NW 2750

KANE ENVIRONMENTAL INC

Remediation Product Injection & Groundwater Performance Monitoring

Living Color
9416 Rainier Avenue South
Seattle, Washington 98118

Prepared For:

Mr. Eugene Shin
Living Color
9416 Rainier Avenue South
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January 26, 2011

Project Number: 30803

Prepared By:

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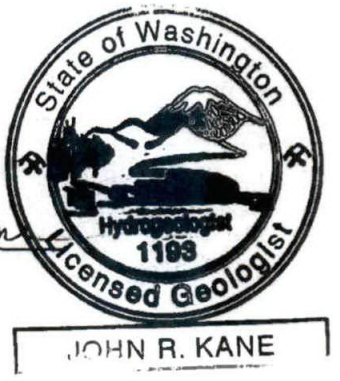

KANE ENVIRONMENTAL INC

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1.0 INTRODUCTION

Kane Environmental, Inc. (Kane Environmental) has conducted two rounds of remediation product injection and associated performance groundwater monitoring at the property located at 9416 Rainier Avenue South in Seattle, Washington (The Property, Figure 1). The purpose of this report is to summarize the findings of groundwater sampling since 2008 and includes a recommendation to continue the remediation product application to the groundwater at the Property to reduce petroleum hydrocarbon concentrations to below State of Washington Department of Ecology groundwater cleanup standards.

1.1 Background

In June 2008, Kane Environmental conducted a Limited Phase II Environmental Site Assessment (ESA) on the Property to determine if soil and groundwater had been impacted with petroleum products from the Property's prior use as a carwash. As part of the Phase II ESA Kane Environmental installed three groundwater monitoring wells (KMW-1, KMW-2, and KMW-3) on the Property and advanced one soil boring (KSB-1) inside the Living Color building (Figure 2).

Soil samples resulted in concentrations of benzene, ethylbenzene, toluene, xylenes (BTEX), total petroleum hydrocarbons as gasoline (TPH-gasoline), and TPH as diesel (TPH-diesel) below the Washington State Department of Ecology Model Toxics Control Act (MTCA) Method A Soil Cleanup Level for Unrestricted Use. Groundwater samples collected from the monitoring wells reported concentrations of BTEX and TPH-gasoline below the MTCA Method A Cleanup Levels for Ground Water.

Groundwater samples from KMW-2 and KMW-3 also reported concentrations of TPH-diesel below the MTCA Method A Cleanup Level for Ground Water. The groundwater sample from KMW-1 reported a concentration of TPH-diesel (910 micrograms per liter (ug/L)), exceeding the MTCA Method A Cleanup Level for Ground Water of 500 ug/L.

In response to the results of the Limited Phase II ESA, Kane Environmental was retained to design and implement a remediation plan to reduce the concentration of TPH-diesel in the groundwater below the MTCA Method A Cleanup Level for Ground Water. Based on the results of the Limited Phase II ESA, Kane Environmental selected the remediation product RegenOx™, manufactured by Regenesis, which acts as an aggressive short-term treatment measure. RegenOx™ directly oxidizes contaminants while its catalytic component generates highly oxidizing free radicals that rapidly destroy the target contaminants. RegenOx™ also includes a component that acts as a surfactant, a detergent-like compound, that releases the petroleum hydrocarbons adsorbed onto the subsurface saturated soil particles. The immediate effect is an increase of petroleum hydrocarbons concentrations in groundwater, followed by a

decrease in concentration as the oxygenated portion of the remediation product takes effect. Kane Environmental also added petroleum-ingesting bacteria in the groundwater which significantly enhanced the decrease in petroleum hydrocarbons after the initial increase from the application of RegenOx™

Additional information regarding RegenOx™ is included in Attachment B.

1.2 Scope of Work

The remedial product injection and performance groundwater monitoring conducted by Kane Environmental included the following scope of work:

- Baseline groundwater sampling of groundwater monitoring wells prior to remedial injection
- Drill temporary injection borings in the vicinity of KMW-1,
- Inject remedial product (Regenesis RegenOx™) into temporary injection borings,
- Install three permanent injection wells in the vicinity of KMW-1,
- Performance groundwater sampling of KMW-1,
- Injection of petroleum-ingesting bacteria
- Performance groundwater monitoring of KMW-1, KMW-2, and KMW-3,
- Report including summary of findings and recommendations.

2.0 SUBSURFACE CONDITIONS

2.1 Geologic Setting

The City of Seattle, Washington is located in the Puget Sound Basin, where the majority of geological and land features were formed during the Pleistocene Epoch which began approximately 1.5 million years ago. Soils in the Puget Sound Basin and specifically in the vicinity of the site generally consist of glacial till deposited by the retreat of the Vashon Glacier. Glacial till is a mixture of sand and gravel with silt and clay. Soils encountered at the Property were brown, fine to coarse-grained sands with trace silt and gravel. Soils ranged from loose to dense and dry to wet.

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2.2 Hydrogeologic Setting

The U.S. Geological Survey (USGS) Seattle, Washington 7.5-Minute Quadrangle Topographic Map (Figure 1), indicates the Property is approximately thirty (30) feet above mean sea level (msl) and that the ground surface of the Property slopes down to the northeast, towards Lake Washington. Groundwater was present at depths between twelve (12) and sixteen (16) feet below ground surface (bgs). Groundwater at the Property moves in a generally easterly direction, towards Lake Washington, however seasonal changes have been observed. Figure 2, Well Locations is a graphical representation of the monitoring well locations on the site and shows the general groundwater flow direction.

Table 1 – Groundwater Elevation Data, 2009

Monitoring Well Designation	Casing Elevations[1] (in feet)	Depth to Water (in feet bgs)		Water Elevation[1] (in feet)	
		September 2009	November 2009	September 2009	November 2009
KMW-1	50	11.51	10.50	38.49	39.50
KMW-2	49.90	10.17	9.42	39.73	40.48
KMW-3	49.28	14.45	12.02	34.83	37.26

1 – Elevations are relative and not tied to mean sea level. Elevation for KMW-1 was assumed to be 50'.

Table 2 – Groundwater Elevation Data, 2010

Monitoring Well Designation	Casing Elevations[1] (in feet)	Depth to Water (in feet bgs)			Water Elevation[1] (in feet)		
		January 2010	June 2010	December 2010	January 2010	June 2010	December 2010
KMW-1	50	9.75	9.66	9.29	40.25	40.34	40.71
KMW-2	49.90	7.33	7.88	7.22	42.57	42.02	42.68
KMW-3	49.28	11.11	10.99	10.43	38.17	38.29	38.85

1 – Elevations are relative and not tied to mean sea level. Elevation for KMW-1 was assumed to be 50'.

3.0 FIELD METHODOLOGY

Field methods utilized, including sample collection, selected analyses, and documentation procedures, are briefly described in the following subsection.

3.1 Utility Locate

Kane Environmental contacted the Washington Utilities Underground Location Center prior to starting the fieldwork to conduct a general locating survey for telephone, gas, water, sewer, and electric service for study areas at the Property. Areas identified as utility corridors by Washington Utilities Underground Location Center were marked and no drilling occurred in these areas. A private utility locator, Underground Detection Services (UDS) of Seattle, Washington, was retained to perform an on-property utility survey to determine if underground utilities and structures were located in the area of the drilling activity. No drilling occurred in areas marking as containing underground utilities.

3.2 Remedial Product Injection Methodology

The boring locations were selected for field investigation based on the location of the contaminated groundwater, in the vicinity of KMW-1, safe distance from underground utilities, and accessibility by the drilling rig. A total of three remedial injection wells were constructed and six temporary injection borings were advanced on the Property by ESN Northwest, Inc. (ESN NW) on October 21, 2009 using a Geoprobe drilling rig. The locations of the injection borings and wells are shown in Figure 3. No soil samples were collected from any of the boring or well locations.

The injection borings were advanced to a depth of sixteen (16) feet bgs. Once the boring reached sixteen (16) feet bgs, approximately one-hundred ninety (190) gallons of remediation slurry was injected into the bottom ten feet of the boring at two (2) foot intervals. RegenOx^{TM} consists of two parts, Part A, a powder oxidizer and Part B, a viscous, liquid catalyst. The remediation slurry consisted of one-hundred eighty five (185) gallons of water mixed with forty-eight (48) pounds of RegenOx^{TM} Part A, and forty-eight (48) pounds of RegenOx^{TM} Part B mixed with twelve (12) pounds of water. The remediation slurry was injected under pressure using a bladder pump.

After the injection of the remediation product in the temporary borings, ESN, NW advanced three borings to sixteen (16) feet bgs and converted these borings to injection wells. No remediation product was injected using these wells. As-built figures of the injection wells (IW-1, IW-2, and IW-3) are included as Attachment C.

In the second week of October 2010, a total of 50 gallons of bio-remediation bacteria solution was added to the injection wells. The solution was not added under pressure.

3.3 Groundwater Sampling Procedures

The groundwater sampling procedure for each well, including Quality Assurance/Quality Control (QA/QC) procedures, is described below in detail. All three groundwater monitoring wells were sampled on September 2, 2009 to provide an environmental baseline prior to remedial product injection. Groundwater monitoring well KMW-1 was sampled on November 4, 2009 to evaluate the progress of the remedial injection.

- Depth to groundwater in each well was measured with a decontaminated electric water interface probe. The probe was cleaned with alconox and rinsed with de-ionized water between sampling activities.

- Groundwater collected from all of the wells was sampled using a peristaltic pump with new polyethylene tubing. Approximately three well volumes of water were removed from each well and field parameters allowed to stabilize to within 10% for the last three readings prior to sampling. Field parameters included pH, temperature, conductivity, and Total Dissolved Solids (TDS) using a Hanna HI 991300 meter. Prior to sampling activities, the meter was calibrated with standard solutions.

- Groundwater was placed into appropriate laboratory-supplied, pre-cleaned and preserved containers for analysis. Samples were labeled and placed into plastic bags to minimize the potential for cross-contamination and then placed into an ice-filled cooler.

- The groundwater samples were immediately placed into ice-filled coolers and transported to OnSite Environmental, Inc. (OnSite) in Redmond, Washington under standard chain-of-custody procedures.

4.0 ANALYTICAL METHODS

Soil and groundwater samples were submitted to the laboratory and analyzed for benzene, toluene, ethylbenzene, toluene, and xylenes (BTEX) using EPA Method 8021B, TPH-diesel using Northwest Method NWTPH-Dx/Dx Extended, and TPH-gasoline using Northwest Method NWTPH-Gx.

All analyses were performed in accordance with OnSite's in-house Quality Assurance/Quality Control Plans. Sample analyses were performed in compliance with EPA analytical methods and Ecology guidelines. Samples were analyzed within specified holding times. All detection limits were within method requirements and no factors appeared to adversely affect data quality.

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4.1 Laboratory QA/QC Procedures

Internal test methods run by the laboratory to ensure data accuracy and reproducibility include method blanks, method blank duplicates, surrogate blanks, and surrogate blank duplicates.

5.0 ANALYTICAL RESULTS

5.1 Groundwater – September 2009

Analytical data results for the groundwater samples from KMW-2 and KMW-3 reported non-detectable concentrations of all analytes. Analytical data results for the groundwater sample from KMW-1 reported non-detectable concentrations of BTEX and TPH as lube oil and detectable concentrations of TPH-gasoline (740 micrograms per liter (ug/L)), and TPH-diesel (1,700 ug/L) The reported concentration of TPH-diesel exceeded the MTCA Method A Cleanup Level for Groundwater of 500 ug/L.

Groundwater sample analytical results are summarized in Tables 3 and 4. The laboratory analytical reports are included as Attachment A.

5.2 Groundwater – November 2009

Monitoring wells KMW-2 and KMW-3 were not sampled in November. Analytical data results for the groundwater sample from KMW-1 reported non-detectable concentrations of benzene and ethylbenzene. Detectable concentrations of toluene (9.1 ug/L), xylenes (4.8 ug/L), TPH-gasoline (2,100 ug/L), TPH-lube oil (4,400 ug/L), and TPH-diesel (10,000 ug/L) The reported concentration of TPH-diesel, TPH-lube oil, and TPH-gasoline exceeded their respective MTCA Method A Cleanup Levels for Groundwater. Groundwater sample analytical results are summarized in Tables 3 and 4. The laboratory analytical reports are included as Attachment A.

5.3 Groundwater – January 2010

Analytical data results for the groundwater sample from KMW-3 reported non-detectable concentrations of all analytes. Analytical data results for the groundwater sample from KMW-1 reported non-detectable concentrations of benzene, ethylbenzene, and total xylenes and detectable concentrations of toluene (13 ug/L), TPH-lube oil (43,000 ug/L), TPH-gasoline (1,800 ug/L), a0nd TPH-diesel (4,200 ug/L). The reported concentrations of TPH-diesel, TPH-lube oil, and TPH-gasoline exceeded their respective MTCA Method A Cleanup Levels for Groundwater. Analytical data results for the groundwater sample from KMW-2 reported non-detectable concentrations of toluene, ethylbenzene, TPH-gasoline, and TPH-diesel and detectable concentrations of benzene (2.7 ug/L), total xylenes (3.5 ug/L), and TPH-lube oil (630 ug/L). The reported concentration of TPH-lube oil exceeded the MTCA Method A Cleanup Level for

Groundwater. Groundwater sample analytical results are summarized in Tables 3 and 4. The laboratory analytical reports are included as Attachment A.

5.4 Groundwater – June 2010

Groundwater samples were not collected from KMW-2 and KMW-3. Analytical data results for the groundwater sample from KMW-1 reported non-detectable concentrations of benzene, ethylbenzene, and total xylenes and detectable concentrations of toluene (6.7 ug/L), TPH-lube oil (930 ug/L), TPH-gasoline (1,400 ug/L), and TPH-diesel (1,200 ug/L). The reported concentrations of TPH-diesel, TPH-lube oil, and TPH-gasoline exceeded their respective MTCA Method A Cleanup Levels for Groundwater. Analytical data results for the groundwater sample from KMW-2 reported non-detectable concentrations of toluene, ethylbenzene, TPH-gasoline, and TPH-diesel and detectable concentrations of benzene (2.7 ug/L), total xylenes (3.5 ug/L), and TPH-lube oil (630 ug/L). Groundwater sample analytical results are summarized in Tables 3 and 4. The laboratory analytical reports are included as Attachment A.

5.5 Groundwater – December 2010

Analytical data results for the groundwater sample from KMW-3 reported non-detectable concentrations of all analytes, except benzene (1.3 ug/L). This concentration does not exceed the MTCA Method A Cleanup Level for Groundwater. Analytical data results for the groundwater sample from KMW-2 reported non-detectable concentrations of all analytes, except benzene (4.0 ug/L) and total xylenes (3.2 ug/L). These chemical concentrations do not exceed their respective MTCA Method A Cleanup Levels for Groundwater. Analytical data results for the groundwater sample from KMW-1 reported non-detectable concentrations of benzene and TPH-lube oil and detectable concentrations of toluene (4.5 ug/L), ethylbenzene (3.0 ug/L), total xylenes (4.8 ug/L), TPH-gasoline (1,400 ug/L), and TPH-diesel (1,400 ug/L). The reported concentrations of TPH-gasoline, and TPH-diesel exceeded their respective MTCA Method A Cleanup Levels for Groundwater. Groundwater sample analytical results are summarized in Tables 3 and 4. The laboratory analytical reports are included as Attachment A.

6.0 DISCUSSION AND RECOMMENDATIONS

Based on the analytical results of the groundwater sampling conducted on the Property in 2009 and 2010, concentrations of TPH-gasoline and TPH-diesel exceeding the MTCA Method A Cleanup Level for Groundwater remain in the groundwater at the Property.

After injection of the treatment compound, concentrations of TPH-gasoline, TPH-diesel, and TPH-lube oil increased in KMW-1 and KMW-2. After these initial increases concentrations decreased by December of 2010. Additionally, benzene concentrations in KMW-2 and KMW-3 have increased over the past year,

but remain below the MTCA Method A Cleanup Level for Groundwater. Based on the data trends observed, the bio-remediation bacteria solution has significantly decreased the concentrations of petroleum hydrocarbons, after the initial increase due to the injection of RegenOx™

The heavy oil portion of the hydrocarbon release was decreased to non-detectable concentrations. The TPH-gasoline and diesel concentrations remain above their respective groundwater cleanup levels, but additional injection of an oxidizing agent, such as a hydrogen peroxide based compound, is expected to reduce these concentrations below their cleanup levels. We recommend injecting again at the Property within the next one to two weeks, and sampling well KMW-1 in approximately two to three weeks following the injection. It is possible that more than one additional injection may be needed to reach concentrations below cleanup levels.

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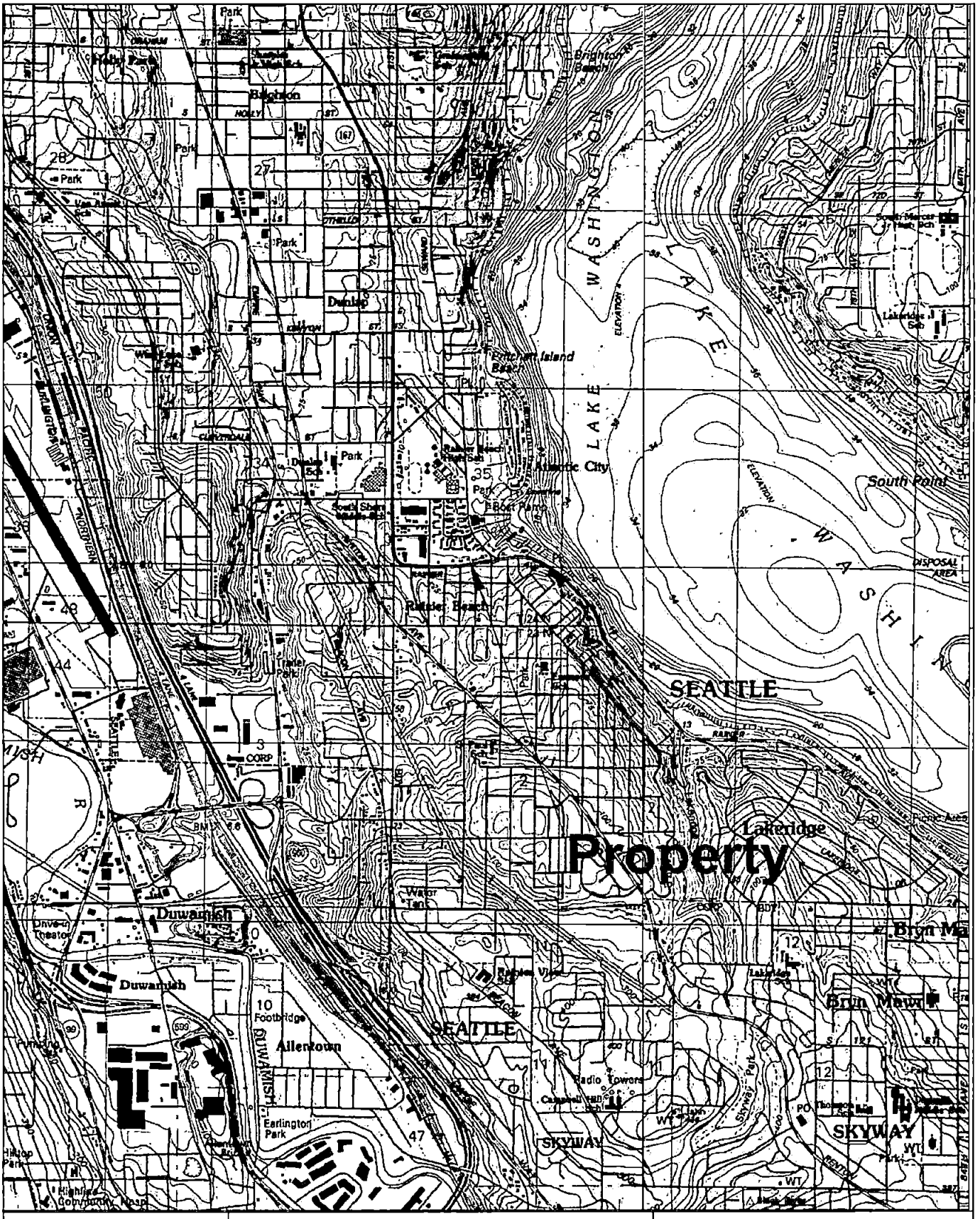
7.0 LIMITATIONS

Kane Environmental has performed this work in general accordance with generally accepted professional practices using the standard of the industry today, for the nature and conditions of the work completed in the same locality and at the same time as the work was performed, and with the terms and conditions as set forth in our proposal.

Kane Environmental shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time the report was prepared. Facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time the work was performed. The Remedial Injection and Groundwater Monitoring does not include other services not specifically described in the scope of work in Section 1.0 of this report. Conclusions were made within the operative constraints of the scope of work, budget, and schedule for this project.

Our assessment of the property may change as new data become available, either from persons familiar with the site or during additional site studies, exploration, or sampling. This report is intended for the exclusive use by Mr. Eugene Shin and his designated assignees, for specific application to the referenced Property. It is not meant to represent a legal opinion. No other warranty, express or implied, is made.

FIGURES



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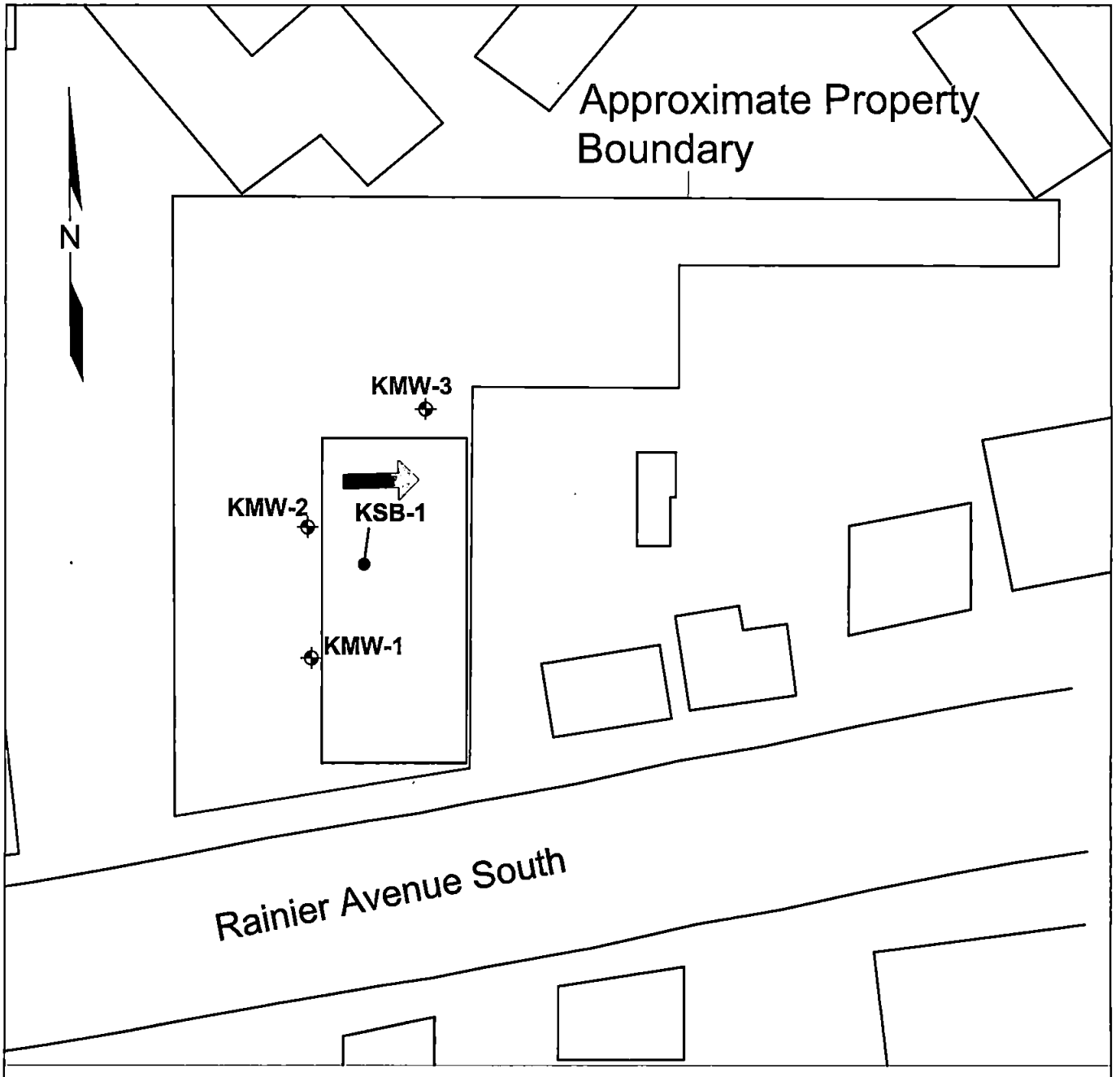
Remedial Action
Living Color Beauty Supply
9416 Rainier Avenue South
Seattle, Washington

Figure 1
Vicinity Map



LEGEND

KMW-1 **Monitoring Well Location**

Building

Approximate Property Boundary

KSB-1 **Soil Boring Location**

General Direction of Groundwater Flow, 2009 & 2010

0 50 100

Approximate Scale in Feet

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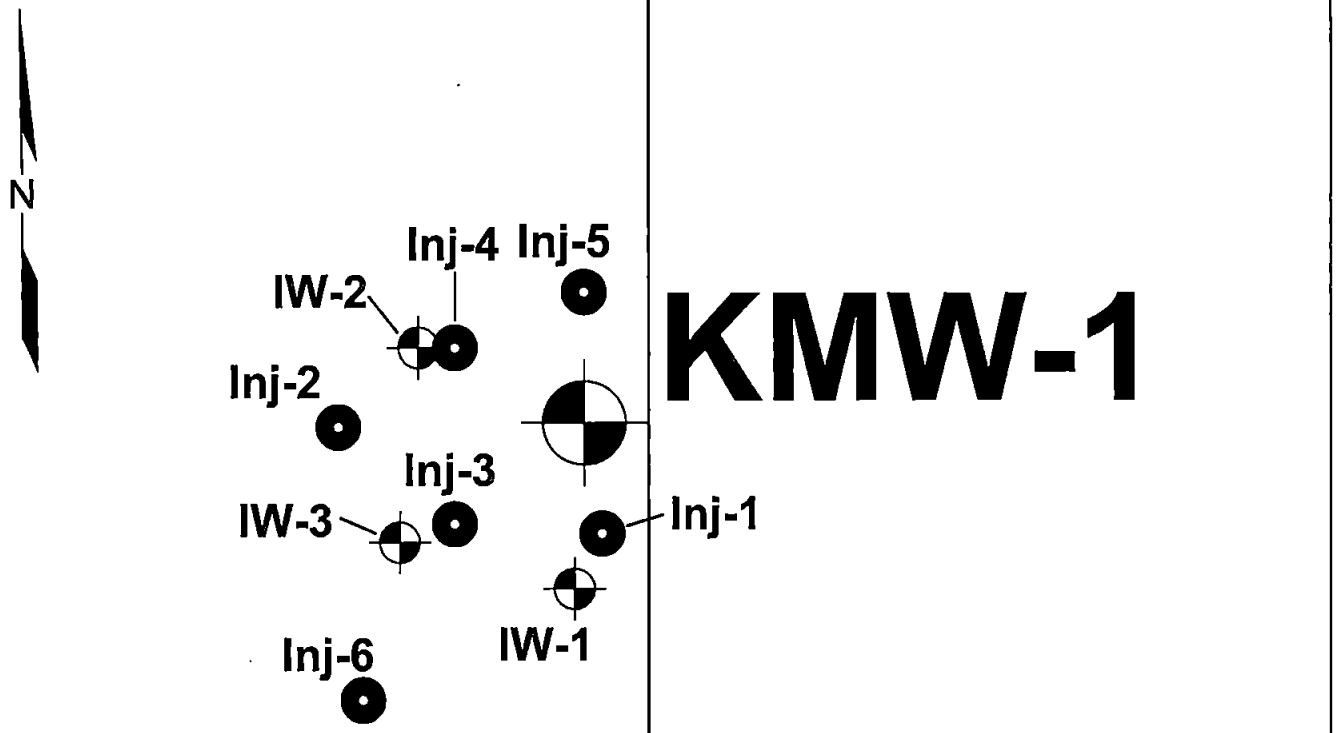
Remedial Action
Living Color Beauty Supply
9416 Rainier Avenue South
Seattle, Washington

Figure 2
Monitoring Well Locations & General Groundwater Flow



LEGEND

- KMW-1 — **Monitoring Well Location**
- Inj-1 — **Temporary Injection Point Location**
- IW-1 — **Injection Well Location**

0 10 20

Approximate Scale in Feet

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Remedial Action
Living Color Beauty Supply
9416 Rainier Avenue South
Seattle, Washington

Figure 3
Temporary Injection Points &
Injection Well Locations

TABLES

TABLE 3
Summary of Petroleum Products and BTEX in Groundwater, KMW-1
9416 Rainier Avenue South
Seattle, Washington

Sample ID	KMW-1-W	Practical Quantitation Limit (µg/L)*	KMW-1	Practical Quantitation Limit (µg/L)*	KMW-1	Practical Quantitation Limit (µg/L)*	KMW-1	Practical Quantitation Limit (µg/L)*	KMW-1	Practical Quantitation Limit (µg/L)*	KMW-1	Practical Quantitation Limit (µg/L)*	MTCA Method A Cleanup Level for Groundwater (µg/L)
Sample Date	6/11/08		9/2/09		11/4/09		1/22/10		6/11/10		12/20/10		ug/L
Benzene	nd	1	nd	4.0	nd	4.0	nd[c, f]	4.0	nd[f]	4.0	nd	1.0	5
Toluene	nd	1	nd	4.0	9.1	4.0	13[c, f]	4.0	6.7[f]	4.0	4.5	1.0	1000
Ethylbenzene	3.1	1	nd	4.0	nd [U1]	20.0	nd[c, U1, f]	200.0	nd[f]	20	3.0	1.0	700
Total Xylenes	4.1	1	nd	8.0	4.8	8.0	nd[c, f]	8.0	nd[f]	8.0	4.8	2.0	1000
Gasoline	630	100	740	400	**2100**	400	**1800**[f]	400	**1400**[f]	400	**1400**	100	800*/1,000
Diesel/Fuel Oil	**910**	200	**1700**	260	**4400^**	1300	**4200^**	1300	**1200**	260	**1400**	250	500
Motor/Lube Oil	nd	400	nd	410	**10000^**	2000	**43,000^**	2000	**930**	420	nd	400	500

Notes:
All groundwater samples measured in µg/L.
µg/L = micrograms per liter [equivalent to parts per billion (ppb)]
nd = No value detected at method reporting limit.
Shaded and Bold concentrations are above MTCA Method Cleanup Level for Groundwater.
* = Practical Quantitation Limits are shown for each monitoring event.
a = Cleanup level used if benzene is present.
U1= The practical quantitation limit is elevated due to interferences present in the sample
c = Analysis method requires the pH of water samples to be adjusted to less than 2. This sample had a pH of 8 after analysis.
^ = The surrogate recovery in this sample was low due to matrix interferences. Sample was re-extracted and re-analyzed with similar results.
f = Surrogate recovery data not available due to high concentration of coeluting compounds.

TABLE 4
Summary of Petroleum Products and BTEX in Groundwater, KMW-2
9416 Rainier Avenue South
Seattle, Washington

Sample ID	KMW-2-W	Practical Quantitation Limit (µg/L)*	KMW-2	Practical Quantitation Limit (µg/L)*	KMW-2	Practical Quantitation Limit (µg/L)*	KMW-2	Practical Quantitation Limit (µg/L)*	MTCA Method A Cleanup Level for Groundwater (µg/L)
Sample Date	6/11/08		9/2/09		1/22/10		12/20/10		ug/L
Benzene	nd	1	nd	4.0	2.7	1.0	4.0	1.0	5
Toluene	nd	1	nd	4.0	nd	1.0	nd	1.0	1000
Ethylbenzene	nd	1	nd	4.0	nd	1.0	nd	1.0	700
Total Xylenes	nd	1	nd	8.0	3.5	2.0	3.2	2.0	1000
Gasoline	150	100	nd	400	nd	100	nd	100	800[a]/1.000
Diesel/Fuel Oil	nd	200	nd	260	nd	250	nd	250	500
Motor/Lube Oil	nd	400	nd	410	**630**	400	nd	400	500

Notes:
All groundwater samples measured in µg/L.
µg/L = micrograms per liter [equivalent to parts per billion (ppb)]
nd = No value detected at method reporting limit.
Shaded and Bold concentrations are above MTCA Method Cleanup Level for Groundwater.
* = Practical Quantitation Limits are shown for each monitoring event.
a = Cleanup level used if benzene is present.

TABLE 5
Summary of Petroleum Products and BTEX in Groundwater, KMW-3
9416 Rainier Avenue South
Seattle, Washington

Sample ID	KMW-3-W	Practical Quantitation Limit (µg/L)*	KMW-3	Practical Quantitation Limit (µg/L)*	KMW-3	Practical Quantitation Limit (µg/L)*	KMW-3	Practical Quantitation Limit (µg/L)*	MTCA Method A Cleanup Level for Groundwater (µg/L)
Sample Date	6/11/08		9/2/09		1/22/10		12/20/10		ug/L
Benzene	nd	1	nd	4.0	nd	1.0	1.3	1.0	5
Toluene	nd	1	nd	4.0	nd	1.0	nd	1.0	1000
Ethylbenzene	nd	1	nd	4.0	nd	1.0	nd	1.0	700
Total Xylenes	nd	1	nd	8.0	nd	2.0	nd	2.0	1000
Gasoline	110	100	nd	400	nd	100	nd	100	800[a]/1.000
Diesel/Fuel Oil	nd	200	nd	260	nd	250	nd	250	500
Motor/Lube Oil	nd	400	nd	410	nd	400	nd	400	500

Notes:
All groundwater samples measured in µg/L.
µg/L = micrograms per liter [equivalent to parts per billion (ppb)]
nd = No value detected at method reporting limit.
Shaded and Bold concentrations are above MTCA Method Cleanup Level for Groundwater.
* = Practical Quantitation Limits are shown for each monitoring event.
a = Cleanup level used if benzene is present.

ATTACHMENT A
LABORATORY ANALYTICAL RESULTS

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

September 9, 2009

John Kane
Kane Environmental, Inc.
3831 Stone Way Avenue N
Seattle, WA 98103

Re: Analytical Data for Project Living Color
Laboratory Reference No. 0909-032

Dear John:

Enclosed are the analytical results and associated quality control data for samples submitted on September 3, 2009.

The standard policy of OnSite Environmental Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: September 9, 2009
Samples Submitted: September 3, 2009
Laboratory Reference: 0909-032
Project: Living Color

Case Narrative

Samples were collected on September 2, 2009, and received by the laboratory on September 3, 2009. They were maintained at the laboratory at a temperature of 2°C to 6°C except as noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: September 9, 2009
Samples Submitted: September 3, 2009
Laboratory Reference: 0909-032
Project: Living Color

NWTPH-Gx/BTEX

Date Extracted: 9-3-09
Date Analyzed: 9-3-09

Matrix: Water
Units: ug/L (ppb)

Client ID:	**KMW-1**			**KMW-2**		
Lab ID:	09-032-01			09-032-02		
	Result	Flags	PQL	**Result**	Flags	PQL
Benzene	**ND**		4.0	**ND**		4.0
Toluene	**ND**		4.0	**ND**		4.0
Ethyl Benzene	**ND**		4.0	**ND**		4.0
m,p-Xylene	**ND**		4.0	**ND**		4.0
o-Xylene	**ND**		4.0	**ND**		4.0
TPH-Gas	**740**	T	400	**ND**		400
Surrogate Recovery:						
Fluorobenzene	92%			91%		

Date of Report: September 9, 2009
Samples Submitted: September 3, 2009
Laboratory Reference: 0909-032
Project: Living Color

NWTPH-Gx/BTEX

Date Extracted: 9-3-09
Date Analyzed: 9-3-09

Matrix: Water
Units: ug/L (ppb)

Client ID: **KMW-3**
Lab ID: 09-032-03

	Result	Flags	PQL
Benzene	**ND**		4.0
Toluene	**ND**		4.0
Ethyl Benzene	**ND**		4.0
m,p-Xylene	**ND**		4.0
o-Xylene	**ND**		4.0
TPH-Gas	**ND**		400
Surrogate Recovery:			
Fluorobenzene	90%		

Date of Report: September 9, 2009
Samples Submitted: September 3, 2009
Laboratory Reference: 0909-032
Project: Living Color

NWTPH-Gx/BTEX
METHOD BLANK QUALITY CONTROL

Date Extracted: 9-3-09
Date Analyzed: 9-3-09

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0903W1

	Result	Flags	PQL
Benzene	**ND**		1.0
Toluene	**ND**		1.0
Ethyl Benzene	**ND**		1.0
m,p-Xylene	**ND**		1.0
o-Xylene	**ND**		1.0
TPH-Gas	**ND**		100
Surrogate Recovery:			
Fluorobenzene	92%		

Date of Report: September 9, 2009
Samples Submitted: September 3, 2009
Laboratory Reference: 0909-032
Project: Living Color

NWTPH-Gx/BTEX
DUPLICATE QUALITY CONTROL

Date Extracted: 9-3-09
Date Analyzed: 9-3-09

Matrix: Water
Units: ug/L (ppb)

Lab ID:	09-039-02 **Original**	09-039-02 **Duplicate**	**RPD**	**Flags**
Benzene	**ND**	**ND**	NA	
Toluene	**ND**	**ND**	NA	
Ethyl Benzene	**ND**	**ND**	NA	
m,p-Xylene	**ND**	**ND**	NA	
o-Xylene	**ND**	**ND**	NA	
TPH-Gas	**ND**	**ND**	NA	
Surrogate Recovery:				
Fluorobenzene	91%	92%		

Date of Report: September 9, 2009
Samples Submitted: September 3, 2009
Laboratory Reference: 0909-032
Project: Living Color

NWTPH-Gx/BTEX
SB/SBD QUALITY CONTROL

Date Extracted: 9-3-09
Date Analyzed: 9-3-09

Matrix: Water
Units: ug/L (ppb)

Spike Level: 50.0 ppb

Lab ID:	SB090903 **SB**	Percent Recovery	SBD090903 **SBD**	Percent Recovery	**RPD**	**Flags**
Benzene	**48.1**	**96**	**46.8**	**94**	3	
Toluene	**48.1**	**96**	**46.0**	**92**	4	
Ethyl Benzene	**49.9**	**100**	**46.7**	**93**	7	
m,p-Xylene	**50.2**	**100**	**46.5**	**93**	8	
o-Xylene	**49.9**	**100**	**47.3**	**95**	5	
Surrogate Recovery:						
Fluorobenzene	91%		88%			

Date of Report: September 9, 2009
Samples Submitted: September 3, 2009
Laboratory Reference: 0909-032
Project: Living Color

NWTPH-Dx

Date Extracted:	9-4-09
Date Analyzed:	9-4-09
Matrix:	Water
Units:	mg/L (ppm)

Client ID:	**KMW-1**	**KMW-2**	**KMW-3**
Lab ID:	09-032-01	09-032-02	09-032-03
Diesel Range:	**1.7**	**ND**	**ND**
PQL:	0.26	0.27	0.26
Identification:	Diesel Range Organics	---	---
Lube Oil Range:	**ND**	**ND**	**ND**
PQL:	0.41	0.43	0.41
Identification:	---	---	---
Surrogate Recovery			
o-Terphenyl:	90%	88%	75%
Flags:	Y	Y	Y

Date of Report: September 9, 2009
Samples Submitted: September 3, 2009
Laboratory Reference: 0909-032
Project: Living Color

NWTPH-Dx
METHOD BLANK QUALITY CONTROL

Date Extracted:	9-4-09
Date Analyzed:	9-4-09
Matrix:	Water
Units:	mg/L (ppm)
Lab ID:	MB0904W1
Diesel Range:	**ND**
PQL:	0.25
Identification:	---
Lube Oil Range:	**ND**
PQL:	0.4
Identification:	---
Surrogate Recovery	
o-Terphenyl:	68%
Flags:	Y

Date of Report: September 9, 2009
Samples Submitted: September 3, 2009
Laboratory Reference: 0909-032
Project: Living Color

NWTPH-Dx
DUPLICATE QUALITY CONTROL

Date Extracted:	9-4-09
Date Analyzed:	9-4-09
Matrix:	Water
Units:	mg/L (ppm)

Lab ID:	09-032-01	09-032-01 DUP
Diesel Range:	**1.70**	**1.67**
PQL:	0.26	0.25
RPD:	2	
Surrogate Recovery		
o-Terphenyl:	90%	87%
Flags:	Y	Y

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in the diesel range are impacting the lube oil range result.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical gas.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.

Phone: (425) 883-3881 • Fax: (425) 885-4603

Company: KANE ENVIRONMENTAL

Project Number: 206.691.0476

Project Name: LIVING COLOR

Project Manager: J. KANE

Sampled by: J. SAUER

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Day
- ☐ 3 Day
- ☑ Standard (7 working days) (TPH analysis 5 working days)
- ☐ _____ (other)

Laboratory Number: 09-032

Requested Analysis

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270D	PAHs by 8270D / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664	% Moisture
1	KMW-1	9/2/9	1430	W	3		X	X											
2	KMW-2	↓	1400	↓	↓		X	X											
3	KMW-3	↓	1315	↓	↓		X	X											

	Signature	Company	Date	Time
Relinquished by		KANE ENVIRONMENTAL	9/3/9	0815
Received by		OSE	9.3.09	8:05A
Relinquished by				
Received by				
Relinquished by				
Received by				

Comments/Special Instructions

Reviewed by/Date

Reviewed by/Date

Chromatograms with final report ☐

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OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

November 16, 2009

Luke Martinkosky
Kane Environmental, Inc.
3831 Stone Way Avenue N
Seattle, WA 98103

Re: Analytical Data for Project 30803
Laboratory Reference No. 0911-036

Dear Luke:

Enclosed are the analytical results and associated quality control data for samples submitted on November 4, 2009.

The standard policy of OnSite Environmental Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: November 16, 2009
Samples Submitted: November 4, 2009
Laboratory Reference: 0911-036
Project: 30803

Case Narrative

Samples were collected on November 4, 2009, and received by the laboratory on November 4, 2009. They were maintained at the laboratory at a temperature of 2°C to 6°C except as noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

NWTPH-Dx Analysis

Surrogate recovery was below control limits for sample KMW-1 due to matrix effects. Sample re-extracted with similar results.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: November 16, 2009
Samples Submitted: November 4, 2009
Laboratory Reference: 0911-036
Project: 30803

NWTPH-Gx/BTEX

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Date Prepared	Date Analyzed	Flags
Lab ID:	11-036-01				
Client ID:	**KMW-1**				
Benzene	**ND**	4.0	11-9-09	11-9-09	
Toluene	**9.1**	4.0	11-9-09	11-9-09	
Ethyl Benzene	**ND**	20	11-9-09	11-9-09	U1
m,p-Xylene	**4.8**	4.0	11-9-09	11-9-09	
o-Xylene	**ND**	4.0	11-9-09	11-9-09	
TPH-Gas	**2100**	400	11-9-09	11-9-09	
Surrogate: Fluorobenzene	---	74-121			F

Date of Report: November 16, 2009
Samples Submitted: November 4, 2009
Laboratory Reference: 0911-036
Project: 30803

NWTPH-Gx/BTEX
METHOD BLANK QUALITY CONTROL

Date Extracted: 11-9-09
Date Analyzed: 11-9-09

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB1109W3

	Result	Flags	PQL
Benzene	**ND**		1.0
Toluene	**ND**		1.0
Ethyl Benzene	**ND**		1.0
m,p-Xylene	**ND**		1.0
o-Xylene	**ND**		1.0
TPH-Gas	**ND**		100

Surrogate Recovery:
Fluorobenzene 97%

Date of Report: November 16, 2009
Samples Submitted: November 4, 2009
Laboratory Reference: 0911-036
Project: 30803

NWTPH-Gx/BTEX
DUPLICATE QUALITY CONTROL

Date Extracted: 11-9-09
Date Analyzed: 11-9-09

Matrix: Water
Units: ug/L (ppb)

Lab ID:	11-035-27 **Original**	11-035-27 **Duplicate**	**RPD**	**Flags**
Benzene	**ND**	**ND**	NA	
Toluene	**ND**	**ND**	NA	
Ethyl Benzene	**ND**	**ND**	NA	
m,p-Xylene	**ND**	**ND**	NA	
o-Xylene	**ND**	**ND**	NA	
TPH-Gas	**ND**	**ND**	NA	
Surrogate Recovery: Fluorobenzene	96%	96%		

Date of Report: November 16, 2009
Samples Submitted: November 4, 2009
Laboratory Reference: 0911-036
Project: 30803

NWTPH-Gx/BTEX
MS/MSD QUALITY CONTROL

Date Extracted: 11-9-09
Date Analyzed: 11-9-09

Matrix: Water
Units: ug/L (ppb)

Spike Level: 50.0 ppb

Lab ID:	11-054-01 **MS**	Percent Recovery	11-054-01 **MSD**	Percent Recovery	**RPD**	**Flags**
Benzene	**47.5**	**95**	**46.8**	**94**	2	
Toluene	**50.1**	**100**	**49.8**	**100**	1	
Ethyl Benzene	**52.3**	**105**	**51.6**	**103**	1	
m,p-Xylene	**52.1**	**104**	**51.4**	**103**	1	
o-Xylene	**52.0**	**104**	**51.7**	**103**	1	

Surrogate Recovery:			
Fluorobenzene	100%		98%

Date of Report: November 16, 2009
Samples Submitted: November 4, 2009
Laboratory Reference: 0911-036
Project: 30803

NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Date Prepared	Date Analyzed	Flags
Lab ID:	11-036-01				
Client ID:	**KMW-1**				
Diesel Range Organics	**4.4**	1.3	11-9-09	11-10-09	Y
Lube Oil	**10**	2.0	11-9-09	11-10-09	Y
Surrogate: o-terphenyl	37%	50-150			Q

Date of Report: November 16, 2009
Samples Submitted: November 4, 2009
Laboratory Reference: 0911-036
Project: 30803

NWTPH-Dx
METHOD BLANK QUALITY CONTROL

Date Extracted:	11-9-09
Date Analyzed:	11-9-09
Matrix:	Water
Units:	mg/L (ppm)
Lab ID:	MB1109W1
Diesel Range:	**ND**
PQL:	0.20
Identification:	---
Lube Oil Range:	**ND**
PQL:	0.32
Identification:	---
Surrogate Recovery	
o-Terphenyl:	81%
Flags:	Y

Date of Report: November 16, 2009
Samples Submitted: November 4, 2009
Laboratory Reference: 0911-036
Project: 30803

NWTPH-Dx
DUPLICATE QUALITY CONTROL

Date Extracted:	11-9-09	
Date Analyzed:	11-9-09	
Matrix:	Water	
Units:	mg/L (ppm)	
Lab ID:	11-054-01	11-054-01 DUP
Diesel Range:	**ND**	**ND**
PQL:	0.26	0.26
RPD:	N/A	
Surrogate Recovery		
o-Terphenyl:	85%	84%
Flags:	Y	Y

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in the diesel range are impacting the lube oil range result.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Laboratory Number: 11-036

Company: Kane Environmental
Project Number: 30803
Project Name: Living Color
Project Manager: Luke Martinkosky
Sampled by: LM

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Day
- ☐ 3 Day
- ☑ Standard (7 working days)
  (TPH analysis 5 working days)
- ☐ _____ (other)

Requested Analysis

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270D / SIM	PAHs by 8270D / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664	% Moisture
1	KMW-1	11/4/09	725	AQ	5		X	X											

	Signature	Company	Date	Time
Relinquished by		Kane	11/4/09	1550
Received by			11/4/09	1550
Relinquished by				
Received by				
Relinquished by				
Received by				

Comments/Special Instructions:

Reviewed by/Date

Reviewed by/Date

Chromatograms with final report ☐

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OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

February 2, 2010

Luke Martinkosky
Kane Environmental, Inc.
3831 Stone Way Avenue N
Seattle, WA 98103

Re: Analytical Data for Project 30803
Laboratory Reference No. 1001-133

Dear Luke:

Enclosed are the analytical results and associated quality control data for samples submitted on January 22, 2010.

The standard policy of OnSite Environmental Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: February 2, 2010
Samples Submitted: January 22, 2010
Laboratory Reference: 1001-133
Project: 30803

Case Narrative

Samples were collected on January 22, 2010, and received by the laboratory on January 22, 2010. They were maintained at the laboratory at a temperature of 2°C to 6°C except as noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

NWTPH Gx/BTEX Analysis

Method 8021 requires the pH of water samples to be adjusted to less than 2. Sample KMW-1 had a pH of 8 after analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

NWTPH Dx Analysis

The surrogate recovery in sample KMW-1 was low due to matrix interferences. Sample was re-extracted and re-analyzed with similar results.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: February 2, 2010
Samples Submitted: January 22, 2010
Laboratory Reference: 1001-133
Project: 30803

NWTPH-Gx/BTEX

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW-1**					
Laboratory ID:	01-133-01					
Benzene	**ND**	4.0	EPA 8021	1-29-10	1-29-10	
Toluene	**13**	4.0	EPA 8021	1-29-10	1-29-10	
Ethyl Benzene	**ND**	200	EPA 8021	1-29-10	1-29-10	U1
m,p-Xylene	**ND**	4.0	EPA 8021	1-29-10	1-29-10	
o-Xylene	**ND**	4.0	EPA 8021	1-29-10	1-29-10	
Gasoline	**1800**	400	NWTPH-Gx	1-29-10	1-29-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	---	*74-121*				F
Client ID:	**KMW-2**					
Laboratory ID:	01-133-02					
Benzene	**2.7**	1.0	EPA 8021	1-29-10	1-29-10	
Toluene	**ND**	1.0	EPA 8021	1-29-10	1-29-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	1-29-10	1-29-10	
m,p-Xylene	**3.5**	1.0	EPA 8021	1-29-10	1-29-10	
o-Xylene	**ND**	1.0	EPA 8021	1-29-10	1-29-10	
Gasoline	**ND**	100	NWTPH-Gx	1-29-10	1-29-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*95*	*74-121*				
Client ID:	**KMW-3**					
Laboratory ID:	01-133-03					
Benzene	**ND**	1.0	EPA 8021	1-29-10	1-29-10	
Toluene	**ND**	1.0	EPA 8021	1-29-10	1-29-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	1-29-10	1-29-10	
m,p-Xylene	**ND**	1.0	EPA 8021	1-29-10	1-29-10	
o-Xylene	**ND**	1.0	EPA 8021	1-29-10	1-29-10	
Gasoline	**ND**	100	NWTPH-Gx	1-29-10	1-29-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*94*	*74-121*				

Date of Report: February 2, 2010
Samples Submitted: January 22, 2010
Laboratory Reference: 1001-133
Project: 30803

NWTPH-Gx/BTEX
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0129W1					
Benzene	**ND**	1.0	EPA 8021	1-29-10	1-29-10	
Toluene	**ND**	1.0	EPA 8021	1-29-10	1-29-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	1-29-10	1-29-10	
m,p-Xylene	**ND**	1.0	EPA 8021	1-29-10	1-29-10	
o-Xylene	**ND**	1.0	EPA 8021	1-29-10	1-29-10	
Gasoline	**ND**	100	NWTPH-Gx	1-29-10	1-29-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*91*	*74-121*				
Laboratory ID:	MB0201W1					
Benzene	**ND**	1.0	EPA 8021	2-1-10	2-1-10	
Toluene	**ND**	1.0	EPA 8021	2-1-10	2-1-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	2-1-10	2-1-10	
m,p-Xylene	**ND**	1.0	EPA 8021	2-1-10	2-1-10	
o-Xylene	**ND**	1.0	EPA 8021	2-1-10	2-1-10	
Gasoline	**ND**	100	NWTPH-Gx	2-1-10	2-1-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*95*	*74-121*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	01-162-17										
	ORIG	DUP									
Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Toluene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Ethyl Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
o-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*97*	*96*	*74-121*			
MATRIX SPIKES											
Laboratory ID:	01-162-17										
	MS	MSD	MS	MSD		MS	MSD				
Benzene	**46.2**	**45.1**	50.0	50.0	ND	**92**	**90**	80-122	2	9	
Toluene	**53.0**	**51.2**	50.0	50.0	ND	**106**	**102**	81-121	3	10	
Ethyl Benzene	**56.5**	**55.1**	50.0	50.0	ND	**113**	**110**	82-120	3	10	
m,p-Xylene	**55.3**	**54.9**	50.0	50.0	ND	**111**	**110**	81-121	1	10	
o-Xylene	**56.2**	**55.8**	50.0	50.0	ND	**112**	**112**	81-121	1	10	
Surrogate:											
Fluorobenzene						*100*	*104*	*74-121*			

Date of Report: February 2, 2010
Samples Submitted: January 22, 2010
Laboratory Reference: 1001-133
Project: 30803

NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Date Prepared	Date Analyzed	Flags
Lab ID:	01-133-01				
Client ID:	**KMW-1**				
Diesel Range Organics	**4.2**	1.3	1-26-10	1-26-10	Y
Lube Oil	**43**	2.0	1-26-10	1-26-10	Y
Surrogate: o-terphenyl	43%	50-150			Z
Lab ID:	01-133-02				
Client ID:	**KMW-2**				
Diesel Range	**ND**	0.25	1-25-10	1-26-10	Y
Lube Oil	**0.63**	0.40	1-25-10	1-26-10	Y
Surrogate: o-terphenyl	84%	50-150			
Lab ID:	01-133-03				
Client ID:	**KMW-3**				
Diesel Range	**ND**	0.25	1-25-10	1-26-10	Y
Lube Oil Range	**ND**	0.40	1-25-10	1-26-10	Y
Surrogate: o-terphenyl	92%	50-150			

Date of Report: February 2, 2010
Samples Submitted: January 22, 2010
Laboratory Reference: 1001-133
Project: 30803

NWTPH-Dx
METHOD BLANK QUALITY CONTROL

Date Extracted:	1-25-10
Date Analyzed:	1-25-10
Matrix:	Water
Units:	mg/L (ppm)
Lab ID:	MB0125W1
Diesel Range:	**ND**
PQL:	0.25
Identification:	---
Lube Oil Range:	**ND**
PQL:	0.40
Identification:	---
Surrogate Recovery	
o-Terphenyl:	72%
Flags:	Y

Date of Report: February 2, 2010
Samples Submitted: January 22, 2010
Laboratory Reference: 1001-133
Project: 30803

NWTPH-Dx
METHOD BLANK QUALITY CONTROL

Date Extracted:	1-26-10
Date Analyzed:	1-26-10
Matrix:	Water
Units:	mg/L (ppm)
Lab ID:	MB0126W1
Diesel Range:	**ND**
PQL:	0.25
Identification:	---
Lube Oil Range:	**ND**
PQL:	0.40
Identification:	---
Surrogate Recovery	
o-Terphenyl:	91%
Flags:	Y

Date of Report: February 2, 2010
Samples Submitted: January 22, 2010
Laboratory Reference: 1001-133
Project: 30803

NWTPH-Dx
DUPLICATE QUALITY CONTROL

Date Extracted:	1-25-10
Date Analyzed:	1-25-10
Matrix:	Water
Units:	mg/L (ppm)

Lab ID:	01-141-01	01-141-01 DUP
Diesel Range:	**ND**	**ND**
PQL:	0.25	0.25
RPD:	N/A	
Surrogate Recovery		
o-Terphenyl:	103%	93%
Flags:	Y	Y

Date of Report: February 2, 2010
Samples Submitted: January 22, 2010
Laboratory Reference: 1001-133
Project: 30803

NWTPH-Dx
DUPLICATE QUALITY CONTROL

Date Extracted:	1-26-10
Date Analyzed:	1-26-10
Matrix:	Water
Units:	mg/L (ppm)

Lab ID:	01-150-01	01-150-01 DUP
Diesel Range:	**ND**	**ND**
PQL:	0.25	0.25
RPD:	N/A	
Surrogate Recovery		
o-Terphenyl:	84%	92%
Flags:	Y	Y

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in the diesel range are impacting the lube oil range result.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z - Surrogate recovery is low due to matrix interference.

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Kane Environmental
Project Number: 30803
Project Name: Living Color Remediation
Project Manager: Luke Martinkosky
Sampled by: LM

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Day
- ☐ 3 Day
- ☑ Standard (7 working days) (TPH analysis 5 working days)
- ☐ _____ (other)

Laboratory Number: 01-133

Requested Analysis

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270D / SIM	PAHs by 8270D / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664	% Moisture
1	KMW-1	1/22	1320	H2O	6		X	X											
2	KMW-2	↓	1425	↓	↓		↓	↓											
3	KMW-3	↓	1510	↓	↓		↓	↓											

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished by	[signature]	Kane Env.	1/22/10	1605	KMW-1 is not product
Received by	[signature]	OSE	1/22/10	1605	
Relinquished by					
Received by					
Relinquished by					
Received by					
Reviewed by/Date		Reviewed by/Date			Chromatograms with final report ☐

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OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

June 21, 2010

Luke Martinkosky
Kane Environmental, Inc.
3831 Stone Way Avenue N
Seattle, WA 98103

Re: Analytical Data for Project 30803
Laboratory Reference No. 1006-092

Dear Luke:

Enclosed are the analytical results and associated quality control data for samples submitted on June 11, 2010.

The standard policy of OnSite Environmental Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: June 21, 2010
Samples Submitted: June 11, 2010
Laboratory Reference: 1006-092
Project: 30803

Case Narrative

Samples were collected on June 11, 2010 and received by the laboratory on June 11, 2010. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: June 21, 2010
Samples Submitted: June 11, 2010
Laboratory Reference: 1006-092
Project: 30803

NWTPH-Gx/BTEX

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW-1**					
Laboratory ID:	06-092-01					
Benzene	**ND**	4.0	EPA 8021	6-14-10	6-14-10	
Toluene	**6.7**	4.0	EPA 8021	6-14-10	6-14-10	
Ethyl Benzene	**ND**	20	EPA 8021	6-14-10	6-14-10	U1
m,p-Xylene	**ND**	4.0	EPA 8021	6-14-10	6-14-10	
o-Xylene	**ND**	4.0	EPA 8021	6-14-10	6-14-10	
Gasoline	**1400**	400	NWTPH-Gx	6-14-10	6-14-10	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	---	74-121				F

Date of Report: June 21, 2010
Samples Submitted: June 11, 2010
Laboratory Reference: 1006-092
Project: 30803

NWTPH-Gx/BTEX
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0614W1					
Benzene	**ND**	1.0	EPA 8021	6-14-10	6-14-10	
Toluene	**ND**	1.0	EPA 8021	6-14-10	6-14-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	6-14-10	6-14-10	
m,p-Xylene	**ND**	1.0	EPA 8021	6-14-10	6-14-10	
o-Xylene	**ND**	1.0	EPA 8021	6-14-10	6-14-10	
Gasoline	**ND**	100	NWTPH-Gx	6-14-10	6-14-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*98*	*74-121*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	06-093-01										
	ORIG	DUP									
Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Toluene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Ethyl Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
o-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*98*	*93*	*74-121*			
MATRIX SPIKES											
Laboratory ID:	06-093-01										
	MS	MSD	MS	MSD		MS	MSD				
Benzene	**54.0**	**54.5**	50.0	50.0	ND	**108**	**109**	78-118	1	8	
Toluene	**52.8**	**53.5**	50.0	50.0	ND	**106**	**107**	81-119	1	8	
Ethyl Benzene	**53.3**	**54.2**	50.0	50.0	ND	**107**	**108**	81-121	2	8	
m,p-Xylene	**52.0**	**52.6**	50.0	50.0	ND	**104**	**105**	79-123	1	8	
o-Xylene	**52.0**	**52.6**	50.0	50.0	ND	**104**	**105**	79-121	1	8	
Surrogate:											
Fluorobenzene						*99*	*99*	*74-121*			

Date of Report: June 21, 2010
Samples Submitted: June 11, 2010
Laboratory Reference: 1006-092
Project: 30803

NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW-1**					
Laboratory ID:	06-092-01					
Diesel Range Organics	**1.2**	0.26	NWTPH-Dx	6-18-10	6-18-10	
Lube Oil	**0.93**	0.42	NWTPH-Dx	6-18-10	6-18-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*51*	*50-150*				

Date of Report: June 21, 2010
Samples Submitted: June 11, 2010
Laboratory Reference: 1006-092
Project: 30803

NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0618W1					
Diesel Range Organics	**ND**	0.25	NWTPH-Dx	6-18-10	6-18-10	
Lube Oil Range Organics	**ND**	0.40	NWTPH-Dx	6-18-10	6-18-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*79*	*50-150*				

Analyte	Result		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	06-124-01							
	ORIG	DUP						
Diesel Range Organics	**ND**	**ND**				NA	NA	
Lube Oil Range Organics	**ND**	**ND**				NA	NA	
Surrogate:								
o-Terphenyl			*54*	*60*	*50-150*			

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Kane Environmental
Project Number: 30803
Project Name: Viking Color Remediation
Project Manager: Luke Martinkosky
Sampled by: LM

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Day
- ☐ 3 Day
- ☒ Standard (7 working days)
  (TPH analysis 5 working days)
- ☐ _____ (other)

Laboratory Number: 06-092

Requested Analysis

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270D / SIM	PAHs by 8270D / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664	% Moisture
1	KMW-1	6/11	925	H2O	6		X	X											

	Signature	Company	Date	Time
Relinquished by	Luke Martinkosky	Kane Environmental	6/11/10	1255
Received by		Kane Environmental	6/11/10	1:00
Relinquished by		Kane Environmental	6/11/10	2:00
Received by			6/11/10	1400
Relinquished by				
Received by				
Reviewed by/Date		Reviewed by/Date		

Comments/Special Instructions: not free product.

Chromatograms with final report ☐

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OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

December 28, 2010

John Kane
Kane Environmental, Inc.
3831 Stone Way Avenue N
Seattle, WA 98103

Re: Analytical Data for Project 30803
Laboratory Reference No. 1012-169

Dear John:

Enclosed are the analytical results and associated quality control data for samples submitted on December 20, 2010.

The standard policy of OnSite Environmental Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: December 28, 2010
Samples Submitted: December 20, 2010
Laboratory Reference: 1012-169
Project: 30803

Case Narrative

Samples were collected on December 20, 2010 and received by the laboratory on December 20, 2010. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

NWTPH Gx/BTEX Analysis

The chromatogram for sample KMW-1 is not similar to a typical gas.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: December 28, 2010
Samples Submitted: December 20, 2010
Laboratory Reference: 1012-169
Project: 30803

NWTPH-Gx/BTEX

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW-1**					
Laboratory ID:	12-169-01					
Benzene	**ND**	1.0	EPA 8021	12-22-10	12-22-10	
Toluene	**4.5**	1.0	EPA 8021	12-22-10	12-22-10	
Ethyl Benzene	**3.0**	1.0	EPA 8021	12-22-10	12-22-10	
m,p-Xylene	**2.8**	1.0	EPA 8021	12-22-10	12-22-10	
o-Xylene	**2.0**	1.0	EPA 8021	12-22-10	12-22-10	
Gasoline	**1400**	100	NWTPH-Gx	12-22-10	12-22-10	T
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*97*	*74-121*				
Client ID:	**KMW-2**					
Laboratory ID:	12-169-02					
Benzene	**4.0**	1.0	EPA 8021	12-22-10	12-22-10	
Toluene	**ND**	1.0	EPA 8021	12-22-10	12-22-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	12-22-10	12-22-10	
m,p-Xylene	**3.2**	1.0	EPA 8021	12-22-10	12-22-10	
o-Xylene	**ND**	1.0	EPA 8021	12-22-10	12-22-10	
Gasoline	**ND**	100	NWTPH-Gx	12-22-10	12-22-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*99*	*74-121*				
Client ID:	**KMW-3**					
Laboratory ID:	12-169-03					
Benzene	**1.3**	1.0	EPA 8021	12-22-10	12-22-10	
Toluene	**ND**	1.0	EPA 8021	12-22-10	12-22-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	12-22-10	12-22-10	
m,p-Xylene	**ND**	1.0	EPA 8021	12-22-10	12-22-10	
o-Xylene	**ND**	1.0	EPA 8021	12-22-10	12-22-10	
Gasoline	**ND**	100	NWTPH-Gx	12-22-10	12-22-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*96*	*74-121*				

Date of Report: December 28, 2010
Samples Submitted: December 20, 2010
Laboratory Reference: 1012-169
Project: 30803

NWTPH-Gx/BTEX
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1222W1					
Benzene	**ND**	1.0	EPA 8021	12-22-10	12-22-10	
Toluene	**ND**	1.0	EPA 8021	12-22-10	12-22-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	12-22-10	12-22-10	
m,p-Xylene	**ND**	1.0	EPA 8021	12-22-10	12-22-10	
o-Xylene	**ND**	1.0	EPA 8021	12-22-10	12-22-10	
Gasoline	**ND**	100	NWTPH-Gx	12-22-10	12-22-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*93*	*74-121*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	12-176-01										
	ORIG	DUP									
Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Toluene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Ethyl Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
o-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*94*	*87*	*74-121*			
MATRIX SPIKES											
Laboratory ID:	12-176-01										
	MS	MSD	MS	MSD		MS	MSD				
Benzene	**47.9**	**47.3**	50.0	50.0	ND	**96**	**95**	78-118	1	8	
Toluene	**50.6**	**49.1**	50.0	50.0	ND	**101**	**98**	81-119	3	8	
Ethyl Benzene	**51.3**	**50.3**	50.0	50.0	ND	**103**	**101**	81-121	2	8	
m,p-Xylene	**53.3**	**50.2**	50.0	50.0	ND	**107**	**100**	79-123	6	8	
o-Xylene	**51.5**	**50.2**	50.0	50.0	ND	**103**	**100**	79-121	3	8	
Surrogate:											
Fluorobenzene						*98*	*100*	*74-121*			

Date of Report: December 28, 2010
Samples Submitted: December 20, 2010
Laboratory Reference: 1012-169
Project: 30803

NWTPH-Dx
(with acid/silica gel clean-up)

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW-1**					
Laboratory ID:	12-169-01					
Diesel Range Organics	**1.4**	0.26	NWTPH-Dx	12-22-10	12-22-10	M
Lube Oil Range Organics	**ND**	0.42	NWTPH-Dx	12-22-10	12-22-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*77*	*50-150*				
Client ID:	**KMW-2**					
Laboratory ID:	12-169-02					
Diesel Range Organics	**ND**	0.26	NWTPH-Dx	12-22-10	12-22-10	
Lube Oil Range Organics	**ND**	0.41	NWTPH-Dx	12-22-10	12-22-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*92*	*50-150*				
Client ID:	**KMW-3**					
Laboratory ID:	12-169-03					
Diesel Range Organics	**ND**	0.26	NWTPH-Dx	12-22-10	12-22-10	
Lube Oil Range Organics	**ND**	0.41	NWTPH-Dx	12-22-10	12-22-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*87*	*50-150*				

Date of Report: December 28, 2010
Samples Submitted: December 20, 2010
Laboratory Reference: 1012-169
Project: 30803

NWTPH-Dx
QUALITY CONTROL
(with acid/silica gel clean-up)

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1222W1					
Diesel Range Organics	**ND**	0.25	NWTPH-Dx	12-22-10	12-22-10	
Lube Oil Range Organics	**ND**	0.40	NWTPH-Dx	12-22-10	12-22-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*84*	*50-150*				

Analyte	Result		Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE							
Laboratory ID:	12-176-01						
	ORIG	DUP					
Diesel Range Organics	**ND**	**ND**			NA	NA	
Lube Oil Range Organics	**ND**	**ND**			NA	NA	
Surrogate:							
o-Terphenyl			*93* *92*	*50-150*			

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical gas.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Laboratory Number: 12-169

Company: Kane Environmental
Project Number: 30803
Project Name: Living Color
Project Manager: John Kane (Email results to Luke Martinkenas)
Sampled by: Adam Klech

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (ACID/SG)	Volatiles 8260B	Halogenated Volatiles 8260B	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA / MTCA Metals (circle one)	TCLP Metals	HEM (oil and grease) 1664	% Moisture
1	KMW-1	12/20/10	1035	H_2O	Bulk 2 Amb.		X	X	X												
2	KMW-2	12/20/10	1130	H_2O	5		X	X	↓												
3	KMW-3	12/20/10	1205	H_2O	4		X	X	↓												

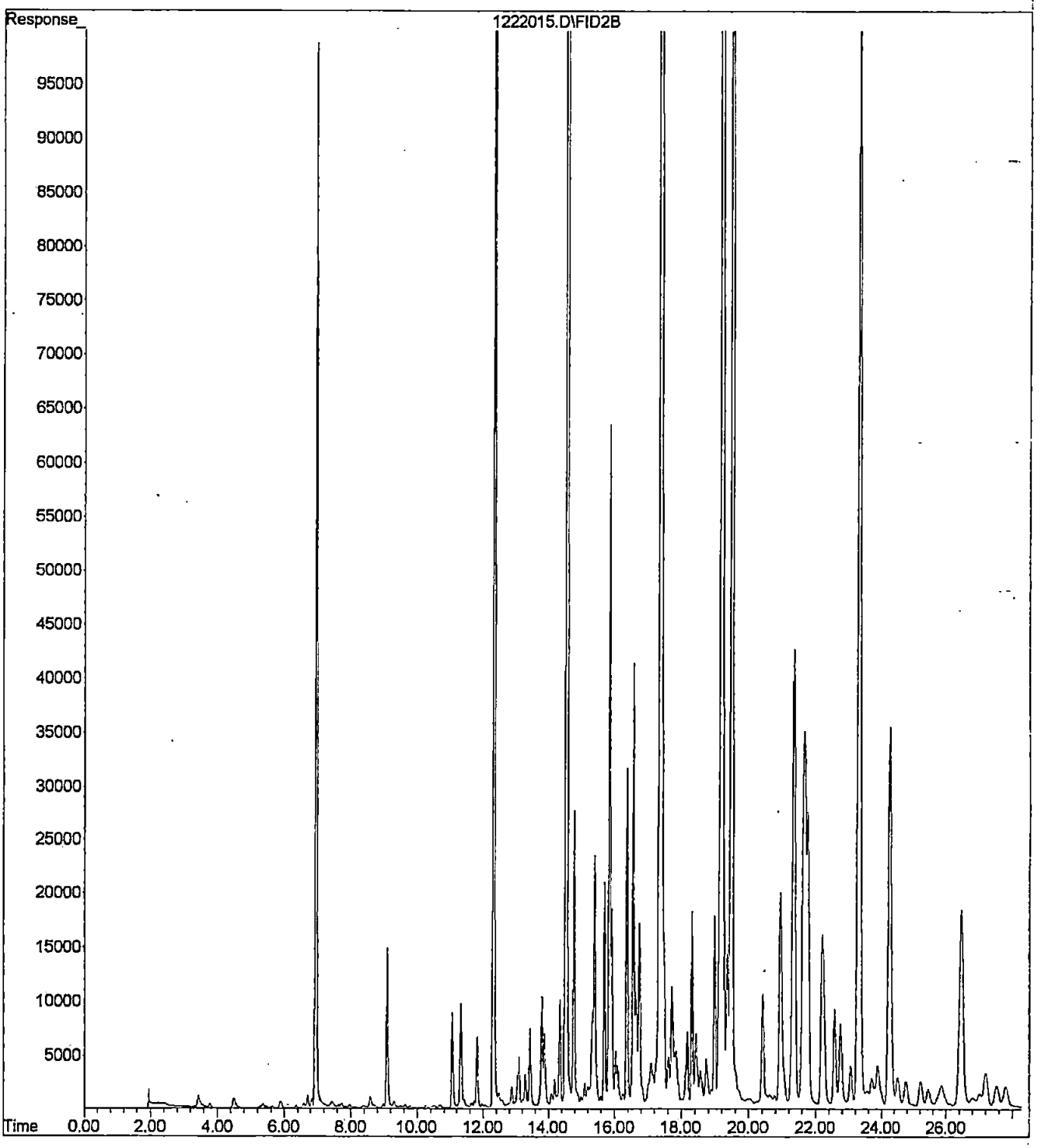
	Signature	Company	Date	Time
Relinquished		Kane	12/20/10	1304
Received		ONE	12/20/10	1304
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions: not free product

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☐ _____

File : X:\BTEX\DARYL\DATA\D101222\1222015.D
Operator :
Acquired : 22 Dec 2010 20:22 using AcqMethod 101202B.M
Instrument : Daryl
Sample Name: 12-169-01d
Misc Info : V2-24-11
Vial Number: 15



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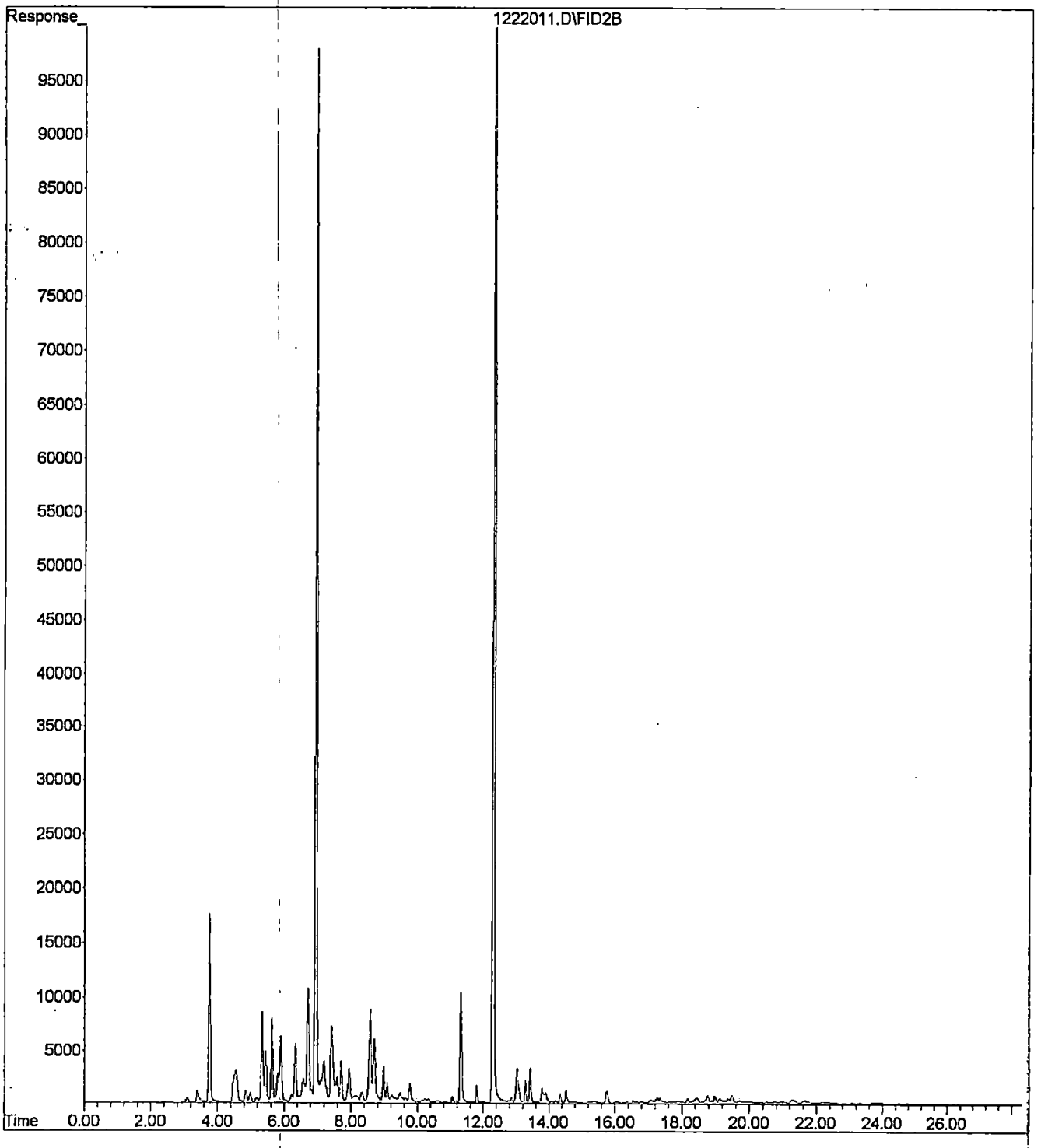
Instrument : Daryl
Sample Name: 12-169-02c
Misc Info : V2-24-11
Vial Number: 11



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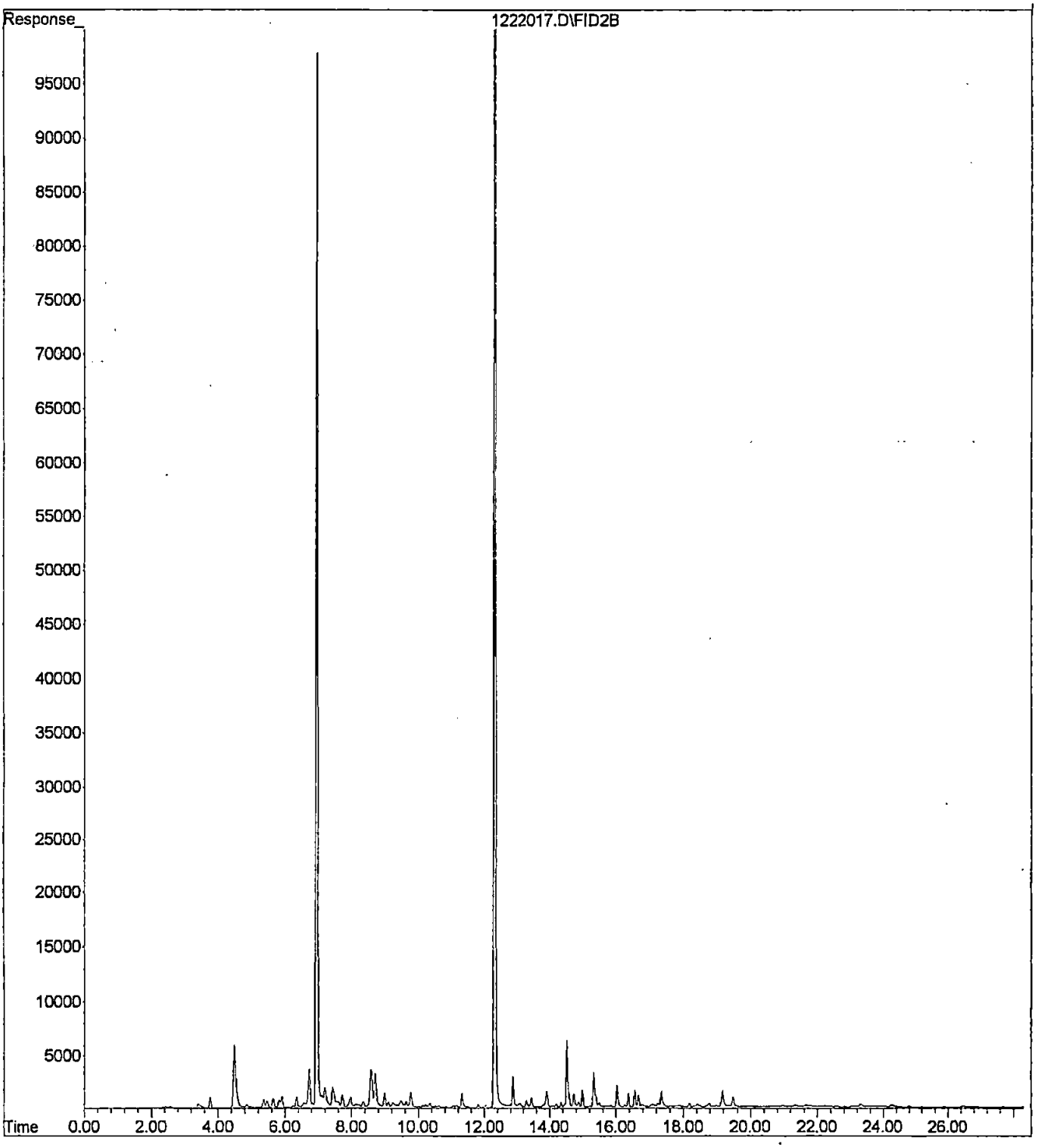
Operator :
Acquired : 22 Dec 2010 21:30 using AcqMethod 101202B.M
Instrument : Daryl
Sample Name: 12-169-03c
Misc Info : V2-24-11
Vial Number: 17



ATTACHMENT B
REGENOX™ INFORMATION

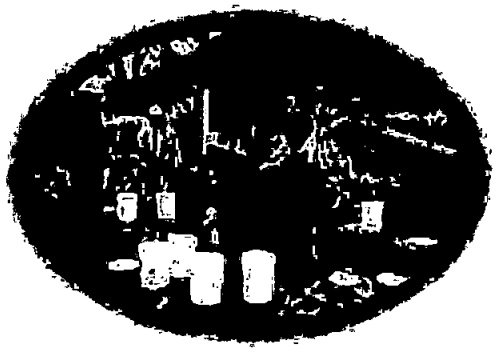
RegenOx™

CHEMICAL OXIDATION REDEFINED...

RegenOx™ is an advanced in situ chemical oxidation technology designed to treat organic contaminants including high concentration source areas in the saturated and vadose zones*

PRODUCT FEATURES:

- Rapid and sustained oxidation of target compounds
- Easily applied with readily available equipment
- Destroys a broad range of contaminants
- More efficient than other solid oxidants
- Enhances subsequent bioremediation
- Avoids detrimental impacts to groundwater aquifers



RegenOx product application

HOW IT WORKS:

RegenOx maximizes in situ performance using a solid alkaline oxidant that employs a sodium percarbonate complex with a multi-part catalytic formula. The product is delivered as two parts that are combined and injected into the subsurface using common drilling or direct-push equipment. Once in the subsurface, the combined product produces an effective oxidation reaction comparable to that of Fenton's Reagent without a violent exothermic reaction. RegenOx safely, effectively and rapidly destroys a wide range of contaminants in both soil and groundwater (Table 1).

ACHIEVES RAPID OXIDATION VIA A NUMBER OF MECHANISMS

RegenOx directly oxidizes contaminants while its unique catalytic complex generates a suite of highly charged, oxidative free radicals that are responsible for the rapid destruction of contaminants. The mechanisms by which RegenOx operates are:

- Surface- Mediated Oxidation: (see Figure 1 and description below)
- Direct Oxidation: $C_2Cl_4 + 2\ Na_2CO_3 \bullet 3\ H_2O_2 + 2\ H_2O \longleftrightarrow 2CO_2 + 4\ NaCl + 4\ H_2O + 2\ H_2CO_3$
- Free Radical Oxidation:
  - Perhydroxyl Radical ($HO_2\bullet$)
  - Hydroxyl Radical ($OH\bullet$)
  - Superoxide Radical ($O_2\bullet$)

Figure 1. RegenOx™ Surface-Mediated Oxidation

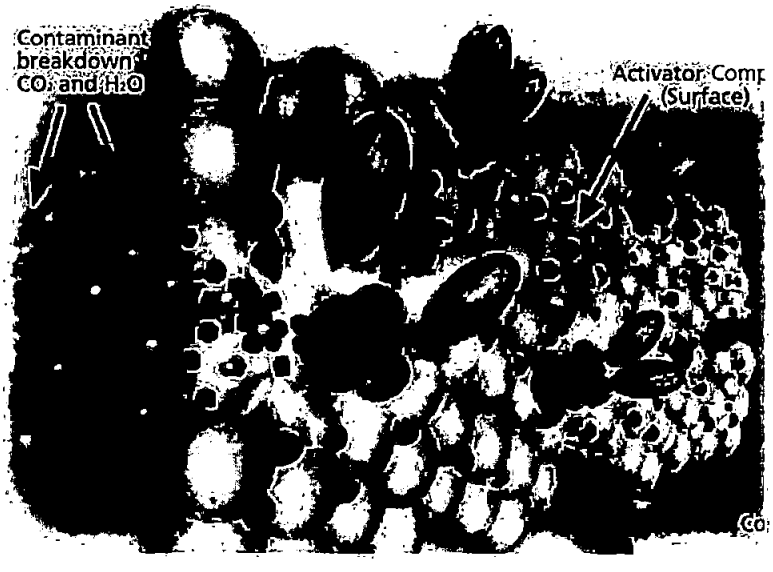


Figure 1. Surface-Mediated Oxidation is responsible for the majority of RegenOx contaminant destruction. This process takes place in two stages. First, the RegenOx activator complex coats the subsurface. Second, the oxidizer complex and contaminant react with the activator complex surface destroying the contaminant.

* Patent applied for

RegenOx™

From Mass Reduction to Bioremediation:

RegenOx™ is an effective and rapid contaminant mass reduction technology. A single injection will remove significant amounts of target contaminants from the subsurface. Strategies employing multiple Regenox injections coupled with follow-on accelerated bioremediation can be used to treat highly contaminated sites to regulatory closure. In fact, RegenOx was designed specifically to allow for a seamless transition to low-cost accelerated bioremediation using any of Regenesis controlled release compounds.

Significant Longevity:

RegenOx has been shown to destroy contaminants for periods of up to one month.

Product Application Made Safe and Easy:

RegenOx produces minimal heat and as with all oxidants proper health and safety procedures must be followed. The necessary safety guidance accompanies all shipments of RegenOx and additional resources are available on request. Through the use of readily available, highly mobile, direct-push equipment and an array of pumps, RegenOx has been designed to be as easy to install as other Regenesis products like ORC® and HRC®.

Effective on a Wide Range of Contaminants:

RegenOx has been rigorously tested in both the laboratory and the field on petroleum hydrocarbons (aliphatics and aromatics), gasoline oxygenates (e.g., MTBE and TAME), polyaromatic hydrocarbons (e.g., naphthalene and phenanthrene) and chlorinated hydrocarbons (e.g., PCE, TCE, TCA).

Oxidant Effectiveness vs. Contaminant Type:

Table 1

Contaminant	RegenOx™	Fenton's Reagent	Permanganate	Persulfate	Activated Persulfate	Ozone
Petroleum Hydrocarbons	A	A	B	B	B	A
Benzene	A	A	D	B	B	A
MTBE	A	B	B	C	B	B
Phenols	A	A	B	C	B	A
Chlorinated Ethenes (PCE, TCE, DCE, VC)	A	A	A	B	A	A
Chlorinated Ethanes (TCA, DCA)	A	B	C	D	C	B
Polycyclic Aromatic Hydrocarbons (PAHs)	A	A	B	B	A	A
Polychlorinated Biphenyls (PCBs)	B	C	D	D	D	B
Explosives (RDX, HMX)	A	A	A	A	A	A

Based on laboratory kinetic data, thermodynamic calculations, and literature reports.

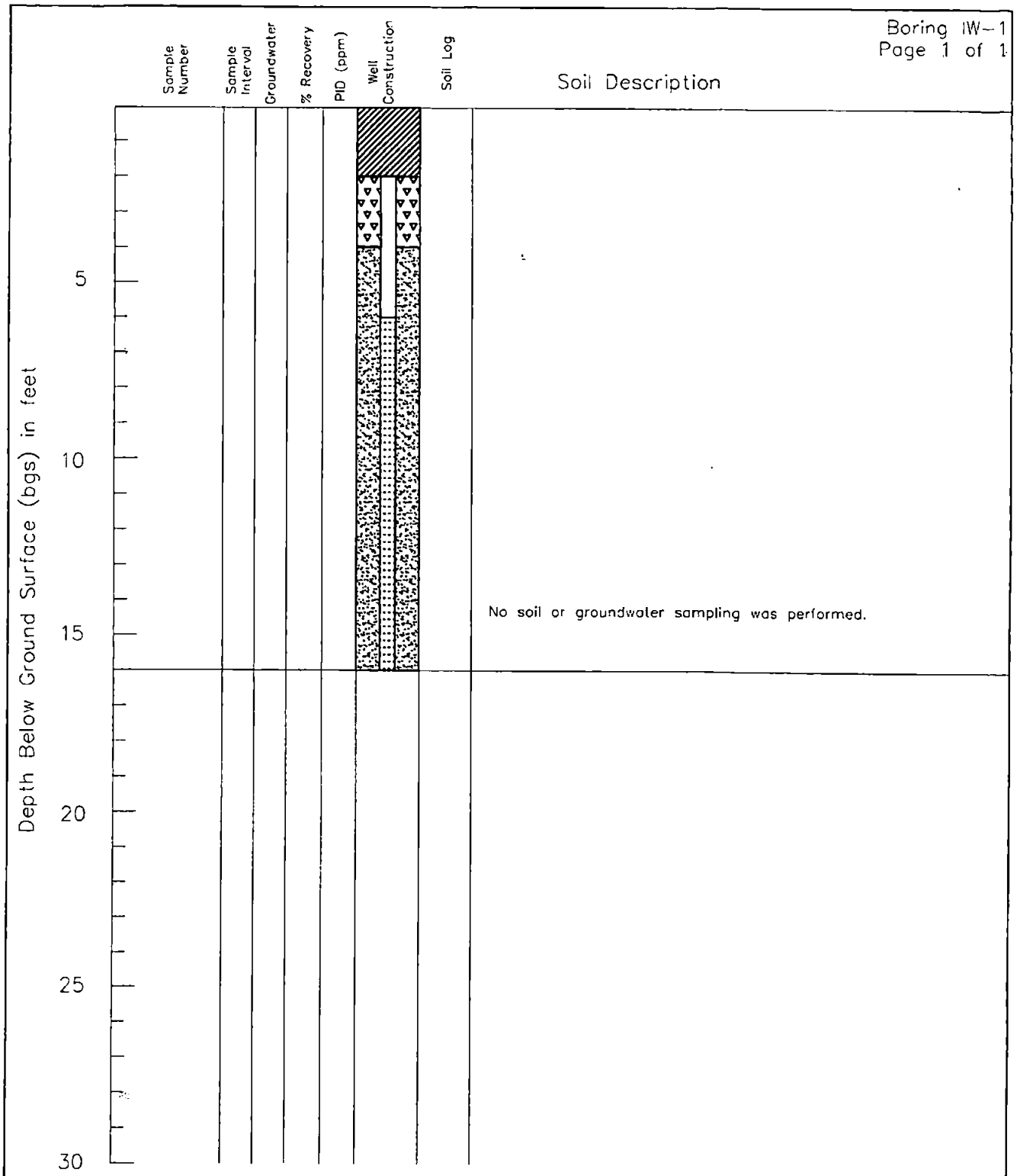
Oxidant Effectiveness Key:

A = Short half life, low free energy (most energetically favored), most complete
B = Intermediate half life, low free energy, intermediate degree of completion
C = Intermediate half life, intermediate free energy, low degree of completion
D = Long half life, high free energy (least favored), very low degree of completion

REGENESIS
Advanced Technologies for Groundwater Resources
1011 Calle Sombra / San Clemente / California 92673-6244
Tel: 949/366-8000 / Fax: 949/366-8090 / www.regenesis.com

ATTACHMENT C
INJECTION WELL AS-BUILTS

Boring IW-1
Page 1 of 1



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Driller: ESN Northwest	Date Drilled: 10/21/09
Drilling Method: Geoprobe	Hole Diameter: 2 inches
Sampling Method: Not Applicable (NA)	Hole Depth: 16 feet
Casing Type: Schedule 80 PVC	Well Diameter: 1 inch
Annular Pack: Silica Sand	Well Depth: 16 feet
Slot Size: 0.010 inches	Screened Interval: 6–16 feet

Soils classified visually using the Unified Soils Classification System

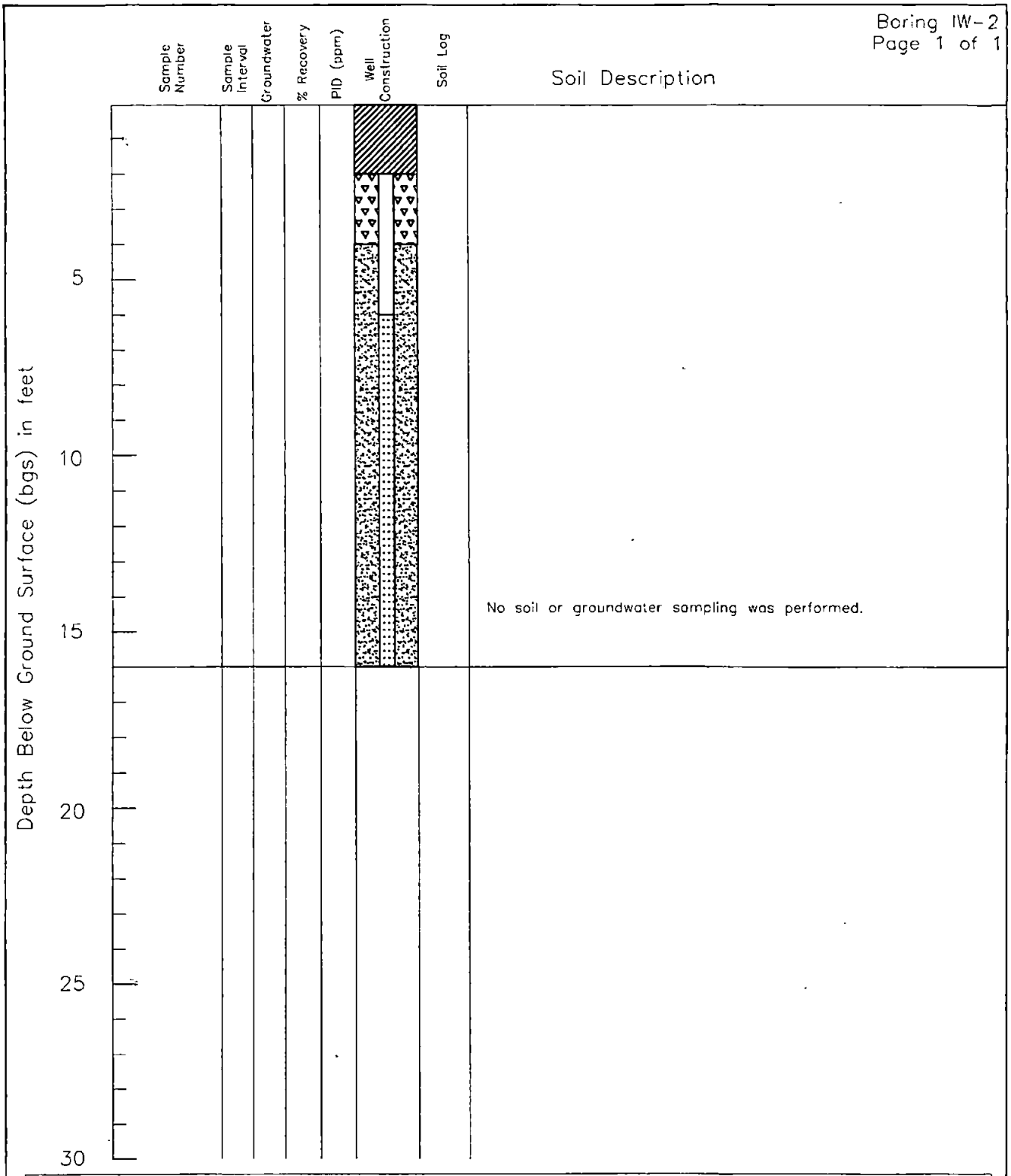
Key:
Concrete:
Bentonite
Silica sand
Screen

KANE ENVIRONMENTAL INC
3831 Stone Way N, Seattle, WA - 206-691-6169
www.kane-environmental.com

Remediation Product Injection
Living Color
9416 Rainier Avenue South
Seattle, Washington

Injection Well Schematic

Boring IW-2
Page 1 of 1



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Drilling Method: Geoprobe	Hole Diameter: 2 inches
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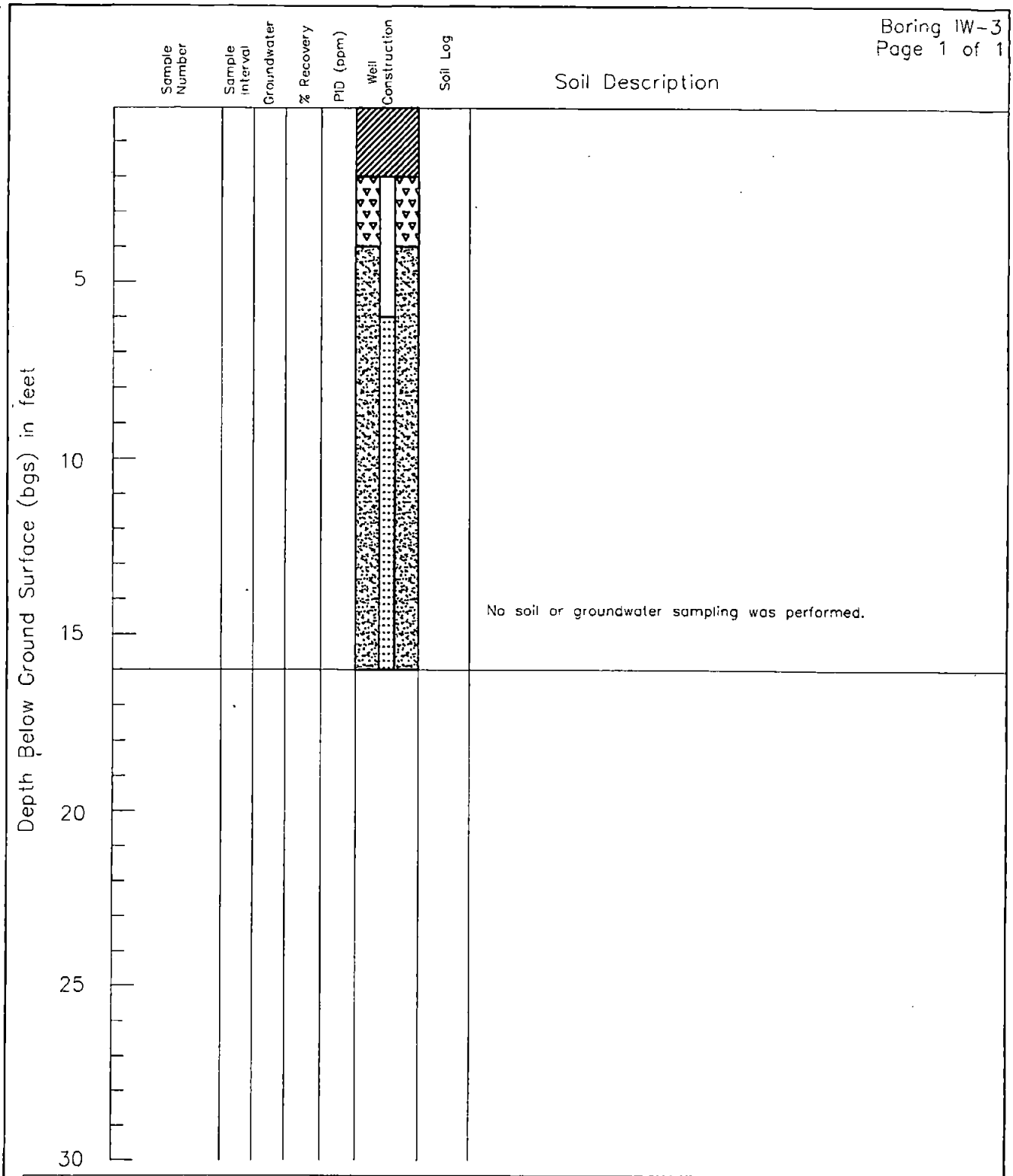
Injection Well Schematic

Boring IW-3
Page 1 of 1



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Injection Well Schematic