REMEDIAL TREATMENT REPORT: JANUARY 2015

PNEC Corp Former Bulk Petroleum Facility
Shepard Way NW & Bromley Place NW
Bainbridge Island, Kitsap County, Washington

April 2, 2015
Project No. 81147093A

Prepared for:
PNEC Corp dba SC Fuels
Orange, California

Prepared by:
Terracon Consultants, Inc.
21905 64th Avenue, Suite 100
Mountlake Terrace, WA 98042

Terracon

April 2, 2015

SC Fuels/PNEC Corp
1800 West Katella Avenue, Suite 400
Orange, California 92867

Attn: Mr. De Holbrook

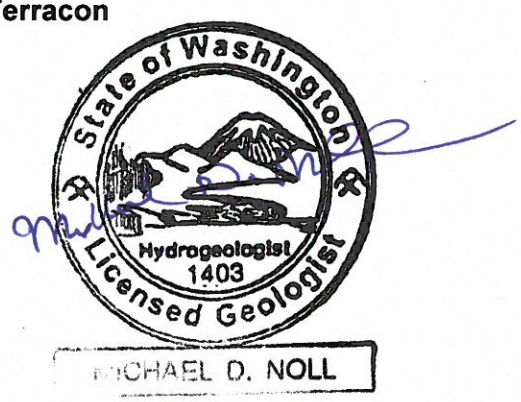
Re: Remedial Treatment Report – January 2015
PNEC Corp Former Bulk Petroleum Facility
Shepard Way NW & Bromley Place NW
Bainbridge Island, Kitsap County, Washington
Terracon Project No. 81147093A

Dear Mr. Holbrook:

Terracon Consultants, Inc. (Terracon) is pleased to submit this Remedial Treatment Report for the above referenced site. This work was performed in general accordance with Terracon Proposal No. P81140240 dated November 4, 2014, and the terms, conditions and limitations in the Environmental Consulting Agreement between Terracon Consultants, Inc. and Pacific Northwest Energy Corporation (PNEC Corp), d.b.a. SC Fuels, dated November 4, 2014.

We appreciate the opportunity to perform these services for SC Fuels/PNEC Corp. Please contact either of the undersigned at 425-771-3304 if you have questions regarding the information provided in the report.

Sincerely,
Terracon



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

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

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1.0 INTRODUCTION

This remedial treatment report documents groundwater treatment and follow-up sampling activities that were conducted at the PNEC Corp Former Bulk Petroleum Facility site (Site), located on the southwest corner of Shepard Way NW & Bromley Place NW in Bainbridge Island, Kitsap County, Washington. Remedial activities and sampling were performed in January and February 2015. The property (Kitsap County Parcel No. 272502-4-005-2011) covers approximately 0.9 acres. A Topographic Map is included as Figure 1 that shows the site in relation to the surrounding area. Figure 2 presents the locations of the monitoring wells and former features at the Site. Figure 3 depicts the February 2015 groundwater migration direction.

1.1 Scope of Work

Terracon Consultants, Inc. (Terracon) treated site groundwater and conducted follow-up groundwater monitoring at select wells, in general accordance with Terracon Proposal No. P81140240 dated November 4, 2014, and the terms, conditions and limitations in the Environmental Consulting Agreement between Terracon Consultants, Inc. and PNEC Corp., d.b.a. SC Fuels, dated November 4, 2014.

Terracon completed a Washington Department of Ecology (Ecology) underground injection control (UIC) site well registration for remediation well RW-1, and injected Regenesis RegenOx® Part A and Part B solution into RW-1 in an effort to treat site groundwater for residual diesel-range petroleum hydrocarbon impacts at nearby site groundwater monitoring wells MW-2A and MW-5. After a period of approximately three weeks, Terracon conducted follow-up groundwater monitoring at wells MW-2A, MW-5, and RW-1 to further evaluate concentrations of diesel-range total petroleum hydrocarbons (TPH) at the site.

This report includes a description of the groundwater remedial treatment and groundwater sample collection activities, tables showing current and historical depth to groundwater measurements and analytical results, and a copy of the analytical laboratory report with chain-of-custody documentation.

The groundwater remedial treatment work was performed as an independent action intended to meet the requirements of the Washington State Model Toxics Control Act (MTCA) Cleanup Regulation, as established in Chapter 173-340 of the Washington Administrative Code (WAC173-340), in order to achieve regulatory closure. Work was performed in general accordance with MTCA and the *Guidance for Remediation of Petroleum Contaminated Sites,* Ecology Publication No. 10-09-057, dated September 2011.

1.2 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. Please note that Terracon does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report. These groundwater remedial treatment and follow-up monitoring services were performed in accordance with the scope of work agreed with you, our client, as reflected in our proposal.

1.3 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 groundwater sampling event. 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.

1.4 Reliance

This report has been prepared for the exclusive use and reliance of PNEC Corp/SC Fuels. Use or reliance by any other party is prohibited without the written authorization of PNEC Corp/SC Fuels and Terracon.

Reliance on this report by the client and all authorized parties will be subject to the terms, conditions and limitations stated in this report and Terracon's agreement for services. 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 SITE HISTORY AND PREVIOUS SAMPLING EVENTS

A former on-site bulk petroleum storage facility was constructed about 1970, and was used primarily for heating oil storage. PNEC Corp purchased the Site in June 1997. Former site AST, pumping station, and overhead loading rack structures were removed in 1997. The attached Figure 2 Site Diagram shows the approximate locations of former site features.

Five groundwater monitoring wells (MW-1 through MW-5) were installed at the Site by others in June 2001 (Figure 2). Well MW-2 was excavated and removed during petroleum-contaminated soil (PCS) excavation work in March 2003, and replacement well MW-2A and remediation well RW-1 were installed at that time. Measured depth to groundwater in the wells has ranged from approximately 4 to 11 feet below the top of the well casing (TOC), with an inferred groundwater flow direction that varies, but flows mainly toward the south and southwest. Groundwater samples were collected from the wells on a quarterly or annual basis between 2001 and 2007. Samples were analyzed for gasoline-, diesel-, and oil-range TPH; benzene, toluene, ethylbenzene, and xylenes (BTEX); volatile organic hydrocarbons (VOCs); polycyclic aromatic hydrocarbons (PAHs); and/or total and dissolved lead. Diesel-range TPH (1,100 micrograms per liter [µg/L]) was detected in well MW-5 in June 2007, at a concentration exceeding the MTCA Method A cleanup level (500 µg/L). All other laboratory analytical results for the groundwater samples collected from the site wells in June 2007 were below the MTCA Method A or Method B cleanup levels. Historical groundwater data collected from the site in 2006 and 2007 are included in Table 1 and Table 2.

Terracon collected groundwater samples from wells MW-1, MW-2A, MW-3, MW-4, MW-5, and RW-1 in August 2014. Prior to that sampling event, no groundwater samples had been collected from the site since June 2007. The results were documented in our report, *Groundwater Monitoring Report: August 2014*, dated September 30, 2014. Diesel-range TPH was identified in the samples collected from groundwater monitoring wells MW-2A and MW-5 at concentrations of 920 µg/L and 800 µg/L, respectively, exceeding the MTCA Method A cleanup level. Gasoline-range TPH, BTEX compounds, and total lead were not identified above the laboratory method reporting limits (MRLs) in any of the samples collected. The groundwater flow direction was generally toward the south and southwest, consistent with previous results. It appeared that the groundwater in the vicinity of monitoring wells MW-2A and MW-5 remained impacted with residual diesel-range TPH.

3.0 GROUNDWATER REMEDIAL TREATMENT AND SAMPLING

3.1 UIC Well Permitting

Terracon prepared and submitted a UIC permit application to Ecology for the proposed RegenOx® Part A and Part B injections at remediation well RW-1. The UIC permit application was completed using an Ecology online application submittal software system. A copy of the UIC permit is included in Appendix A.

3.2 Groundwater Remedial Treatment

Terracon contracted with Stratus Corporation (Stratus) of Gaston, Oregon, to inject RegenOx® Part A and Part B mixture into existing 4-inch diameter polyvinyl chloride (PVC) UIC remediation well RW-1 (Figure 2). Well RW-1 is screened from approximately 5 to 15 feet below the ground surface (bgs). The well was completed in washed drain rock installed in the bottom of the March 2003 PCS removal excavation.

Approximately 360 pounds of RegenOx® Part A (twelve 30-pound pails) and 240 pounds of RegenOx® Part B (six 40-pound pails) were mixed with 1,325 gallons of potable water. Stratus supplied potable water from tanks transported to the site on a flatbed truck and trailer. The RegenOx® Part A and Part B were mixed in 43-gallon batches using a PVC drum and pumps/water jets until it was thoroughly mixed, at a ratio of approximately 1 pound RegenOx® Part A or Part B to 2 to 3 gallons of water, for a concentration of approximately 3.5% to 4.5%. Approximately 15 gallons of potable water were pumped into well RW-1 following the final batch of the RegenOx® Part A or Part B mixtures in order to flush the chemicals from the well casing. Photographs depicting the groundwater remedial treatment activities are included in Appendix B.

The RegenOx® Part A and Part B mixtures were pumped into well RW-1 at a pumping rate of approximately 4 gallon per minute (gpm) and a maximum pressure of approximately 5 pounds per square inch (psi) through a 4-inch diameter inflatable well plug attached to an electrical submersible pump discharge hose. Terracon monitored the groundwater at monitoring well MW-2A, located approximately 8 feet west of RW-1, for evidence of breakthrough of RegenOx® Part A and Part B mixtures at this well. Breakthrough was assessed by slowly pumping water from well MW-2A with a peristaltic pump and measuring the pH of the well purge water using a multifunction meter and a flow-through cell. During the injections, the pH at monitoring well MW-2A increased from 6.11 to 6.43, suggesting that breakthrough had occurred.

3.3 Groundwater Sampling

After a period of approximately three weeks following the RegenOx® Part A and Part B injections, Terracon measured depth to groundwater and collected groundwater samples from wells MW-2A, MW-5, and RW-1. Wells MW-2A and MW-5 were the only site wells that indicated groundwater impacts (diesel-range TPH) exceeding the MTCA Method A cleanup level in August 2014. Well RW-1 was sampled as an upgradient point of compliance well.

Depth to groundwater in each well was measured prior to sample collection. The water level probe was cleaned using an Alconox® wash and distilled water rinse before use in each well. Measured depth to water ranged from 3.82 feet below TOC at well MW-5 to 4.06 feet below TOC at well RW-1 (Table 1). Measured depth to groundwater and TOC elevation data relative to a site datum were used to determine the relative groundwater elevation at each well. Relative groundwater elevations ranged from 91.58 feet at well RW-1 to 90.82 feet at well MW-5. Based on groundwater level measurements collected during Terracon's groundwater sampling event, groundwater flow direction at the Site is generally to the south and southwest (Figure 3).

The wells were purged using a peristaltic pump equipped with clean tubing. Low-flow groundwater discharge rates were maintained during purging in order to minimize the drawdown of the water level in the wells. Groundwater parameters (pH, temperature, specific conductance, and dissolved oxygen) were measured during well purging using a multifunction meter and a flow-through cell. Samples were collected when all parameters were within 10% for two consecutive readings. Purge volumes ranged from approximately 0.5 gallons from well MW-2A and well MW-5, to 2.5 gallons from well RW-1. The purge water from wells MW-2A and MW-5 was clear, with no sediment. The RW-1 purge water was light orange. No hydrocarbon-like odor was observed in the purge water from any of the wells. The purge water was stored onsite in a steel, Department of Transportation (DOT) approved, 55-gallon drum. The drum was properly

labeled and left onsite near well MW-1 pending receipt of laboratory analytical results. Following the stabilization of measured groundwater parameters, samples were collected utilizing the peristaltic pump. Discharge from the peristaltic pump was directed into laboratory provided glassware. Each sample container was labeled with the site name, date, time, and well/sample number.

3.4 Analytical Laboratory Testing

Groundwater samples were delivered to ESC Lab Sciences, a Washington-accredited analytical laboratory in Mt. Juliet, Tennessee, for laboratory analysis for the following:

- Diesel- and oil-range TPH via Northwest Method NWTPH-Dx.

The executed chain-of-custody form and laboratory analytical certificate are provided in Appendix C. All analyses were completed using standard turnaround times.

3.5 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: Reporting limits were below relevant MTCA cleanup levels.

Based upon our interpretation of quality control information provided by the laboratory, it is our opinion that the overall dataset is useable as qualified for the purposes of this groundwater sampling event.

4.0 LABORATORY ANALYTICAL RESULTS

A summary of analytical results for groundwater quality from the February 2015 sampling event is presented in Table 2. The results are tabulated, with the state cleanup levels included for comparison. The complete laboratory report and chain-of-custody form for analytical results from this sampling event are included in Appendix C.

Diesel- and Oil-Range Organics

Diesel-range TPH was identified above the laboratory reporting limit in the samples. The sample from MW-5 contained diesel-range TPH at a concentration of 1,200 µg/L and oil-range TPH at a concentration of 560 µg/L, both exceeding the Model Toxics Control Act (MTCA) Method A cleanup level of 500 µg/L.

5.0 FINDINGS AND CONCLUSIONS

Groundwater at the site was treated with RegenOx® Part A and Part B injections into UIC remediation well RW-1 in January 2015. Approximately 360 pounds of RegenOx® Part A and 240 pounds of RegenOx® Part B were mixed with 1,325 gallons of potable water, at a ratio of approximately 1 pound of RegenOx® to 2 to 3 gallons of water, for a concentration of approximately 3.5% to 4.5%. Wells MW-2A, MW-5, and RW-1 were sampled in February 2015, approximately 3 weeks following the RegenOx® injections.

Based on results of the groundwater sampling event completed in February 2015, the findings and conclusions of this report are as follows:

- Diesel- and oil-range TPH were identified in the sample collected from MW-5 at concentrations of 1,200 µg/L and 560 µg/L, respectively, exceeding the MTCA Method A cleanup level of 500 µg/L.
- Diesel-range TPH was identified at concentrations above the laboratory reporting limit but below the MTCA Method A cleanup level in the samples collected from MW-2A and RW-1.
- The groundwater flow direction is generally toward the south and southwest.

It appears that the groundwater in the vicinity of MW-5 remains impacted with diesel- and oil-range petroleum hydrocarbons, possibly due to poor hydraulic communication between the RW-1 injection point and this well, or because the remedial amendments are still working their way to the MW-5 location.

6.0 RECOMMENDATIONS

Based on the results of the groundwater monitoring conducted at the site, Terracon recommends that groundwater sampling be continued at the Site.

FIGURES

Figure 1 - Topographic Map
Figure 2 - Site Diagram
Figure 3 – Groundwater Contour Map – February 11, 2015

USGS Suquamish, WA, 7.5-minute Quadrangles, 1981.

LEGEND:

APPROXIMATE SITE BOUNDARY

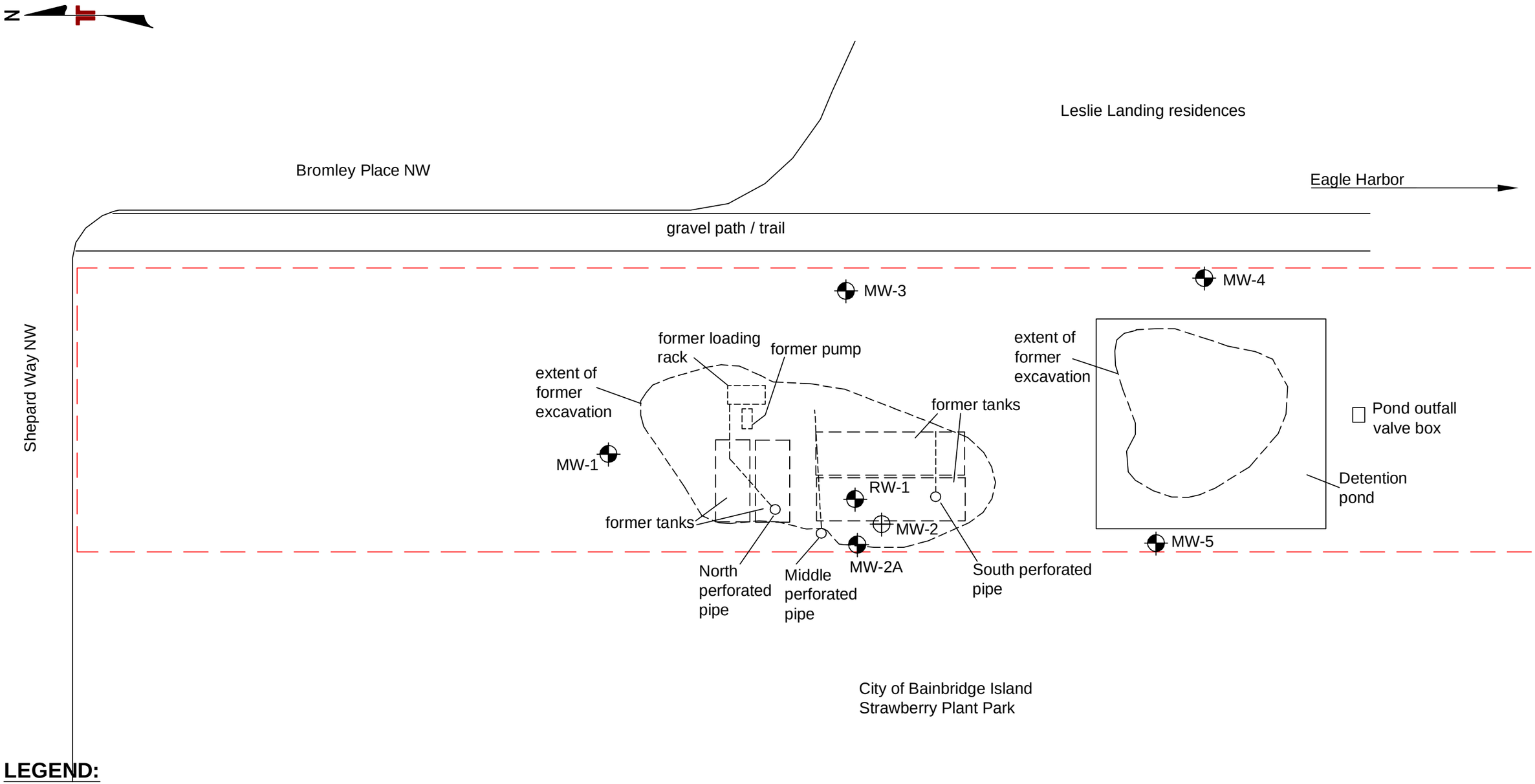
Project Mngr: MDN	Project No. 81147093
Drawn By: SAB	Scale: Not to Scale
Checked By: MDN	File No.
Approved By: MYW	Date: September 2014

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

TOPOGRAPHIC MAP

Former PNEC Bulk Petroleum Facility
Shepard Way NW & Bromley Place NW
Brainbridge Island, Kitsap County, Washington

FIG. No. 1



LEGEND:

APPROXIMATE SITE BOUNDARY

MW-1 — MONITORING WELL NUMBER AND APPROXIMATE LOCATION

MW-2 — FORMER MONITORING WELL LOCATION

Project Mngr:	MDN
Drawn By:	SAB
Checked By:	MDN
Approved By:	MYW
Project No.	81147093
Scale:	Not to Scale
File No.	
Date:	September 2014

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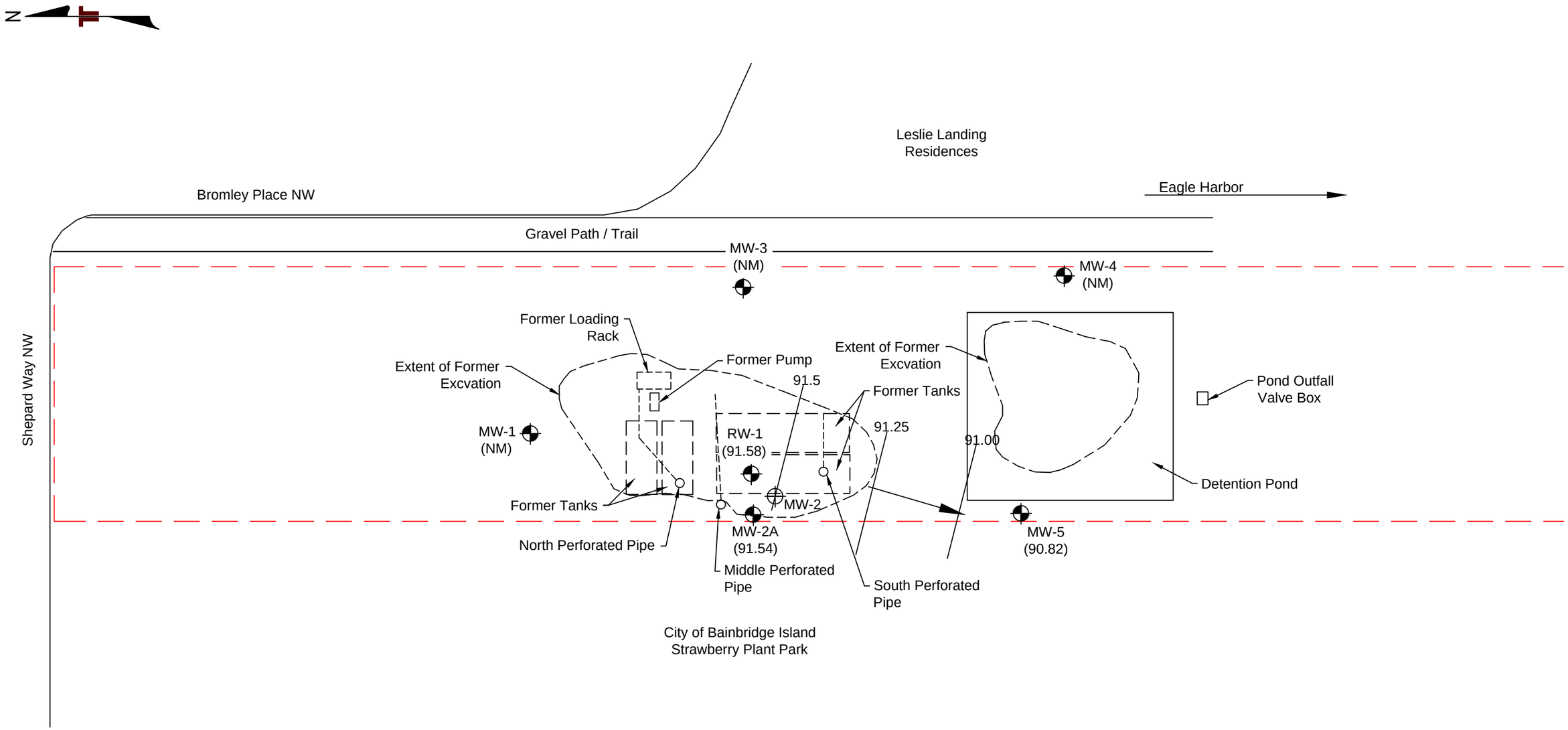
SITE DIAGRAM

Former PNEC Bulk Petroleum Facility
Shepard Way NW & Bromley Place NW
Bainbridge Island, Kitsap County, Washington

FIG. No. 2



LEGEND:

APPROXIMATE SITE BOUNDARY

INFERRED GROUNDWATER FLOW DIRECTION

91 GROUNDWATER CONTOUR (feet)

NM = NOT MEASURED

MW-5 (90.82) MONITORING WELL NUMBER AND APPROXIMATE LOCATION (Groundwater elevation, February 11, 2015)

MW-2 FORMER MONITORING WELL LOCATION

20 0 5 10 20
SCALE IN FEET

Project Mngr:	MDN
Drawn By:	SAB/RMS/AAS
Checked By:	MDN
Approved By:	MYW
Project No.	81147093A
Scale:	AS SHOWN
File No.	figure2.dwg
Date:	September 2014

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GROUNDWATER CONTOUR MAP - FEBRUARY 11, 2015

Former PNEC Bulk Petroleum Facility
Shepard Way NW & Bromley Place NW
Bainbridge Island, Kitsap County, Washington

FIG. No. 3

TABLES

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

TABLE 1

SUMMARY OF DEPTH TO GROUNDWATER MEASUREMENTS
PNEC Former Bulk Petroleum Facility
Shepard Way NW and Bromley Place NW
Bainbridge Island, Kitsap County, Washington

Well Number	Sample Date	TOC Elevation (Feet)	Depth to Water (Feet)	Relative Groundwater Elevation (Feet)
MW-1	9/13/2006	96.62	9.40	87.22
	12/20/2006		3.85	92.77
screened 4.8-14.8 feet	3/26/2007		4.49	92.13
	6/18/2007		7.08	89.54
	8/19/2014		9.00	87.62
	8/21/2014		9.09	87.53
MW-2A	9/13/2006	95.37	8.88	86.49
	12/20/2006		4.46	90.91
screened 4.8-14.8 feet	3/26/2007		4.79	90.58
	6/18/2007		6.78	88.59
	8/19/2014		8.24	87.13
	8/21/2014		8.31	87.06
	2/11/2015		3.83	91.54
MW-3	9/13/2006	94.66	7.40	87.26
	12/20/2006		3.95	90.71
screened 5-15 feet	3/26/2007		3.41	91.25
	6/18/2007		5.77	88.89
	8/19/2014		7.19	87.47
	8/21/2014		7.30	87.36
MW-4	9/13/2006	94.15	9.65	84.50
	12/20/2006		3.34	90.81
screened 4.9-14.9 feet	3/26/2007		3.91	90.24
	6/18/2007		6.90	87.25
	8/19/2014		8.76	85.39
	8/21/2014		8.94	85.21
MW-5	9/13/2006	94.64	11.60	83.04
	12/20/2006		3.97	90.67
screened 5.2-15.2 feet	3/26/2007		4.28	90.36
	6/18/2007		6.10	88.54
	8/19/2014		10.48	84.16
	8/21/2014		10.71	83.93
	2/11/2015		3.82	90.82
RW-1	9/13/2006	95.64	8.80	86.84
	12/20/2006		4.70	90.94
screened 4.7-14.7 feet	3/26/2007		5.03	90.61
	6/18/2007		7.02	88.62
	8/19/2014		8.40	87.24
	8/21/2014		8.45	87.19
	2/11/2015		4.06	91.58

TOC: top of casing
NM : not measured
Goldsmith surveyed TOC on all groundwater monitoring wells for the April sampling event
All the monitoring wells are 2-inch diameter

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

PNEC Former Bulk Petroleum Facility
Shepard Way NW and Bromley Place NW
Bainbridge Island, Kitsap County, Washington

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

Sample Name	Sample Date	TPH			BTEX				MTBE
		Gasoline-Range	Diesel-Range	Oil-Range	Benzene	Toluene	Ethylbeneze	Xylenes	
MW-1	9/13/2006	ND (<48)	**160**	**150**	ND (<0.5)	ND (<0.7)	ND (<0.7)	ND (<0.8)	ND (<0.5)
	12/20/2006	ND (<48)	ND (<76)	ND (<95)	ND (<0.5)	ND (<0.7)	ND (<0.8)	ND (<0.8)	ND (<0.5)
	3/26/2007	ND (<240)	ND (<75)	ND (<94)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
	6/18/2007	ND (<50)	ND (<76)	ND (<95)	ND (<0.5)	ND (<0.7)	ND (<0.8)	ND (<0.8)	ND (<0.5)
	8/21/2014	ND (<100)	ND (<100)	ND (<250)	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<1.5)	NS
MW-2A	9/13/2006	**300**	**2,700**	**530**	ND (<0.5)	ND (<0.7)	**2**	ND (<0.8)	ND (<0.5)
	12/20/2006	ND (<48)	**280**	ND (<95)	ND (<0.5)	ND (<0.7)	ND (<0.8)	ND (<0.8)	ND (<0.5)
	3/26/2007	ND (<48)	**300**	**120**	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
	6/18/2007	ND (<50)	**330**	ND (<95)	ND (<0.5)	ND (<0.7)	ND (<0.8)	ND (<0.8)	ND (<0.5)
	8/21/2014	ND (<100)	**920**	**360**	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<1.5)	NS
	2/11/2015	NS	**330**	ND <250	NS	NS	NS	NS	NS
MW-3	9/13/2006	ND (<48)	**88**	**97**	ND (<0.5)	ND (<0.7)	ND (<0.8)	ND (<0.8)	ND (<0.5)
	12/20/2006	ND (<48)	**88**	ND (<95)	ND (<0.5)	ND (<0.7)	ND (<0.8)	ND (<0.8)	ND (<0.5)
	3/26/2007	ND (<48)	ND (<75)	ND (<94)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
	6/18/2007	ND (<50)	ND (<76)	ND (<95)	ND (<0.5)	ND (<0.7)	ND (<0.8)	ND (<0.8)	ND (<0.5)
	8/21/2014	ND (<100)	ND (<100)	ND (<250)	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<1.5)	NS

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

PNEC Former Bulk Petroleum Facility
Shepard Way NW and Bromley Place NW
Bainbridge Island, Kitsap County, Washington

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

Sample Name	Sample Date	TPH			BTEX				MTBE
		Gasoline-Range	Diesel-Range	Oil-Range	Benzene	Toluene	Ethylbeneze	Xylenes	
MW-4	9/13/2006	ND (<48)	**390**	**200**	ND (<0.5)	ND (<0.7)	ND (<0.8)	ND (<0.8)	ND (<0.5)
	12/20/2006	ND (<48)	**230**	**110**	ND (<0.5)	ND (<0.7)	ND (<0.8)	ND (<0.8)	ND (<0.5)
	3/26/2007	ND (<48)	**150**	ND (<95)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
	6/18/2007	ND (<50)	**430**	ND (<95)	ND (<0.5)	ND (<0.7)	ND (<0.8)	ND (<0.8)	ND (<0.5)
	8/21/2014	ND (<100)	**410**	**270**	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<1.5)	NS
MW-5	9/13/2006	**61**	**840**	**230**	ND (<0.5)	**12**	ND (<0.8)	ND (<0.8)	ND (<0.5)
	12/20/2006	**200**	**2,000**	**390**	ND (<0.5)	**8**	ND (<0.8)	ND (<0.8)	ND (<0.5)
	3/26/2007	**250**	**1,300**	**300**	ND (<0.5)	**0.7**	ND (<0.5)	ND (<0.5)	ND (<0.5)
	6/18/2007	**130**	**1,100**	**120**	ND (<0.5)	ND (<0.7)	ND (<0.8)	ND (<0.8)	ND (<0.5)
	8/21/2014	ND (<100)	**800**	ND (<500)	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<1.5)	NS
	2/11/2015	NS	**1,200**	**560**	NS	NS	NS	NS	NS

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
PNEC Former Bulk Petroleum Facility
Shepard Way NW and Bromley Place NW
Bainbridge Island, Kitsap County, Washington

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

Sample Name	Sample Date	TPH			BTEX				MTBE
		Gasoline-Range	Diesel-Range	Oil-Range	Benzene	Toluene	Ethylbeneze	Xylenes	
RW-1	9/13/2006	ND (<48)	ND (<77)	ND (<96)	ND (<0.5)	ND (<0.7)	ND (<0.8)	ND (<0.8)	ND (<0.5)
	12/20/2006	ND (<48)	**180**	ND (<96)	ND (<0.5)	ND (<0.7)	ND (<0.8)	ND (<0.8)	ND (<0.5)
	3/26/2007	ND (<48)	**210**	ND (<95)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)
	6/18/2007	ND (<50)	**280**	ND (<96)	ND (<0.5)	ND (<0.7)	ND (<0.8)	ND (<0.8)	ND (<0.5)
	8/21/2014	ND (<100)	**210**	ND (<250)	ND (<0.50)	ND (<5.0)	ND (<0.50)	ND (<1.5)	NS
	2/11/2015	NS	**410**	ND (<250)	NS	NS	NS	NS	NS
MTCA Method A Cleanup Level		**1,000** [1]	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**

Note: Concentrations detected are in BOLD type.

Shaded and bold concentrations are above MTCA cleanup levels.

TPH - Total petroleum hydrocarbons

MTBE - Methyl tert butyl ether

MTCA - Model Toxics Control Act

1 - No detectable benzene in ground water

NS - Not sampled

ND - Not detected above laboratory reporting limit

Appendix A

Underground Injection Control (UIC) Permit

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

January 14, 2015

Mr. De Lenn Holbrook
SC Fuels
1800 Katella Ave
Orange, CA 92867

RE: Registration with the Underground Injection Control (UIC) Program, former PNEC Corp. Bulk Plant, Weaver Road and Shepard Way NW, Bainbridge Island, WA

Dear Mr. Holbrook:

This letter is to acknowledge receipt of your registration form received January 5, 2014 to register the above-mentioned site with the UIC Program. The project will include:

- A one- time injection of 760 pounds of RegenOX Part A and Part B mixed with 2000 gallons of water into UIC well RW-1.
- A start date of January 21, 2015.
- Down gradient groundwater monitoring for iron and sulfate will occur in MW-2A and MW5. Sampling results should not exceed the Water Quality Criteria for Ground water of the State of Washington, chapter 173-200 WAC (GWQS), https://fortress.wa.gov/ecy/publications/SummaryPages/173200.html at monitoring wells located close to the property or plume boundary.

Clean up actions/sites that are not approved by WA State Department of Ecology under the Model Toxics Control Act (MTCA), chapter 70.105D RCW or approved by the United States Environmental Protection Agency under the Comprehensive Environmental Response Compensation and Liability Act, 42 U.S.C. 9601 et seq are required to meet the GWQS. The injected compounds are intended to improve groundwater quality. There are inherent environmental risks associated with injecting compounds into groundwater. Carefully characterize, manage, and monitor the site to minimize risk and prevent unforeseen degradation of groundwater quality. Mobilized metals or other substances, injected chemicals or hazardous bi-products, are not allowed to migrate beyond the site property boundary. A thorough discussion of risk and management options is provided in the following document: *Technical and Regulatory Guidance for In Situ Chemical Oxidation of Contaminated Soil and Groundwater,* June 2005, prepared by Interstate Technology and Regulatory Cooperation Work Group. This document is available on the internet at: http://www.itrcweb.org/Documents/ISCO-2.pdf.

The two UIC Program requirements for rule authorization are, registration of UIC wells (prior to use) and the discharge from the well must meet the nonendangerment standard, of WAC 173-218-080. The UIC

site is number 32692. Listed below are the minimum requirements to meet the nonendangerment standard. Your site is conditionally rule authorized when the following have been met:

- Meet the groundwater quality standards, chapter 173-200-WAC;
- Complete a thorough site characterization including: geologic investigation, concentration and extent of contaminant plume, aquifer characteristics, and location of preferential migration pathways (natural and manmade);
- A groundwater monitoring program that includes: well location and sampling sufficient to characterize the background groundwater quality, the water quality at the point of compliance, and identify any changes in groundwater quality resulting from the injected compounds;
- Develop a conceptual site model that balances the injection rate, concentration, and total mass of injected compound with that of the subsurface oxidizable material. The model should predict the expected changes in groundwater chemistry over time, final groundwater quality at the point of compliance, and predicted restoration timeframe;
- Hydraulically contain within the site property boundaries or plume boundaries, the injected compounds and any regulated substances mobilized by the injected products;
- Prepare a written contingency plan that describes, in detail, the actions to be taken in case of spills, failures, equipment breakdowns and/or unforeseen environmental degradation caused by the cleanup activities; and,
- Retain all plans, modeling, monitoring results, interim and final reports. Upon request, provide these documents to the Department of Ecology.

If groundwater quality does not meet the Ground Water Quality Standards at the point of compliance, you must notify the Department of Ecology within 24 hours of discovery.

At any time, the Department of Ecology may require you to apply for and obtain a Waste Discharge Permit for the continued use of these compounds to promote In Situ Chemical Oxidation.

A formal approval for this project may be obtained through the departments' State Waste Discharge Permit Program or the MTCA Program.

Please call me at (360) 407-6143 if you have any questions. Additional information on the UIC Program can also be found at our website http://www.ecy.wa.gov/programs/wq/grndwtr/uic/index.html

Sincerely,

MSHansen

Mary Shaleen-Hansen
UIC Coordinator
Water Quality Program

Cc: Michael Noll, Terracon Consultants, Inc.

Appendix B

Site Photographs

Photo 1 Looking southwest, red injection hose set up at well RW-1, peristaltic pump set up to monitor groundwater at well MW-2A (right background). RegenOx buckets to left.

Photo 2 Looking west, red injection hose connected to inflated well plug with fitting installed in well RW-1.

Photo 3 Looking north, Stratus crew at truck and trailer mixing RegenOx for injection into well RW-1.

Photo 4 Looking northeast, plastic mixing barrel with RegenOx Part B mixture, electric stir tool set into barrel, electric submersible pump in white bucket to right.

Appendix C

Analytical Report and Chain-of-Custody Documentation

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

Thursday February 26, 2015

Report Number: L748962
Samples Received: 02/13/15
Client Project: 81147093A

Description: S.C. Fuels

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
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Est. 1970

REPORT OF ANALYSIS

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

February 26,2015

ESC Sample # : L748962-01

Site ID :

Project # : 81147093A

Date Received : February 13, 2015
Description : S.C. Fuels

Sample ID : MW-5 10FT

Collected By : S. Kyle Long
Collection Date : 02/11/15 12:34

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Diesel Range Organics (DRO)	1200	100	ug/l	NWTPHDX	02/18/15	1
Residual Range Organics (RRO)	560	250	ug/l	NWTPHDX	02/18/15	1
Surrogate Recovery						
o-Terphenyl	102.		% Rec.	NWTPHDX	02/18/15	1

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

.
Reported: 02/26/15 16:55 Printed: 02/26/15 16:56

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REPORT OF ANALYSIS

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

February 26,2015

ESC Sample # : L748962-02

Site ID :

Project # : 81147093A

Date Received : February 13, 2015
Description : S.C. Fuels

Sample ID : MW-2A 10FT

Collected By : S. Kyle Long
Collection Date : 02/11/15 12:58

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Diesel Range Organics (DRO)	330	100	ug/l	NWTPHDX	02/18/15	1
Residual Range Organics (RRO)	BDL	250	ug/l	NWTPHDX	02/18/15	1
Surrogate Recovery						
o-Terphenyl	73.6		% Rec.	NWTPHDX	02/18/15	1

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

.
Reported: 02/26/15 16:55 Printed: 02/26/15 16:56

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REPORT OF ANALYSIS

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

February 26,2015

ESC Sample # : L748962-03

Site ID :

Project # : 81147093A

Date Received : February 13, 2015
Description : S.C. Fuels

Sample ID : RW-1 6FT

Collected By : S. Kyle Long
Collection Date : 02/11/15 13:54

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Diesel Range Organics (DRO)	410	100	ug/l	NWTPHDX	02/18/15	1
Residual Range Organics (RRO)	BDL	250	ug/l	NWTPHDX	02/18/15	1
Surrogate Recovery						
o-Terphenyl	29.6		% Rec.	NWTPHDX	02/18/15	1

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

.
Reported: 02/26/15 16:55 Printed: 02/26/15 16:56

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L748962-03	WG771057	SAMP	o-Terphenyl	R3020521	J2

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

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Mike Noll
21905 64th Ave W Ste 100

Mountlake Terrace, WA 98043

Quality Assurance Report
Level II

L748962

February 26, 2015

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Diesel Range Organics (DRO)	< .1	mg/l			WG771057	02/17/15 21:29
Residual Range Organics (RRO)	< .25	mg/l			WG771057	02/17/15 21:29
o-Terphenyl		% Rec.	107.0	50-150	WG771057	02/17/15 21:29

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Diesel Range Organics (DRO)	mg/l	.75	0.773	103.	50-150	WG771057
Residual Range Organics (RRO)	mg/l	.75	0.730	97.3	50-150	WG771057
o-Terphenyl				106.0	50-150	WG771057

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Diesel Range Organics (DRO)	mg/l	0.783	0.773	104.	50-150	1.35	20	WG771057
Residual Range Organics (RRO)	mg/l	0.776	0.730	103.	50-150	6.15	20	WG771057
o-Terphenyl				106.0	50-150			WG771057

Batch number /Run number / Sample number cross reference

WG771057: R3020521: L748962-01 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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Terracon- Mountlake Terrace, WA
Mike Noll
21905 64th Ave W Ste 100

Mountlake Terrace, WA 98043

Quality Assurance Report
Level II

L748962

February 26, 2015

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.

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

Attention: Karen Meyer

Report to: Mike Noll

Email to: mdnoll@terracon.com

Project Description: S.C. Fuels

City/State Collected: Bainbridge Island

Phone: 425 409 2602

FAX:

Client Project #: 81147093A

ESC Key: Jarred Willis

Collected by: S. Kyle Long

Site/Facility ID#:

P.O.#:

Collected by (signature): S. Kyle Long

Immediately Packed on Ice N ___ Y X

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

Date Results Needed:

Email? _No X Yes

FAX? X No _Yes

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	NWTPH-DX	Remarks/Contaminant	Sample # (lab only)
MW-5	Grab	GW	10'	2/11/15	12:34	3	X	Diesel	-01
MW-2A	↓	↓	10'	↓	12:58	3	X	"	-02
RW-1	↓	↓	6'	↓	13:54	3	X	"	-03

Analysis/Container/Preservative

Chain of Custody
Page 1 of 1

ESC LABORATORY SCIENCES
12065 Lebanon Road
Mt. Juliet, TN 37122

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

I110

CoCode (lab use only)

Template/Prelogin L748962

Shipped Via: Fed Ex

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

pH _____ Temp _____

Flow _____ Other _____

Remarks: Standard TAT per Terracon 605 2424 2673

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
S. Kyle Long	2/11/15	16:30	Michael D. Noll
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
Michael D. Noll	2/12/2015	0900	

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

Temp: 3.1° Bottles Received: 9+1TL

Date: 2/13/15 Time: 09:00

Condition: (lab use only) NVS OK

CoC Seals Intact: ✓ Y ___ N ___ NA

pH Checked: NCF: