have not already been documented and addressed by Ecology.
- Diesel-range TPH was detected at a concentration slightly above the MTCA Method A cleanup level for groundwater samples collected from MW-5 and MW-7.
- All other soil and groundwater analytical results were below the analytical laboratory MRL and/or respective MTCA Method A cleanup levels for gasoline-range TPH, BTEX, and diesel- and oil-range TPH.

5.0 CONCLUSIONS AND RECOMMENDATIONS

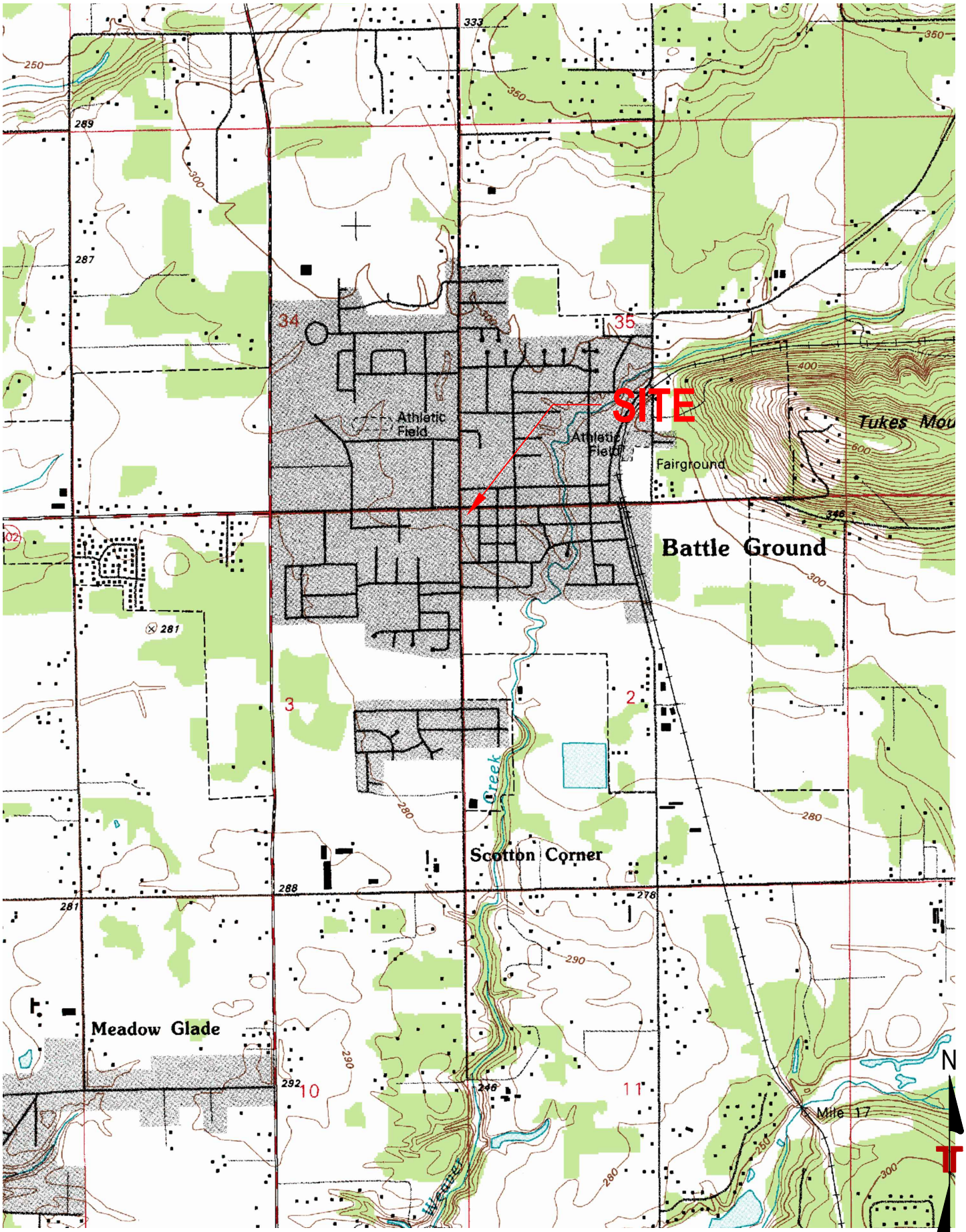
Based on the information discussed above and in this report, Terracon recommends that no further investigation be conducted at this time. The TPH and BTEX detections in the soil and/or

groundwater near former boring B-3 are consistent with findings previously documented by Ecology as part of a site characterization and remedial action conducted in the late 1990's that resulted in a determination of no further action (NFA) for the site. Ecology issued the NFA after determining that the then-remaining residual site impacts did not represent a risk to human health or the environment. Based on the recent (post-2011) site investigation work conducted by Terracon, no evidence was found indicating that new releases have occurred at the site associated with the closed UST system.

In the event that the site monitoring wells are not part of planned future groundwater sampling events, they should be decommissioned in accordance with Washington State regulations.

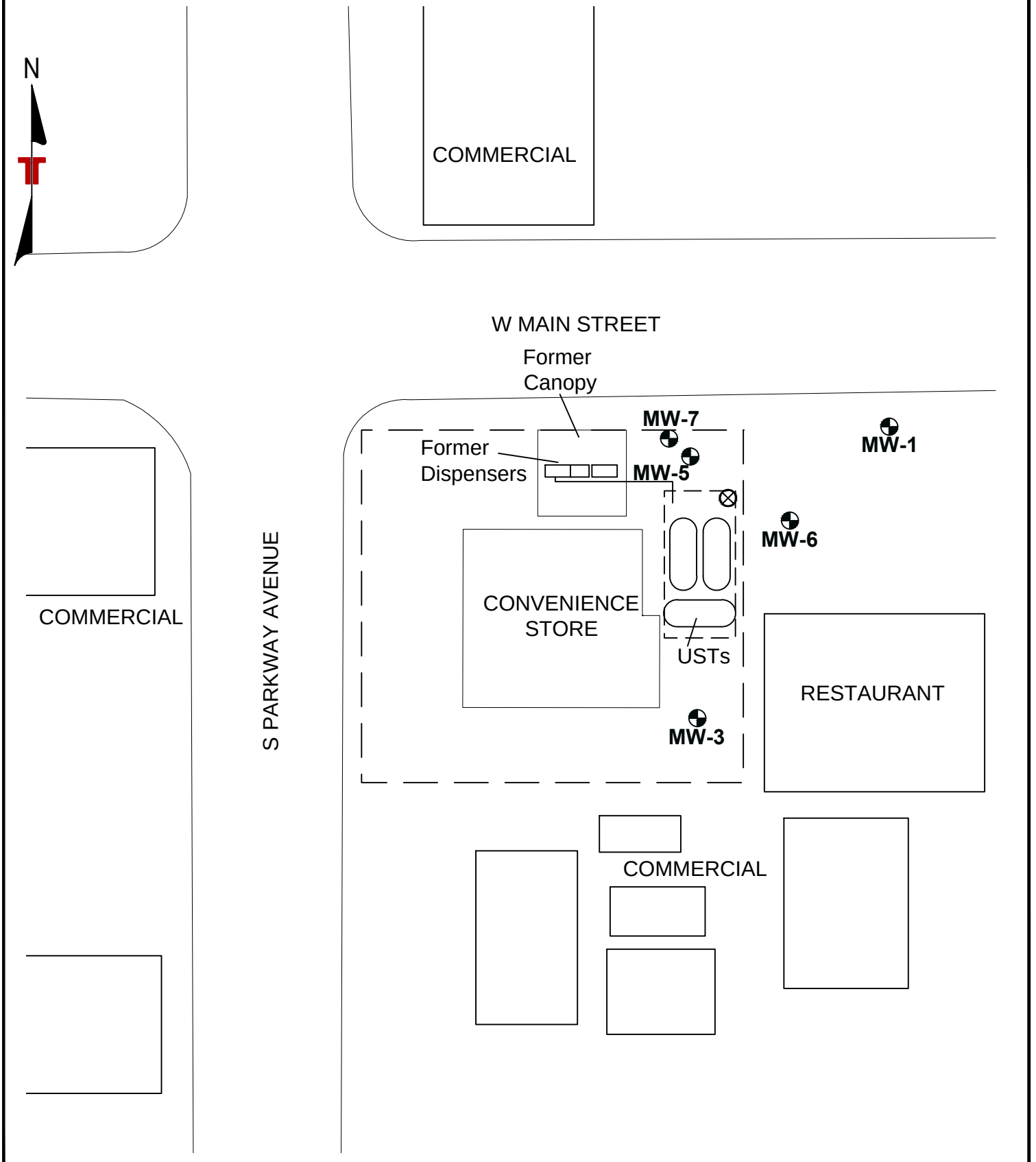
APPENDIX A

Figure 1 – Topographic Map
Figure 2 – Site Diagram
Figure 3 – Sample Location Map
Figure 4 – Groundwater Contour Map



Project Mngr: EAD	Project No. 81127006	Terracon Consulting Engineers and Scientists	**TOPOGRAPHIC MAP**
Drawn By: EAD	Scale: Not to Scale	21905 64th Avenue W., Ste 100 Mountlake Terrace, WA 98043	Union 76 Mini Mart
Checked By: EAD	File No. Figure1.dwg	PH. (425) 771-3304 FAX. (425) 771-3549	13 East Main Street
Approved By: MYW	Date: June 2014		Battle Ground, Clark County, Washington

FIG. No. 1



LEGEND:

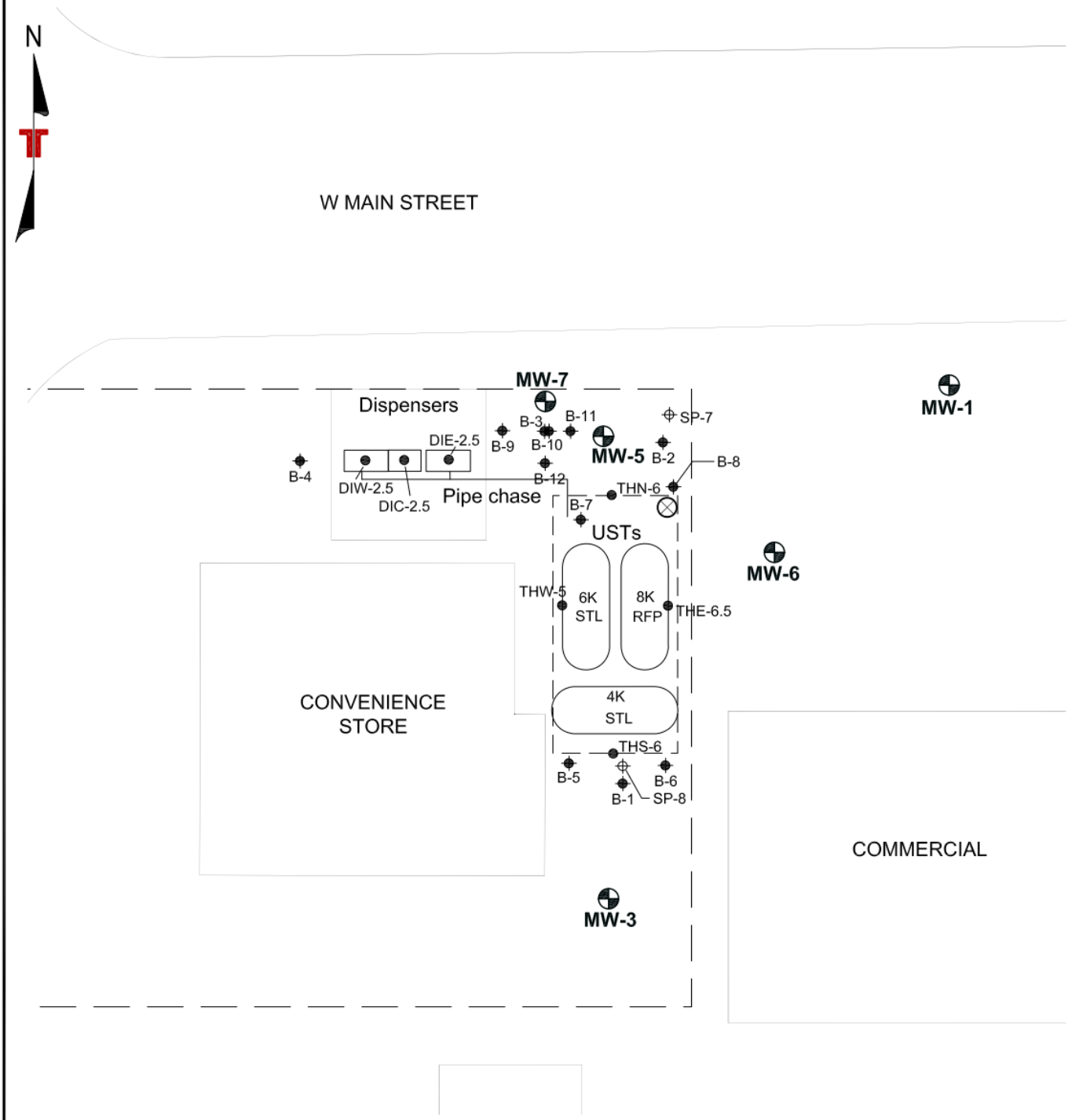
MW-3 Groundwater monitoring well number

Tank Pit Observation well

approximate site boundary

Project Mngr: EAD	Project No. 81127006	Terracon Consulting Engineers and Scientists	**SITE DIAGRAM**
Drawn By: EAD	Scale: Not to Scale	21905 64th Avenue W., Ste 100 Mountlake Terrace, WA 98043	Union 76 Mini Mart
Checked By: EAD	File No. Figure1.dwg	PH. (425) 771-3304 FAX. (425) 771-3549	13 East Main Street
Approved By: MYW	Date: December 2014		Battle Ground, Clark County, Washington

FIG. No. 2



LEGEND:

MW-3 Groundwater monitoring well number

THW-5 approx. UST closure sample location

B-1 Terracon boring location

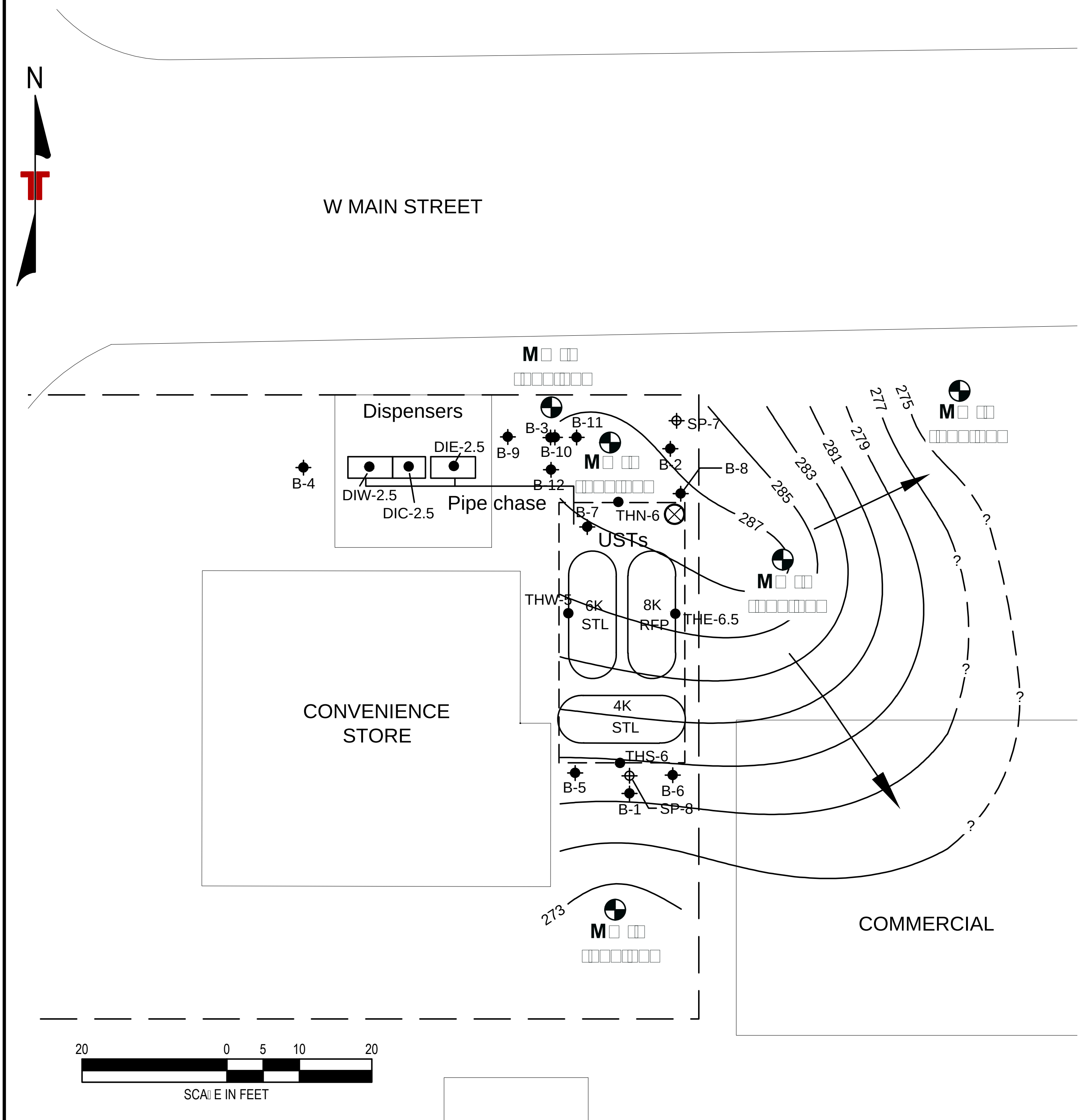
SP-7 Ecology soil boring number and approx. location

Tank Pit Observation Well

20 0 5 10 20

SCALE IN FEET

Project Mngr: EAD	Project No. 81127006	Terracon Consulting Engineers and Scientists	**SAMPLE LOCATION MAP**	FIG. No.
Drawn By: EAD	Scale: As shown		Union 76 Mini Mart	
Checked By: EAD	File No.		13 East Main Street	3
Approved By: MYW	Date: November 2014	21905 64th Avenue W., Ste 100 Mountlake Terrace, WA 98043 PH. (425) 771-3304 FAX. (425) 771-3549	Battle Ground, Clark County, Washington	



□□G□□□□

M□ □□ (271.76) Groundwater monitoring well number (Groundwater elevation) November 10, 2014

285 Groundwater Contour (feet)

Inferred Groundwater Flow Direction

TH□ □□ approx. sample location

□□□ Terracon 2011 soil boring number and approx. location

□P□□ Ecology soil boring number and approx. location

Tank Pit Observation Well

Project Mngr: EAD	Project No. 81127006
Drawn By: EAD	Scale: As Shown
Checked By: EAD	File No. GW Contour Map.dwg
Approved By: MYW	Date: Nove□ □er 2014

Terracon
Consulting Engineers and Scientists

21905 64th Avenue W., Ste 100 Mountlake Terrace, WA 98043
PH. (425) 771-3304 FAX. (425) 771-3549

GRO□□□□ AT□R CO□TO□R MAP
Union 76 Mini Mart
13 East Main Street
Battle Ground, Clark County, Washington

FIG. No. 4

APPENDIX B

Table 1 – Summary of Soil Analytical Results
Table 2 – Summary of Groundwater Analytical Results
Table 3 – Summary of Depth to Groundwater Measurements

TABLE 1

SUMMARY OF SOIL ANALYTICAL RESULTS
Union 76 Mini Mart
13 East Main Street
Battle Ground, Clark County, Washington

all concentrations are in mg/kg (milligrams per kilogram)

				TPH			BTEX				Metals
Sample Location	**Sample Number**	**Sample Date**	**Sample Depth (ft)**	**Gasoline-Range**	**Diesel-Range**	**Oil-Range**	**Benzene**	**Toluene**	**Ethylbenzene**	**Xylenes**	**Lead**
South of USTs	B-1 (6-8')	9/2/2011	6 to 8	**2.4**	ND (<5.2)	ND (<13)	ND (<0.0013	ND (<0.0064)	ND (<0.0013	ND (<0.0039)	**9.7**
South of USTs	B-1 (8-10')	9/2/2011	8 to 10	ND (<0.13)	ND (<5.3)	ND (<13)	ND (<0.0013	ND (<0.0066)	ND (<0.0013	ND (<0.0040)	--
Northeast of USTs	B-2 (6-8')	9/2/2011	6 to 8	ND (<0.13)	ND (<5.2)	ND (<13)	ND (<0.0013	ND (<0.0065)	ND (<0.0013	ND (<0.0039)	**13**
Northeast of USTs	B-2 (8-10')	9/2/2011	8 to 10	ND (<0.13)	ND (<5.2)	ND (<13)	ND (<0.0013	ND (<0.0065)	ND (<0.0013	ND (<0.0039)	--
Northwest of USTs	B-3 (6-8')	9/2/2011	6 to 8	**200**	**1.7 J**	ND (<13)	**0.022 J**	ND (<0.25)	**3.0**	**0.036 J**	**14**
Northwest of USTs	B-3 (8-10')	9/2/2011	8 to 10	**12**	**4.9 J**	**7.4 J**	**0.016**	ND (<0.0066)	**0.094**	**0.028**	--
West of Dispensers	B-4 (4-6')	9/2/2011	4 to 6	ND (<0.13)	ND (<5.3)	**37 J6**	ND (<0.0013	ND (<0.0066)	ND (<0.0013	ND (<0.0040)	--
West of Dispensers	B-4 (8-10')	9/2/2011	8 to 10	ND (<0.13)	ND (<52)	**210**	ND (<0.0013	**0.0018 J**	**0.0023**	**0.016**	--
North End of USTs	THN-6	4/28/2014	6	**9.8**	--	--	**0.00084**	**0.0075**	**0.030**	**0.11**	**12**
East Side of USTs	THE-6.5	4/28/2014	6.5	ND (<0.13)	--	--	ND (<0.00067)	ND (<0.0067)	ND (<0.00067)	ND (<0.0020)	--
South End of USTs	THS-6	4/28/2014	6	--	ND (<5.0)	ND (<13)	ND (<0.00063)	ND (<0.0063)	ND (<0.00063)	ND (<0.0019)	--
West Side of USTs	THW-5	4/28/2014	5	ND (<0.12)	--	--	ND (<0.00061)	ND (<0.0061)	ND (<0.00061)	ND (<0.0018)	--
East Dispenser Island	DIE-2.5	4/29/2014	2.5	ND (<.13)	ND (<5.2)	ND (<13)	**0.0030**	**0.028**	**0.0039**	**0.031**	--
Center Dispenser Island	DIC-2.5	4/29/2014	2.5	ND (<.13)	ND (<5.2)	ND (<13)	**0.0017**	ND (<0.0064)	ND (<0.00064)	ND (<0.0019)	--
West Dispenser Island	DIW-2.5	4/29/2014	2.5	ND (<.13)	ND (<5.3)	ND (<13)	ND (<0.00066)	ND (<.0066)	ND (<0.00066)	ND (<0.0020)	**16**

TABLE 1

SUMMARY OF SOIL ANALYTICAL RESULTS
Union 76 Mini Mart
13 East Main Street
Battle Ground, Clark County, Washington

all concentrations are in mg/kg (milligrams per kilogram)

Sample Location	Sample Number	Sample Date	Sample Depth (ft)	TPH			BTEX				Metals
				Gasoline-Range	Diesel-Range	Oil-Range	Benzene	Toluene	Ethylbenzene	Xylenes	Lead
South End of USTs	B-5-6	5/22/2014	6	**1.6**	ND (<5.2)	ND (<13)	ND (<0.00066)	ND (<.0066)	ND (<0.00066)	**0.011**	--
South End of USTs	B-6-7	5/22/2014	7	ND (0.64)	ND (<5.1)	ND (<13)	ND (<0.0032)	ND (<0.032)	ND (<0.0032)	ND (<0.0096)	--
North End of USTs	B-7-7	5/22/2014	7	**1.1**	ND (<5.3)	ND (<13)	ND (<0.0033)	ND (<0.033)	ND (<0.0033)	**0.011**	--
North End of USTs	B-8-7	5/22/2014	7	ND (0.67)	ND (<5.4)	ND (<13)	ND (<0.0034)	ND (<0.034)	ND (<0.0034)	ND (<0.010)	--
North of USTs	B-9 S-2 4.0	11/7/2014	4	**1.9**	ND (<5.2)	ND (<13)	**0.0028**	ND (<0.0065)	**0.0028**	**0.0048**	--
North of USTs	B-10 S-2 4.5	11/7/2014	4.5	**1.0**	ND (<5.4)	ND (<13)	**0.0073**	ND (<0.0067)	**0.0077**	ND (<0.0020)	--
North of USTs	B-11 S-2 4.5	11/7/2014	4.5	**0.28**	ND (<5.3)	ND (<13)	ND (<0.00066)	ND (<0.0066)	ND (<0.00066)	ND (<0.0020)	--
North of USTs	B-12 S-2 4.5	11/7/2014	4.5	**0.34**	ND (<5.2)	ND (<13)	ND (<0.00065)	ND (<0.0065)	ND (<0.00065)	ND (<0.0020)	--
North of USTs	MW-7 S-2 4.5	11/7/2014	4.5	**0.87**	**5.7**	ND (<13)	ND (<0.00066)	ND (<0.0066)	**0.00098**	**0.0054**	--
North of USTs	MW-7 S-3 7.5	11/7/2014	7.5	**69**	ND (<5.3)	ND (<13)	**0.15**	ND (<0.25)	**0.20**	**0.74**	
MTCA Method A Cleanup Level				**30**	**2,000**	**2,000**	**0.03**	**7**	**6**	**9**	**250**

Note: Concentrations detected are in **BOLD** type. Shaded and bold concentrations are above MTCA cleanup levels.

TPH - total petroleum hydrocarbons

MTCA - Model Toxics Control Act

-- - not sampled

ND - Not detected above laboratory reporting limit.

J: Estimated value below the lowest calibration point. Confidence correlates with concentration

J6: The sample matrix interfered with the ability to make any accurate determination; spike value is low.

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Union 76 Mini Mart
13 East Main Street
Battle Ground, Clark County, Washington

all concentrations are in µg/l (micrograms per liter)

Well Location	Sample Number	Sample Date	Groundwater Depth (ft)	TPH			BTEX				Metals
				Gasoline-Range	Diesel-Range	Oil-Range	Benzene	Toluene	Ethylbenzene	Xylenes	Lead
MW-1	MW-1	4/29/2014	18.10	ND (<100)	ND (<100)	ND (<250)	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<1.5)	--
MW-3	MW-S	9/2/2011	23	ND (<100)	**41 J**	ND (<250)	ND (<1.0)	ND (<5.0)	ND (<1.0)	ND (<3.0)	--
	MW-3	4/28/2014	20.03	ND (<100)	ND (<100)	ND (<250)	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<1.5)	--
MW-5	MW-N	9/2/2011	9	**150**	**270**	ND (<250)	ND (<1.0)	ND (<5.0)	ND (<1.0)	ND (<3.0)	--
	MW-5	4/28/2014	4.40	ND (<100)	**200**	ND (<250)	**0.73**	ND (<5.0)	**0.51**	**2.0**	ND (<5.0)
	MW-5	11/10/2014	4.34	ND (<100)	**560**	ND (<250)	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<1.5)	--
MW-6	MW-6	4/29/2014	4.09	ND (<100)	ND (<100)	ND (<250)	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<1.5)	--
MW-7	MW-7	11/10/2014	5.41	**990**	**980**	**280**	**1.3**	ND (<5.0)	**41**	**2.1**	--
B-3	B-3	9/2/2011	10	**2,900**	**270**	ND (<250)	**4.4**	**0.66 J**	**50**	**0.96 J**	--
MTCA Method A Cleanup Level				**1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**15**

Note: Concentrations detected are in **BOLD** type.

TPH - total petroleum hydrocarbons

MTCA - Model Toxics Control Act

-- - not sampled

ND - Not detected above laboratory reporting limit.

J: Estimated value below the lowest calibration point. Confidence correlates with concentration

TABLE 3

SUMMARY OF DEPTH TO GROUNDWATER MEASUREMENTS

Union 76 Mini Mart

13 East Main Street

Battle Ground, Washington

Well Number	Sample Date	TOC Elevation* (Feet)	Depth to Water (Feet)	Relative Groundwater Elevation (Feet)
MW-1 (Depth to Bottom = 20.5 feet; Well Screen = 10 to 20 feet)	11/10/2014	291.83	19.45	272.38
	5/22/2014	291.83	18.50	273.33
	4/29/2014	291.83	18.10	273.73
	Dec-99	291.83	19.2	272.63
	Sep-98	291.83	Dry	--
	Nov-95	291.83	19.3	272.53
	May-95	291.83	19.1	272.73
	Nov-94	291.83	18.8	273.03
	Apr-94	291.83	19.6	272.23
	Apr-93	291.83	19.2	272.63
	Jan-93	291.83	19.3	272.53
	Oct-92	291.83	Dry	--
	May-92	291.83	17.7	274.13
	Apr-92	291.83	15.6	276.23
	Mar-92	291.83	13.0	278.83
MW-3 (Depth to Bottom = 24.0 feet; Well Screen = 13 to 23 feet)	11/10/2014	293.08	21.32	271.76
	5/22/2014	293.08	20.89	272.19
	4/29/2014	293.08	20.16	272.92
	Dec-99	293.08	21.0	272.08
	Sep-98	293.08	22.3	270.78
	Nov-95	293.08	20.8	272.28
	May-95	293.08	21.1	271.98
	Nov-94	293.08	20.0	273.08
	Apr-94	293.08	21.3	271.78
	Apr-93	293.08	21.2	271.88
	Jan-93	293.08	21.0	272.08
	Oct-92	293.08	22.7	270.38
	May-92	293.08	20.7	272.38
	Apr-92	293.08	20.4	272.68
	Mar-92	293.08	14.0	279.08

TABLE 3

SUMMARY OF DEPTH TO GROUNDWATER MEASUREMENTS

Union 76 Mini Mart

13 East Main Street

Battle Ground, Washington

Well Number	Sample Date	TOC Elevation* (Feet)	Depth to Water (Feet)	Relative Groundwater Elevation (Feet)
MW-5 (Depth to Bottom = 20.5 feet; Well Screen = 10 to 20 feet)	11/10/2014	292.25	4.34	287.91
	5/22/2014	292.25	5.56	286.69
	4/29/2014	292.25	4.63	287.62
	Dec-99	292.25	7.3	284.95
	Sep-98	292.25	15.6	276.65
	Nov-95	292.25	9.46	282.79
	May-95	292.25	11.4	280.85
	Nov-94	292.25	13.9	278.35
	Apr-94	292.25	13.5	278.75
	Apr-93	292.25	11.8	280.45
	Jan-93	292.25	12.6	279.65
	Oct-92	292.25	17.6	274.65
	May-92	292.25	8.6	283.65
	Apr-92	292.25	8.3	283.95
	Mar-92	292.25	9.5	282.75
MW-6 (Depth to Bottom = 20.0 feet; Well Screen = 10 to 20 feet)	11/10/2014	291.86	3.78	288.08
	5/22/2014	291.86	4.65	287.21
	4/29/2014	291.86	4.09	287.77
	Dec-99	291.86	4.7	287.16
	Sep-98	291.86	7.6	284.26
	Nov-95	291.86	4.5	287.36
	May-95	291.86	4.8	287.06
	Nov-94	291.86	5.5	286.36
	Apr-94	291.86	6.1	285.76
	Apr-93	291.86	5.0	286.86
	Jan-93	291.86	5.8	286.06
	Oct-92	291.86	8.1	283.76
	May-92	291.86	9.1	282.76
	Apr-92	291.86	5.8	286.06
	Mar-92	291.86	9.0	282.86

TABLE 3

SUMMARY OF DEPTH TO GROUNDWATER MEASUREMENTS

Union 76 Mini Mart

13 East Main Street

Battle Ground, Washington

Well Number	Sample Date	TOC Elevation* (Feet)	Depth to Water (Feet)	Relative Groundwater Elevation (Feet)
MW-7 (Depth to Bottom = 20.0 feet; Well Screen = 10 to 20 feet)	11/10/2014	292.21	5.41	286.80

*TOC = Top of casing elevations from *Feasability Studies and Remedial Activities Conducted at Jim's BP* , Department of Ecology, June 30, 2000, Figure 5 - Stratigarphic Cross Sections.

APPENDIX C

Exploration Logs

BORING LOG NO. B-9

PROJECT: CLMG Battle Ground

CLIENT: CLMG Corporation
Plano, Texas

SITE: 13 East Main Street
Battle Ground, Washington

LOCATION See Exhibit A-2

GRAPHIC LOG	DEPTH	MATERIAL DESCRIPTION	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE
		FILL - SILTY GRAVEL , trace sand, brownish gray, trace wood fragments, damp			
	2.0				
		SANDY SILT, tan, moist to wet			
	5.0				
		Boring Terminated at 5 Feet	5		

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method:
Direct push

Abandonment Method:
Borings backfilled with bentonite chips upon completion

See Appendices for description of field procedures.
See Appendices for description of laboratory procedures and additional data (if any).
See Appendices for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Not encountered while drilling

Terracon
4103 SE International Way, # 300
Portland, Oregon

Boring Started: 11/7/2014 | Boring Completed: 11/7/2014
Drill Rig: GeoProbe | Driller: Cascade
Project No.: 81127006 | Exhibit: B-4

BORING LOG NO. B-10

PROJECT: CLMG Battle Ground

CLIENT: CLMG Corporation
Plano, Texas

SITE: 13 East Main Street
Battle Ground, Washington

LOCATION See Exhibit A-2

GRAPHIC LOG	DEPTH	MATERIAL DESCRIPTION	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE
		FILL - SILTY GRAVEL, trace sand, brownish gray, damp			
	2.0				
		SANDY SILT, tan, moist to wet			
	5.0				
		Boring Terminated at 5 Feet	5		

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method:
Direct push

Abandonment Method:
Borings backfilled with bentonite chips upon completion

See Appendices for description of field procedures.
See Appendices for description of laboratory procedures and additional data (if any).
See Appendices for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Not encountered while drilling

Terracon
4103 SE International Way, # 300
Portland, Oregon

Boring Started: 11/7/2014 | Boring Completed: 11/7/2014
Drill Rig: GeoProbe | Driller: Cascade
Project No.: 81127006 | Exhibit: B-1

BORING LOG NO. B-11

PROJECT: CLMG Battle Ground

CLIENT: CLMG Corporation
Plano, Texas

SITE: 13 East Main Street
Battle Ground, Washington

LOCATION See Exhibit A-2

GRAPHIC LOG	DEPTH	MATERIAL DESCRIPTION	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE
		FILL - SILTY GRAVEL, trace sand, brownish gray, damp			
	2.0				
		SANDY SILT, tan, moist to wet			
	5.0				
		Boring Terminated at 5 Feet	5		

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method:
Direct push

Abandonment Method:
Borings backfilled with bentonite chips upon completion

See Appendices for description of field procedures.
See Appendices for description of laboratory procedures and additional data (if any).
See Appendices for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Not encountered while drilling

Terracon
4103 SE International Way, # 300
Portland, Oregon

Boring Started: 11/7/2014 | Boring Completed: 11/7/2014
Drill Rig: GeoProbe | Driller: Cascade
Project No.: 81127006 | Exhibit: B-2

BORING LOG NO. B-12

PROJECT: CLMG Battle Ground

CLIENT: CLMG Corporation
Plano, Texas

SITE: 13 East Main Street
Battle Ground, Washington

LOCATION See Exhibit A-2

GRAPHIC LOG	DEPTH	MATERIAL DESCRIPTION	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE
		FILL - SILTY GRAVEL, trace sand, brownish gray, damp			
	2.0				
		SANDY SILT, tan, moist to wet			
	5.0				
		Boring Terminated at 5 Feet	5		

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method:
Direct push

Abandonment Method:
Borings backfilled with bentonite chips upon completion

See Appendices for description of field procedures.
See Appendices for description of laboratory procedures and additional data (if any).
See Appendices for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Not encountered while drilling

Terracon
4103 SE International Way, # 300
Portland, Oregon

Boring Started: 11/7/2014 | Boring Completed: 11/7/2014
Drill Rig: GeoProbe | Driller: Cascade
Project No.: 81127006 | Exhibit: B-3

BORING LOG NO. MW-7

PROJECT: CLMG Battle Ground

CLIENT: CLMG Corporation
Plano, Texas

SITE: 13 East Main Street
Battle Ground, Washington

LOCATION See Exhibit A-2

DEPTH	MATERIAL DESCRIPTION
	FILL - SILTY GRAVEL , trace sand, brownish gray, trace wood fragments, damp
2.0	
	SILT WITH SAND, tan to gray, moist to wet
12.0	
	LEAN CLAY, tan, wet
17.0	
	LEAN CLAY WITH GRAVEL, orange-brown, wet (weathered gravels)
20.0	
	Boring Terminated at 20 Feet

GRAPHIC LOG | DEPTH (ft) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE

5 10 15 20

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method:
Direct push

Abandonment Method:
Well set at 20 feet, boring backfilled with sand to 4 feet, bentonite to 1 foot, concrete and monument to surface.

See Appendices for description of field procedures.
See Appendices for description of laboratory procedures and additional data (if any).
See Appendices for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Not encountered while drilling

5.41 feet after 72 hours

Terracon
4103 SE International Way, # 300
Portland, Oregon

Boring Started: 11/7/2014 | Boring Completed: 11/7/2014

Drill Rig: GeoProbe | Driller: Cascade

Project No.: 81127006 | Exhibit: B-5

APPENDIX D

Analytical Results

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Mike Noll
Terracon- Mountlake Terrace, WA
21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

Report Summary

Wednesday November 12, 2014

Report Number: L732547
Samples Received: 11/08/14
Client Project: 81127006

Description: CLMG Battle Ground

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Jarred Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

ESC LAB SCIENCES
YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mike Noll
Terracon- Mountlake Terrace, WA
21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

November 12,2014

ESC Sample # : L732547-02

Site ID :

Project # : 81127006

Date Received : November 08, 2014
Description : CLMG Battle Ground

Sample ID : B-9 S-2 4.0

Collected By : Martin Erersawl
Collection Date : 11/07/14 09:30

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	77.0		%	2540 G-2011	11/10/14	1
Gasoline Range Organics-NWTPH	1.9	0.13	mg/kg	NWTPHGX	11/10/14	1
Benzene	0.0028	0.00065	mg/kg	8021B	11/10/14	1
Toluene	BDL	0.0065	mg/kg	8021B	11/10/14	1
Ethylbenzene	0.0028	0.00065	mg/kg	8021B	11/10/14	1
Total Xylene	0.0048	0.0019	mg/kg	8021B	11/10/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	11/10/14	1
a,a,a-Trifluorotoluene(FID)	95.8		% Rec.	NWTPHGX	11/10/14	1
Diesel Range Organics (DRO)	BDL	5.2	mg/kg	NWTPHDX	11/10/14	1
Residual Range Organics (RRO)	BDL	13.	mg/kg	NWTPHDX	11/10/14	1
Surrogate Recovery						
o-Terphenyl	84.1		% Rec.	NWTPHDX	11/10/14	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:

The reported analytical results relate only to the sample submitted
Reported: 11/12/14 16:30 Printed: 11/12/14 16:30

ESC LAB SCIENCES
YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mike Noll
Terracon- Mountlake Terrace, WA
21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

November 12,2014

ESC Sample # : L732547-03

Site ID :

Project # : 81127006

Date Received : November 08, 2014
Description : CLMG Battle Ground

Sample ID : B-10 S-2 4.5

Collected By : Martin Erersawl
Collection Date : 11/07/14 10:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	74.2		%	2540 G-2011	11/10/14	1
Gasoline Range Organics-NWTPH	1.0	0.13	mg/kg	NWTPHGX	11/10/14	1
Benzene	0.00073	0.00067	mg/kg	8021B	11/10/14	1
Toluene	BDL	0.0067	mg/kg	8021B	11/10/14	1
Ethylbenzene	0.00077	0.00067	mg/kg	8021B	11/10/14	1
Total Xylene	BDL	0.0020	mg/kg	8021B	11/10/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	11/10/14	1
a,a,a-Trifluorotoluene(FID)	96.6		% Rec.	NWTPHGX	11/10/14	1
Diesel Range Organics (DRO)	BDL	5.4	mg/kg	NWTPHDX	11/10/14	1
Residual Range Organics (RRO)	BDL	13.	mg/kg	NWTPHDX	11/10/14	1
Surrogate Recovery						
o-Terphenyl	85.2		% Rec.	NWTPHDX	11/10/14	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:

The reported analytical results relate only to the sample submitted
Reported: 11/12/14 16:30 Printed: 11/12/14 16:30

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Mike Noll
Terracon- Mountlake Terrace, WA
21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

November 12,2014

ESC Sample # : L732547-04

Site ID :

Project # : 81127006

Date Received : November 08, 2014
Description : CLMG Battle Ground

Sample ID : B-11 S-2 4.5

Collected By : Martin Erersawl
Collection Date : 11/07/14 10:15

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	75.9		%	2540 G-2011	11/10/14	1
Gasoline Range Organics-NWTPH	0.28	0.13	mg/kg	NWTPHGX	11/10/14	1
Benzene	BDL	0.00066	mg/kg	8021B	11/10/14	1
Toluene	BDL	0.0066	mg/kg	8021B	11/10/14	1
Ethylbenzene	BDL	0.00066	mg/kg	8021B	11/10/14	1
Total Xylene	BDL	0.0020	mg/kg	8021B	11/10/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021B	11/10/14	1
a,a,a-Trifluorotoluene(FID)	97.0		% Rec.	NWTPHGX	11/10/14	1
Diesel Range Organics (DRO)	BDL	5.3	mg/kg	NWTPHDX	11/10/14	1
Residual Range Organics (RRO)	BDL	13.	mg/kg	NWTPHDX	11/10/14	1
Surrogate Recovery						
o-Terphenyl	81.6		% Rec.	NWTPHDX	11/10/14	1

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Mike Noll
Terracon- Mountlake Terrace, WA
21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

November 12,2014

ESC Sample # : L732547-05

Site ID :

Project # : 81127006

Date Received : November 08, 2014
Description : CLMG Battle Ground

Sample ID : B-12 S-2 4.5

Collected By : Martin Erersawl
Collection Date : 11/07/14 10:35

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	76.4		%	2540 G-2011	11/10/14	1
Gasoline Range Organics-NWTPH	0.34	0.13	mg/kg	NWTPHGX	11/12/14	1
Benzene	BDL	0.00065	mg/kg	8021B	11/12/14	1
Toluene	BDL	0.0065	mg/kg	8021B	11/12/14	1
Ethylbenzene	BDL	0.00065	mg/kg	8021B	11/12/14	1
Total Xylene	BDL	0.0020	mg/kg	8021B	11/12/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	11/12/14	1
a,a,a-Trifluorotoluene(FID)	101.		% Rec.	NWTPHGX	11/12/14	1
Diesel Range Organics (DRO)	BDL	5.2	mg/kg	NWTPHDX	11/10/14	1
Residual Range Organics (RRO)	BDL	13.	mg/kg	NWTPHDX	11/10/14	1
Surrogate Recovery						
o-Terphenyl	71.2		% Rec.	NWTPHDX	11/10/14	1

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Mike Noll
Terracon- Mountlake Terrace, WA
21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

November 12,2014

ESC Sample # : L732547-06

Site ID :

Project # : 81127006

Date Received : November 08, 2014
Description : CLMG Battle Ground

Sample ID : MW-7 S-2 4.5FT

Collected By : Martin Erersawl
Collection Date : 11/07/14 11:10

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	75.8		%	2540 G-2011	11/10/14	1
Gasoline Range Organics-NWTPH	0.87	0.13	mg/kg	NWTPHGX	11/12/14	1
Benzene	BDL	0.00066	mg/kg	8021B	11/12/14	1
Toluene	BDL	0.0066	mg/kg	8021B	11/12/14	1
Ethylbenzene	0.00098	0.00066	mg/kg	8021B	11/12/14	1
Total Xylene	0.0054	0.0020	mg/kg	8021B	11/12/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021B	11/12/14	1
a,a,a-Trifluorotoluene(FID)	99.8		% Rec.	NWTPHGX	11/12/14	1
Diesel Range Organics (DRO)	5.7	5.3	mg/kg	NWTPHDX	11/10/14	1
Residual Range Organics (RRO)	BDL	13.	mg/kg	NWTPHDX	11/10/14	1
Surrogate Recovery						
o-Terphenyl	83.2		% Rec.	NWTPHDX	11/10/14	1

Results listed are dry weight basis.
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Det. Limit - Practical Quantitation Limit(PQL)
Note:

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REPORT OF ANALYSIS

Mike Noll
Terracon- Mountlake Terrace, WA
21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

November 12,2014

ESC Sample # : L732547-07

Site ID :

Project # : 81127006

Date Received : November 08, 2014
Description : CLMG Battle Ground

Sample ID : MW-7 S-3 7.5FT

Collected By : Martin Erersawl
Collection Date : 11/07/14 11:40

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	75.1		%	2540 G-2011	11/10/14	1
Gasoline Range Organics-NWTPH	69.	5.0	mg/kg	NWTPHGX	11/12/14	38
Benzene	0.15	0.025	mg/kg	8021B	11/12/14	38
Toluene	BDL	0.25	mg/kg	8021B	11/12/14	38
Ethylbenzene	0.20	0.025	mg/kg	8021B	11/12/14	38
Total Xylene	0.74	0.076	mg/kg	8021B	11/12/14	38
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	11/12/14	38
a,a,a-Trifluorotoluene(FID)	100.		% Rec.	NWTPHGX	11/12/14	38
Diesel Range Organics (DRO)	BDL	5.3	mg/kg	NWTPHDX	11/10/14	1
Residual Range Organics (RRO)	BDL	13.	mg/kg	NWTPHDX	11/10/14	1
Surrogate Recovery						
o-Terphenyl	84.4		% Rec.	NWTPHDX	11/10/14	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:

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REPORT OF ANALYSIS

Mike Noll
Terracon- Mountlake Terrace, WA
21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

November 12,2014

ESC Sample # : L732547-08

Site ID :

Project # : 81127006

Date Received : November 08, 2014
Description : CLMG Battle Ground

Sample ID : TRIP BLANK

Collected By : Martin Erersawl
Collection Date : 11/07/14 00:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Gasoline Range Organics-NWTPH	BDL	100	ug/l	NWTPHGX	11/11/14	1
Benzene	BDL	0.50	ug/l	8021B	11/11/14	1
Toluene	BDL	5.0	ug/l	8021B	11/11/14	1
Ethylbenzene	BDL	0.50	ug/l	8021B	11/11/14	1
Total Xylene	BDL	1.5	ug/l	8021B	11/11/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	11/11/14	1
a,a,a-Trifluorotoluene(FID)	100.		% Rec.	NWTPHGX	11/11/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

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Reported: 11/12/14 16:30 Printed: 11/12/14 16:30

Summary of Remarks For Samples Printed
11/12/14 at 16:30:57

TSR Signing Reports: 358
R3 - Rush: Two Day

Log ALL arsenic water samples by 6020. Take ASICP out of RCRA8 & add ASG at $0.

Sample: L732547-02 Account: TERRLWA Received: 11/08/14 09:00 Due Date: 11/12/14 00:00 RPT Date: 11/12/14 16:30

Sample: L732547-03 Account: TERRLWA Received: 11/08/14 09:00 Due Date: 11/12/14 00:00 RPT Date: 11/12/14 16:30

Sample: L732547-04 Account: TERRLWA Received: 11/08/14 09:00 Due Date: 11/12/14 00:00 RPT Date: 11/12/14 16:30

Sample: L732547-05 Account: TERRLWA Received: 11/08/14 09:00 Due Date: 11/12/14 00:00 RPT Date: 11/12/14 16:30

Sample: L732547-06 Account: TERRLWA Received: 11/08/14 09:00 Due Date: 11/12/14 00:00 RPT Date: 11/12/14 16:30

Sample: L732547-07 Account: TERRLWA Received: 11/08/14 09:00 Due Date: 11/12/14 00:00 RPT Date: 11/12/14 16:30

Sample: L732547-08 Account: TERRLWA Received: 11/08/14 09:00 Due Date: 11/12/14 00:00 RPT Date: 11/12/14 16:30

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Terracon- Mountlake Terrace, WA
Mike Noll
21905 64th Ave W Ste 100

Mountlake Terrace, WA 98043

Quality Assurance Report
Level II

L732547

November 12, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Total Solids	< .1	%			WG753562	11/10/14 09:04
Total Solids	< .1	%			WG753561	11/10/14 09:09
Diesel Range Organics (DRO)	< 4	mg/kg			WG753577	11/10/14 10:03
Residual Range Organics (RRO)	< 10	mg/kg			WG753577	11/10/14 10:03
o-Terphenyl		% Rec.	98.50	50-150	WG753577	11/10/14 10:03
Benzene	< .0005	mg/kg			WG753528	11/10/14 18:27
Ethylbenzene	< .0005	mg/kg			WG753528	11/10/14 18:27
Toluene	< .005	mg/kg			WG753528	11/10/14 18:27
Gasoline Range Organics-NWTPH	< .1	mg/kg			WG753528	11/10/14 18:27
Total Xylene	< .0015	mg/kg			WG753528	11/10/14 18:27
a,a,a-Trifluorotoluene(FID)		% Rec.	97.60	59-128	WG753528	11/10/14 18:27
a,a,a-Trifluorotoluene(PID)		% Rec.	101.0	54-144	WG753528	11/10/14 18:27
Benzene	< .0005	mg/l			WG753852	11/11/14 14:30
Ethylbenzene	< .0005	mg/l			WG753852	11/11/14 14:30
Toluene	< .005	mg/l			WG753852	11/11/14 14:30
Gasoline Range Organics-NWTPH	< .1	mg/l			WG753852	11/11/14 14:30
Total Xylene	< .0015	mg/l			WG753852	11/11/14 14:30
a,a,a-Trifluorotoluene(FID)		% Rec.	101.0	62-128	WG753852	11/11/14 14:30
a,a,a-Trifluorotoluene(PID)		% Rec.	106.0	55-122	WG753852	11/11/14 14:30
Benzene	< .0005	mg/kg			WG753533	11/12/14 13:23
Ethylbenzene	< .0005	mg/kg			WG753533	11/12/14 13:23
Toluene	< .005	mg/kg			WG753533	11/12/14 13:23
Gasoline Range Organics-NWTPH	< .1	mg/kg			WG753533	11/12/14 13:23
Total Xylene	< .0015	mg/kg			WG753533	11/12/14 13:23
a,a,a-Trifluorotoluene(FID)		% Rec.	101.0	59-128	WG753533	11/12/14 13:23
a,a,a-Trifluorotoluene(PID)		% Rec.	101.0	54-144	WG753533	11/12/14 13:23
Benzene	< .0005	mg/kg			WG753937	11/12/14 13:43
Ethylbenzene	< .0005	mg/kg			WG753937	11/12/14 13:43
Toluene	< .005	mg/kg			WG753937	11/12/14 13:43
Gasoline Range Organics-NWTPH	< .1	mg/kg			WG753937	11/12/14 13:43
Total Xylene	< .0015	mg/kg			WG753937	11/12/14 13:43
a,a,a-Trifluorotoluene(FID)		% Rec.	101.0	59-128	WG753937	11/12/14 13:43
a,a,a-Trifluorotoluene(PID)		% Rec.	107.0	54-144	WG753937	11/12/14 13:43

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Total Solids	%	90.5	95.2	5.13*	5	L732409-01	WG753562
Total Solids	%	87.5	87.7	0.322	5	L732496-02	WG753561

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Total Solids	%	50	50.0	100.	85-115	WG753562

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Mike Noll
21905 64th Ave W Ste 100

Mountlake Terrace, WA 98043

Quality Assurance Report
Level II

L732547

November 12, 2014

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Total Solids	%	50	50.0	100.	85-115	WG753561
Diesel Range Organics (DRO)	mg/kg	30	24.4	81.3	50-150	WG753577
Residual Range Organics (RRO)	mg/kg	30	25.6	85.2	50-150	WG753577
o-Terphenyl				98.50	50-150	WG753577
Benzene	mg/kg	.05	0.0476	95.2	70-130	WG753528
Ethylbenzene	mg/kg	.05	0.0506	101.	70-130	WG753528
Toluene	mg/kg	.05	0.0492	98.3	70-130	WG753528
Total Xylene	mg/kg	.15	0.149	99.3	70-130	WG753528
a,a,a-Trifluorotoluene(PID)				100.0	54-144	WG753528
Gasoline Range Organics-NWTPH	mg/kg	5.5	4.05	73.7	62.2-127	WG753528
a,a,a-Trifluorotoluene(FID)				95.50	59-128	WG753528
Benzene	mg/l	.05	0.0532	106.	70-130	WG753852
Ethylbenzene	mg/l	.05	0.0509	102.	70-130	WG753852
Toluene	mg/l	.05	0.0519	104.	70-130	WG753852
Total Xylene	mg/l	.15	0.155	104.	70-130	WG753852
a,a,a-Trifluorotoluene(PID)				105.0	55-122	WG753852
Gasoline Range Organics-NWTPH	mg/l	5.5	4.50	81.8	66-123	WG753852
a,a,a-Trifluorotoluene(FID)				99.70	62-128	WG753852
Benzene	mg/kg	.05	0.0514	103.	70-130	WG753533
Ethylbenzene	mg/kg	.05	0.0546	109.	70-130	WG753533
Toluene	mg/kg	.05	0.0545	109.	70-130	WG753533
Total Xylene	mg/kg	.15	0.167	111.	70-130	WG753533
a,a,a-Trifluorotoluene(FID)				100.0	59-128	WG753533
a,a,a-Trifluorotoluene(PID)				101.0	54-144	WG753533
Gasoline Range Organics-NWTPH	mg/kg	5.5	5.13	93.3	62.2-127	WG753533
a,a,a-Trifluorotoluene(FID)				99.50	59-128	WG753533
a,a,a-Trifluorotoluene(PID)				104.0	54-144	WG753533
Benzene	mg/kg	.05	0.0532	106.	70-130	WG753937
Ethylbenzene	mg/kg	.05	0.0508	102.	70-130	WG753937
Toluene	mg/kg	.05	0.0518	104.	70-130	WG753937
Total Xylene	mg/kg	.15	0.155	103.	70-130	WG753937
a,a,a-Trifluorotoluene(PID)				106.0	54-144	WG753937
Gasoline Range Organics-NWTPH	mg/kg	5.5	4.40	80.0	62.2-127	WG753937
a,a,a-Trifluorotoluene(FID)				99.80	59-128	WG753937

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Diesel Range Organics (DRO)	mg/kg	23.7	24.4	79.0	50-150	3.02	20	WG753577
Residual Range Organics (RRO)	mg/kg	26.6	25.6	89.0	50-150	4.11	20	WG753577
o-Terphenyl				102.0	50-150			WG753577
Benzene	mg/kg	0.0473	0.0476	95.0	70-130	0.620	20	WG753528
Ethylbenzene	mg/kg	0.0497	0.0506	99.0	70-130	1.77	20	WG753528
Toluene	mg/kg	0.0483	0.0492	96.0	70-130	1.78	20	WG753528
Total Xylene	mg/kg	0.146	0.149	98.0	70-130	1.78	20	WG753528
a,a,a-Trifluorotoluene(PID)				100.0	54-144			WG753528

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Mountlake Terrace, WA 98043

Quality Assurance Report
Level II

L732547

November 12, 2014

Analyte	Units	Laboratory Control Sample Result	Ref	%Rec	Limit	RPD	Limit	Batch
Gasoline Range Organics-NWTPH	mg/kg	4.03	4.05	73.0	62.2-127	0.570	20	WG753528
a,a,a-Trifluorotoluene(FID)				97.80	59-128			WG753528
Benzene	mg/l	0.0521	0.0532	104.	70-130	1.98	20	WG753852
Ethylbenzene	mg/l	0.0496	0.0509	99.0	70-130	2.58	20	WG753852
Toluene	mg/l	0.0503	0.0519	101.	70-130	3.04	20	WG753852
Total Xylene	mg/l	0.151	0.155	100.	70-130	3.15	20	WG753852
a,a,a-Trifluorotoluene(PID)				105.0	55-122			WG753852
Gasoline Range Organics-NWTPH	mg/l	4.28	4.50	78.0	66-123	5.03	20	WG753852
a,a,a-Trifluorotoluene(FID)				99.40	62-128			WG753852
Benzene	mg/kg	0.0480	0.0514	96.0	70-130	6.76	20	WG753533
Ethylbenzene	mg/kg	0.0508	0.0546	102.	70-130	7.26	20	WG753533
Toluene	mg/kg	0.0506	0.0545	101.	70-130	7.38	20	WG753533
Total Xylene	mg/kg	0.155	0.167	103.	70-130	7.33	20	WG753533
a,a,a-Trifluorotoluene(FID)				100.0	59-128			WG753533
a,a,a-Trifluorotoluene(PID)				102.0	54-144			WG753533
Gasoline Range Organics-NWTPH	mg/kg	5.20	5.13	94.0	62.2-127	1.40	20	WG753533
a,a,a-Trifluorotoluene(FID)				97.60	59-128			WG753533
a,a,a-Trifluorotoluene(PID)				104.0	54-144			WG753533
Benzene	mg/kg	0.0524	0.0532	105.	70-130	1.62	20	WG753937
Ethylbenzene	mg/kg	0.0501	0.0508	100.	70-130	1.46	20	WG753937
Toluene	mg/kg	0.0506	0.0518	101.	70-130	2.30	20	WG753937
Total Xylene	mg/kg	0.152	0.155	101.	70-130	1.98	20	WG753937
a,a,a-Trifluorotoluene(PID)				105.0	54-144			WG753937
Gasoline Range Organics-NWTPH	mg/kg	4.37	4.40	79.0	62.2-127	0.750	20	WG753937
a,a,a-Trifluorotoluene(FID)				99.80	59-128			WG753937

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Diesel Range Organics (DRO)	mg/kg	24.7	0.0	30	82.0	50-150	L732572-01	WG753577
Residual Range Organics (RRO)	mg/kg	28.5	2.53	30	86.0	50-150	L732572-01	WG753577
o-Terphenyl					85.30	50-150		WG753577
Benzene	mg/kg	0.262	0.000212	.05	100.	49.7-127	L731665-01	WG753528
Ethylbenzene	mg/kg	0.266	0.000267	.05	110.	40.8-141	L731665-01	WG753528
Toluene	mg/kg	0.267	0.000848	.05	110.	49.8-132	L731665-01	WG753528
Total Xylene	mg/kg	0.786	0.00149	.15	100.	41.2-140	L731665-01	WG753528
a,a,a-Trifluorotoluene(PID)					99.90	54-144		WG753528
Gasoline Range Organics-NWTPH	mg/kg	26.6	0.0	5.5	97.0	20.5-134	L731665-01	WG753528
a,a,a-Trifluorotoluene(FID)					97.40	59-128		WG753528
Benzene	mg/l	0.0527	0.000156	.05	100.	57.2-131	L732330-01	WG753852
Ethylbenzene	mg/l	0.0510	0.000126	.05	100.	67.5-135	L732330-01	WG753852
Toluene	mg/l	0.0523	0.000180	.05	100.	63.7-134	L732330-01	WG753852
Total Xylene	mg/l	0.156	0.000365	.15	100.	65.9-138	L732330-01	WG753852
a,a,a-Trifluorotoluene(PID)					104.0	55-122		WG753852
Gasoline Range Organics-NWTPH	mg/l	4.44	0.0193	5.5	80.0	47.5-136	L732330-01	WG753852
a,a,a-Trifluorotoluene(FID)					96.60	62-128		WG753852
Benzene	mg/kg	0.0461	0.000247	.05	92.0	49.7-127	L732547-06	WG753533

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Terracon- Mountlake Terrace, WA
Mike Noll
21905 64th Ave W Ste 100

Mountlake Terrace, WA 98043

Quality Assurance Report
Level II

L732547

November 12, 2014

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Ethylbenzene	mg/kg	0.0497	0.000738	.05	98.0	40.8-141	L732547-06	WG753533
Toluene	mg/kg	0.0495	0.000359	.05	98.0	49.8-132	L732547-06	WG753533
Total Xylene	mg/kg	0.152	0.00408	.15	98.0	41.2-140	L732547-06	WG753533
a,a,a-Trifluorotoluene(FID)					98.10	59-128		WG753533
a,a,a-Trifluorotoluene(PID)					100.0	54-144		WG753533
Gasoline Range Organics-NWTPH	mg/kg	5.39	0.664	5.5	86.0	20.5-134	L732547-06	WG753533
a,a,a-Trifluorotoluene(FID)					98.20	59-128		WG753533
a,a,a-Trifluorotoluene(PID)					103.0	54-144		WG753533
Benzene	mg/kg	0.0449	0.000132	.05	90.0	49.7-127	L732547-05	WG753937
Ethylbenzene	mg/kg	0.0434	0.0000550	.05	87.0	40.8-141	L732547-05	WG753937
Toluene	mg/kg	0.0446	0.000272	.05	89.0	49.8-132	L732547-05	WG753937
Total Xylene	mg/kg	0.133	0.00108	.15	88.0	41.2-140	L732547-05	WG753937
a,a,a-Trifluorotoluene(PID)					105.0	54-144		WG753937
Gasoline Range Organics-NWTPH	mg/kg	3.76	0.261	5.5	64.0	20.5-134	L732547-05	WG753937
a,a,a-Trifluorotoluene(FID)					99.70	59-128		WG753937

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Diesel Range Organics (DRO)	mg/kg	24.3	24.7	81.0	50-150	1.51	20	L732572-01	WG753577
Residual Range Organics (RRO)	mg/kg	29.7	28.5	90.7	50-150	4.37	20	L732572-01	WG753577
o-Terphenyl				79.60	50-150				WG753577
Benzene	mg/kg	0.311	0.262	124.	49.7-127	16.9	23.5	L731665-01	WG753528
Ethylbenzene	mg/kg	0.303	0.266	121.	40.8-141	13.2	23.8	L731665-01	WG753528
Toluene	mg/kg	0.303	0.267	121.	49.8-132	12.7	23.5	L731665-01	WG753528
Total Xylene	mg/kg	0.895	0.786	119.	41.2-140	13.0	23.7	L731665-01	WG753528
a,a,a-Trifluorotoluene(PID)				112.0	54-144				WG753528
Gasoline Range Organics-NWTPH	mg/kg	27.2	26.6	99.0	20.5-134	2.22	23.8	L731665-01	WG753528
a,a,a-Trifluorotoluene(FID)				97.20	59-128				WG753528
Benzene	mg/l	0.0519	0.0527	103.	57.2-131	1.58	20	L732330-01	WG753852
Ethylbenzene	mg/l	0.0493	0.0510	98.3	67.5-135	3.32	20	L732330-01	WG753852
Toluene	mg/l	0.0501	0.0523	99.8	63.7-134	4.21	20	L732330-01	WG753852
Total Xylene	mg/l	0.150	0.156	99.6	65.9-138	4.03	20	L732330-01	WG753852
a,a,a-Trifluorotoluene(PID)				104.0	55-122				WG753852
Gasoline Range Organics-NWTPH	mg/l	4.07	4.44	73.6	47.5-136	8.67	20	L732330-01	WG753852
a,a,a-Trifluorotoluene(FID)				96.50	62-128				WG753852
Benzene	mg/kg	0.0470	0.0461	93.4	49.7-127	1.76	23.5	L732547-06	WG753533
Ethylbenzene	mg/kg	0.0504	0.0497	99.2	40.8-141	1.31	23.8	L732547-06	WG753533
Toluene	mg/kg	0.0498	0.0495	99.0	49.8-132	0.600	23.5	L732547-06	WG753533
Total Xylene	mg/kg	0.154	0.152	100.	41.2-140	1.58	23.7	L732547-06	WG753533
a,a,a-Trifluorotoluene(FID)				102.0	59-128				WG753533
a,a,a-Trifluorotoluene(PID)				100.0	54-144				WG753533
Gasoline Range Organics-NWTPH	mg/kg	5.79	5.39	93.2	20.5-134	7.10	23.8	L732547-06	WG753533
a,a,a-Trifluorotoluene(FID)				97.40	59-128				WG753533
a,a,a-Trifluorotoluene(PID)				102.0	54-144				WG753533
Benzene	mg/kg	0.0483	0.0449	96.4	49.7-127	7.39	23.5	L732547-05	WG753937
Ethylbenzene	mg/kg	0.0455	0.0434	90.8	40.8-141	4.70	23.8	L732547-05	WG753937
Toluene	mg/kg	0.0466	0.0446	92.7	49.8-132	4.41	23.5	L732547-05	WG753937
Total Xylene	mg/kg	0.139	0.133	91.9	41.2-140	4.43	23.7	L732547-05	WG753937

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Terracon- Mountlake Terrace, WA
Mike Noll
21905 64th Ave W Ste 100

Mountlake Terrace, WA 98043

Quality Assurance Report
Level II

L732547

November 12, 2014

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
a,a,a-Trifluorotoluene(PID)				104.0	54-144				
Gasoline Range Organics-NWTPH	mg/kg	3.79	3.76	64.2	20.5-134	0.760	23.8	L732547-05	WG753937
a,a,a-Trifluorotoluene(FID)				99.70	59-128				WG753937

Batch number /Run number / Sample number cross reference

WG753562: R3003377: L732547-06 07
WG753561: R3003379: L732547-02 03 04 05
WG753577: R3003548: L732547-02 03 04 05 06 07
WG753528: R3003732: L732547-02 03 04
WG753852: R3003775: L732547-08
WG753533: R3003995: L732547-06 07
WG753937: R3004004: L732547-05

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Mountlake Terrace, WA 98043

Quality Assurance Report
Level II

L732547

November 12, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Terracon- Mountlake Terrace, WA

21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

Billing Information:
Accounts Payable
21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

Report to: Mike Noll

Email To: mdnoll@terracon.com; aastauffer@terracon.com;

Project Description: CLMG Battle Ground

City/State Collected: Battle Ground, WA

Phone: 425-771-3304
Fax: 425-771-3549

Client Project # 81127006

Lab Project # TERRLWA-81127006

Collected by (print): Martin Eversaul

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
X Two Day 50%
___ Three Day 25%

Date Results Needed 11/11/14

Email? ___No X_Yes
FAX? ___No ___Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	GXBTEX Screen 2ozClr-NoPres	NWTPHDX / TS 4ozClr-NoPres	NWTPHGXBTEX 40ml/NaHSO4/Syr/MeOH	NWTPHGXBTEX- TB 40mlAmb-HCl-Blk	Rem./Contaminant	Sample # (lab only)
B-9, S-1, 2.0	Grab	SS	2.0	11/7/14	9:20	5	X	X	X		Hold	
B-9, S-2, 4.0		SS	4.0		9:30	5	X	X	X			-01
B-10, S-1, 2.0		SS	2.0		9:45	5	X	X	X		Hold	
B-10, S-2, 4.5		SS	4.5		10:00	5	X	X	X			02
B-11, S-1, 2.5		SS	2.5		10:05	5	X	X	X		Hold	
B-11, S-2, 4.5		SS	4.5		10:15	5	X	X	X			03
B-12, S-1, 2.5		SS	2.5		10:25	5	X	X	X		Hold	
B-12, S-2, 4.5		SS	4.5		10:35	5	X	X	X			04
MW-7, S-1, 2.5		SS	2.5		11:00	5	X	X	X		Hold	
MW-7, S-2, 4.5		SS	4.5		11:10	5	X	X	X			05

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks: 2-day rush TAT needed

6200 8042 4596

pH _____ Temp _____

Flow _____ Other _____

Hold # 11-0040

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	11/7/14	14:30	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____

Temp: 3.2 °C Bottles Received: 56

Date: 11/8/14 Time: 09:00

Condition: (lab use only) MB OK

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

Chain of Custody Page ___ of ___

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Phone: 800-767-5859
Fax: 615-758-5859

L# L732547

Table # J241

Acctnum: TERRLWA

Template: T98135

Prelogin: P488084

TSR: 358 - Jarred Willis

PB:

Shipped Via: FedEX Ground

Terracon- Mountlake Terrace, WA

21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

Billing Information:
Accounts Payable
21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

Report to: **Mike Noll**

Email To: mdnoll@terracon.com; aastauffer@terracon.com;

Project Description: **CLMG Battle Ground**

City/State Collected: Battle Ground, WA

Phone: 425-771-3304
Fax: 425-771-3549

Client Project # **81127006**

Lab Project # **TERRLWA-81127006**

Collected by (print): Martin Evasan

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
X Two Day 50%
___ Three Day 25%

Date Results Needed: 11/11/14

Email? ___No X_Yes
FAX? ___No ___Yes

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	GXBTEX Screen 2ozClr-NoPres	NWTPHDX / TS 4ozClr-NoPres	NWTPHGXBTEX 40ml/NaHSO4/Syr/MeOH	NWTPHGXBTEX- TB 40mlAmb-HCl-Blk	Rem./Contaminant	Sample # (lab only)
MW-7,5-3,75	Grab	SS	7.5	11/7/14	11:40	5	X	X	X			-06
		SS				~~5~~	~~X~~	~~X~~	~~X~~			
TRIP BLANK		GW				1				X		07

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L732547

Table #

Acctnum: **TERRLWA**
Template: **T98135**
Prelogin: **P488084**
TSR: **358 - Jarred Willis**
PB:

Shipped Via: **FedEX Ground**

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

Remarks:2-day rush TAT needed

pH _____ Temp _____
Flow _____ Other _____

Hold #

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____

Condition: (lab use only) (OK)

Temp: 3.2 °C Bottles Received: 56

COC Seal Intact: ___Y ___N ___NA

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	11/7/14	14:30	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Date: 11/8/14 Time: 09:00

pH Checked: NCF:

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Est. 1970

Mike Noll
Terracon- Mountlake Terrace, WA
21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

Report Summary

Wednesday November 12, 2014

Report Number: L732662
Samples Received: 11/11/14
Client Project: 81127006

Description: CLMG Battle Ground

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jarred Willis

Jarred Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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REPORT OF ANALYSIS

Mike Noll
Terracon- Mountlake Terrace, WA
21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

November 12,2014

ESC Sample # : L732662-01

Site ID :

Project # : 81127006

Date Received : November 11, 2014
Description : CLMG Battle Ground

Sample ID : MW-7 7 FT

Collected By : Martin Erersawl
Collection Date : 11/10/14 09:45

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Gasoline Range Organics-NWTPH	990	100	ug/l	NWTPHGX	11/11/14	1
Benzene	1.3	0.50	ug/l	8021B	11/11/14	1
Toluene	BDL	5.0	ug/l	8021B	11/11/14	1
Ethylbenzene	41.	0.50	ug/l	8021B	11/11/14	1
Total Xylene	2.1	1.5	ug/l	8021B	11/11/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	107.		% Rec.	8021B	11/11/14	1
a,a,a-Trifluorotoluene(FID)	100.		% Rec.	NWTPHGX	11/11/14	1
Diesel Range Organics (DRO)	980	100	ug/l	NWTPHDX	11/12/14	1
Residual Range Organics (RRO)	280	250	ug/l	NWTPHDX	11/12/14	1
Surrogate Recovery						
o-Terphenyl	106.		% Rec.	NWTPHDX	11/12/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 11/12/14 14:22 Printed: 11/12/14 14:22

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REPORT OF ANALYSIS

Mike Noll
Terracon- Mountlake Terrace, WA
21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

November 12,2014

ESC Sample # : L732662-02

Site ID :

Project # : 81127006

Date Received : November 11, 2014
Description : CLMG Battle Ground

Sample ID : MW-5 6 FT

Collected By : Martin Erersawl
Collection Date : 11/10/14 10:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Gasoline Range Organics-NWTPH	BDL	100	ug/l	NWTPHGX	11/11/14	1
Benzene	BDL	0.50	ug/l	8021B	11/11/14	1
Toluene	BDL	5.0	ug/l	8021B	11/11/14	1
Ethylbenzene	BDL	0.50	ug/l	8021B	11/11/14	1
Total Xylene	BDL	1.5	ug/l	8021B	11/11/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	11/11/14	1
a,a,a-Trifluorotoluene(FID)	99.7		% Rec.	NWTPHGX	11/11/14	1
Diesel Range Organics (DRO)	560	100	ug/l	NWTPHDX	11/12/14	1
Residual Range Organics (RRO)	BDL	250	ug/l	NWTPHDX	11/12/14	1
Surrogate Recovery						
o-Terphenyl	97.9		% Rec.	NWTPHDX	11/12/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 11/12/14 14:22 Printed: 11/12/14 14:22

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REPORT OF ANALYSIS

Mike Noll
Terracon- Mountlake Terrace, WA
21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

November 12,2014

ESC Sample # : L732662-03

Site ID :

Project # : 81127006

Date Received : November 11, 2014
Description : CLMG Battle Ground

Sample ID : TRIP BLANK

Collected By : Martin Erersawl
Collection Date : 11/10/14 00:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Gasoline Range Organics-NWTPH	BDL	100	ug/l	NWTPHGX	11/11/14	1
Benzene	BDL	0.50	ug/l	8021B	11/11/14	1
Toluene	BDL	5.0	ug/l	8021B	11/11/14	1
Ethylbenzene	BDL	0.50	ug/l	8021B	11/11/14	1
Total Xylene	BDL	1.5	ug/l	8021B	11/11/14	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021B	11/11/14	1
a,a,a-Trifluorotoluene(FID)	99.6		% Rec.	NWTPHGX	11/11/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 11/12/14 14:22 Printed: 11/12/14 14:22

Summary of Remarks For Samples Printed
11/12/14 at 14:22:54

TSR Signing Reports: 358
R2 - Rush: Next Day

Log ALL arsenic water samples by 6020. Take ASICP out of RCRA8 & add ASG at $0.

Sample: L732662-01 Account: TERRLWA Received: 11/11/14 09:00 Due Date: 11/12/14 00:00 RPT Date: 11/12/14 14:22

Sample: L732662-02 Account: TERRLWA Received: 11/11/14 09:00 Due Date: 11/12/14 00:00 RPT Date: 11/12/14 14:22

Sample: L732662-03 Account: TERRLWA Received: 11/11/14 09:00 Due Date: 11/12/14 00:00 RPT Date: 11/12/14 14:22

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Mt. Juliet, TN 37122
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Tax I.D. 62-0814289

Est. 1970

Terracon- Mountlake Terrace, WA
Mike Noll
21905 64th Ave W Ste 100

Mountlake Terrace, WA 98043

Quality Assurance Report
Level II

L732662

November 12, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Benzene	< .0005	mg/l			WG753852	11/11/14 14:30
Ethylbenzene	< .0005	mg/l			WG753852	11/11/14 14:30
Toluene	< .005	mg/l			WG753852	11/11/14 14:30
Gasoline Range Organics-NWTPH	< .1	mg/l			WG753852	11/11/14 14:30
Total Xylene	< .0015	mg/l			WG753852	11/11/14 14:30
a,a,a-Trifluorotoluene(FID)		% Rec.	101.0	62-128	WG753852	11/11/14 14:30
a,a,a-Trifluorotoluene(PID)		% Rec.	106.0	55-122	WG753852	11/11/14 14:30
Diesel Range Organics (DRO)	< .1	mg/l			WG753983	11/12/14 10:23
Residual Range Organics (RRO)	< .25	mg/l			WG753983	11/12/14 10:23
o-Terphenyl		% Rec.	96.50	50-150	WG753983	11/12/14 10:23

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Benzene	mg/l	.05	0.0532	106.	70-130	WG753852
Ethylbenzene	mg/l	.05	0.0509	102.	70-130	WG753852
Toluene	mg/l	.05	0.0519	104.	70-130	WG753852
Total Xylene	mg/l	.15	0.155	104.	70-130	WG753852
a,a,a-Trifluorotoluene(PID)				105.0	55-122	WG753852
Gasoline Range Organics-NWTPH	mg/l	5.5	4.50	81.8	66-123	WG753852
a,a,a-Trifluorotoluene(FID)				99.70	62-128	WG753852
Diesel Range Organics (DRO)	mg/l	.75	0.747	99.6	50-150	WG753983
Residual Range Organics (RRO)	mg/l	.75	0.594	79.1	50-150	WG753983
o-Terphenyl				101.0	50-150	WG753983

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Benzene	mg/l	0.0521	0.0532	104.	70-130	1.98	20	WG753852
Ethylbenzene	mg/l	0.0496	0.0509	99.0	70-130	2.58	20	WG753852
Toluene	mg/l	0.0503	0.0519	101.	70-130	3.04	20	WG753852
Total Xylene	mg/l	0.151	0.155	100.	70-130	3.15	20	WG753852
a,a,a-Trifluorotoluene(PID)				105.0	55-122			WG753852
Gasoline Range Organics-NWTPH	mg/l	4.28	4.50	78.0	66-123	5.03	20	WG753852
a,a,a-Trifluorotoluene(FID)				99.40	62-128			WG753852
Diesel Range Organics (DRO)	mg/l	0.715	0.747	95.0	50-150	4.35	20	WG753983
Residual Range Organics (RRO)	mg/l	0.594	0.594	79.0	50-150	0.140	20	WG753983
o-Terphenyl				101.0	50-150			WG753983

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Benzene	mg/l	0.0527	0.000156	.05	100.	57.2-131	L732330-01	WG753852
Ethylbenzene	mg/l	0.0510	0.000126	.05	100.	67.5-135	L732330-01	WG753852
Toluene	mg/l	0.0523	0.000180	.05	100.	63.7-134	L732330-01	WG753852
Total Xylene	mg/l	0.156	0.000365	.15	100.	65.9-138	L732330-01	WG753852
a,a,a-Trifluorotoluene(PID)					104.0	55-122		WG753852
Gasoline Range Organics-NWTPH	mg/l	4.44	0.0193	5.5	80.0	47.5-136	L732330-01	WG753852
a,a,a-Trifluorotoluene(FID)					96.60	62-128		WG753852

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L732662

November 12, 2014

Analyte	Units	Matrix Spike MSD	Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Benzene	mg/l	0.0519	0.0527	103.	57.2-131	1.58	20	L732330-01	WG753852
Ethylbenzene	mg/l	0.0493	0.0510	98.3	67.5-135	3.32	20	L732330-01	WG753852
Toluene	mg/l	0.0501	0.0523	99.8	63.7-134	4.21	20	L732330-01	WG753852
Total Xylene	mg/l	0.150	0.156	99.6	65.9-138	4.03	20	L732330-01	WG753852
a,a,a-Trifluorotoluene(PID)				104.0	55-122				WG753852
Gasoline Range Organics-NWTPH	mg/l	4.07	4.44	73.6	47.5-136	8.67	20	L732330-01	WG753852
a,a,a-Trifluorotoluene(FID)				96.50	62-128				WG753852

Batch number /Run number / Sample number cross reference

WG753852: R3003775: L732662-01 02 03
WG753983: R3003955: L732662-01 02

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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November 12, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Chain of Custody Page ___ of ___

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L# L732662

G222

Acctnum: TERRLWA
Template: T98136
Prelogin: P488086
TSR: 358 - Jarred Willis
PB:
Shipped Via: FedEX Ground

Terracon- Mountlake Terrace, WA

21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

Billing Information:
Accounts Payable
21905 64th Ave W Ste 100
Mountlake Terrace, WA 98043

Report to: Mike Noll

Email To: mdnoll@terracon.com; aastauffer@terracon.com;

Project Description: CLMG Battle Ground

City/State Collected:

Phone: 425-771-3304
Fax: 425-771-3549

Client Project # 81127006

Lab Project # TERRLWA-81127006

Collected by (print): Martin Eversaul

Site/Facility ID #

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
X Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: 11/12/14
Email? ___No X Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPHDXLVI 40mlAmb-HCl-BT	NWTPHGXBTEX 40mlAmb HCl	NWTPHGXBTEX- TB 40mlAmb-HCl-Blk							Rem./Contaminant	Sample # (lab only)
MW-7	Grab	GW	7'	11/10/14	9 45	5	X	X									01
MW-5	Grab	GW	6'	11/10/14	10 30	5	X	X									02
TRIP BLANK		GW				1			X								03

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other________

Remarks: Next-day rush TAT needed.

pH ________ Temp ________
Flow ________ Other ________

6200804235 90

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐ ____	Condition: (lab use only)
[signature]	11/10/14	11:15			503
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.7 °C Bottles Received: 11	COC Seal Intact: ___Y ___N ___NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 11-11-14 Time: 0900	pH Checked: NCF: