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September 19, 2014

Scott Rose
VCP Unit Manager
Washington State Department of Ecology
PO Box 47775
Olympia, Washington 98504-7775

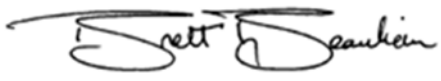
SUBJECT: PUGET SOUND TRUCK LINES LONGVIEW VCP APPLICATION

Dear Mr. Rose:

Enclosed are the completed forms for enrollment in the Voluntary Cleanup Program (VCP) for the Puget Sound Truck Lines Longview site (Site). The Site is used as a shipping company with truck storage and maintenance activities and originally had a 10,000-gallon aboveground storage tank (AST) that contained diesel and a single fuel dispenser. A site investigation in late 2011 confirmed diesel impacts to soil and groundwater that were likely due to surface spills, leaks, and overfilling associated with the former diesel AST. All soil contaminated with diesel-range organics (DRO) at the Site has been remediated via excavation activities conducted by 3 Kings Environmental Inc. (3 Kings) in 2012, and the Site is currently undergoing compliance monitoring by Floyd|Snider. The Site is listed under the Toxics Cleanup Program as Facility Site ID 74481279.

At this time, Floyd|Snider would like to request a No Further Action (NFA)-likely opinion letter based on the remedial actions performed by 3 Kings as soon as the Site is assigned a Washington State Department of Ecology (Ecology) case manager. The Remedial Investigation and Cleanup Report submitted by 3 Kings is attached, which may have previously been provided to Ecology. In addition, the Floyd|Snider 2014 Groundwater Compliance Sampling and Analysis Plan and Groundwater Compliance Well Installation and Monitoring Results are attached. After four consecutive quarters of groundwater results less than Model Toxics Control Act (MTCA) Method A cleanup levels, Floyd|Snider will submit a groundwater monitoring report to Ecology and request an NFA opinion. We are looking forward to Ecology's assistance with confirming that ongoing compliance monitoring and previous remediation activities are consistent with the requirements outlined in MTCA. Please contact me directly or via email as soon as a case manager has been assigned. I can be reached at (206) 292-2170 or my email at brett.beaulieu@floydsnider.com. I appreciate your assistance.

Sincerely yours,
FLOYD | SNIDER



Brett Beaulieu
Hydrogeologist

Encl.: VCP Application
VCP Agreement
Background Materials (Provided on Disc)
Floyd|Snider 2014 Groundwater Compliance Sampling and Analysis Plan
Floyd|Snider 2014 Groundwater Compliance Well Installation and Monitoring Results
Copies: Tom Lovejoy (Puget Sound Truck Lines)
Teri Floyd (Floyd|Snider)

VCP Application

Voluntary Cleanup Program

Washington State Department of Ecology
Toxics Cleanup Program

APPLICATION FORM

Under the Voluntary Cleanup Program (VCP), the Department of Ecology (Ecology) may provide informal site-specific technical consultations to persons conducting independent remedial actions at a hazardous waste site. Ecology may provide such consultations under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC.

To enter the VCP, complete and submit to Ecology a VCP Application. The Application consists of the following two documents:

1. Application Form (including required attachments). ← **THIS DOCUMENT**
2. Agreement.

For guidance on how to complete your Application, please refer to the Application Instructions, which are available separately on the VCP web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm.

Part 1 - ADMINISTRATION

A. Customer Information. The Customer is the person or organization requesting services from Ecology under the VCP, and is responsible for paying the costs incurred by Ecology. The authority and duty of the Customer are explained in the Agreement.

Name of Customer: Puget Sound Truck Lines (Tom Lovejoy)

What type of entity is the Customer?

☐ Person

*If the Customer is a **"person,"** then the Customer shall serve as both the Project Manager and the Project Billing Contact. Please identify this person and their contact information in both Parts 1B and 1C.*

☒ Organization

*If the Customer is an **"organization,"** then please identify the Project Manager in Part 1B and the Project Billing Contact in Part 1C. **Both persons must be employed by the Customer organization.***

What is the Customer's involvement at the Site? Please check all that apply.

☐ Property owner
☒ Past property owner
☐ Future property owner
☐ Property lessee
☐ Other – please specify: _____
☐ Business owner (operator)
☐ Mortgage holder
☐ Consultant
☐ Attorney

If not the current property owner, is the Customer acting as the agent for the property owner?

☐ Yes ☒ No

If not the current property owner, is the Customer authorized to grant access to the property?

☐ Yes ☒ No

Part 1 – ADMINISTRATION continued

B. Project Manager Information. Ecology will send this person all official correspondence. This person must either be the Customer or be employed by the Customer. This person may not be an independent contractor hired by the Customer. Please enter the required information below.

Name: Tom Lovejoy (Puget Sound Truck Lines)		Title: Former Property Owner
Mailing address: PO Box 24526		
City: Seattle	State: Washington	Zip: 98124-0526
Phone: 206-623-1600	Fax:	E-mail:

C. Project Billing Contact Information. Ecology will send this person monthly invoices. This person must either be the Customer or be employed by the Customer. This person may not be an independent contractor hired by the Customer. Please enter the required information below.

Name: Tom Lovejoy (Puget Sound Truck Lines)		Title: Former Property Owner
Mailing address: PO Box 24526		
City: Seattle	State: Washington	Zip: 98124-0526
Phone: 206-623-1600	Fax:	E-mail:

D. Project Consultant Information.

Is the Customer a consultant?

☐ Yes *If you answered **"YES,"** then skip to the next question.*

☒ No *If you answered **"NO"** and the Customer hired a consultant to conduct the independent remedial action, then enter the required information below.*

Name: Brett Beaulieu		Title: Hydrogeologist
Organization: Floyd|Snider		
Mailing address: 601 Union Street, Suite 600		
City: Seattle	State: Washington	Zip: 98101
Phone: 206-292-2078	Fax: 206-682-7867	E-mail: Brett.Beaulieu@floydsnider.com

Do you want Ecology to contact the Project Consultant?

☒ Yes ☐ No

E. Property Owner Information.

Is the Customer the owner of the property where independent remedial action is being conducted?

☐ Yes *If you answered **"YES,"** then enter the type of entity and skip to the next question.*

☒ No *If you answered **"NO,"** then please enter all of the required information below.*

Name: James Williams		Title: Current Property Owner
Organization: Wil-Hunt I LLC		
Mailing address: PO Box 3456		
City: Spokane	State: Washington	Zip: 99220-3456
Phone:	Fax:	E-mail:

Part 1 – ADMINISTRATION continued

What type of entity is the property owner? Please check only one.

☒ Private	☐ County
☐ Tribal	☐ Municipal
☐ Federal	☐ Mixed
☐ State	☐ Public School
☐ Other – please specify: _____	

F. Request for Written Opinion.

Are you requesting a written opinion at this time?

☒ Yes ☐ No

If you answered **"YES,"** on what planned or completed remedial action do you want a written opinion?

All soil contaminated with diesel-range organics (DRO) at the site has been remediated via excavation activities conducted by 3 Kings Environmental Inc. (3 Kings) in 2012. In 2014, Floyd|Snider installed four groundwater monitoring wells within the vicinity of the former diesel AST excavation footprint and is currently conducting compliance monitoring on behalf of the former owner, Puget Sound Truck Lines. At this time, Floyd|Snider would like to request an NFA-likely opinion letter based on the remedial actions performed by 3 Kings as soon as the site is assigned an Ecology PM. In addition, after four consecutive quarters of groundwater results below MTCA Method A cleanup levels, Floyd|Snider will submit an annual groundwater monitoring report to Ecology and request an NFA opinion.

Please attach to this Application any additional remedial action plans or reports you want Ecology to review. Ecology will base its opinion on the information contained in the Site file, including any information attached to this Application.

If you answered **"NO,"** please explain why you are enrolling in the VCP at this time and when you expect to request a written opinion from Ecology.

Attach additional pages if necessary.

G. Reporting Requirements.

Please comply with the following reporting requirements when requesting written opinions on planned or completed remedial actions:

- ❑ **Licensing.** Documents submitted containing geologic, hydrologic, or engineering work must be under the seal of an appropriately licensed professional, as required by Chapters 18.43 and 18.220 RCW.
- ❑ **Data Submittal.** Environmental sampling data must be submitted in both a printed form and an electronic form capable of being transferred into Ecology's data management systems. For instructions on how to submit the data, please refer to the following Ecology web site: www.ecy.wa.gov/programs/tcp/data_submittal/Data_Requirements.htm.

Failure to comply with these requirements may result in unnecessary delays. **Ecology will not issue a No Further Action (NFA) opinion unless these requirements are satisfied.**

Part 2 - DESCRIPTION OF THE SITE

A. Name of the Site. If Ecology has already identified the Site, enter the name provided by Ecology. Otherwise, enter a suggested name for the Site. You may also include an alternate name.

Name: Puget Sound Truck Lines Longview

Alternate Name: Puget Sound Truck Lines Inc. LGVW; Puget Sound truck Lines Inc. Longview; Puget Sound Freight Lines.

B. Location of Property where the Releases Occurred (Source Property).

The "source property" is the property where hazardous substances were released into the environment. For example, if petroleum was released from a leaking UST, the source property is the property where the UST was located.

Do you know on which property the releases occurred?

☒ Yes — *If you answered **"YES,"** then please refer to the source property when answering the following questions.*

☐ No — *If you answered **"NO,"** then please refer to the property addressed by your remedial action (cleanup) when answering the following questions.*

Physical Address. Please enter the physical address of the property below.

Street Address: 146 Industrial Way		
City: Longview	State: Washington	Zip: 98632-1004

Geographic Position. Please enter the geographical position of the property below. For additional guidance on how to complete this part, please refer to instructions on the VCP web site.

COORDINATES	**LATITUDE:**	Degrees: 46	Minutes: 6	Seconds: 56.86
	LONGITUDE :	Degrees: -122	Minutes: 55	Seconds: 21.80
LOCATION ON PROPERTY: [e.g., point of release or center of parcel]		Southern portion of the property, slightly west of center.		
COLLECTION METHOD: [e.g., GPS or address matching]				
COLLECTION SOURCE: [i.e., map scale]				
HORIZONTAL DATUM: [i.e., base reference for coordinate system]				
ACCURACY LEVEL: [i.e., +/- feet or meters]				

Legal Descriptions.

TRS DATA:	Township: 7N	Range: 2W	Section: 3	Quarter-Quarter:
TAX PARCEL #(S):	10132			

Part 2 - DESCRIPTION OF THE SITE continued

C. Identification of Properties affected by the Releases (Affected Properties).

An "affected property" is a property affected by the release of hazardous substances on the source property. For example, petroleum released from a leaking UST on one property (source property) may migrate through the soil or ground water onto an adjacent property (affected property).

Do any of the releases affect any properties adjacent to the source property?

☐ Yes — *If you answered **"YES,"** then please identify below each property that you know has been affected by the releases on the source property. If you need to identify additional properties, please attach additional pages.*

☒ No — *If you answered **"NO,"** then skip to the next question.*

☐ Unknown — *If you answered **"UNKNOWN,"** then skip to the next question.*

1.	Address:
	Tax Parcel(s):
2.	Address:
	Tax Parcel(s):
3.	Address:
	Tax Parcel(s):
4.	Address:
	Tax Parcel(s):

D. Identification of Public Right-of-Ways affected by the Releases.

Do any of the releases affect any public right-of-ways (e.g., streets)?

☐ Yes ☒ No ☐ Unknown

If you answered **"YES"** above, please specify below. Otherwise, skip to the next question.

Attach additional pages if necessary.

E. Extent of the Site.

What is the approximate areal extent of the Site? Please check only one.

☐ < 5,000 square feet
☐ > 5,000 square feet, but < 1 acre
☒ > 1 acre, but < 10 acres
☐ > 10 acres
☐ Unknown

Part 2 - DESCRIPTION OF THE SITE continued

F. Description of Release(s) at the Site.

Source of Release(s).

What are the source(s) of the release(s) at the Site? Please check all that apply.

- ☒ Point source (e.g., leaking tank)
- ☐ Non-point source (e.g., contaminated soil used as fill)
- ☐ Area-wide lead and arsenic soil contamination (see questions below)
- ☐ Other – please specify: _____
- ☐ Unknown

To the extent known, please describe the source(s) of the release(s):

The petroleum release was identified at the site in association with a former 10,000-gallon diesel aboveground storage tank (AST).

Attach additional pages if necessary.

Circumstances of Release(s). To the extent known, please describe below the circumstances of the release(s).

Diesel-range organic impacts to soil and groundwater were likely due to spills, leaks, and overfilling associated with the former diesel AST and single dispenser.

Attach additional pages if necessary.

Circumstances of Release Discovery. To the extent known, please describe below the circumstances of the discovery of the release(s).

DRO impacts in soil and groundwater were first discovered during an Environmental Site Assessment conducted in December 2011. Additional investigations were subsequently conducted in 2012 to delineate the extent of diesel impacts. A remedial excavation was conducted in 2012 to remove the diesel-contaminated soil associated with the former AST.

Attach additional pages if necessary.

Part 2 - DESCRIPTION OF THE SITE continued

Area-Wide Soil Contamination. For information about the area-wide soil contamination project, please refer to the following web site: www.ecy.wa.gov/programs/tcp/area_wide/area_wide_hp.html. For information about the Tacoma Smelter Plume (TSP) and the associated Management Plan, please refer to the following web site: www.ecy.wa.gov/programs/tcp/sites/tacoma_smelter/ts_hp.htm.

Is the Site located within an area affected by smelter emissions, such as the TSP area?

☐ Yes ☒ No ☐ Unknown

To determine whether your Site is located within the TSP area, please refer to the map on the TSP web site identified above.

Is the Site located on a former apple or pear orchard in operation prior to 1947?

☐ Yes ☒ No ☐ Unknown

Is the Site impacted by area-wide arsenic and/or lead soil contamination?

☐ Yes ☒ No ☐ Unknown

G. Nature and Extent of Hazardous Substances Released at the Site. The following questions refer to conditions after the release, but prior to any cleanup, of the hazardous substances at the Site.

Hazardous Substances and Affected Media. To the extent known, please identify in the following table the hazardous substances released at the Site and the media (e.g., soil) impacted by those substances. Use the codes at the bottom of the table.

Hazardous Substance	Affected Media				
	Soil	Ground Water	Surface Water	Sediment	Air
EXAMPLE: Benzene	C	S	N/A	N/A	B
Diesel-Range Organics	B	C	N/A	N/A	N/A
Heavy Oil-Range Organics	B	B	N/A	N/A	N/A
Benzene	N/A	O	N/A	N/A	N/A
Ethylbenzene	N/A	B	N/A	N/A	N/A
Toluene	N/A	B	N/A	N/A	N/A
Total Xylenes	N/A	B	N/A	N/A	N/A
PAHs	O	O	N/A	N/A	N/A
Lead	B	O	N/A	N/A	N/A
Cadmium	B	O	N/A	N/A	N/A
Chromium	O	O	N/A	N/A	N/A

When identifying the affected media in the table above, please use one of the following codes:

- C = confirmed, above cleanup level
- B = confirmed, below cleanup level
- O = confirmed, not present
- S = suspected
- N/A = not suspected
- U = unknown

Part 2 - DESCRIPTION OF THE SITE continued

Drinking Water.

Does any of the contamination at the Site pose a threat or potential threat to an existing drinking water source (ground water or surface water)?

☐ Yes ☒ No ☐ Unknown

If you answered "YES" above, what type of drinking water system is threatened by the contamination? Please check all that apply.

☐ Single Family
☐ Public Drinking Water Supply

If you checked "Public Drinking Water Supply" above, is the contamination located within or upstream of a 10-year wellhead protection area?

☐ Yes ☐ No ☐ Unknown

To help answer the above question or if you answered "Yes" to that question, then go to https://fortress.wa.gov/doh/eh/dw/swap/maps/ or call (800) 521-0323.

Indoor Air.

Are contaminant odors present in any buildings, manholes, or other confined spaces?

☐ Yes ☒ No ☐ Unknown

If you answered "YES" above, please specify:

Attach additional pages if necessary.

H. Maps of the Site.

Please attach to this application map(s) that identify, to the extent known, the following:

- ❑ The location of the site.
- ❑ The properties, and any public right-of ways, affected by the site.
- ❑ The source(s) of the release(s) at the site.
- ❑ The nature and extent of contamination at the site.
- ❑ Any human or ecological receptors impacted by the site (e.g., drinking water wells).
- ❑ The physical characteristics of the site (e.g., property lines, building and road outlines, surface water bodies, water supply wells, ground water flow direction, and utility right-of-ways).
- ❑ The properties adjacent to the site and the uses of those properties (e.g., gas station, dry cleaner, residential).

Part 3 – OPERATIONAL HISTORY OF THE SITE

A. Current Use of Source Property. *Note that the following questions refer only to the Source Property, not other properties affected by the Site. Answer these questions to the best of your ability.*

Current Property Owners. To the extent known, please identify below the current owner of the source property.

Name: James Williams	Title: Property Owner	
Organization: Wil-Hunt I LLC		
Mailing address: PO Box 3456		
City: Spokane	State: Washington	Zip code: 99220-3456
Phone:		

Current Business Owner (Operator). To the extent known, please identify below the current owner of the business located on the source property.

Name: James Williams	Title: Property Owner	
Organization: Wil-Hunt I LLC		
Mailing address: PO Box 3456		
City: Spokane	State: Washington	Zip code: 99220-3456
Phone:		

Current Business Operations. To the extent known, please identify below the current operations of the business located on the source property.

What is the current land use of the source property? Please check all that apply.

- ☐ Residential
- ☒ Commercial
- ☐ Industrial
- ☐ Agricultural
- ☐ School
- ☐ Childcare facility
- ☐ Park
- ☐ Other – please specify: _____

Is there a currently operational commercial or industrial business located on the source property?

☒ Yes ☐ No ☐ Unknown

If you answered "YES" above, please identify in the following table the current business operations using the North American Industry Classification System (NAICS) codes and specifying the operations.

NAICS CODE	DESCRIPTION OF OPERATIONS
EX: 447110	Gasoline Stations with Convenience Stores
484110	Truck Freight Yard and Shipping Company

Part 3 – OPERATIONAL HISTORY OF THE SITE continued

Is there a solid waste handling facility located on the Source Property?

☐ Yes ☒ No ☐ Unknown

If you answered "YES" above, please identify:

Attach additional pages if necessary.

Is there a dangerous waste treatment, storage, or disposal facility located on the Source Property?

☐ Yes ☒ No ☐ Unknown

If you answered "YES" above, please identify:

Attach additional pages if necessary.

Regulation of Current Business Operations.

Does the business operate under any federal, state, or local permits related to the release of hazardous substances into the environment (e.g., NPDES permit)?

☐ Yes ☒ No ☐ Unknown

If you answered "YES" above, please specify the regulated operation, the name of the permit, and the date it was issued in the table below.

REGULATED OPERATION	PERMIT	DATE ISSUED
EX: Wastewater discharge	NPDES permit	02/02/02

Has a state or federal notice of enforcement action (e.g., notice of violation) ever been issued related to the release of hazardous substances at the business?

☐ Yes ☒ No ☐ Unknown

If you answered "yes" above, please specify (notice and year issued): _____

Have business operations resulted in any other spills or other unpermitted releases on the source property?

☐ Yes ☒ No ☐ Unknown

If you answered "YES" above, please specify in the table below.

RELEASE	DATE OF RELEASE	STATUS OF RELEASE

Part 3 – OPERATIONAL HISTORY OF THE SITE continued

Storage Tank Information. In table below, please identify all above ground storage tanks (AST) and underground storage tanks (UST) that have been used for storing hazardous substances on the source property, irrespective of whether the tanks are still in use or in place. *If you are unable to provide answers to specific questions regarding a tank, please enter "U" for unknown.*

IDENTIFICATION				STATUS AND CLOSURE				RELEASES	
Hazardous Substance	Type (AST/UST)	Size (Gallons)	TANK ID	DATE INSTALL	IN USE (Y/N)	DATE CLOSED	CLOSURE METHOD (*)	PAST (Y/N)	CURRENT (Y/N)
EX: Diesel	UST	10,000	4	02/87	N	05/98	Removed	Y	N
Diesel	AST	10,000	U	U	N	01/12	Removed	Y	N
Waste Oil	UST	U	1	01/84	N	08/96	Removed	N	N

(*) Options = Removed or Closed in Place

B. Past Use of Source Property. *Note that the following questions refer only to the Source Property, not other properties affected by the Site. Please answer these questions to the best of your ability.*

Past Property Owners. To the extent known, please identify below the owner of the source property at the time the release occurred.

Name: Tom Lovejoy	Title: Former Property Owner	
Organization: Puget Sound Truck Lines		
Mailing address: PO Box 24526		
City: Seattle	State: Washington	Zip code: 98124-0526
Phone: 206-623-1600	Fax:	E-mail:

Past Business Owners (Operators). To the extent known, please identify below the owner of the business (operator) at the time the release occurred.

Name:	Title:	
Organization:		
Mailing address:		
City:	State:	Zip code:
Phone:	Fax:	E-mail:

Identification of Past Business Operations. Please identify in the following table the past operations of businesses located on the source property using the North American Industry Classification System (NAICS) codes and/or specifying the operations.

NAICS CODE	DESCRIPTION OF OPERATIONS
EX: 447110	Gasoline Stations with Convenience Stores
U	Trucking and Freight Shipping

Part 3 – OPERATIONAL HISTORY OF THE SITE continued

C. Future Use of Source and Affected Properties. The following questions refer to both source and affected properties. Please answer these questions to the best of your ability.

Will any ownership interest in the source or affected properties be conveyed prior to, or upon completion of, the cleanup?

☐ Yes ☐ No ☒ Unknown

If you answered "YES" above, please specify:

Attach additional pages if necessary.

Will any of the source or affected properties, or portions of those properties, be redeveloped as part of the cleanup?

☐ Yes ☒ No ☐ Unknown

If you answered "YES" above, please specify the proposed land use below. Please check all that apply.

☐ Residential
☐ Commercial
☐ Industrial
☐ Agricultural
☐ School
☐ Childcare facility
☐ Park
☐ Other – please specify:

Please also specify the activities proposed for that land use:

Attach additional pages if necessary.

Part 4 – ADMINISTRATIVE HISTORY OF THE SITE

Have you previously reported the release(s) of hazardous substances at the Site to Ecology?

☒ Yes – If so, when? 07/30/2012 ☐ No ☐ Unknown

Has the cleanup of the Site, or any portion of the Site, ever been managed under the VCP?

☐ Yes – If so, please specify the VCP Project Number: _____
☒ No
☐ Unknown

Has the cleanup of the Site, or any portion of the Site, ever been managed under a federal or state order or decree?

☐ Yes – If so, please specify the type and docket number: _____
☒ No
☐ Unknown

Part 5 – DESCRIPTION OF INDEPENDENT REMEDIAL ACTIONS AT THE SITE

A. Scope of Remedial Actions.

Do you plan to characterize and address all of the contamination at the Site, including any contamination located on affected adjacent properties, as part of the VCP project?

☒ Yes ☐ No ☐ Unknown

If you answered "NO" above, please describe below the scope of the VCP project, including the contamination (properties, portions of a property, media and/or hazardous substances) that you DO NOT plan on characterizing and/or addressing as part of the VCP project. Please include additional pages if necessary.

Attach additional pages if necessary.

Part 5 – DESCRIPTION OF INDEPENDENT REMEDIAL ACTIONS AT THE SITE continued

B. Status of Remedial Actions.

What is the current status of remedial actions at the site? Please check all that apply in the table below.

Remedial Action	Planned	Ongoing	Completed	Not Applicable
Initial response (UST only)				X
Interim action			X	
Remedial investigation			X	
Feasibility study			X	
Cleanup action		X		

C. Documentation of Remedial Actions.

Please list in the table below all known remedial action plans or reports produced for the site, including:

- The title of the plan or report,
- The author (e.g. consulting firm) of the plan or report,
- The date the plan or report was produced,
- Whether the plan or report has been submitted to Ecology,
- The date the plan or report was submitted to Ecology.

	Title	Author	Date	Submitted to Ecology	
				Y/N?	Date
Ex:	John Doe's Site: Remedial Investigation Work Plan	Mom's Consulting Firm	02/20/05	NO	N/A
1.	Limited Phase II Environmental Site Assessment	Adapt Engineering, Inc.	12/29/11	N	
2.	Independent Cleanup Action and Addendum Report	3 Kings Environmental, Inc.	06/13/12	Y	07/27/12
3.	Remedial Investigation and Cleanup Report	3 Kings Environmental, Inc.	12/24/12	Y	12/24/12
4.					
5.					
6.					
7.					
8.					
9.					
10.					

Part 6 – STATEMENT AND SIGNATURE

A. Statement and Signature. The undersigned affirms that the information contained in this application is true and accurate to the best of his or her knowledge. Please note that someone other than the Customer may sign this Application Form.

Name: Brett Beaulieu	Title: Project Manager	
Signature:		Date:
Organization: Floyd|Snider		
Mailing address: 601 Union Street, Suite 600		
City: Seattle	State: Washington	Zip code: 98101
Phone: 206-292-2170	Fax: 206-682-7867	E-mail: Brett.Beaulieu@floydsnider.com

B. Affiliation.

What is the signatory's involvement at the Site? Please check all that apply.

- ☐ Customer
- ☐ Property Owner
- ☒ Consultant
- ☐ Attorney
- ☐ Other – please specify: _____

VCP Agreement

VCP AGREEMENT

DEPARTMENT OF ECOLOGY
State of Washington

INSTRUCTIONS: Submit this Agreement (original) to Ecology as part of your Application. Before submitting, enter the Customer's name and the Site's address on the first page and sign the Agreement on the second page. If your Application is accepted, then Ecology will do the following: 1) identify the Site and VCP project in the box below; 2) sign the Agreement; and 3) send you a copy of the completed Agreement.

This document constitutes an Agreement between the State of Washington Department of Ecology (Ecology) and Puget Sound Truck Lines (Tom Lovejoy) _____ (Customer) to provide informal site-specific technical consultations under the Voluntary Cleanup Program (VCP) for the Site identified below and associated with the following address:
146 Industrial Way, Longview, Washington 98632-1004 _____ .

The purpose of this Agreement is to facilitate independent remedial action at the Site. Ecology is entering into this Agreement under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC. If a term in this Agreement is defined in MTCA or Chapter 173-340 WAC, then that definition shall govern.

Services Provided by Ecology

Upon request, Ecology agrees to provide the Customer informal site-specific technical consultations on the independent remedial actions proposed for or performed at the Site consistent with WAC 173-340-515(5). Those consultations may include assistance in identifying applicable regulatory requirements and opinions on whether the remedial actions proposed for or conducted at the Site meet those requirements.

Ecology may use any appropriate resource to provide the Customer with the requested consultative services. Those resources may include, but shall not be limited to, those of Ecology and the Office of the Attorney General. However, Ecology shall not use independent contractors unless the Customer provides Ecology with prior written authorization.

In accordance with RCW 70.105D.030(1)(i), any opinions provided by Ecology under this Agreement are advisory only and not binding on Ecology. Ecology, the state, and officers and employees of the state are immune from all liability. Furthermore, no cause of action of any nature may arise from any act or omission in providing, or failing to provide, informal advice and assistance under the VCP.

Payment for Services by Customer

The Customer agrees to pay all costs incurred by Ecology in providing the informal site-specific technical consultations requested by the Customer consistent with WAC 173-340-515(6) and 173-340-550(6). Those costs may include the costs incurred by attorneys or independent contractors used by Ecology to provide the requested consultative services. Ecology's hourly costs shall be determined based on the method in WAC 173-340-550(2).

Ecology shall mail the Customer a monthly itemized statement of costs (invoice) by the tenth day of each month (invoice date) that there is a balance on the account. The invoice shall include a summary of the costs incurred, payments received, identity of staff involved, and amount of time staff spent on the project.

The Customer shall pay the required amount by the due date, which shall be thirty (30) calendar days after the invoice date. If payment has not been received by the due date, then Ecology shall withhold

FOR COMPLETION BY ECOLOGY ONLY	**Facility / Site Name:**
	Facility / Site No.:
	VCP Project No.:

any requested opinions and notify the Customer by certified mail that the debt is past due. If payment has not been received within sixty (60) calendar days of the invoice date, then Ecology shall stop all work under the Agreement and may, as appropriate, assign the debt to a collection agency under Chapter 19.16 RCW. The Customer agrees to pay the collection agency fee incurred by Ecology in the course of debt collection.

Reservation of Rights / No Settlement

This Agreement does not constitute a settlement of liability to the state under MTCA. This Agreement also does not protect a liable person from contribution claims by third parties for matters addressed by the Agreement. The state does not have the authority to settle with any person potentially liable under MTCA except in accordance with RCW 70.105D.040(4). Ecology's signature on this Agreement in no way constitutes a covenant not to sue or a compromise of any Ecology rights or authority.

Ecology reserves all rights under MTCA, including the right to require additional or different remedial actions at the Site should it deem such actions necessary to protect human health and the environment, and to issue orders requiring such remedial actions. Ecology also reserves all rights regarding the injury to, destruction of, or loss of natural resources resulting from the release or threatened release of hazardous substances at the Site.

Effective Date, Modifications, and Severability

The effective date of this Agreement shall be the date on which this Agreement is signed by the Toxics Cleanup Program's Section Manager or delegated representative. This Agreement may be amended by mutual agreement of Ecology and the Customer. Amendments shall be in writing and shall be effective when signed by the Toxics Cleanup Program's Section Manager or delegated representative. If any provision of this Agreement proves to be void, it shall in no way invalidate any other provision of this Agreement.

Termination of Agreement

Either party may terminate this Agreement without cause by sending written notice by U.S. mail to the other party. The effective date of termination shall be the date Ecology sends notice to the Customer or the date Ecology receives notice from the Customer, whichever occurs first. Unless otherwise directed, issuance of a No Further Action opinion, either for the Site as a whole or for a portion of the real property located within the Site, shall constitute notice of termination by Ecology.

Under this Agreement, the Customer is only responsible for costs incurred by Ecology before the effective date of termination. However, termination of this Agreement shall not affect any right Ecology may have to recover its costs under MTCA or any other provision of law.

Representations and Signatures

The undersigned representative of the Customer hereby certifies that he or she is fully authorized to enter into this Agreement and to execute and legally bind the Customer to comply with the Agreement.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

_____
Signature

_____
Printed Name

Section Manager, _____
Toxics Cleanup Program *Section*

Date: _____

PSFL LEASING, INC., FORMERLY PUGET SOUND TRUCK LINES
Name of Customer

Thomas E. Lovejoy
Signature

THOMAS E. LOVEJOY
Printed Name of Signatory

CHAIRMAN
Title of Signatory

Date: SEPT 10, 2014

If you need this document in an alternative format, please call the Toxics Cleanup Program at 360-407-7170. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Background Materials

Initial Investigation Close-Out Router

ERTS #: *635466*	**Site Name:** *Puget Sound Freight Lines Longview*	
1	Recommended Action: Circle one of the appropriate categories: No Further Action (NFA) List on Confirmed and Suspected Contaminated Sites List (CSCSL) Initial Investigator: *F. Svendsen/ C. Matthews* CM	
2	Recommended Action: Circle one of the appropriate categories: NFA (Non-List) NFA (List on CSCSL as NFA; cleanup occurred) List on CSCSL Unit Supervisor: 3/11/13	
3	Final Action: Circle one of the appropriate categories: NFA (Non-List) NFA (List on CSCSL as NFA; cleanup occurred) List on CSCSL Section Manager: Rebecca Lawson	
Non-Listed NFAs go Directly to the Incident Tracker, and Then the File Room; Others Follow the Process Below		
4	Date Entered into ISIS: Cleanup Site ID Number: Facility/Site ID Number: Date Early Notice Letter Sent (*Listed Sites Only, excludes NFA-List*): FS/ISIS Coordinator:	
5	Incident Tracker: Date:	
6	File Room: County: File Type:	

Department of Ecology - Environmental Report Tracking System

ERTS # 635466

Initial Report

External Reference #

Caller Information

	First	Last
Name	Brett	MacDonald
Busines Name	3 Kings Environmental	
Street Address		
Other Address		
City	State WA	Zip
E-mail		Confidential_FL ☐

Phone	Ext	Type
(360) 907-4515		Mobile

Where did it happen

Berth		Anchorage	
Location Name	Puget Sound Freight Line		
Street Address	146 Industrial Way		
Other Address			
City/Place	LONGVIEW	State WA	Zip
County - Region	COWLITZ	SWRO	FS ID
WIRA #			
Waterway		Type	
Latitude		Longitude	
Topo Quad 1:24:000	KELSO		

Direction/Landmark (mile post, cross roads, township/range)

What happened

Spills Program Oil Spill? Y

Incident Date	2/1/2012	Received Date	7/30/2012 13:48
Medium	Land		
Material	Diesel Oil		
Sheen Only	Quantity	To Water	
☐	100		
Source	Aboveground Storage Tank		
Type	Facility	Primary	☑
Cause			
Incident Type	Oil Spill (without precursor incident)		
Activity	Other		
Impact	GROUND WATER CONTAMINATION		
Vessel Name			
Hull Number			

Primary Potentially Responsible Party Information

	First	Last
Name		
Business Name		
Street Address		
Other Address		
City	State	Zip
Phone	Ext	Type
E-mail		

Additional Contact Information

Name	Phone	Ext	Type

More Information

During a site assessment in February 2012 noticed that the above ground tank was leaking about 50-100 gallons of diesel to soil and groundwater. This has been decommission by removal.

Entry Person Mendoza, Sonia Entry Date 7/30/2012

ERTS # 635466

Referral

Referral Method

- ○ E-mail ERTS number
- ◉ E-mail attachment
- ○ Print
- ○ Telephone

Referral # 159179

Primary ☐

Person Referred to	SVENDSEN, FERN
Phone	(360) 407-6246 Fax
E-mail	fsve461@ecy.wa.gov
Program/Organization	TOXICS CLEANUP
Address	
City	WA
Region/Location	swro
Referral Date	7/30/2012

Followup (None)

WASHINGTON STATE DEPARTMENT OF ECOLOGY

INITIAL INVESTIGATION FIELD REPORT

ERTS: 635466
Parcel(s): 10132, 10134, 10137
County: Cowlitz

SITE INFORMATION

Site Name (e.g., Co. name over door): Puget Sound Freight Lines	Site Address (including City and Zip+4): 146 Industrial Way, Longview, WA 98632-1004	Site Phone: N/A
Site Contact and Title: Brett MacDonald, RG 3 Kings Environmental, Inc.	Site Contact Address (including City and Zip+4): 1311 Grace Avenue, Battle Ground, WA 98604-3526	Site Contact Phone: 360-666-8202
Site Owner: Wil-Hunt I LLC	Site Owner Address (including City and Zip+4): PO Box 3456, Spokane, WA, 99220-3456	Site Owner Phone: N/A
Site Owner Contact: Tom Lovejoy Puget Sound Freight Lines	Site Owner Contact Address (including City and Zip+4): PO Box 24526, Seattle, WA 98124-0526	Owner Contact Phone: 206-623-1600
Alternate Site Name(s):	Comments:	
Previous Site Owner(s):	Comments:	

Latitude (Decimal Degrees): 46.116220
Longitude (Decimal Degrees): -122.923131

INSPECTION INFORMATION

Inspection Conducted? Yes ☐ No ☒	Date/Time:	Entry Notice: Announced ☐	Unannounced ☐
Photographs taken?	Yes ☐	No ☒	
Samples collected?	Yes ☒	No ☐	As part of 3 Kings Environmental, Inc. investigation / remediation

RECOMMENDATION

No Further Action (Check appropriate box below):		**LIST on Confirmed and Suspected Contaminated Sites List:** ☒
Release or threatened release does not pose a threat	☐	
No release or threatened release	☐	
Refer to program/agency (Name:_____)	☐	
Independent Cleanup Action Completed (i.e., contamination removed)	☐	

COMPLAINT (Brief Summary of ERTS Complaint): A phase II environmental investigation in 2011found petroleum hydrocarbon contamination in soil and groundwater at the Puget Sound Freight Lines yard in east Longview.

CURRENT SITE STATUS (Brief Summary of why Site is recommended for **Listing**):

Remedial work in 2012 included contaminated soil removal and push-probe characterization of groundwater. The work eliminated the soil source and majority of the pathway but diesel contamination in shallow groundwater was confirmed above MTCA CULs.

Investigator: Cris Matthews	Date Submitted: 1/17/2013

OBSERVATIONS

Description (please be sure to include the following: site observations, site features and cover, chronology of events, sources/past practices likely responsible for contamination, presence of water supply wells and other potential exposure pathways, etc.):

In December 2011, Adapt Engineering, Inc. was contracted by Puget Sound Freight Lines to conduct a Phase I environmental investigation of a freight yard property in Longview. Based on the results, a limited Phase II investigation was undertaken to follow on. This work consisted of soil and groundwater sampling by push probe in each of three areas on site identified as potential contamination sources:

- Above-ground fuel storage tank (AST)
- Former waste oil underground storage tank (UST)
- Dry well

The probe was advanced to approximately 12' bgs in each location. The latter two site borings – noted as SB-2 and SB-3 – found no visual or olfactory evidence of petroleum contamination. However, boring SB-1 adjacent to the AST encountered obvious soil contamination and 'moderate' sheen on the groundwater collected. Sample analyses found 4,200 mg/kg diesel range organics (DRO) in SB-1 soil collected from an interval 5 – 7' bgs, and DRO values of 530,000 and 2,400 µg/L in groundwater from SB-1 and SB-2, respectively (MTCA Method A CUL for groundwater = 500 µg/L).

Later, in January 2012, 3 Kings Environmental, Inc. (3 Kings) excavated 11 test pits to characterize the extent of contamination and define areas for remedial excavation. A total of 12 soil samples found DRO contamination exceeding MTCA Method A CULs for soil in only one location, TP-7 adjacent to the AST. The other pit samples detected DRO, but at values below CULs. Selective grab samples of water collecting in some of the pits found DRO values ranging as high as 15.4 mg/L in TP-9, approximately 30 times the CUL.

3 Kings then excavated an area including the former AST site where the previous sampling had indicated soil impact, removing 2,850 tons of soil – approximately 4000 ft^2 to a depth of 10'bgs – for disposal in the Weyerhaeuser HQ Road LF. Confirmation soil sampling following removal detected only minor amounts of DRO contaminant, all well below CULs. However, analysis of water accumulating in the excavation – assumed to be groundwater – was found to substantially exceed CULs:

- TP1H2O-020212 @ 8.35 mg/L TPH-Dx (approximately 16 times CUL)

In an attempt to characterize the apparent groundwater impact, 3 Kings returned to the site three times later in the year to obtain representative samples with push-probe equipment. Two borings to a depth of 10' bgs in the footprint of the excavation were completed in both June and July. The site was allowed to stabilize and followed in December 2012 with four borings – two in the excavation footprint and two additional in presumed up / down hydraulic gradient locations. Groundwater was encountered at approximately 4' bgs – presumably a local static groundwater level – in each boring in the latest sampling. Analysis included NWTPH-Dx and BTEX components.

Results for the June and July samplings were mixed. Three of the four samples obtained were below the CUL (one was essentially non-detect) for DRO, with only one exceedance:

- B4H2O-071012 @ 1.18 mg/L TPH-Dx. Ethylbenzene and xylenes were detected at values far below CULs

The December sampling had similar mixed results, with a single outright exceedance of CULs:

- DP-2-W @ 174 mg/L TPH Dx. Toluene and xylenes were detected at values far below the CULs

As a result of this additional characterization, 3 Kings recommends the installation of at least 4 permanent groundwater monitoring wells with a program of quarterly monitoring for the site. The wells would bracket the affected area to include a hydraulically up-gradient point, one placement within the excavation area, and 2 wells down gradient spaced along the southern edge of the main site.

Based on these findings and contractor recommendations, this site will be placed on Ecology's Confirmed & Suspected Contaminated Sites Report for future disposition.

(fill in contaminant matrix below with appropriate status choice from the key below the table)

CONTAMINANT GROUP	CONTAMINANT	SOIL	GROUNDWATER	SURFACE WATER	AIR	BEDROCK	DESCRIPTION
Non-Halogenated Organics	Phenolic Compounds						Compounds containing phenols (Examples: phenol; 4-methylphenol; 2-methylphenol)
	Non-Halogenated Solvents		B				Organic solvents, typically volatile or semi-volatile, not containing halogens, i.e., Chlorine, Iodine, Bromine or Fluorine. (Examples include acetone, *benzene, toluene, ethylbenzene & xylenes* [**BTEX**], methyl ethyl ketone, ethyl acetate, methanol, ethanol, isopropranol, formic acid, acetic acid, Stoddard solvent and naphtha)
	Polynuclear Aromatic Hydrocarbons (PAH)						Hydrocarbons composed of two or more benzene rings.
	Tributyltin						The main active ingredients in biocides used to control a broad spectrum of organisms. Found in antifouling marine paint, antifungal action in textiles and industrial water systems. (Examples: Tributyltin; monobutyltin; dibutyltin)
	Methyl tertiary-butyl ether						MTBE is a volatile oxygen-containing organic compound that was formerly used as a gasoline additive to promote complete combustion and help reduce air pollution.
	Benzene						Benzene
	Other Non-Halogenated Organics						Other Non-Halogenated Organics (Example: Phthalates)
	Petroleum Diesel	RB	C				Petroleum Diesel
	Petroleum Gasoline						Petroleum Gasoline
	Petroleum Other						Crude oil and any fraction thereof. Petroleum products that are not specifically Gasoline or Diesel.
Halogenated Organics (see notes at bottom)	PBDE						Polybrominated di-phenyl ether
	Other Halogenated Organics						Other organic compounds with halogens (chlorine, fluorine, bromine, iodine). search HSDB (http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB) and look at the Chemical/Physical Properties, and Molecular Formula. If there is a Cl, I, Br, F in the formula, it is halogenated. (Examples: Hexachlorobutadiene; hexachlorobenzene; pentachlorophenol)
	Halogenated solvents						Solvents containing halogens (Halogen is typically chlorine, but can also be fluorine, bromine, iodine), and their breakdown products (Examples: Trichloroethylene; Tetrachloroethylene (aka Perchloroethylene); TCE; TCA; trans and cis 1,2 dichloroethylene; vinyl chloride)
	Polychlorinated Biphenyls (PCB)						Any of a family of industrial compounds produced by chlorination of biphenyl, noted primarily as an environmental pollutant that accumulates in animal tissue with resultant pathogenic and teratogenic effects
	Dioxin/dibenzofuran compounds (see notes at bottom)						A family of more than 70 compounds of chlorinated dioxins or furans. (Examples: Dioxin; Furan; Dioxin TEQ; PCDD; PCDF; TCDD; TCDF; OCDD; OCDF). *Do not use for 'dibenzofuran', which is a non-chlorinated compound that is detected using the semivolatile organics analysis 8270*
Metals	Metals - Other						Metals other than arsenic, lead, or mercury. (Examples: cadmium, antimony, zinc, copper, silver)
	Lead						Lead
	Mercury						Mercury
	Arsenic						Arsenic
Pesticides	Non-halogenated pesticides						Pesticides without halogens (Examples: parathion, malathion, diazinon, phosmet, carbaryl (sevin), fenoxycarb, aldicarb)
	Halogenated pesticides						Pesticides with halogens (Examples: DDT; DDE; Chlordane; Heptachlor; alpha-beta and delta BHC; Aldrin; Endosulfan, dieldrin, endrin)
Other Contaminants	Radioactive Wastes						Wastes that emit more than background levels of radiation.
	Conventional Contaminants, Organic						Unspecified organic matter that imposes an oxygen demand during its decomposition (Example: Total Organic Carbon)

CONTAMINANT GROUP	CONTAMINANT	SOIL	GROUNDWATER	SURFACE WATER	AIR	BEDROCK	DESCRIPTION
	Conventional Contaminants, Inorganic						Non-metallic inorganic substances or indicator parameters that may indicate the existence of contamination if present at unusual levels (Examples: Sulfides, ammonia)
	Asbestos						All forms of Asbestos. Asbestos fibers have been used in products such as building materials, friction products and heat-resistant materials.
	Other Deleterious Substances						Other contaminants or substances that cause subtle or unexpected harm to sediments (Examples: Wood debris; garbage (e.g., dumped in sediments))
	Benthic Failures						Failures of the benthic analysis standards from the Sediment Management Standards.
	Bioassay Failures						For sediments, a failure to meet bioassay criteria from the Sediment Management Standards. For soils, a failure to meet TEE bioassay criteria for plant, animal or soil biota toxicity.
Reactive Wastes	Unexploded Ordinance						Weapons that failed to detonate or discarded shells containing volatile material.
	Other Reactive Wastes						Other Reactive Wastes (Examples: phosphorous, lithium metal, sodium metal)
	Corrosive Wastes						Corrosive wastes are acidic or alkaline (basic) wastes that can readily corrode or dissolve materials they come into contact with. Wastes that are highly corrosive as defined by the Dangerous Waste Regulation (WAC 173-303-090(6)). (Examples: Hydrochloric acid; sulfuric acid; caustic soda)

Status choices for contaminants	
Contaminant Status	**Definition**
B - Below Cleanup Levels (Confirmed)	The contaminant was tested and found to be below cleanup levels. (Generally, we would not enter each and every contaminant that was tested; for example if an SVOC analysis was done we would not enter each SVOC with a status of "below". We would use this for contaminants that were believed likely to be present but were found to be below standards when tested
S - Suspected	The contaminant is suspected to be present; based on some knowledge about the history of the site, knowledge of regional contaminants, or based on other contaminants known to be present
C - Confirmed Above Cleanup Levels	The contaminant is confirmed to be present above any cleanup level. For example - above MTCA method A, B, or C; above Sediment Quality Standards; or above a presumed site-specific cleanup level (such as human health criteria for a sediment contaminant).
RA - Remediated - Above	The contaminant was remediated, but remains on site above the cleanup standards (for example - capped area).
RB - Remediated - Below	The contaminant was remediated, and no area of the site contains this contaminant above cleanup standards (for example - complete removal of contaminated soils).

Halogenated chemicals and solvents: Any chemical compound with chloro, bromo, iodo or fluoro is halogenated; those with eight or fewer carbons are generally solvents (e.g. halogenated methane, ethane, propane, butane, pentane, hexane, heptane or octane) and may also be used for or registered as pesticides or fumigants. Most are dangerous wastes, either listed or categorical. Organic compounds with more carbons are almost always halogenated pesticides or a contaminant or derivitive. Referral to the HSDB is recommended you are unfamiliar with a chemical name or compound, as it contains useful information about synonyms, uses, trade names, waste codes, and other regulatory information about most toxic or potentially toxic chemicals.

Dibenzodioxins and dibenzofurans are normalized to a combined equivalent toxicity based on 2,3,7,8-tetrachloro-p-dibenzodioxin as set out in Ch. 173-340-708(8)(d) and in the Evaluating the Toxicity and Assessing the Carcinogenic Risk of Environmental Mixtures using Toxicity Equivalency Factors Focus Sheet (https://fortress.wa.gov/ecy/clarc/FocusSheets/tef.pdf). Results may be reported as individual compounds and isomers (usually lab results), or as a toxic equivalency value (reports).

FOR ECOLOGY USE ONLY (For Listing Sites):

How did the Site come to be known:
☒ **Site Discovery (received a report):** 12/28/2012 (Date Report Received)
☒ **ERTS Complaint**
☐ **Other (please explain):** The original ERTS was logged 7/30/2012. Ecology received a supplementary cleanup report from 3 Kings Environmental, Inc. 12/28/2012

Does an Early Notice Letter need to be sent: ☒ Yes ☐ No
If *No*, please explain why: _____

NAICS Code (if known): _____
Otherwise, briefly explain how property is/was used (i.e., gas station, dry cleaner, paint shop, vacant land, etc.):
Truck freight yard

Site Unit(s) to be created (Unit Type): ☒ Upland (includes VCP & LUST) ☐ Sediment

If multiple Units needed, please explain why: _____

Cleanup Process Type (for the Unit):
☒ No Process
☐ Voluntary Cleanup Program
☐ Federal-supervised or conducted
☐ Independent Action
☐ Ecology-supervised or conducted

Site Status:
☒ Awaiting Cleanup
☐ Cleanup Started
☐ No Further Action Required
☐ Construction Complete – Performance Monitoring
☐ Cleanup Complete – Active O&M/Monitoring

Site Manager (Default: Southwest Region): SWRO

Specific confirmed contaminants include:

_____ in Soil

TPH-Dx (diesel) in Groundwater

_____ in Other (specify matrix: _____)

Facility/Site ID No. (if known):
_____

COUNTY ASSESSOR INFO:

Please attach to this report a copy of the tax parcel/ownership information for each parcel associated with the site, as well as a parcel map illustrating the parcel boundary and location.

Cowlitz County Parcel Search

Home Assessor Treasurer County Permit Search City Of Longview Permit Search

Click Here for New Search

Account Information

Account R033356 **Click account to view parcel map.** (Flash Player 11.1.0 or greater required)
Parcel 10134
Jurisdiction CITY OF LONGVIEW
Owner WIL-HUNT I LLC

Mailing Address PO BOX 3456
SPOKANE, WA 99220

Abbreviated Property Reference SUB:LONGVIEW OUTLOT BLK:LVOL LOT:92 SECT,TWN,RNG:3-7N-2W
DESC: J BURBEE DLC PARCEL: 10134

Situs
Tax District 400 Longview City Limits

Click the underlined tax district to view summarized tax authorities
Click here to view individual tax authorities

Neighborhood 227 - LONGVIEW INDUSTRIAL

Sales Data Map Data Click Here For Interactive Map Instructions

* No sales data is available for this parcel. This can occur if the parcel is a non-residential (i.e. commercial) parcel.

Levy LV-122-LV

Current Year Levy Rate (2010 Assess 2011 Payable) 11.796298

Current Assessment Information

Click Here to View Historical Values

Assessment Year	Taxes Payable Year	Type	Actual Value	Assessed Value	Acres	Notice of Valuation** (pdf)
2012	2013	LAND	110880	110880	1.06	10134.pdf

*** This is the Notice of Valuation as it was originally mailed out. Any subsequent changes to values after the initial notice was produced are not reflected in this PDF.*

Current Transaction Information

Click Here to View Historical Taxes

Click on Tax Year to view detail

Payment Processing: Until your payment is posted, the website will continue to automatically update your account with accruing interest and penalty charges. Longer processing times can be expected during the months of April/May and October/November. Please be advised it may take up to two weeks before all property tax payments are posted.

Assessment Year	Tax Year	Total Charges	Paid 1st Half	Paid 2nd Half	Paid Whole Year	Unpaid Amount	Tax Bill** (pdf)	Credit Card Payment Link
2011	2012	$1,795.60	$897.80	$897.80		$0.00	R033356.pdf	www.officialpayments.com

*** This is the tax bill as it was mailed out in February. Subsequent changes to the tax bill are not reflected in this PDF.*

Make Checks Payable to:
Cowlitz County Treasurer
207 4th Ave. N.
Kelso, WA 98626

Conveyance History

Click on the links to view

Reception	Book	Page	Grantor

conveyance documents

While we make every attempt to make documents available online, there may be some cases where documents are only available in the Auditor's Office.

3453378			PSFL LEASING INC FKA PUGET SOUND TRUCK
762822	806	36	

In order to view conveyance documents, you must first download and install the latest version of the Java runtime software. Please use the link below to access the Java download website. This is a one-time download and does not need to be installed each subsequent time you open a conveyance document.

Java is a trademark of Sun Microsystems, Inc.

Property Details

Click here to view historical property details.

Timber Moratorium ExpirationDate	None
Timber Moratorium Fee Number	None
Short Plat/Large Lot #	
Model: BUS_MASTER	
Model: COMM_LAND	
SQFT	46200

Cowlitz County Permits

Click on the links to view permit documents

Permit# Project Name Type Remark Filing Date Status

Click Here For Online Planning Maps (EPIC)

While we make every attempt to make documents available online, there may be some cases where documents are unavailable in an electronic format.

Photographs

Cowlitz County Parcel Search

Home Assessor Treasurer County Permit Search City Of Longview Permit Search

Click Here for New Search

Account Information

Account	R033354 **Click account to view parcel map.** (Flash Player 11.1.0 or greater required)
Parcel	10132
Jurisdiction	CITY OF LONGVIEW
Owner	WIL-HUNT I LLC
Mailing Address	PO BOX 3456 SPOKANE, WA 99220
Abbreviated Property Reference	SUB:LONGVIEW OUTLOT BLK:LVOL LOT:91B SECT,TWN,RNG:3-7N-2W DESC: J BURBEE DLC PARCEL: 10132
Situs	146 INDUSTRIAL WAY , LONGVIEW 98632
Tax District	400 Longview City Limits

Click the underlined tax district to view summarized tax authorities
Click here to view individual tax authorities

Neighborhood 227 - LONGVIEW INDUSTRIAL

Sales Data Map Data Click Here For Interactive Map Instructions

* No sales data is available for this parcel. This can occur if the parcel is a non-residential (i.e. commercial) parcel.

Levy LV-122-LV

Current Year Levy Rate (2010 Assess 2011 Payable) 11.796298

Current Assessment Information Click Here to View Historical Values

Assessment Year	Taxes Payable Year	Type	Actual Value	Assessed Value	Acres	Notice of Valuation** (pdf)
2012	2013	IMPROVEMENTS	194830	194830	0	10132.pdf
2012	2013	LAND	144960	144960	1.39	10132.pdf

** *This is the Notice of Valuation as it was originally mailed out. Any subsequent changes to values after the initial notice was produced are not reflected in this PDF.*

Current Transaction Information Click Here to View Historical Taxes

Click on Tax Year to view detail

Payment Processing: Until your payment is posted, the website will continue to automatically update your account with accruing interest and penalty charges. Longer processing times can be expected during the months of April/May and October/November. Please be advised it may take up to two weeks before all property tax payments are posted.

Assessment Year	Tax Year	Total Charges	Paid 1st Half	Paid 2nd Half	Paid Whole Year	Unpaid Amount	Tax Bill** (pdf)	Credit Card Payment Link
2011	2012	$4,865.92	$2,432.96	$2,432.96		$0.00	R033354.pdf	www.officialpayments.com

** *This is the tax bill as it was mailed out in February. Subsequent changes to the tax bill are not reflected in this PDF.*

Make Checks Payable to:
Cowlitz County Treasurer
207 4th Ave. N.
Kelso, WA 98626

Conveyance History

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3453378			PSFL LEASING INC FKA PUGET SOUND TRUCK
840301028	967	713	

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Java is a trademark of Sun Microsystems, Inc.

Property Details

Click here to view historical property details.

Timber Moratorium ExpirationDate	None
Timber Moratorium Fee Number	None
Short Plat/Large Lot #	
Model: BUS_MASTER	
Model: COMM	
BLDG	3144
Model: COMM_LAND	
SQFT	60400

Cowlitz County Permits

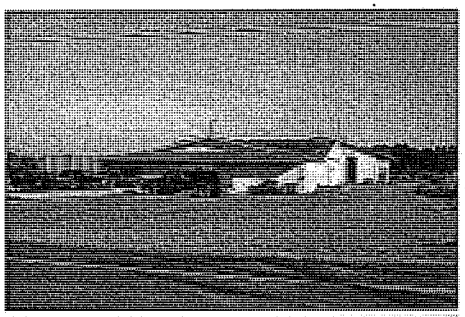
Click on the links to view permit documents

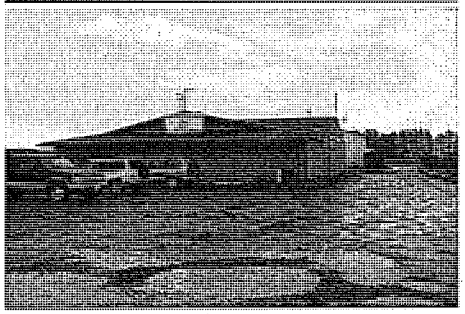
Permit# Project Name Type Remark Filing Date Status

Click Here For Online Planning Maps (EPIC)

While we make every attempt to make documents available online, there may be some cases where documents are unavailable in an electronic format.

Photographs





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Cowlitz County

3 Kings Environmental, Inc.

24 December 2012

Washington State Department of Ecology
c/o Mr. Scott Rose
Toxics Cleanup Program
300 Desmond Drive
Lacy, WA 98503

Re: Transmittal of "Remedial Investigation & Cleanup Report" for the Puget Sound Freight Lines Trucking Facility Located at 146 Industrial Way in Kelso, Washington
Washington DOE Facility ID: 74481279; 3 Kings Project Number: 212005

Mr. Rose:

3 Kings Environmental Inc. (3 Kings) is pleased to submit the attached "Remedial Investigation & Cleanup Report" for the Puget Sound Freight Lines (PSFL) trucking facility located at 146 Industrial Way in Kelso, Cowlitz County, Washington ("subject site"). As the enclosed report states, a petroleum release was identified, assessed and remediated at the subject site, associated with a former 10,000-gallon diesel Aboveground Storage Tank (AST). The AST was decommissioned by removal, 2,580 tons of soil was removed for offsite disposal, approximately 147,000 gallons of petroleum-impacted water was removed from the former tank cavity and treated onsite, and confirmation soil and groundwater samples were collected. As the enclosed report states, remaining petroleum impacts to soil are below applicable Model Toxics Control Act (MTCA) Method A cleanup levels, while groundwater samples indicated remaining petroleum impacts which exceed MTCA Method A cleanup standards. Thus, 3 Kings recommends additional groundwater remediation and monitoring, including installation of groundwater monitoring wells, completion of at least four consecutive quarterly groundwater monitoring events, and associated report preparation.

Please review the attached report, and feel free to contact me if you have questions or need clarification of the activities at the subject site. Thank you for the help with this project.

Sincerely,

Brett S. MacDonald, R.G.
3 Kings Environmental, Inc.

enlosure

REMEDIAL INVESTIGATION & CLEANUP REPORT

Puget Sound Freight Lines Facility – 146 Industrial Way Longview, Washington

RECEIVED

DEC 28 2012

WA State Department of Ecology (SWRO)

Prepared for:

Mr. Tom Lovejoy
Puget Sound Freight Lines
P.O. Box 24526
Seattle, Washington 98124

Date:

24 December 2012

Prepared by:

3Kings Environmental, Inc.

1311 Grace Avenue
Battle Ground, Washington 98604
Phone: (360) 666-5464 Fax: (360) 666-8202
3Kingsinc.com

3 Kings Environmental, Inc.

24 December 2012

Puget Sound Freight Lines
c/o Mr. Tom Lovejoy
P.O. Box 24526
Seattle, Washington 98124

Re: Remedial Investigation and Cleanup Report for the Puget Sound Freight Lines Facility Located at 146 Industrial Way in Longview, Cowlitz County, Washington
Washington DOE Facility ID: 74481279; 3 Kings Project Number: # 212005

Mr. Lovejoy:

3 Kings Environmental Inc. (3 Kings) has completed a remedial investigation and cleanup associated with a petroleum release from an Aboveground Storage Tank (AST) System at the Puget Sound Freight Lines facility located at 146 Industrial Way in Longview, Cowlitz County, Washington ("subject site"). This report provides background information about the subject site and surrounding properties, describes work activities completed at the subject site, provides findings and associated conclusions regarding completed work, and provides recommendations for additional work necessary to achieve a "No Further Action" (NFA) finding by the Washington Department of Ecology (DOE) associated with a petroleum release from a historic AST System formerly located at the subject site.

1.0 BACKGROUND INFORMATION

The following sections summarize background information associated with the subject site and surrounding properties, including the site details, history, current site setting, as well as topography, geology and hydrology of the locale.

1.1 Site Details

Based on information obtained by 3 Kings, the subject site consists of an approximate 3.3-acre parcel located on the north side of Industrial Way, approximately ¼ mile east of the intersection with 3rd Avenue. The subject site is located on the southern edge of the City of Longview, in an industrial area between the Columbia and Cowlitz Rivers. See Figure 1, "Site Vicinity Map." The subject site is further identified by the Cowlitz County Assessor as Tax Lots 10132, 10134 and 10137. The subject site is located within Section 3, within Township 7 North and Range 2 West of the Willamette Baseline and Meridian. The subject site is currently owned by Wil-Hunt I LLC, and is leased to Puget Sound Freight Lines.

At the time of work activities, the subject site was utilized as a shipping company with truck storage and maintenance areas. The subject site contained four structures, including two buildings used as offices and located at the southeastern corner of the property, a truck maintenance shop located at the northeast portion of the property, and a storage building located at the northeastern corner of the property. The western half of the property was used for truck parking, trailer storage and access roads. A former Diesel AST System was located on a concrete pad identified approximately 100 feet east and 50 feet north of the southwestern corner of the subject site, and included a presumed 10,000-gallon AST and single dispenser. In addition, a reported former waste oil Underground Storage Tank (UST) was formerly located immediately north of the northwest corner of the truck maintenance building. The waste oil UST was reportedly decommissioned. The subject site is mainly covered with gravel, with sections of asphalt and concrete around buildings. See Figure 2, "Site Map," for a map illustrating the layout of the property.

The subject site is surrounded by industrial properties. A vehicle maintenance and storage facility was identified adjacent to and east of the subject site, with freight hauling businesses beyond, lumber cutting operations and a sheet metal fabrication company are identified immediately across Industrial Way from the subject site, an apparent warehouse and storage facility associated with lumber operations was identified adjacent to and west of the subject site, with industrial properties beyond, and a railroad track was identified adjacent to and north of the subject site, with undeveloped parcels beyond.

1.2 Regional Topography

The subject site was identified at an elevation of approximately 10 feet above mean sea level (amsl) within the floodplain of the Columbia and Cowlitz Rivers. Topography at and adjacent to the subject site is almost completely flat, due to the proximity to the Cowlitz River, located less than ¼ mile northeast of the subject site, and the Columbia River, located approximately one mile southwest of the subject site. In addition, a log pond associated with the lumber facility across Industrial Way was identified approximately 1,000 feet south of the subject site.

1.3 Regional and Local Geology

The subject site and surrounding properties are identified within the *Puget Lowlands* geologic province. This province is identified north of the *Portland Basin*, east of the *Willapa Hills,* and west of the *Cascade Mountain* province. The *Puget Lowlands* is described as a broad, low lying region, stretching from southern Washington into British Columbia.

Rocks within the *Puget Lowlands* range in age from over 60 million years in age to less than one million years in age, and include argillite, shales, siltstones, limestones, and other sedimentary rocks, with intermingled ophiolites, gabbros and other igneous members. As a series of events aided in the deposition of the rock bodies, lithology varies drastically from point to point within the province. Pleistocene glaciation provided the best mechanism for erosion.

Based on boring logs maintained by Washington DOE, and reviewed by 3 Kings, bedrock was not identified to a depth of at least 100 feet below ground surface (bgs) in the same Township, Range and Section as the subject site. Reportedly, silt, sand and gravel were identified from the surface to the base of this boring. Groundwater was first identified at a depth of three feet bgs, with water present throughout the Section at a maximum depth of 15 feet bgs. Several

borings were completed at 250 Industrial Way (i.e., Ross-Simpson Lumber), which indicated water at a depth of between four and eight feet bgs.

According to the U.S. Department of Agriculture *Soil Survey of Cowlitz County, Washington*, the subject site is underlain by the Caples silty clay loam with slopes ranging from zero to three percent. This soil type is located on flood plains and is composed of mixed alluvium. The Caples silty clay loam is described as a very deep, artificially drained soil type, with slow permeability, slow runoff, and high available water capacity. Flooding is considered rare.

A typical cross-section of the Caples silty clay loam includes an approximate four-inch thick surface layer described as a dark brown silty clay loam, followed by an approximate five-inch thick layer of mottled, dark brown silty clay loam, followed by an approximate 16-inch thick layer of mottled, gray silty clay loam, followed by a 14-inch thick layer of mottled, grayish brown silty clay loam, followed by an approximate five-inch thick layer of mottled, dark gray silty clay loam, and completely underlain by an approximate 16-inch thick layer of mottled, gray silty clay loam.

Based on information obtained during field work at the subject site, 3 Kings confirmed the presence of brown to gray silty clay with some sands. Apparent fill material, in the form of gravel and cobbles, were identified from the surface to a depth of approximately two feet bgs. This material appears indicative of the Caples silty clay loam.

1.6 Hydrology

The nearest surface water body to the subject site is the Cowlitz River, identified approximately ¼ mile northeast of the subject site. In addition, a large log pond associated with the property adjacent to and south of the subject site was identified within ¼ mile. The Columbia River was identified approximately one mile southwest of the subject site, with the confluence of the Cowlitz and Columbia Rivers just over one mile south of the subject site. As the subject site and surrounding properties are located between these water bodies, groundwater is presumably shallow with a highly variable flow direction. The predominant groundwater flow direction is presumably to the northeast. Based on boring logs maintained by Washington DOE, groundwater is reportedly identified between four and eight feet below ground surface (bgs) at properties in the same Township, Range and Section as the subject site.

Surface water would likely flow across the subject site from north to south, toward Industrial Way. The subject site contains two storm water infiltration features at the southern edge, which apparently biologically filter storm water prior to infiltration.

2.0 ONSITE WORK ACTIVITIES

The following sections summarize work activities completed at the subject site between December 2011 and June 2012, including initial investigation activities completed by Adapt Engineering, Inc. (AEI), and a series of remedial activities completed by 3 Kings.

2.1 Environmental Site Assessment: December 2011

According to a report dated 29 December 2011, and completed by AEI, three borings were completed at the subject site to facilitate soil and groundwater sample collection activities. Borings were completed using a direct-push, hydraulic, piston-sampling device (i.e., GeoProbe). Reportedly, a boring was completed just north of the AST System, a boring was completed in the vicinity of the former waste oil UST, and a boring was completed at the northeastern corner of the subject site. Soil and groundwater samples were analyzed for petroleum constituents and heavy metals.

Analytical results associated with the boring completed near the AST System indicated the presence of Total Petroleum Hydrocarbon-Diesel extended (TPH-Dx) as diesel at 4,200 milligrams per kilogram, or parts per million (ppm), while TPH-Dx as heavy oil was not detected. The sample collected in the vicinity of the waste oil UST did not contain detectable concentrations of TPH-Dx or Polycyclic Aromatic Hydrocarbon (PAH) constituents, and indicated insignificant concentrations of the heavy metals chromium, cadmium and lead. The groundwater sample collected from the AST System boring indicated the presence of TPH-Dx as diesel at 530,000 micrograms per liter, or parts per billion (ppb), while TPH-Dx as heavy oil, cadmium, chromium and lead were not detected. The sample collected from the former waste oil UST boring contained TPH-Dx as diesel at 2,400 ppb, and the absence of detectable concentrations of TPH-Dx as heavy oil, cadmium, chromium and lead. Apparently, samples from the boring completed at the northeastern corner of the subject site were not analyzed.

The report recommends additional work to remediate the petroleum impacts. A copy of the AEI report is available in Appendix A, "Historic Environmental Assessment Reports." See Figure 3, "Initial Sample Location Map," for a map illustrating the locations of the borings completed by AEI in December 2011.

2.2 Subsurface Investigation: January 2012

On 17 January 2012, 3 Kings was at the subject site to complete subsurface investigation activities, including completion of 11 test pits. Using a track-mounted excavator, test pits were completed to a depth of between seven and ten feet below ground surface (bgs) in areas around a former AST System and a truck repair shop. Test pit TP-1 was completed beneath the former AST, test pit TP-2 was completed south of the former AST, test pits TP-3 and TP-4 were completed just west of the former AST, test pit TP-5 was completed north of the former AST, test pit TP-6 was completed east of the former AST, test pit TP-7 was completed near the western edge of the subject site, test pits TP-8, TP-9 and TP-10 were completed northeast of the former

AST, and test pit TP-11 was completed north of the truck repair shop. Each test pit was completed to a sufficient depth to collect observations and soil samples at the groundwater interface (i.e., approximately seven to eight feet bgs). Soil samples were collected at the approximate soil-water interface using the excavator bucket from each test pit.

A 3 Kings geologist reviewed soil conditions at each test pit location, and prepared exploratory boring logs which described soil conditions, potential presence of contaminants and other relevant observations. Following review and documentation of soil conditions, 3 Kings collected a single sample from test pit at a depth of between seven and nine feet bgs. Soil samples were collected via Environmental Protection Agency (EPA) Method 5035, using pre-weighed 40 milliliter vials partially filled with methanol and a soil plunger. In addition to samples collected using EPA Method 5035, a single laboratory-provided four-ounce jar equipped with a Teflon lid was also collected. Soil sample TP1-7-011712 was collected from test pit TP-1 at a depth of seven feet bgs, soil sample TP2-8-011712 was collected from test pit TP-2 at a depth of eight feet bgs, soil samples TP3-7-011712, TP4-7-011712, TP5-7-011712, TP6-7-011712, TP7-7-011712, TP8-7-011712, TP9-7-011712 and TP10-7-011712 were all collected at seven feet bgs from the corresponding test pit, while soil samples TP-9-9-011712 and TP11-9-011712 were collected at nine feet bgs from the corresponding test pit. Each sample was immediately placed in the appropriate sample container, labeled with a sample-specific identification, stored at approximately four degrees centigrade, and transported to Specialty Analytical in Clackamas, Oregon using chain-of-custody protocols. A single sample from each boring was analyzed for Total Petroleum Hydrocarbon-Diesel extended (TPH-Dx).

Analytical reports from Specialty Analytical confirmed the presence of detectable concentrations of diesel in all samples ranging from 191 milligrams per kilogram, or parts per million (ppm), to a maximum concentration of 3,660 ppm, with the exception of soil samples TP5-7-011712, TP7-7-011712 and TP11-9-011712 which did not contain detectable concentrations. TPH-Dx as heavy oil was not detected in any sample, with the exception of soil sample TP3-7-011712 which had a concentration of 1,660 ppm. Follow-up analysis on sample B5-14-110111 was found to contain TPH-Dx as heavy oil at 133 milligrams per kilogram, or parts per million (ppm), while TPH-Dx as diesel was not detected, which is well below the most stringent applicable cleanup standard of 2,000 ppm.

The following table summarizes analytical results associated with initial investigation activities.

Sample ID	Date Sampled	Sample Location	TPH-Dx as Diesel (mg/kg)	TPH-Dx as Heavy Oil (mg/kg)
TP1-7-011712	1/17/2012	Test Pit TP-1 at 7' bgs	1,020	<64.7
TP2-8-011712	1/17/2012	Test Pit TP-2 at 8' bgs	191	<77.3
TP3-7-011712	1/17/2012	Test Pit TP-3 at 7' bgs	416	1,660
TP4-7-011712	1/17/2012	Test Pit TP-4 at 7' bgs	457	<75.3
TP5-7-011712	1/17/2012	Test Pit TP-5 at 7' bgs	<21.9	<73.0
TP6-7-011712	1/17/2012	Test Pit TP-6 at 7' bgs	3,660	<78.0
TP7-7-011712	1/17/2012	Test Pit TP-7 at 7' bgs	<24.0	<80.0
TP8-7-011712	1/17/2012	Test Pit TP-8 at 7' bgs	1,360	<74.9
TP9-7-011712	1/17/2012	Test Pit TP-9 at 7' bgs	663	<74.7
TP9-9-011712	1/17/2012	Test Pit TP-9 at 9' bgs	405	<77.8
TP10-7-011712	1/17/2012	Test Pit TP-10 at 7' bgs	1,260	<73.3
TP11-9-011712	1/17/2012	Test Pit TP-11 at 9' bgs	<19.9	<66.5

Following collection of soil samples, 3 Kings collected open pit samples from select test pits using a disposable polyethylene bailer. Water samples TP1H2O-011712, TP7H2O-011712, TP9-H2O-011712 and TP11H2O-011712 were collected from test pits TP-1, TP-7, TP-9 and TP-11, respectively. Water samples were immediately placed in appropriate laboratory-provided containers equipped with Teflon lids, labeled with sample-specific identifications, stored at approximately four degrees centigrade and transported to Specialty Analytical using chain-of-custody protocols. Each of the four water samples were analyzed for TPH-Dx. TPH-Dx as diesel was detected at a maximum concentration of 15.4 milligrams per liter, or ppm. The following table summarizes analytical results associated with water samples collected on 17 January 2012.

Sample ID	Date Sampled	TPH-Dx as Diesel (mg/L)	TPH-Dx as Heavy Oil (mg/L)
TP1-H2O-011712	1/17/2012	5.89	0.693
TP7-H2O-011712	1/17/2012	0.288	0.488
TP9-H2O-011712	1/17/2012	15.4	0.295
TP11-H2O-011712	1/17/2012	<0.0762	<0.190

See Figure 3, "Initial Sample Location Map," for a map illustrating samples collected during the initial investigation activities. See Appendix B, "Exploratory Boring Logs," for copies of boring logs completed by a 3 Kings geologist during initial investigation activities. See Appendix C, "Analytical Laboratory Reports," for copies of laboratory reports and chain-of-custodies.

2.3 Remedial Excavation: January - February 2012

In late January and early February 2012, 3 Kings was at the subject site to complete a remedial excavation associated with the petroleum release from the former AST System. 3 Kings completed an excavation measuring approximately 65 feet by 65 feet to a depth of nearly ten feet bgs, centered around the former AST System. A total of 2,580 tons of petroleum-impacted soil was removed from the area, loaded directly into truck and trailers, and transported to Weyerhaueser Landfill in Castle Rock, Washington. In addition to excavation activities, a centrifugal pump and four 20,000-gallon frac tanks were used to control groundwater within the excavation. Approximately 147,000 gallons of petroleum-impacted water was pumped from the excavation, treated by carbon filtration, and discharged to the City of Longview Sewer System.

During excavation activities, additional soil samples were collected from the excavation sidewalls, and from additional test pits around the excavation. In addition, test pits TP-12 and TP-13 were completed approximately 50 feet east of the excavation area. All soil samples were collected from the excavator bucket using Environmental Protection Agency (EPA) Method 5035 methods, and were analyzed for TPH-Dx. Soil samples collected during remedial excavation activities are summarized below.

Sample ID	Date Collected	Sample Location	TPH-Dx as Diesel (mg/kg)	TPH-Dx as Heavy Oil (mg/kg)
TP12-7-013112	1/31/2012	Test Pit TP-12 at 7' bgs	<24.2	<80.5
TP13-7-013112	1/31/2012	Test Pit TP-13 at 7' bgs	<20.7	<69.0
TP6NW-7-013112	1/31/2012	North Wall of Excavation at 7' bgs	<19.7	<65.8
TP6EW-7-013112	1/31/2012	East Wall of Excavation at 7' bgs	<20.7	<69.1
TP1EF2-020112	2/1/2012	Excavated Material (SE Corner)	1,350	<73.2
TP1NC3-020112	2/1/2012	South Wall of Excavation at 7' bgs	1,810	<74.1
TP1NC4-020112	2/1/2012	Excavated Material (NE Corner)	1,460	<76.0
TP1CF5-8-020212	2/2/2012	Center of Excavation at 8' bgs	<21.7	<72.5
WTPS7-3-020612	2/6/2012	Southwest Corner at 3' bgs	<19.5	<65.0
WTPN7-3-020612	2/6/2012	West Wall of Excavation at 3' bgs	<20.4	<68.1

Groundwater samples were also collected during remedial excavation activities, and are summarized below.

Sample ID	Date Collected	Sample Location	TPH-Dx as Diesel (mg/L)	TPH-Dx as Heavy Oil (mg/L)
TP12H2O-013112	1/31/2012	Test Pit TP-12	3.10	<0.191
TP13-H2O-013112	1/31/2012	Test Pit TP-13	62.7	<0.195
TP1H2O-020212	2/2/2012	Center of Excavation (TP-1)	8.35	<0.190
SP8-020712	2/7/2012	Pit Water from Excavation	1.04	<0.190
SP2H2O-021012	2/10/2012	Pit Water from Excavation	0.665	<0.190
SP2H2O-030112	3/1/2012	Pit Water from Excavation	<0.078	<0.190

Groundwater sample SP2H2O-021012 was further analyzed for Polycyclic Aromatic Hydrocarbon (PAH) constituents, and was found to contain acenaphthene at 0.542 micrograms per liter, or parts per billion (ppb), acenaphthylene at 0.0666 ppb, fluorene at 0.657 ppb and phenanthrene at 0.0571 ppb.

See Figure 4, "Final Sample Location Map," for locations of UST decommissioning samples. See Appendix C for copies of analytical laboratory reports and chain-of-custodies.

2.5 Post-Remedial Excavation Groundwater Sampling

On 5 June, 11 July and 10 December 2012, 3 Kings returned to the subject site to complete groundwater sampling from the former excavation and surrounding areas. The goal of the follow-up sampling was to evaluate concentrations of dissolved petroleum hydrocarbon constituents following excavation activities.

In each occurrence, 3 Kings utilized a direct-push, hydraulic, piston-sampling device (i.e., GeoProbe rig) to complete between two and four borings at the subject site. Each boring was advanced to a depth of approximately ten feet bgs, where a temporary well screen was placed. Using disposable polyethylene tubing attached to a peristaltic pump, at least one gallon of purge water was removed from each boring prior to sample collection. Following completion of purging activities, a sample was collected from the peristaltic pump and tubing directly into laboratory-provided bottles equipped with Teflon lids, labeled with a sample-specific identification, stored at approximately four degrees centigrade, and transported to a Washington DOE-accredited analytical laboratory using chain-of-custody protocols. Each sample collected was analyzed for TPH-Dx, BTEX and/or PAH constituents.

On 5 June 2012, two borings were completed within the limits of the former excavation. Borings B1 and B2 were advanced to ten feet bgs, and groundwater samples B1H20-060512 and B2H20-060512 were collected from the two borings, respectively. Groundwater was observed at approximately two feet bgs during drilling activities. The following table summarizes results associated with the 5 June 2012 sampling event.

Sample ID	Date Collected	Sample Location	TPH-Dx as Diesel (mg/L)	TPH-Dx as Heavy Oil (mg/L)
B1H20-060512	6/5/2012	Southern Half of Excavation	<0.080	<0.199
B2H20-060512	6/5/2012	Northern Half of Excavation	0.088	<0.206

On 10 July 2012, 3 Kings returned to the subject site to observe the completion of two additional borings within the limits of the former excavation. Borings B4 and B5 were completed in roughly the same locations as previously-completed borings B1 and B2. These borings were also completed to a depth of approximately ten feet bgs, with temporary well screens set to this depth. Groundwater was observed at approximately four feet bgs during the 10 July 2012 sampling event. The following table summarizes sample results from this event.

Sample ID	Date Collected	Sample Location	TPH-Dx as Diesel (mg/L)	TPH-Dx as Heavy Oil (mg/L)	BTEX (ug/L)
B4H20-071012	7/10/2012	Northern Half of Excavation	1.18	<0.351	B = <0.300 T = <0.500 E = 1.42 X = 4.74
B5H20-071012	7/10/2012	Southern Half of Excavation	0.226	<0.350	B = <0.300 T = <0.500 E = <0.500 X = <1.50

On 10 December 2012, 3 Kings returned to the subject site to observe the completion of four borings within and adjacent to the former excavation. Using a GeoProbe rig, borings DP-1 through DP-4 were advanced to a depth of ten feet bgs. Boring DP-1 was completed at the southwestern corner of the subject site (i.e., outside of excavation in a presumed hydraulically down-gradient position), boring DP-2 was completed within the southern half of the former excavation, boring DP-3 was completed within the northern half of the former excavation, and boring DP-4 was completed approximately 100 feet northeast of the former excavation (i.e., in a presumed hydraulically up-gradient position from the former excavation). Groundwater was observed at a depth of between three and four feet bgs in all borings completed. The following table summarizes results from the 10 December 2012 sampling event.

Sample ID	Date Collected	Sample Location	TPH-Dx as Diesel (mg/L)	TPH-Dx as Heavy Oil (mg/L)	BTEX (ug/L)
DP-1-W	12/10/2012	Southwest Corner of Property Presumed Hydraulically Down-Gradient Position	0.383	0.425	B = <0.300 T = 0.712 E = <0.500 X = <1.50
DP-2-W	12/10/2012	Southern Half of Excavation	174	<0.200	B = <0.300 T = 0.940 E = <0.500 X = 8.56
DP-3-W	12/10/2012	Northern Half of Excavation	0.394	0.283	B = <0.300 T = <0.500 E = <0.500 X = <1.50
DP-4-W	12/10/2012	Northeast of Former Excavation Presumed Hydraulically Up-Gradient Position	0.166	<0.203	B = <0.300 T = <0.500 E = <0.500 X = <1.50

See Figure 5, "Post-Remedial Groundwater Sample Location Map," for locations of borings and corresponding analytical laboratory results. See Appendix B for copies of boring logs completed by 3 Kings during the most recent post-remedial sampling event. See Appendix C for copies of analytical laboratory results.

3.0 MODEL TOXICS CONTROL ACT (MTCA) REVIEW

The Washington Department of Ecology has established the Model Toxics Control Act (MTCA) as a method to evaluate the potential risk to human health or the environment associated with chemicals present in soil or shallow groundwater. The Washington DOE MTCA guidance document includes generic risk-based cleanup levels for four petroleum hydrocarbon whole products, ten individual petroleum hydrocarbon constituents, five heavy metals, four chlorinated solvents, pesticides and poly chlorinated biphenyls for both soil and groundwater.

Risk from exposure to chemicals is generally defined as the combination of a chemical's toxicity and the degree of human exposure to that chemical. Using conservative site characteristics, MTCA has established cleanup standards to effectively determine the potential risk to human or ecological health through the ingestion or dermal contact of surface soil, the ingestion or

inhalation of impacted groundwater or surface water, and the leaching of contaminants to shallow groundwater. To streamline the MTCA review process, generic cleanup standards are established for Unrestricted Land Use (i.e., residential properties) and for Industrial Properties. It is also possible to calculate site-specific standards following the determination of plume characteristics, soil conditions, depth to groundwater, location, size and construction of structures, use of groundwater and ecological use at and adjacent to the subject site. Method A refers to the generic cleanup standards for a property with Unrestricted Land Use and few hazardous substances, Method B refers to generic or site-specific cleanup standards for a property with Unrestricted Land Use with multiple chemicals or with potential for adverse effect to human health or the environment, and Method C refers to generic and site-specific cleanup standards for Industrial Properties.

The subject site is located in an area of commercial and industrial land use, and the subject site is zoned as Heavy Industrial by the City of Longview. This zoning designation precludes the use of properties for residential purposes. Thus, this evaluation will utilize MTCA Method A for Industrial Land Use. The MTCA review will focus on soil and groundwater cleanup standards.

3.1 MTCA Method A Review of Remaining Soil Impacts

Based on confirmation soil samples collected during excavation activities in 2012, remaining petroleum-impacted soil does not remain at levels which exceeds the MTCA Method A cleanup levels. Washington DOE has established the following cleanup levels in soil for petroleum constituents as MTCA Method A for Industrial Land Use:

TPH-Dx as Diesel	2,000 ppm
TPH-Dx as Heavy Oil	2,000 ppm
Benzene	0.03 ppm
Toluene	7 ppm
Ethylbenzene	6 ppm
Xylenes	9 ppm
Naphthalene	5 ppm
PAHs (Utilize Toxic Equivalents for Carcinogenic PAHs)	2 ppm
PCB Mixtures	10 ppm

3.2 MTCA Method A Review of Remaining Groundwater Impacts

Using data collected from the most recent sampling events, remaining petroleum-impacted groundwater was found to contain concentrations of TPH-Dx as diesel at levels that exceed Method A cleanup levels, while remaining constituents were below cleanup levels. Washington DOE has established the following cleanup levels for petroleum constituents in groundwater as MTCA Method A for Industrial and Unrestricted Land Use:

TPH-Dx as Diesel	**500 ppb**
TPH-Dx as Heavy Oil	500 ppb
Benzene	5 ppb
Toluene	1,000 ppb
Ethylbenzene	700 ppb
Xylenes	1,000 ppb
Naphthalene	160 ppb
PAHs (Utilize Toxic Equivalents for Carcinogenic PAHs)	0.1 ppb
PCB Mixtures	0.1 ppb

3.3 MTCA Discussion

As mentioned in Section 3.1, petroleum-impacted soil was not identified at levels which exceed MTCA Method A cleanup levels for Industrial Land Use following completion of excavation activities. A maximum concentration of 1,810 ppm was identified during confirmation soil sampling activities, which is below the MTCA Method A cleanup level of 2,000 ppm. Thus, additional delineation or characterization of soil at the subject site is not warranted.

As discussed in Section 3.2, petroleum-impacted groundwater was identified at levels which exceeds the MTCA Method A cleanup level for TPH-Dx as diesel during post-remedial groundwater sampling activities. TPH-Dx as diesel was detected at 174 ppm in groundwater sample DP-2-W, which is well above the Washington DOE MTCA Method A cleanup level of 0.500 ppm. However, BTEX and PAH constituents detected in sample DP-2-W were below applicable cleanup standards.

Based on the information contained in this section, dissolved petroleum hydrocarbon constituents identified in groundwater indicate remaining source material. Based on the identification of TPH-Dx as diesel and heavy oil in groundwater samples both within and outside the former excavation, it is apparent that subsurface diesel impacts extend beyond the limits of the previous excavation, and may indicate an alternative source.

4.0 CONCLUSIONS

Based on the results associated with confirmation soil sampling along the sidewalls and base of the former remedial excavation surrounding the previous AST System, remaining petroleum-impacted soil attributed to the AST release is not present. However, based on groundwater sampling completed after remedial excavation activities, remaining petroleum impacts to shallow groundwater still exist. This may be a result of remaining petroleum-impacted soil in a previously unknown location, impact from an offsite source, or regional impact to groundwater. In order to close the project file through Washington DOE, additional groundwater assessment must occur.

5.0 RECOMMENDATIONS

Based on the information contained in this report, 3 Kings recommends additional assessment and potential remediation associated with identified impacts to groundwater. Per Washington DOE regulations, groundwater samples must be collected from sanctioned permanent or temporary monitoring wells on a regular basis (i.e., four consecutive quarterly monitoring events) with all petroleum constituents within applicable cleanup standards.

This will likely require the installation of at least four groundwater monitoring wells at the subject site, including one source area well (i.e., located within former excavation), one hydraulically up-gradient well (i.e., located at northern edge of subject site), and two hydraulically down-gradient wells (i.e., located at southern edge of subject site). Each well will be completed to a depth of ten to 15 feet bgs, and will likely consist of two-inch diameter Poly Vinyl Chloride (PVC). Each well will contain ten feet of screen beneath approximately two feet of solid riser pipe. Each well will be completed with steel, traffic-rated monuments to minimize impact to business activities at the subject site.

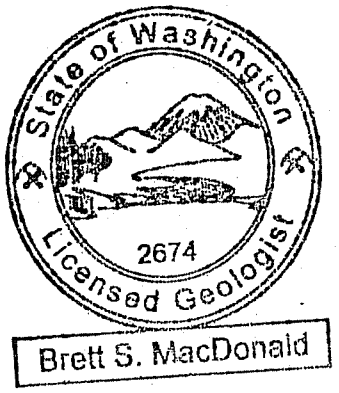
As required by Washington DOE, a minimum of four quarterly groundwater sampling events will be required. Groundwater sampling will include collection of groundwater samples from each well for TPH-Dx, BTEX and/or PAH constituent analysis at a Washington DOE-accredited analytical laboratory. If results associated with groundwater monitoring indicates the absence of constituents identified above applicable Washington DOE cleanup standards over four consecutive sampling events, 3 Kings will recommend project file closure and issuance of a "No Further Action" (NFA) finding for the subject site associated with the former AST.

Assuming dissolved petroleum hydrocarbons at the subject site are at or below MTCA Method A cleanup standards, 3 Kings will prepare a Site Closure Report. The Site Closure Report will be presented to the Washington Department of Ecology (DOE) for review, following enrollment in the Voluntary Cleanup Program (VCP). Washington DOE will then issue a Letter of Opinion on the cleanup activities, presenting either a request for additional information or recommending project file closure and issuance of a "No Further Action" (NFA) finding for the site associated with the petroleum release.

6.0 SIGNATURES

Report Prepared by:

Brett S. MacDonald, R.G.



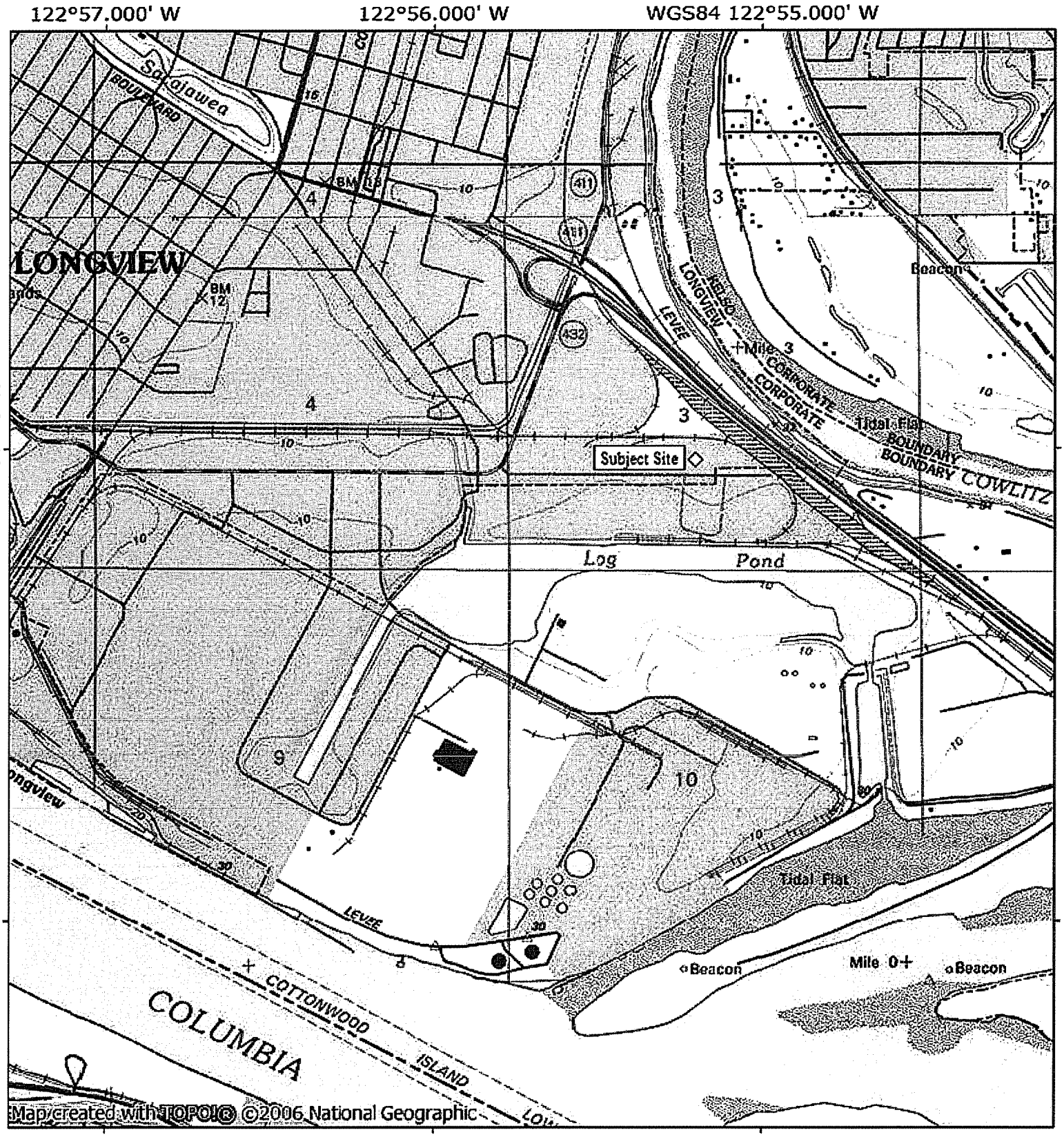


FIGURE 1:
SITE VICINITY MAP

Puget Sound Trucking RSI
146 Industrial Way
Longview, Washington
3 Kings Job Number: 212005

3 Kings Environmental, Inc.

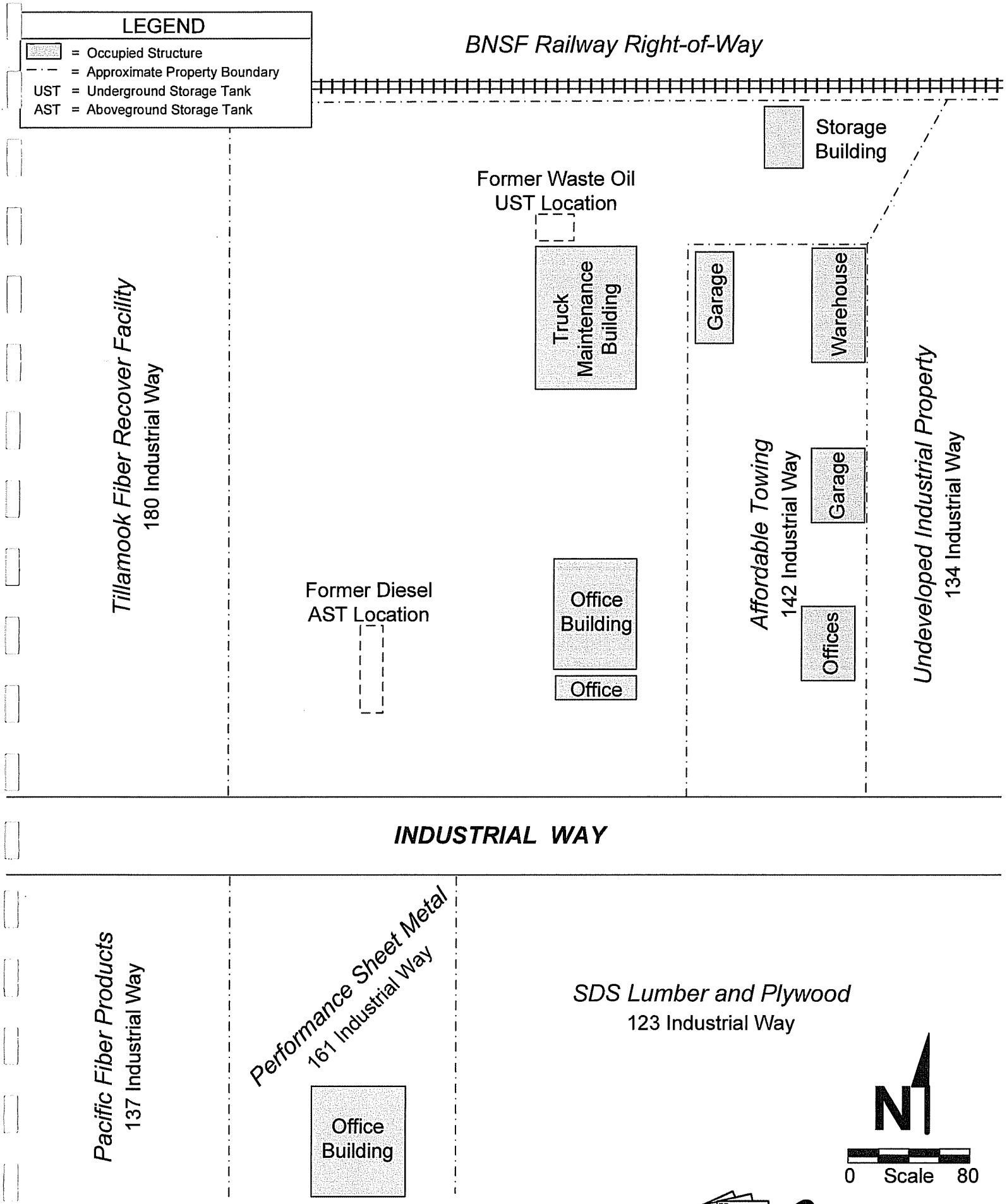


FIGURE 2: SITE MAP

Puget Sound Trucking RSI
146 Industrial Way
Longview, Washington
3 Kings Job Number: 212005

3 Kings Environmental, Inc.

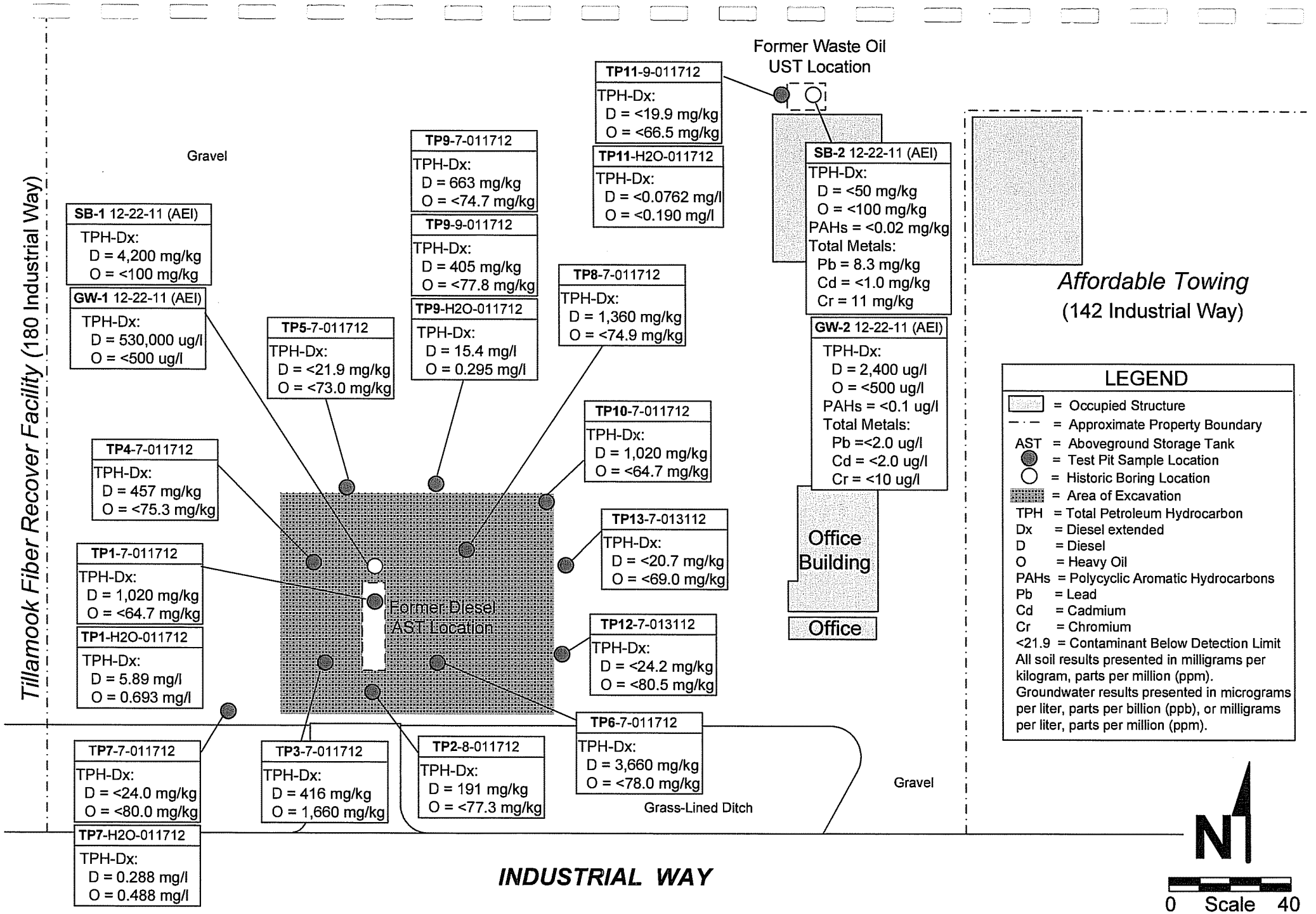
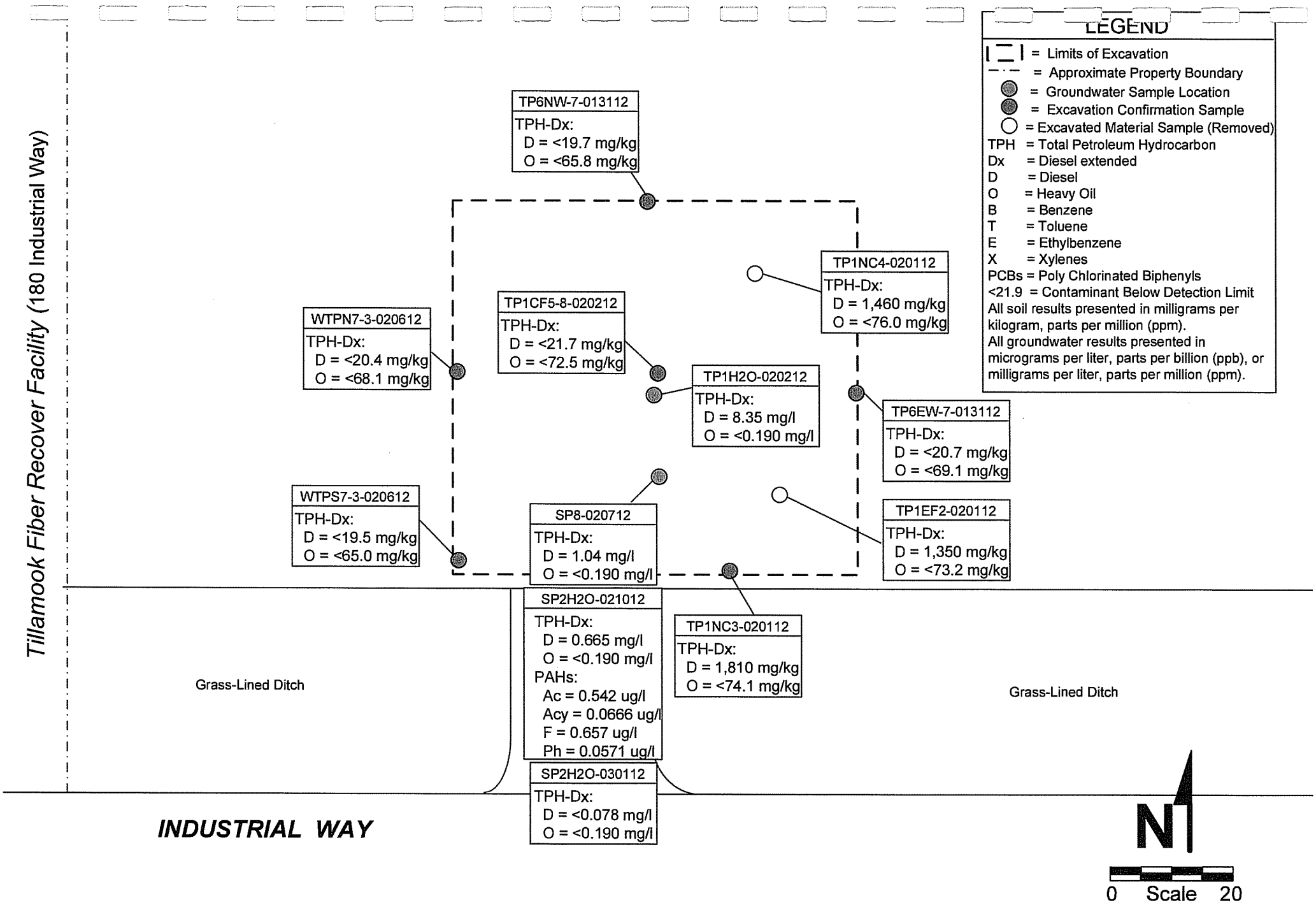


FIGURE 3: INITIAL SAMPLE LOCATION MAP

Puget Sound Trucking RSI
146 Industrial Way
Longview, Washington
3 Kings Job Number: 212005

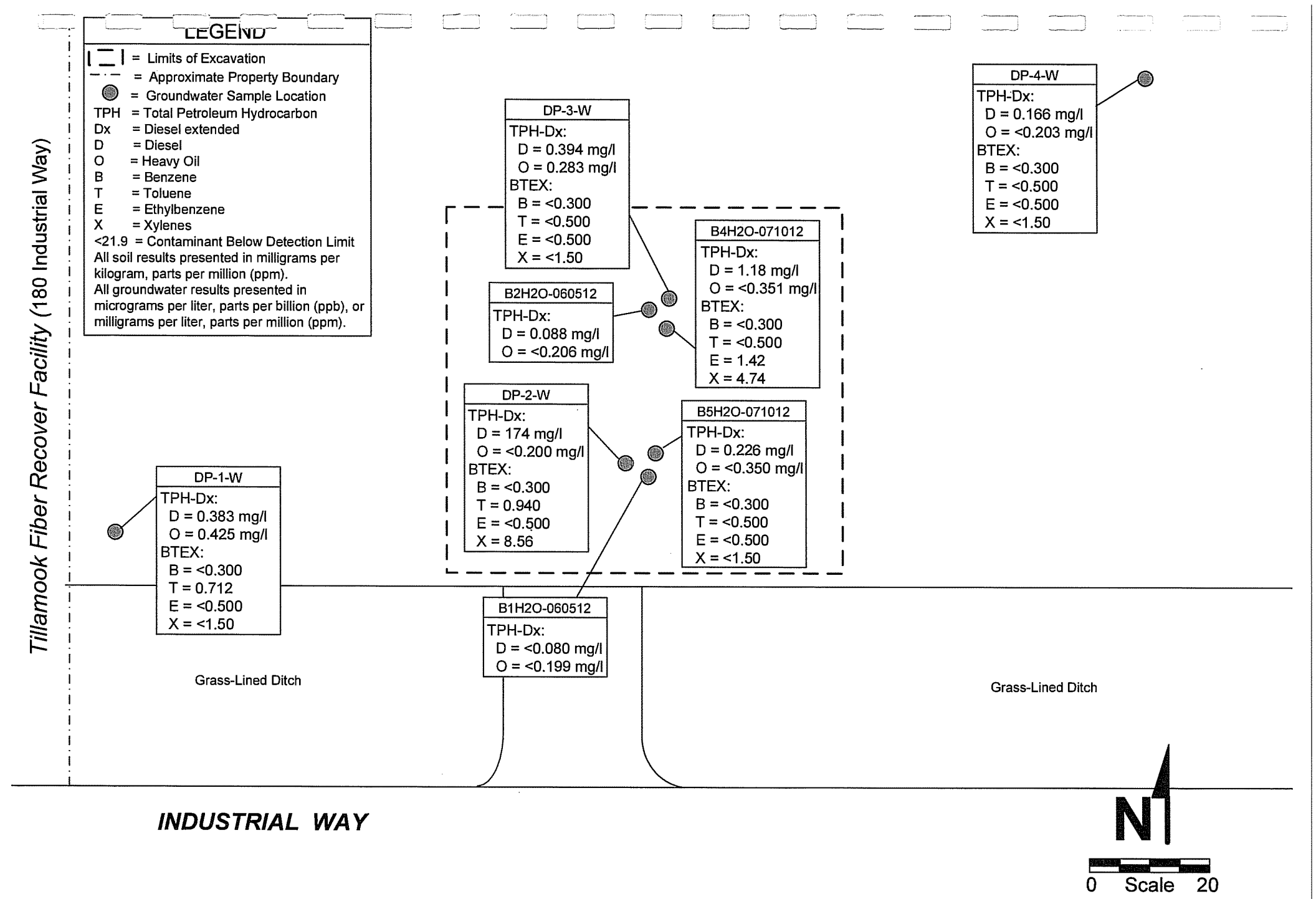
3 Kings Environmental, Inc.



3 Kings Environmental, Inc.

FIGURE 4: FINAL SAMPLE LOCATION MAP

Puget Sound Trucking RSI
146 Industrial Way
Longview, Washington
3 Kings Job Number: 212005



3 Kings Environmental, Inc.

FIGURE 5: POST-REMEDIAL GROUNDWATER SAMPLE LOCATION MAP

Puget Sound Trucking RSI
146 Industrial Way
Longview, Washington
3 Kings Job Number: 212005

Appendix A

Historic Environmental Assessment Reports

Adapt Engineering, Inc.
10725 SW Barbur Boulevard, Suite 350
Portland, Oregon 97219

Tel (503) 892-2346
Fax (503) 892-2348
www.adaptengr.com

December 29, 2011

Adapt Job No. WA11-17547-PHI

Puget Sound Freight Lines, Inc.
10700 Northeast 4th Street, Unit 3414
Bellevue, Washington 98104

Attention: Mr. Tom Lovejoy

Subject: Limited Phase II Environmental Site Assessment
146 Industrial Way
Longview, Washington 98632

Dear Mr. Lovejoy:

Adapt Engineering, Inc. (Adapt) is pleased to present the results of our Limited Phase II Environmental Site Assessment for the above-referenced property. Authorization to proceed with our work was given by you on December 23, 2011.

SITE DESCRIPTION

The subject property consists of three parcels of land (Account Numbers R033354, R033356, and R033359) that total approximately 3.29 acres in size. The subject property is currently developed with three commercial buildings, a manufactured home (utilized as an office), a canopy, asphalt paving, gravel paving, concrete paving, and several bioswales. The subject property is located on the north side of Industrial Way in a predominately industrial area of Longview, Washington.

Based on a review of the United States Geological Survey (USGS) 7.5-minute series topographic map "Rainier, Washington" (1990), the elevation of the subject property is approximately 10 feet above mean sea level (AMSL). Topographically, the subject property is generally level.

PROJECT BACKGROUND

A Phase I Environmental Site Assessment (Phase I) of the subject property was conducted by Adapt and issued on December 21, 2011. Adapt concluded that potential subsurface impacts resulting from the presence of significant surface staining adjacent to an above-ground storage tank containing diesel fuel, the historical presence of a waste oil underground storage tank and the presence of building floor drains that discharge to the ground surface were considered recognized environmental conditions (as defined by ASTM Practice E1527-05).

With the approval of Mr. Tom Lovejoy, a limited Phase II assessment was conducted to sample and test soil and groundwater underlying the subject property for the presence of petroleum hydrocarbons and metals.

PURPOSE AND SCOPE

The purpose of the Phase II was to assess the site for possible soil and groundwater impacts associated with current and past uses of the subject property. Specifically, the goal was to test the subsurface soil and near-surface groundwater near the diesel above-ground storage tank (AST) for petroleum impacts, subsurface soil and near-surface groundwater near the former waste oil underground storage tank (UST) for petroleum and heavy metal impacts, and shallow soils near the discharge point of a drain line connected to two interior floor drains for impact from petroleum hydrocarbons. Adapt's scope of work included the advancement of three GeoProbe borings to depths between 8 and 12 feet below ground surface (bgs) for the purpose of collecting and testing soil and groundwater samples for possible contamination (See Figure 2- Sample Location Plan).

FIELD ACTIVITIES

Prior to conducting field activities, Adapt arranged for a private underground utility locate and coordinated site access with the property owner and GeoProbe contractor.

One GeoProbe boring (SB-1) was advanced near the northeastern corner of the diesel AST. A second boring (SB-2) was installed near the northwestern corner of the central subject property building, in the vicinity of the former waste oil UST. A third boring (SB-3) was installed near the southeastern corner of the northeastern subject property building, in the vicinity of a potential dry well (see Figure 2 – Sample Location Plan). Soil and groundwater samples were collected from borings SB-1 and SB-2. A soil sample was collected from boring SB-3.

Soil samples collected from borings SB-1, SB-2, and SB-3 were logged and inspected for visual and olfactory indications of contamination. Soil samples for laboratory testing were collected from obviously impacted intervals or intervals most likely to contain petroleum impacts. The collected soil samples were placed in appropriate sampling containers, stored in a cooler at approximately four degrees centigrade, and transported to a certified laboratory in Olympia, Washington under Chain-of-Custody protocols.

Groundwater samples were collected from borings SB-1 and SB-2 and inspected for visual and olfactory indications of contamination. Groundwater samples were collected from each of these borings. The collected groundwater samples were placed in appropriate sampling containers, stored in a cooler at approximately four degrees centigrade, and transported to a certified laboratory in Olympia, Washington under Chain-of-Custody protocols.

SUBSURFACE CONDITIONS

Subsurface Conditions

In general, shallow soils beneath the subject property consisted of brown sandy silts with varying amounts clay and gravel between the surface and approximately 12 feet bgs. Groundwater was encountered between approximately 4.75 feet and 7.9 feet bgs in the installed borings.

ANALYTICAL RESULTS

Soil

The soil samples collected from boring SB-1 exhibited significant visual and olfactory indications of hydrocarbon impacts from approximately 2 feet bgs to the maximum explored depth of approximately 12 feet bgs. The soil samples collected from borings SB-2 and SB-3 did not

exhibit any odors or suspicious staining. Soil sample SB-1 12-22-11 was submitted to ESN Northwest Labs for analytical testing for Total Petroleum Hydrocarbons – Diesel Range Organics (TPH-DRO). Soil sample SB-2 12-22-11 was submitted for analytical testing of TPH-DRO, Polyaromatic hydrocarbons (PAHs), Cadmium, Chromium, and Lead. Soil sample SB-3 12-22-11 was submitted for analytical testing of TPH Hydrocarbons Identification (HCID). Soil analytical results are summarized in Table 1 below.

TABLE 1 – Soil Sampling Results

	Diesel Range Organics (mg/kg)	Lube Range Organics (mg/kg)	Polyaromatic Hydrocarbons (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)
Ecology Cleanup Standard*	2,000				2,000	1,000
SB-1 12-22-11	**4,200**	ND	–	–	–	–
SB-2 12-22-11	ND	ND	ND	ND	**11**	**8.3**

– = Sample not tested
Ecology Cleanup Standard* = Standard applicable for industrial sites
ND = Not Detected at or above the laboratory method detection levels
(mg/kg) = milligrams per kilogram or parts per million (ppm)

Groundwater

The groundwater sample collected from boring B-1 (GW-1) exhibited a moderate petroleum sheen. The groundwater sample collected from boring B-2 (GW-2) did not exhibit any odors or suspicious sheens. Groundwater sample GW-1 12-22-11 was submitted to ESN Northwest Labs for analytical testing for TPH-DRO. Groundwater sample GW-2 12-22-11 was submitted for analytical testing for TPH-DRO, PAHs, Cadmium, Chromium, and Lead. The groundwater analytical results are summarized below in Table 2.

TABLE 2 – Groundwater Sampling Results

	Diesel Range Organics (µg/L)	Lube Range Organics (µg/L)	Polyaromatic Hydrocarbons (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Lead (µg/L)
Ecology Cleanup Standard*	500	7				
GW-1 12-22-11	**530,000**	ND	--	ND	ND	ND
GW-2 12-22-11	**2,400**	ND	ND	ND	ND	ND

-- = Sample not tested
Ecology Cleanup Standard* = Standard applicable for industrial sites
ND = Not Detected at or above the laboratory method detection levels
(µg/L) = micrograms per liter or parts per billion (ppb)

DISCUSSION

Diesel range hydrocarbons were detected above the Washington Department of Ecology (Ecology) cleanup standard for groundwater in both groundwater samples. The detected diesel concentration in sample GW-1 from near the diesel AST was approximately 1,000 times

Ecology's cleanup standard of 500 ppb. Diesel concentrations measured in soils adjacent to the diesel AST were also observed to be greater than Ecology's cleanup standard. The limited Phase II sampling did not indicate the presence of any contamination associated with the former waste oil UST or the floor drain discharge area.

CONCLUSIONS AND RECOMMENDATIONS

The limited Phase II sampling assessment indicated that groundwater has been impacted by surface spills of diesel fuel associated with the diesel AST. The diesel concentrations detected are significantly higher than Ecology's cleanup standard. Adapt recommends that the property owner consult with their attorneys regarding possible reporting requirements by Ecology given the high concentrations detected. It should also be noted that the limited Phase II assessment does not address the extent of the groundwater impact.

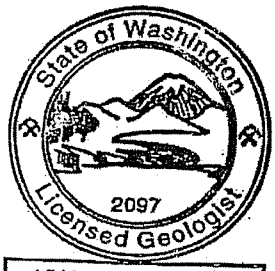
LIMITATIONS

This assessment is intended to provide the client with information regarding potential recognized environmental conditions associated with the subject property. Adapt warrants that this Phase II ESA was performed using generally accepted, good commercial and customary environmental assessment practices and field procedures. Adapt believes that the information obtained from the soil sampling is reliable within the constraints of the proposed sampling plan. This Phase II ESA addressed historic areas of potential concern. Due to the limited nature of the work, there is the possibility that adverse conditions may exist which could not be identified within the scope of this assessment or which were not apparent at the time of the report preparation. Therefore, Adapt cannot and does not warrant or guarantee that the information obtained is representative of conditions across the site. No other warranties, either express or implied, are given.

We appreciate the opportunity to be of service to you. If you have any questions or need additional information please contact us at (503) 892-2346.

Respectfully Submitted,

Adapt Engineering, Inc.

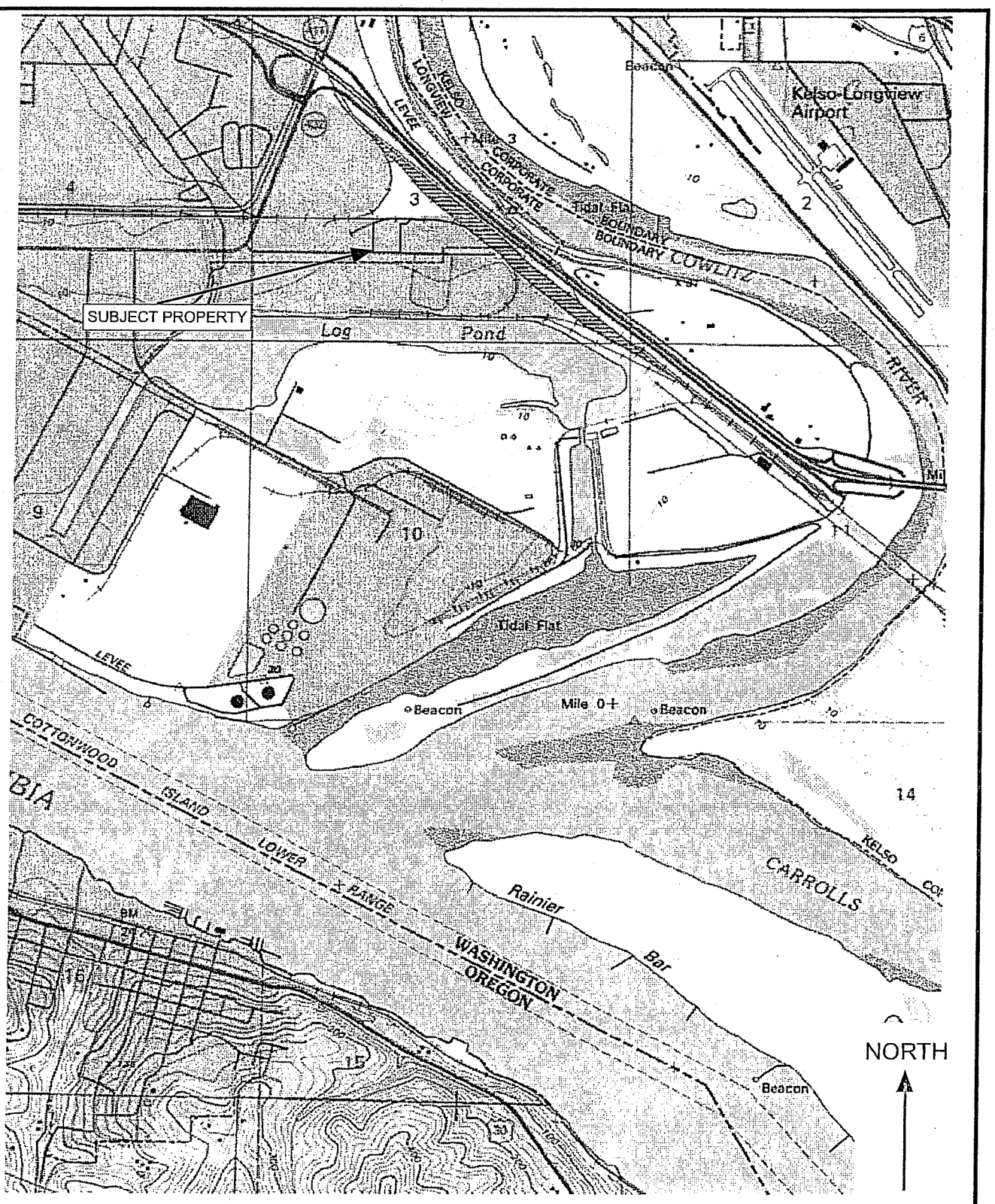


Nicholas Sturdivant, L.G.
Environmental Assessor

John Estrem, L.G.
Portland Environmental Services Manager

Enclosures: Figure 1 - Location Map
Figure 2 - Sample Location Plan

Appendix A - Laboratory Analytical Results

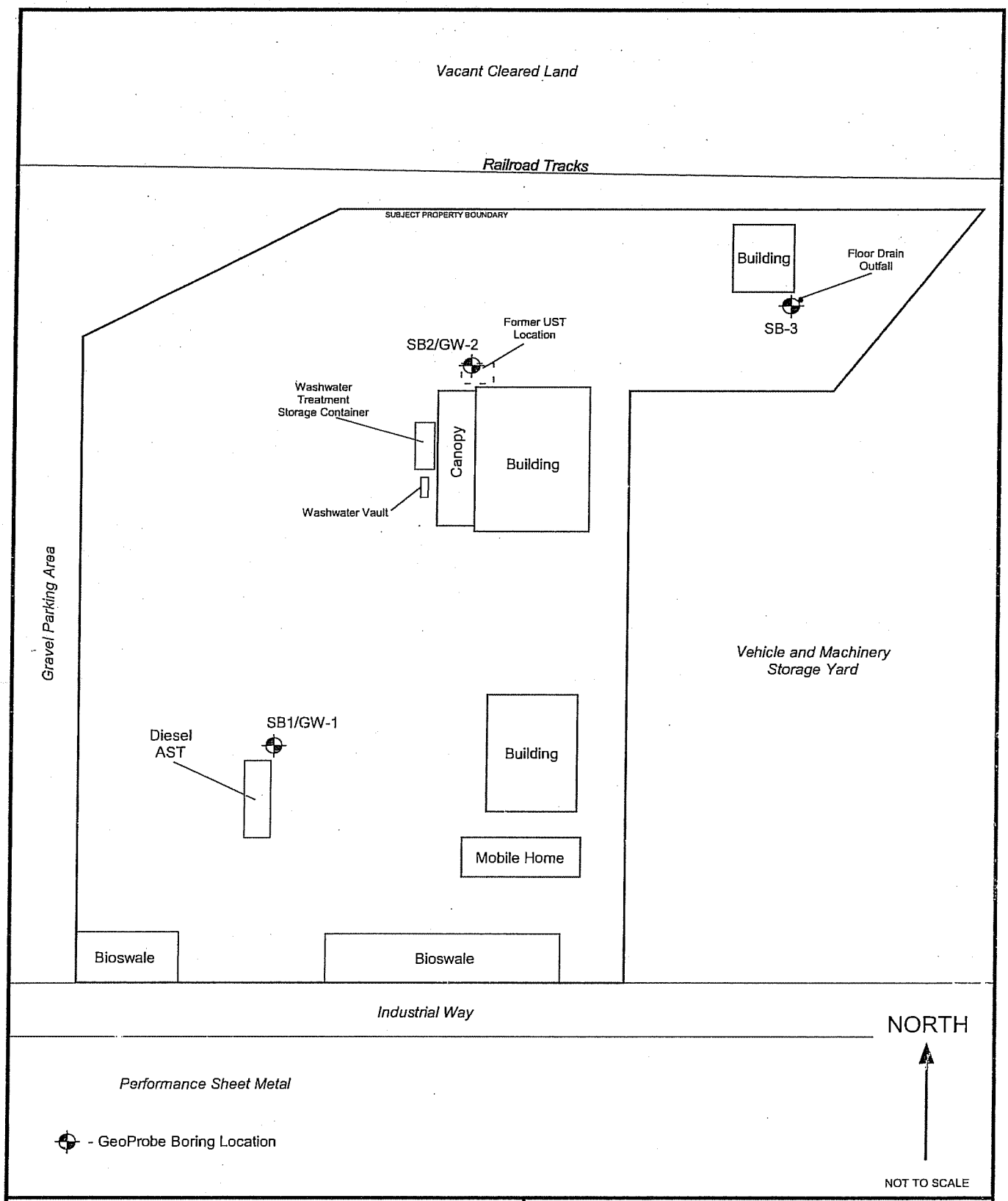


Base Map provided by U.S.G.S. 7.5-minute Topographic Map, "Rainier, WA" Quadrangle (1990) Not to Scale

Adapt Engineering, Inc.
10725 SW Barbur Blvd., Suite 200
Portland, Oregon 97219
Tel: (503) 892-2346 Fax: (503) 892-2348

FIGURE - 1 Location/Topographic Map
Location : Puget Sound Freight Lines
146 Industrial Way
Longview, Washington 98632
Client : Puget Sound Freight Lines
Date : 12/21/11 **Job # :** WA11-17547-PHI

B



Adapt Engineering, Inc.
10725 SW Barbur Blvd., Suite 200
Portland, Oregon 97219
Tel: (503) 892-2346 Fax: (503) 892-2348

FIGURE 2 - Sample Location Plan

Location : Puget Sound Freight Lines
146 Industrial Way
Longview, Washington 98632

Client : Puget Sound Freight Lines, Inc.

Date : 12/29/11 **Job # :** OR11-17547-PHII

APPENDIX A

LABORATORY ANALYTICAL RESULTS

ESN NORTHWEST, INC. Environmental Services Network

CHAIN-OF-CUSTODY RECORD

CLIENT: Adapt Engineering
ADDRESS: 10725 SW Barber
PHONE: 971-324-2007 FAX:
CLIENT PROJECT #: WA11-17547-PHFT PROJECT MANAGER: Skip Sturdivant

DATE: 12-22-11 PAGE 1 OF 1
PROJECT NAME: PSFL
LOCATION: Longview, WA
COLLECTOR: Skip Sturdivant DATE OF COLLECTION 12-22-11

Sample Number	Depth	Time	Sample Type	Container Type	TPH-HCID	TPH - DIESEL & OIL	TPH - GASOLINE	BTEX	VOC 8260CL	VOC 8260	SemiVol 8270	PAH's 8270	PCB's 8082	CL Pesticides 8081	RCRA 8 Metals	MTCA 5 Metals	Pb	Asbestos-PLM	GRO Suite	DRO Suite	WO Suite	Cd, Cr, Pb	NOTES	Total Number of Containers	Laboratory Note Number
1. SB-1 12-22-11	5-7	940	soil	glass		X																		3	
2. GW-1 12-22-11	—	953	gw	glass		X																		2	
3. SB-2 12-22-11	7-8'	1008	soil	glass		X					X										X			2	
4. BGW-2 12-22-11	—	1026	gw	glass/plastic		X					X										X			3	
5. SB-3	05-2	1053	soil	glass	X																			2	
6.																									
7.																									
8.																									
9.																									
10.																									
11.																									
12.																									
13.																									
14.																									
15.																									
16.																									
17.																									
18.																									

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	12-22-11/1100	[signature]	12/22/11 1100
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☑ ESN DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: 24 HR (48 HR) 5 DAY

ESN NORTHWEST CHEMISTRY LABORATORY

Adapt Engineering
PSIL PROJECT
Client Project #WA11-17547-PHII

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Hydrocarbon Identification Analysis of Soil by Method NWTPH-HCID

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Gasoline Range Organics (mg/kg)	Diesel Range Organics (mg/kg)	Lube Oil Range Organics (mg/kg)
Method Blank	12/23/2011	12/23/2011	138	nd	nd	nd
SB-3	12/23/2011	12/23/2011	126	nd	nd	nd
SB-3 Duplicate	12/23/2011	12/23/2011	127	nd	nd	nd
Reporting Limits				20	50	100

"nd" Indicates not detected at listed detection limits.
"D" Indicates detected above the listed detection limit.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

ESN NORTHWEST CHEMISTRY LABORATORY

Adapt Engineering
PSIL PROJECT
Client Project #WA11-17547-PHII
Longview, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Diesel Range Organics & Lube Oil Range Organics in Soil by Method NWTPH-Dx/Dx Extended

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Diesel Range Organics (mg/kg)	Lube Oil Range Organics (mg/kg)
Method Blank	12/23/2011	12/23/2011	138	nd	nd
SB-1 12-22-11	12/23/2011	12/23/2011	80	**4200**	nd
SB-2 12-22-11	12/23/2011	12/23/2011	122	nd	nd
Reporting Limits				50	100

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

ESN NORTHWEST CHEMISTRY LABORATORY

Adapt Engineering
PSIL PROJECT
Client Project #WA11-17547-PHII

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Diesel Range Organics & Lube Oil Range Organics in Water by Method NWTPH-Dx/Dx Extended

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Diesel Range Organics (ug/L)	Lube Oil Range Organics (ug/L)
Method Blank	12/23/2011	12/27/2011	186	nd	nd
GW-1 12-22-11	12/23/2011	12/27/2011	int	**530,000**	nd
GW-2 12-22-11	12/23/2011	12/27/2011	187	**2400**	nd
Reporting Limits				250	500

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%

ESN NORTHWEST CHEMISTRY LABORATORY

Adapt Engineering
PSIL PROJECT
Client Project #WA11-17547-PHII

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Polynuclear Aromatic Hydrocarbons in Soil by Method 8270

Analytical Results

		MTH BLK	LCS	SB-2 12/22/11	MS	MSD	RPD
Date extracted	Reporting	12/23/11	12/23/11	12/23/11	12/23/11	12/23/11	
Date analyzed	Limits	12/23/11	12/23/11	12/23/11	12/23/11	12/23/11	
Moisture, %	(mg/kg)			25%	25%	25%	
Acenaphthene	0.02	nd	124%	nd	111%	116%	4%
Acenaphthylene	0.02	nd	135%	nd			
Anthracene	0.02	nd	121%	nd			
Benzo(a)anthracene*	0.02	nd	128%	nd			
Benzo(a)pyrene*	0.02	nd	110%	nd			
Benzo(b)fluoranthene*	0.02	nd	106%	nd			
Benzo(ghi)perylene	0.02	nd	88%	nd			
Benzo(k)fluoranthene*	0.02	nd	88%	nd			
Chrysene*	0.02	nd	102%	nd			
Dibenzo(a,h)anthracene*	0.02	nd	115%	nd			
Fluorene	0.02	nd	125%	nd			
Fluoranthene	0.02	nd	132%	nd			
Indeno(1,2,3-cd)pyrene*	0.02	nd	100%	nd			
Naphthalene	0.02	nd	113%	nd			
1-Methylnaphthalene	0.02	nd		nd			
2-Methylnaphthalene	0.02	nd		nd			
Phenanthrene	0.02	nd	116%	nd			
Pyrene	0.02	nd	135%	nd	95%	106%	11%
Total Carcinogens				nd			
Surrogate recoveries:							
2-Fluorobiphenyl		71%	85%	67%	79%	79%	
p-Terphenyl-d14		89%	97%	76%	91%	93%	

Data Qualifiers and Analytical Comments

* - Carcinogenic Analyte
nd - not detected at listed reporting limits
na - not analyzed
C - coelution with sample peaks
M - matrix interference
J - estimated value
Results reported on dry-weight basis
Acceptable Recovery limits: 50% TO 150%
Acceptable RPD limit: 35%

ESN NORTHWEST CHEMISTRY LABORATORY

Adapt Engineering
PSIL PROJECT
Client Project #WA11-17547-PHII

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Polynuclear Aromatic Hydrocarbons in Water by Method 8270

Analytical Results

	Reporting	MTH BLK	LCS	GW-2 12/22/11
Date extracted	Limits	12/23/11	12/23/11	12/23/11
Date analyzed	(ug/L)			
Acenaphthene	0.1	nd	124%	nd
Acenaphthylene	0.1	nd	135%	nd
Anthracene	0.1	nd	121%	nd
Benzo(a)anthracene*	0.1	nd	128%	nd
Benzo(a)pyrene*	0.1	nd	110%	nd
Benzo(b)fluoranthene*	0.1	nd	106%	nd
Benzo(ghi)perylene	0.1	nd	88%	nd
Benzo(k)fluoranthene*	0.1	nd	88%	nd
Chrysene*	0.1	nd	102%	nd
Dibenzo(a,h)anthracene*	0.1	nd	115%	nd
Fluorene	0.1	nd	125%	nd
Fluoranthene	0.1	nd	132%	nd
Indeno(1,2,3-cd)pyrene*	0.1	nd	100%	nd
Naphthalene	0.1	nd	113%	nd
1-Methylnaphthalene	0.1	nd		nd
2-Methylnaphthalene	0.1	nd		nd
Phenanthrene	0.1	nd	116%	nd
Pyrene	0.1	nd	135%	nd
Total Carcinogens				nd
Surrogate recoveries:				
2-Fluorobiphenyl		67%	85%	71%
p-Terphenyl-d14		88%	97%	100%

Notes: There were insufficient samples to perform MS/MSD ananlyses

Data Qualifiers and Analytical Comments

* - Carcinogenic Analyte
nd - not detected at listed reporting limits
na - not analyzed
C - coelution with sample peaks
M - matrix interference
J - estimated value
Results reported on dry-weight basis
Acceptable Recovery limits: 50% TO 150%
Acceptable RPD limit: 35%

ESN NORTHWEST CHEMISTRY LABORATORY

Adapt Engineering
PSIL PROJECT
Client Project #WA11-17547-PHII

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Total Metals in Soil by EPA-6020 Series

Sample Number	Date Analyzed	Lead (Pb) (mg/kg)	Cadmium (Cd) (mg/kg)	Chromium (Cr) (mg/kg)
Method Blank	12/28/2011	nd	nd	nd
SB-2 12-22-11	12/28/2011	8.3	nd	11
SB-2 12-22-11 Duplicate	12/28/2011	8.7	nd	11
Reporting Limits		5.0	1.0	5.0

"nd" Indicates not detected at listed detection limits.

ESN NORTHWEST CHEMISTRY LABORATORY

Adapt Engineering
PSIL PROJECT
Client Project #WA11-17547-PHII

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

QA/QC Data - Total Metals EPA-6020

Sample Number: QC Batch

	Matrix Spike			Matrix Spike Duplicate			RPD
	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)	(%)
Lead	86	85	99	75	79	105	6.2
Cadmium	86	77	90	75	69	92	2.7
Chromium	86	71	83	75	63	84	1.7

	Laboratory Control Sample		
	Spiked Conc. (mg/kg)	Measured Conc. (mg/kg)	Spike Recovery (%)
Lead	100	99	99
Cadmium	100	102	102
Chromium	100	93	93

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 80%-120%
ACCEPTABLE RPD IS 35%
M - Matrix Spike recovery failed due to matrix interference.

ESN NORTHWEST CHEMISTRY LABORATORY

Adapt Engineering
PSIL PROJECT
Client Project #WA11-17547-PHII

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Total Metals in Water by EPA-6020 Method

Sample Number	Date Analyzed	Lead (Pb) (ug/L)	Cadmium (Cd) (ug/L)	Chromium (Cr) (ug/L)
Method Blank	12/28/2011	nd	nd	nd
GW-2 12-22-11	12/28/2011	nd	nd	nd
GW-2 12-22-11 Duplicate	12/28/2011	nd	nd	nd
Reporting Limits		2.0	2.0	10

"nd" Indicates not detected at listed detection limits.

ESN NORTHWEST CHEMISTRY LABORATORY

Adapt Engineering
PSIL PROJECT
Client Project #WA11-17547-PHII

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

QA/QC Data - Dissolved Metals EPA-6020

Sample Number: QC Batch

	Matrix Spike			Matrix Spike Duplicate			RPD
	Spiked Conc. (ug/L)	Measured Conc. (ug/L)	Spike Recovery (%)	Spiked Conc. (ug/L)	Measured Conc. (ug/L)	Spike Recovery (%)	(%)
Lead	20	16	80	20	17	85	6.06
Cadmium	20	22	110	20	21	105	4.65
Chromium	20	17	85	20	16	80	6.06

	Laboratory Control Sample		
	Spiked Conc. (ug/L)	Measured Conc. (ug/L)	Spike Recovery (%)
Lead	20	20	100
Cadmium	20	19	95
Chromium	20	20	100

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 80%-120%
ACCEPTABLE RPD IS 35%
M - Matrix Spike recovery failed due to matrix interference.

Appendix B

Exploratory Boring Logs

EXCAVATION LOG

3 Kings Environmental, Inc.

	Project Name Puget Sound Trucking	**Date:** 1/17/2012 **Job # :** 212005.2
	Location 146 Industrial Way, Longview **Excavation Contractor** 3 Kings Environmental	**Project Type** Subsurface Investigation
Excavation Method Trac-hoe	**Depth to Water** ~7-7.5 feet	**Sampling Method** Soil Grab
Backfill Material Excavated Materials	**Excavation Size** 4' X 10'	**Analysis** Diesel Range Hydrocarbons
Excavation # TP-1 **Geologist** R.Hamlet **Surface Elevation**	**Subsurface Conditions** Gravels Sandy, silty Clay **Topography:** Level	**Weather Conditions** Cloudy, showers, cool

Depth (ft)	USCS Symbol	Geologic Description	Comments
		Gravel Surface	
	GC	Medium Gravels (1"-2")	
		Large BaseRock (6" > 12")	
2	GW	Wet BaseRock	
4		Gray w/brown, sl. silty, v.sandy Clay	
	CL	to v. clayey Sand, moist to dry.	
6			
			▼
	CL	Gray, silty, sl. sandy, fractured Clay, wet in fractures.	
8			H20 ~ 7-7.5 feet bgs
	CL	Gray, silty, sl. sandy Clay, dry-moist.	
		Total Depth 9' bgs	
10			

	Gravel Surface		LEGEND
2		Gravels & BaseRock	Wet Gravels
4		Silyt, sl. \sandy Clays	
			▼
6			
8			
9		TD 9'	
	PLAN SECTION		

Geologist: R.Hamlet Date Page 1 of 1

EXCAVATION LOG

3 Kings Environmental, Inc.

Project Name Puget Sound Trucking		**Date:** 1/17/2012 **Job # :** 212005.2
Location 146 Industrial Way, Longview **Excavation Contractor** 3 Kings		**Project Type** Subsurface Investigation
Excavation Method Trac-hoe	**Depth to Water** ~7-7.5 feet	**Sampling Method** Soil Grab
Backfill Material Excavated Materials	**Excavation Size** 4' X 10'	**Analysis** Diesel Range Hydrocarbons
Excavation # TP-2 **Geologist** R.Hamlet **Surface Elevation**	**Subsurface Conditions** Gravels Sandy, silty Clay **Topography:** Level	**Weather Conditions** Cloudy, showers, cool

Depth (ft)	USCS Symbol	Geologic Description	Comments
		Gravel Surface	
	GC	Medium Gravels (1"-2")	
		Large BaseRock (6" > 12")	
2	GW	Wet BaseRock	
4		Gray w/brown, sl. silty, v.sandy Clay	
		to v. clayey Sand, moist to dry.	
	CL		
6			
			▽
	CL	Gray, silty, sl. sandy, fractured Clay, wet in fractures.	
8			H20 ~ 7-7.5 feet bgs
	CL	Gray, silty, sl. sandy Clay, dry-moist.	
		Total Depth 9' bgs	
10			

	Gravel Surface		LEGEND
2		Gravels & BaseRock	Wet Gravels
4		Silyt, sl. \sandy Clays	
6			▽
8			
9		TD 9'	
	PLAN SECTION		

Geologist: R.Hamlet Date Page 1 of 1

EXCAVATION LOG

3 Kings Environmental, Inc.

	Project Name Puget Sound Trucking	**Date: 1/17/2012** **Job # : 212005.2**
	Location 146 Industrial Way, Longview **Excavation Contractor** 3 Kings	**Project Type** Subsurface Investigation
Excavation Method Trac-hoe	**Depth to Water** ~7-7.5 feet	**Sampling Method** Soil Grab
Backfill Material Excavated Materials	**Excavation Size** 4' X 10'	**Analysis** Diesel Range Hydrocarbons
Excavation # TP-3 **Geologist** R.Hamlet **Surface Elevation**	**Subsurface Conditions** Gravels Sandy, silty Clay **Topography:** Level	**Weather Conditions** Cloudy, showers, cool

Depth (ft)	USCS Symbol	Geologic Description	Comments
		Gravel Surface	
	GC	Medium Gravels (1"-2")	
		Large BaseRock (6" > 12")	
2	GW	Wet BaseRock	
		Gray w/brown, sl. silty, v.sandy Clay	
4		to v. clayey Sand, moist to dry.	
	CL		
6			
			▽
	CL	Gray, silty, sl. sandy, fractured Clay, wet in fractures.	
8			H20 ~ 7-7.5 feet bgs
	CL	Gray, silty, sl. sandy Clay, dry-moist.	
		Total Depth 9' bgs	
10			

	Gravel Surface		LEGEND
2		Gravels & BaseRock	Wet Gravels
4		Silyt, sl. \sandy Clays	
6			▽
8			
9		TD 9'	
	PLAN SECTION		

Geologist: R.Hamlet Date Page 1 of 1

EXCAVATION LOG

3 Kings Environmental, Inc.

Project Name Puget Sound Trucking		**Date: 1/17/2012** **Job # : 212005.2**
Location 146 Industrial Way, Longview **Excavation Contractor** 3 Kings		**Project Type** Subsurface Investigation
Excavation Method Trac-hoe	**Depth to Water** ~7-7.5 feet	**Sampling Method** Soil Grab
Backfill Material Excavated Materials	**Excavation Size** 4' X 10'	**Analysis** Diesel Range Hydrocarbons
Excavation # TP-4 **Geologist** R.Hamlet **Surface Elevation**	**Subsurface Conditions** Gravels Sandy, silty Clay **Topography:** Level	**Weather Conditions** Cloudy, showers, cool

Depth (ft)	USCS Symbol	Geologic Description	Comments
		Gravel Surface	
	GC	Medium Gravels (1"-2")	
		Large BaseRock (6" > 12")	
2	GW	Wet BaseRock	
4		Gray w/brown, sl. silty, v.sandy Clay	
	CL	to v. clayey Sand, moist to dry.	
6			
			▼
	CL	Gray, silty, sl. sandy, fractured Clay, wet in fractures.	
8			H20 ~ 7-7.5 feet bgs
	CL	Gray, silty, sl. sandy Clay, dry-moist.	
		Total Depth 9' bgs	
10			

	Gravel Surface		LEGEND
2		Gravels & BaseRock	Wet Gravels
4		Silyt, sl. \sandy Clays	
			▼
6			
8			
9		TD 9'	
	PLAN SECTION		

Geologist: R.Hamlet Date Page 1 of 1

EXCAVATION LOG

3 Kings Environmental, Inc.

	Project Name Puget Sound Trucking	**Date:** 1/17/2012 **Job # :** 212005.2
	Location 146 Industrial Way, Longview **Excavation Contractor** 3 Kings	**Project Type** Subsurface Investigation
Excavation Method Trac-hoe	**Depth to Water** ~7-7.5 feet	**Sampling Method** Soil Grab
Backfill Material Excavated Materials	**Excavation Size** 4' X 10'	**Analysis** Diesel Range Hydrocarbons
Excavation # TP-5 **Geologist** R.Hamlet **Surface Elevation**	**Subsurface Conditions** Gravels Sandy, silty Clay **Topography:** Level	**Weather Conditions** Cloudy, showers, cool

Depth (ft)	USCS Symbol	Geologic Description	Comments
		Gravel Surface	
	GC	Medium Gravels (1"-2")	
		Large BaseRock (6" > 12")	
2	GW	Wet BaseRock	
4		Gray w/brown, sl. silty, v.sandy Clay	
	CL	to v. clayey Sand, moist to dry.	
6			
			▼
	CL	Gray, silty, sl. sandy, fractured Clay, wet in fractures.	
8			H20 ~ 7-7.5 feet bgs
	CL	Gray, silty, sl. sandy Clay, dry-moist.	
		Total Depth 9' bgs	
10			

	Gravel Surface		LEGEND
2		Gravels & BaseRock	Wet Gravels
4		Silyt, sl. \sandy Clays	
6			▼
8			
9		TD 9'	
	PLAN SECTION		

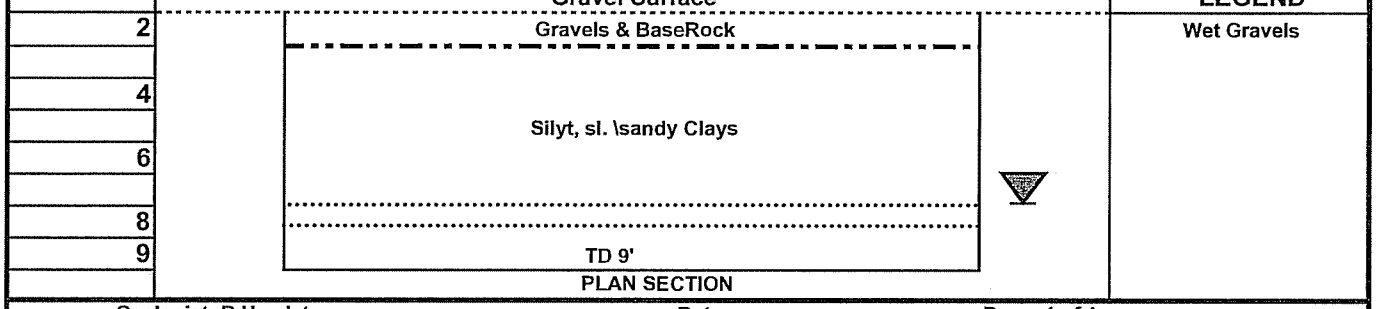
Geologist: R.Hamlet Date Page 1 of 1

EXCAVATION LOG

3 Kings Environmental, Inc.

	Project Name Puget Sound Trucking	**Date:** 1/17/2012 **Job # :** 212005.2
	Location 146 Industrial Way, Longview **Excavation Contractor** 3 Kings	**Project Type** Subsurface Investigation
Excavation Method Trac-hoe	**Depth to Water** ~7-7.5 feet	**Sampling Method** Soil Grab
Backfill Material Excavated Materials	**Excavation Size** 4' X 10'	**Analysis** Diesel Range Hydrocarbons
Excavation # TP-6 **Geologist** R.Hamlet **Surface Elevation**	**Subsurface Conditions** Gravels Sandy, silty Clay **Topography:** Level	**Weather Conditions** Cloudy, showers, cool

Depth (ft)	USCS Symbol	Geologic Description	Comments
		Gravel Surface	
	GC	Medium Gravels (1"-2")	
		Large BaseRock (6" > 12")	
2	GW	Wet BaseRock	
		Gray w/brown, sl. silty, v.sandy Clay to v. clayey Sand, moist to dry.	
4	CL		
6			▽
	CL	Gray, silty, sl. sandy, fractured Clay, wet in fractures.	
8	CL	Gray, silty, sl. sandy Clay, dry-moist.	H20 ~ 7-7.5 feet bgs
10		Total Depth 9' bgs	



PLAN SECTION

EXCAVATION LOG

3 Kings Environmental, Inc.

	Project Name Puget Sound Trucking	**Date:** 1/17/2012 **Job # :** 212005.2
	Location 146 Industrial Way, Longview **Excavation Contractor** 3 Kings	**Project Type** Subsurface Investigation
Excavation Method Trac-hoe	**Depth to Water** ~7-7.5 feet	**Sampling Method** Soil Grab
Backfill Material Excavated Materials	**Excavation Size** 4' X 10'	**Analysis** Diesel Range Hydrocarbons
Excavation # TP-7 **Geologist** R.Hamlet **Surface Elevation**	**Subsurface Conditions** Gravels Sandy, silty Clay **Topography:** Level	**Weather Conditions** Cloudy, showers, cool

Depth (ft)	USCS Symbol	Geologic Description	Comments
		Gravel Surface	
	GC	Medium Gravels (1"-2")	
		Large BaseRock (6" > 12")	
2	GW	Wet BaseRock	
4		Gray w/brown, sl. silty, v.sandy Clay	
		to v. clayey Sand, moist to dry.	
	CL		
6			
			▽
	CL	Gray, silty, sl. sandy, fractured Clay, wet in fractures.	
8			H20 ~ 7-7.5 feet bgs
	CL	Gray, silty, sl. sandy Clay, dry-moist.	
		Total Depth 9' bgs	
10			

	Gravel Surface		LEGEND
2		Gravels & BaseRock	Wet Gravels
4			
		Silyt, sl. \sandy Clays	
6			▽
8			
9		TD 9'	
	PLAN SECTION		

Geologist: R.Hamlet Date Page 1 of 1

EXCAVATION LOG

3 Kings Environmental, Inc.

	Project Name Puget Sound Trucking	**Date:** 1/17/2012 **Job # :** 212005.2
	Location 146 Industrial Way, Longview **Excavation Contractor** 3 Kings	**Project Type** Subsurface Investigation
Excavation Method Trac-hoe	**Depth to Water** ~7-7.5 feet	**Sampling Method** Soil Grab
Backfill Material Excavated Materials	**Excavation Size** 4' X 10'	**Analysis** Diesel Range Hydrocarbons
Excavation # TP-8 **Geologist** R.Hamlet **Surface Elevation**	**Subsurface Conditions** Gravels Sandy, silty Clay **Topography:** Level	**Weather Conditions** Cloudy, showers, cool

Depth (ft)	USCS Symbol	Geologic Description	Comments
		Gravel Surface	
	GC	Medium Gravels (1"-2")	
		Large BaseRock (6" > 12")	
2	GW	Wet BaseRock	
4		Gray w/brown, sl. silty, v.sandy Clay	
		to v. clayey Sand, moist to dry.	
	CL		
6			
			▼
	CL	Gray, silty, sl. sandy, fractured Clay, wet in fractures.	
8			H20 ~ 7-7.5 feet bgs
	CL	Gray, silty, sl. sandy Clay, dry-moist.	
		Total Depth 9' bgs	
10			

	Gravel Surface		LEGEND
2	Gravels & BaseRock		Wet Gravels
4	Silyt, sl. \sandy Clays		
6			
		▼	
8			
9	TD 9'		
	PLAN SECTION		

Geologist: R.Hamlet Date Page 1 of 1

EXCAVATION LOG

3 Kings Environmental, Inc.

Project Name Puget Sound Trucking		**Date:** 1/17/2012 **Job # :** 212005.2
Location 146 Industrial Way, Longview **Excavation Contractor** 3 Kings		**Project Type** Subsurface Investigation
Excavation Method Trac-hoe	**Depth to Water** ~7-7.5 feet	**Sampling Method** Soil Grab
Backfill Material Excavated Materials	**Excavation Size** 4' X 10'	**Analysis** Diesel Range Hydrocarbons
Excavation # TP-9 **Geologist** R.Hamlet **Surface Elevation**	**Subsurface Conditions** Gravels Sandy, silty Clay **Topography:** Level	**Weather Conditions** Cloudy, showers, cool

Depth (ft)	USCS Symbol	Geologic Description	Comments
		Gravel Surface	
	GC	Medium Gravels (1"-2")	
		Large BaseRock (6" > 12")	
2	GW	Wet BaseRock	
4		Gray w/brown, sl. silty, v.sandy Clay	
		to v. clayey Sand, moist to dry.	
	CL		
6			
			▼
	CL	Gray, silty, sl. sandy, fractured Clay, wet in fractures.	
8			H20 ~ 7-7.5 feet bgs
	CL	Gray, silty, sl. sandy Clay, dry-moist.	
		Total Depth 9' bgs	
10			

	Gravel Surface		LEGEND
2		Gravels & BaseRock	Wet Gravels
4		Silyt, sl. \sandy Clays	
6			▼
8			
9		TD 9'	
	PLAN SECTION		

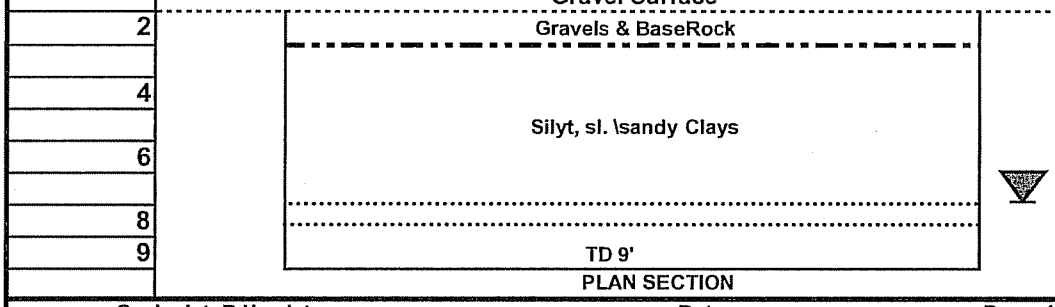
Geologist: R.Hamlet Date Page 1 of 1

EXCAVATION LOG

3 Kings Environmental, Inc.

	Project Name Puget Sound Trucking	**Date:** 1/17/2012 **Job # :** 212005.2
	Location 146 Industrial Way, Longview **Excavation Contractor** 3 Kings	**Project Type** Subsurface Investigation
Excavation Method Trac-hoe	**Depth to Water** ~7-7.5 feet	**Sampling Method** Soil Grab
Backfill Material Excavated Materials	**Excavation Size** 4' X 10'	**Analysis** Diesel Range Hydrocarbons
Excavation # TP-10 **Geologist** R.Hamlet **Surface Elevation**	**Subsurface Conditions** Gravels Sandy, silty Clay **Topography:** Level	**Weather Conditions** Cloudy, showers, cool

Depth (ft)	USCS Symbol	Geologic Description	Comments
		Gravel Surface	
	GC	Medium Gravels (1"-2")	
		Large BaseRock (6" > 12")	
2	GW	Wet BaseRock	
4		Gray w/brown, sl. silty, v.sandy Clay	
	CL	to v. clayey Sand, moist to dry.	
6			
			▼
	CL	Gray, silty, sl. sandy, fractured Clay, wet in fractures.	
8			H20 ~ 7-7.5 feet bgs
	CL	Gray, silty, sl. sandy Clay, dry-moist.	
		Total Depth 9' bgs	
10			



PLAN SECTION

LEGEND

Wet Gravels

Geologist: R.Hamlet Date Page 1 of 1

EXCAVATION LOG

3 Kings Environmental, Inc.

	Project Name Puget Sound Trucking	**Date:** 1/17/2012 **Job # :** 212005.2
	Location 146 Industrial Way, Longview **Excavation Contractor** 3 Kings	**Project Type** Subsurface Investigation
Excavation Method Trac-hoe	**Depth to Water** ~7-7.5 feet	**Sampling Method** Soil Grab
Backfill Material Excavated Materials	**Excavation Size** 4' X 10'	**Analysis** Diesel Range Hydrocarbons
Excavation # TP-11 **Geologist** R.Hamlet **Surface Elevation**	**Subsurface Conditions** Gravels Sandy, silty Clay **Topography:** Level	**Weather Conditions** Cloudy, showers, cool

Depth (ft)	USCS Symbol	Geologic Description	Comments
		Gravel Surface	
	GC	Medium Gravels (1"-2")	
		Large BaseRock (6" > 12")	
2	GW	Wet BaseRock	
4		Gray w/brown, sl. silty, v.sandy Clay	
	CL	to v. clayey Sand, moist to dry.	
6			
			▼
	CL	Gray, silty, sl. sandy, fractured Clay, wet in fractures.	
8			H20 ~ 7-7.5 feet bgs
	CL	Gray, silty, sl. sandy Clay, dry-moist.	
		Total Depth 9' bgs	
10			

	Gravel Surface		LEGEND
2		Gravels & BaseRock	Wet Gravels
4		Silyt, sl. \sandy Clays	
6			▼
8			
9		TD 9'	
	PLAN SECTION		

Geologist: R.Hamlet Date Page 1 of 1

EXCAVATION LOG

3 Kings Environmental, Inc.

	Project Name Puget Sound Trucking	**Date: 1/31/2012** **Job # : 212005.2**
	Location 146 Industrial Way, Longview **Excavation Contractor** 3 Kings	**Project Type** Subsurface Investigation
Excavation Method Trac-hoe	**Depth to Water** ~7-7.5 feet	**Sampling Method** Soil Grab
Backfill Material Excavated Materials	**Excavation Size** 4' X 10'	**Analysis** Diesel Range Hydrocarbons
Excavation # TP-12 **Geologist** R.Hamlet **Surface Elevation**	**Subsurface Conditions** Gravels Sandy, silty Clay **Topography:** Level	**Weather Conditions** Cloudy, showers, cool

Depth (ft)	USCS Symbol	Geologic Description	Comments
		Gravel Surface	
	GC	Medium Gravels (1"-2")	
		Large BaseRock (6" > 12")	
2	GW	Wet BaseRock	
4		Gray w/brown, sl. silty, v.sandy Clay	
		to v. clayey Sand, moist to dry.	
	CL		
6			
			▽
	CL	Gray, silty, sl. sandy, fractured Clay, wet in fractures.	
8			H20 ~ 7-7.5 feet bgs
	CL	Gray, silty, sl. sandy Clay, dry-moist.	
		Total Depth 9' bgs	
10			

	Gravel Surface		LEGEND
2		Gravels & BaseRock	Wet Gravels
4		Silyt, sl. \sandy Clays	
6			▽
8			
9		TD 9'	
	PLAN SECTION		

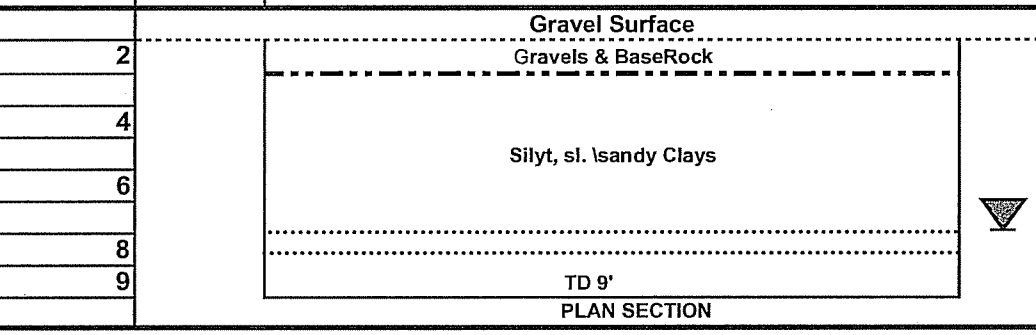
Geologist: R.Hamlet Date Page 1 of 1

EXCAVATION LOG

3 Kings Environmental, Inc.

Project Name Puget Sound Trucking		**Date: 1/31/2012** **Job # : 212005.2**
Location 146 Industrial Way, Longview **Excavation Contractor** 3 Kings		**Project Type** Subsurface Investigation
Excavation Method Trac-hoe	**Depth to Water** ~7-7.5 feet	**Sampling Method** Soil Grab
Backfill Material Excavated Materials	**Excavation Size** 4' X 10'	**Analysis** Diesel Range Hydrocarbons
Excavation # TP-13 **Geologist** R.Hamlet **Surface Elevation**	**Subsurface Conditions** Gravels Sandy, silty Clay **Topography:** Level	**Weather Conditions** Cloudy, showers, cool

Depth (ft)	USCS Symbol	Geologic Description	Comments
		Gravel Surface	
	GC	Medium Gravels (1"-2")	
		Large BaseRock (6" > 12")	
2	GW	Wet BaseRock	
4		Gray w/brown, sl. silty, v.sandy Clay	
		to v. clayey Sand, moist to dry.	
	CL		
6			
			▽
	CL	Gray, silty, sl. sandy, fractured Clay, wet in fractures.	
8			H20 ~ 7-7.5 feet bgs
	CL	Gray, silty, sl. sandy Clay, dry-moist.	
		Total Depth 9' bgs	
10			



PLAN SECTION

LEGEND

Wet Gravels

Geologist: R.Hamlet | Date | Page 1 of 1

BORING LOG

Boring #: DP-1 MW #: N/A		Date: 12/10/2012 Start: — Finish: —
Project: PSFL UST Decom		Boring Location: 81' N and 15' E of SW Corner of Subject Site (125' N of barrier)
Project #: 212005	Client: PSFL	Logged By: Brett MacDonald
Driller: Cascade Drilling (Keith)		Sect: T: R: Q: Boring Dia: 2¼" Depth: 10'
Drilling Method: Direct Push (2¼")		Surface Elev: N/A TOC Elev: N/A
Sampling Method: Geoprobe Macro Sampler		Start Card #: N/A SWL: ~~3.2'~~ bgs Date: 12/10/12

Sample	B.C. PID	Depth	Sample Interval	GW Level	Strata	Lithology
		0			GP	Silty GRAVEL: gray to brown, some sand, moist, stiff, no odor or staining ↑ FILL ↓
		1				
		2			SW	Medium SAND grading to fine SAND: gray, layered, loose to med stiff, moist, organic odor.
		3		▽ 3.2'		
		4				- 1" thick silt layer, stiff, slightly moist, organic odor
DP-1@5'	0.6	5	DP-1@5' (5'-5.2')			
		6			ML	Gray Fine Sandy SILT: some clay, gray, med. stiff, saturated, slight organic odor
DP-1@7'	0.2	7	(7'-7.3')			-less sand with depth
		8				
		9			CL	Silty CLAY: gray, stiff, moist, slight organic odor
		10			↓	Boring terminated @ 10' bgs

NOTES:

Collect water sample DP-1-W (1 x 3VOA)

Boring #: DP-2	**BORING LOG**	Date: 12/10/2012
MW #: N/A		Start: — Finish: —

Project: PSFL UST Decom	Boring Location: 110' N and 170' E of SW Corner of Subject Site (W edge of entryway)
Project #: 212005 / Client: PSFL	Logged By: Brett MacDonald
Driller: Cascade Drilling	Sect: T: R: Q:
	Boring Dia: 2¼" Depth: 10'
Drilling Method: Direpoint	Surface Elev: N/A
	TOC Elev: N/A
Sampling Method: Geoprobe Macro Sampler	Start Card #: N/A
	SWL: 2.05' Date: 12/10/12

Sample	B.C. PID	Depth	Sample Interval	GW Level	Strata	Lithology
		0			GP	Silty GRAVEL: gray to brown, some sand, moist, stiff, no odor or staining. ↑ FILL ↓
		1				
		2		▽ 2.05'	GW	GRAVEL: gray to brown, med. stiff, saturated, no odor
		3				
		4				
		5				- slight odor, sheen ↑ FILL ↓
		6				
		7			ML	Clayey SILT: gray, some sand, med. stiff, saturated, slight diesel odor, sheen
DP-2@8'	3.8	8	7.5'-8.0'			
		9				- stiff, moist @ 9.5'
		10				Boring terminated @ 10' bgs.

NOTES: Collect water sample DP-2-W (2L + 3 VOA)

Boring #: DP-3	BORING LOG	Date: 12/10/2012
MW #: N/A		Start: — Finish: —

Project: PSFL UST Decom	Boring Location: 160' N and 205' E of SW Corner of Property (165' NE of DP-2)
Project #: 212005 / Client: PSFL	Logged By: Brett MacDonald
Driller: Cascade Drilling	Sect: / T: / R: / Q:
Drilling Method: Direct Push	Boring Dia: 2¼" / Depth: 10'
Sampling Method: Geoprobe Macro Sampler	Surface Elev: N/A
	TOC Elev: N/A
	Start Card #: N/A
	SWL: 2.18' Date: 12/10/12

Sample	B.C. PID	Depth	Sample Interval	GW Level	Strata	Lithology
		0			OP	Silty GRAVEL: gray to brown, some sand, stiff, moist, no odor or staining ↑ FILL
		1				
		2		▽ 2.18	GW	GRAVEL: gray to brown, med. stiff, saturated, no odor or staining
		3				
		4				↑ FILL
		5				
		6				
		7			ML	Fine Sandy SILT: some clay, gray, med. stiff, saturated, slight diesel odor
DP-3@8'	1.1	8	7.5'-8.0'			
		9				-stiff, moist at 9.5' bgs.
		10				Boring terminated @ 10' bgs

NOTES:

Boring #: DP-4	**BORING LOG**	Date: 12/10/2012
MW #: N/A		Start: Finish:

Project: PSFL UST Decom	Boring Location: 225' N and 270' E of SW Corner of Subject Site. (153' W of Boundary)
Project #: 212005 / Client: PSFL	Logged By: Brett MacDonald
Driller: Cascade Drilling	Sect: T: R: Q:
	Boring Dia: 2¼" Depth: 10'
Drilling Method: Drivepoint	Surface Elev: N/A
	TOC Elev: N/A
Sampling Method: Geoprobe Macro Sampler	Start Card #: N/A
	SWL: ~4' bgs (3.68') Date: 12/10/12

Sample	~~B.C.~~ PID	Depth	Sample Interval	GW Level	Strata	Lithology
		0			GP	Silty GRAVEL, some sand, stiff, moist, gray, no odor or staining
		1				↑ FILL
	0.0	2				
					SW	Medium SAND grading to fine SAND: medium brown to gray, layered, loose, moist, no odor or staining.
		3		▽ 3.68'		
		4				
DP-4@5'	0.6	5	DP-4@5'		ML	Clayey SILT: gray, medium stiff, wet, organic odor
		6				
		7				
	NC	8				No Recovery
		9				
	NC	10				Boring terminated @ 10' bgs

NOTES: Collect Water sample DP-4-W

Appendix C

Analytical Laboratory Reports

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

January 20, 2012

Robin Hamlet
3 Kings Environmental, Inc.
PO Box 280
1311 SE Grace Avenue
Battle Ground, WA 98604

TEL: (360) 666-5464
FAX: (360) 666-8202

RE: P.S. Trucking / 212005

Order No.: 1201122

Dear Robin Hamlet:

Specialty Analytical received 16 samples on 1/18/2012 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Cindy Hillyard
Project Manager

Technical Review

Specialty Analytical

Date: *20-Jan-12*

CLIENT: 3 Kings Environmental, Inc. **Lab Order:** 1201122
Project: P.S. Trucking / 212005

Lab ID: 1201122-01 **Collection Date:** 1/17/2012 11:38:00 AM
Client Sample ID: TP1-7-011712 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	1020	19.4		mg/Kg-dry	1	1/19/2012
Lube Oil	ND	64.7		mg/Kg-dry	1	1/19/2012
Surr: o-Terphenyl	158	50-150	S	%REC	1	1/19/2012

Lab ID: 1201122-02 **Collection Date:** 1/17/2012 11:50:00 AM
Client Sample ID: TP2-8-011712 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	191	23.2		mg/Kg-dry	1	1/19/2012
Lube Oil	ND	77.3		mg/Kg-dry	1	1/19/2012
Surr: o-Terphenyl	97.1	50-150		%REC	1	1/19/2012

Lab ID: 1201122-03 **Collection Date:** 1/17/2012 11:56:00 AM
Client Sample ID: TP3-7-011712 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	416	23.9		mg/Kg-dry	1	1/19/2012
Lube Oil	1660	79.6		mg/Kg-dry	1	1/19/2012
Surr: o-Terphenyl	129	50-150		%REC	1	1/19/2012

Lab ID: 1201122-04 **Collection Date:** 1/17/2012 12:00:00 PM
Client Sample ID: TP4-7-011712 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	457	22.6		mg/Kg-dry	1	1/19/2012
Lube Oil	ND	75.3		mg/Kg-dry	1	1/19/2012
Surr: o-Terphenyl	120	50-150		%REC	1	1/19/2012

Specialty Analytical

Date: *20-Jan-12*

CLIENT: 3 Kings Environmental, Inc. **Lab Order:** 1201122
Project: P.S. Trucking / 212005

Lab ID: 1201122-05 **Collection Date:** 1/17/2012 12:06:00 PM
Client Sample ID: TP5-7-011712 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	ND	21.9		mg/Kg-dry	1	1/19/2012
Lube Oil	ND	73.0		mg/Kg-dry	1	1/19/2012
Surr: o-Terphenyl	62.6	50-150		%REC	1	1/19/2012

Lab ID: 1201122-06 **Collection Date:** 1/17/2012 12:09:00 PM
Client Sample ID: TP6-7-011712 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	3660	23.4		mg/Kg-dry	1	1/19/2012
Lube Oil	ND	78.0		mg/Kg-dry	1	1/19/2012
Surr: o-Terphenyl	186	50-150	S	%REC	1	1/19/2012

Lab ID: 1201122-07 **Collection Date:** 1/17/2012 12:18:00 PM
Client Sample ID: TP7-7-011712 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	ND	24.0		mg/Kg-dry	1	1/19/2012
Lube Oil	ND	80.0		mg/Kg-dry	1	1/19/2012
Surr: o-Terphenyl	75.6	50-150		%REC	1	1/19/2012

Lab ID: 1201122-08 **Collection Date:** 1/17/2012 12:26:00 PM
Client Sample ID: TP8-7-011712 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	1360	22.5		mg/Kg-dry	1	1/19/2012
Lube Oil	ND	74.9		mg/Kg-dry	1	1/19/2012
Surr: o-Terphenyl	173	50-150	S	%REC	1	1/19/2012

Specialty Analytical

Date: *20-Jan-12*

CLIENT: 3 Kings Environmental, Inc. **Lab Order:** 1201122
Project: P.S. Trucking / 212005

Lab ID: 1201122-09 **Collection Date:** 12/17/2012 12:31:00 PM
Client Sample ID: TP9-7-011712 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: **kh**
Diesel	663	22.4		mg/Kg-dry	1	1/19/2012
Lube Oil	ND	74.7		mg/Kg-dry	1	1/19/2012
Surr: o-Terphenyl	144	50-150		%REC	1	1/19/2012

Lab ID: 1201122-10 **Collection Date:** 1/17/2012 12:32:00 PM
Client Sample ID: TP9-9-011712 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: **kh**
Diesel	405	23.3		mg/Kg-dry	1	1/19/2012
Lube Oil	ND	77.8		mg/Kg-dry	1	1/19/2012
Surr: o-Terphenyl	127	50-150		%REC	1	1/19/2012

Lab ID: 1201122-11 **Collection Date:** 1/17/2012 1:31:00 PM
Client Sample ID: TP10-7-011712 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: **kh**
Diesel	1260	22.0		mg/Kg-dry	1	1/19/2012
Lube Oil	ND	73.3		mg/Kg-dry	1	1/19/2012
Surr: o-Terphenyl	153	50-150	S	%REC	1	1/19/2012

Lab ID: 1201122-12 **Collection Date:** 1/17/2012 1:40:00 PM
Client Sample ID: TP11-9-011712 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: **kh**
Diesel	ND	19.9		mg/Kg-dry	1	1/19/2012
Lube Oil	ND	66.5		mg/Kg-dry	1	1/19/2012
Surr: o-Terphenyl	93.3	50-150		%REC	1	1/19/2012

Specialty Analytical

Date: *20-Jan-12*

CLIENT: 3 Kings Environmental, Inc. **Lab Order:** 1201122
Project: P.S. Trucking / 212005

Lab ID: 1201122-13 **Collection Date:** 1/17/2012 12:53:00 PM
Client Sample ID: TP1H2O-011712 **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	5.89	0.0762	A4	mg/L	1	1/19/2012
Lube Oil	0.693	0.190	A2	mg/L	1	1/19/2012
Surr: o-Terphenyl	172	50-150	S,MI	%REC	1	1/19/2012

Lab ID: 1201122-14 **Collection Date:** 1/17/2012 12:50:00 PM
Client Sample ID: TP7H2O-011712 **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	0.288	0.0760	A1	mg/L	1	1/19/2012
Lube Oil	0.488	0.190	A2	mg/L	1	1/19/2012
Surr: o-Terphenyl	67.7	50-150		%REC	1	1/19/2012

Lab ID: 1201122-15 **Collection Date:** 1/17/2012 12:46:00 PM
Client Sample ID: TP9H2O-011712 **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	15.4	0.0763		mg/L	1	1/19/2012
Lube Oil	0.295	0.191	M	mg/L	1	1/19/2012
Surr: o-Terphenyl	211	50-150	S,MI	%REC	1	1/19/2012

Lab ID: 1201122-16 **Collection Date:** 1/17/2012 1:44:00 PM
Client Sample ID: TP11H2O-011712 **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	ND	0.0762		mg/L	1	1/20/2012
Lube Oil	ND	0.190		mg/L	1	1/20/2012
Surr: o-Terphenyl	78.3	50-150		%REC	1	1/20/2012

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1201122
Project: P.S. Trucking / 212005

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDX_S

Sample ID: MB-30508	SampType: MBLK	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date: 1/18/2012	Run ID: GC-M_120119D
Client ID: ZZZZZ	Batch ID: 30508	TestNo: NWTPH-Dx		Analysis Date: 1/19/2012	SeqNo: 808967

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	34.92	0	33.33	0	105	50	150	0	0		

Sample ID: LCS-30508	SampType: LCS	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date: 1/18/2012	Run ID: GC-M_120119D
Client ID: ZZZZZ	Batch ID: 30508	TestNo: NWTPH-Dx		Analysis Date: 1/19/2012	SeqNo: 808968

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	173.7	15.0	166.6	0	104	76.3	125	0	0		
Lube Oil	131.3	50.0	166.6	0	78.8	69.9	127	0	0		

Sample ID: 1201122-05ADUP	SampType: DUP	TestCode: NWTPHDX_S	Units: mg/Kg-dry	Prep Date: 1/18/2012	Run ID: GC-M_120119D
Client ID: TP5-7-011712	Batch ID: 30508	TestNo: NWTPH-Dx		Analysis Date: 1/19/2012	SeqNo: 808976

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	10.28	21.9	0	0	0	0	0	0	0	20	J
Lube Oil	ND	73.0	0	0	0	0	0	0	0	20	

Sample ID: 1201122-08ADUP	SampType: DUP	TestCode: NWTPHDX_S	Units: mg/Kg-dry	Prep Date: 1/18/2012	Run ID: GC-M_120119D
Client ID: TP8-7-011712	Batch ID: 30508	TestNo: NWTPH-Dx		Analysis Date: 1/19/2012	SeqNo: 808980

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1583	22.5	0	0	0	0	0	1355	15.5	20	
Lube Oil	ND	74.9	0	0	0	0	0	0	0	20	

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date:	Run ID: GC-M_120119D
Client ID: ZZZZZ	Batch ID: 30508	TestNo: NWTPH-Dx		Analysis Date: 1/19/2012	SeqNo: 808966

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1201122
Project: P.S. Trucking / 212005

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDX_S

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date:	Run ID: GC-M_120119D
Client ID: ZZZZZ	Batch ID: 30508	TestNo: NWTPH-Dx		Analysis Date: 1/19/2012	SeqNo: 808966

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1085	15.0	1026	0	106	85	115	0	0		
Lube Oil	474.8	50.0	528.4	0	89.9	85	115	0	0		

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date:	Run ID: GC-M_120119D
Client ID: ZZZZZ	Batch ID: 30508	TestNo: NWTPH-Dx		Analysis Date: 1/19/2012	SeqNo: 808985

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1439	15.0	1368	0	105	85	115	0	0		
Lube Oil	604.4	50.0	704.5	0	85.8	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1201122
Project: P.S. Trucking / 212005

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDXLL_W

Sample ID: MB-30506	SampType: MBLK	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 1/18/2012	Run ID: GC-M_120119C
Client ID: ZZZZZ	Batch ID: 30506	TestNo: NWTPH-Dx		Analysis Date: 1/19/2012	SeqNo: 808930

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.05048	0.0800									J
Lube Oil	0.1865	0.200									J
Surr: o-Terphenyl	0.1459	0	0.2	0	73	50	150	0	0		

Sample ID: LCS-30506	SampType: LCS	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 1/18/2012	Run ID: GC-M_120119C
Client ID: ZZZZZ	Batch ID: 30506	TestNo: NWTPH-Dx		Analysis Date: 1/19/2012	SeqNo: 808931

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.8726	0.0800	1	0	87.3	60.7	121	0	0		
Lube Oil	0.854	0.200	1	0	85.4	64	126	0	0		

Sample ID: LCSD-30506	SampType: LCSD	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 1/18/2012	Run ID: GC-M_120119C
Client ID: ZZZZZ	Batch ID: 30506	TestNo: NWTPH-Dx		Analysis Date: 1/19/2012	SeqNo: 808932

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.8733	0.0800	1	0	87.3	60.7	121	0.8726	0.0871	20	
Lube Oil	0.8779	0.200	1	0	87.8	64	126	0.854	2.76	20	

Sample ID: CCB	SampType: CCB	TestCode: NWTPHDXLL	Units: mg/L	Prep Date:	Run ID: GC-M_120119C
Client ID: ZZZZZ	Batch ID: 30506	TestNo: NWTPH-Dx		Analysis Date: 1/20/2012	SeqNo: 809043

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.05348	0.0800	0	0	0	0	0	0	0		
Lube Oil	0.05396	0.200	0	0	0	0	0	0	0		
o-Terphenyl	0.1545	0	0.2	0	77.3	50	150	0	0		

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDXLL	Units: mg/L	Prep Date:	Run ID: GC-M_120119C
Client ID: ZZZZZ	Batch ID: 30506	TestNo: NWTPH-Dx		Analysis Date: 1/19/2012	SeqNo: 808929

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1201122
Project: P.S. Trucking / 212005

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDXLL_W

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_120119C**
Client ID: **ZZZZZ** Batch ID: **30506** TestNo: **NWTPH-Dx** Analysis Date: **1/19/2012** SeqNo: **808929**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	8.563	0.0800	8.21	0	104	85	115	0	0		
Lube Oil	3.942	0.200	4.227	0	93.3	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_120119C**
Client ID: **ZZZZZ** Batch ID: **30506** TestNo: **NWTPH-Dx** Analysis Date: **1/19/2012** SeqNo: **808941**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.51	0.0800	6.158	0	106	85	115	0	0		
Lube Oil	2.849	0.200	3.17	0	89.9	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_120119C**
Client ID: **ZZZZZ** Batch ID: **30506** TestNo: **NWTPH-Dx** Analysis Date: **1/20/2012** SeqNo: **809045**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.702	0.0800	6.158	0	109	85	115	0	0		
Lube Oil	2.78	0.200	3.17	0	87.7	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_120119C**
Client ID: **ZZZZZ** Batch ID: **30506** TestNo: **NWTPH-Dx** Analysis Date: **1/20/2012** SeqNo: **809046**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	8.633	0.0800	8.21	0	105	85	115	0	0		
Lube Oil	3.627	0.200	4.227	0	85.8	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

KEY TO FLAGS

Rev. May 12, 2010

A	This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
A1	This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
A2	This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
A3	The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
A4	The product appears to be aged or degraded diesel.
B	The blank exhibited a positive result great than the reporting limit for this compound.
CN	See Case Narrative.
D	Result is based from a dilution.
E	Result exceeds the calibration range for this compound. The result should be considered as estimate.
F	The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
G	Result may be biased high due to biogenic interferences. Clean up is recommended.
H	Sample was analyzed outside recommended holding time.
HT	At clients request, samples was analyzed outside of recommended holding time.
J	The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
K	Diesel result is biased high due to amount of Oil contained in the sample.
L	Diesel result is biased high due to amount of Gasoline contained in the sample.
M	Oil result is biased high due to amount of Diesel contained in the sample.
MC	Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
MI	Result is outside control limits due to matrix interference.
MSA	Value determined by Method of Standard Addition.
O	Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
Q	Detection levels elevated due to sample matrix.
R	RPD control limits were exceeded.
RF	Duplicate failed due to result being at or near the method-reporting limit.
RP	Matrix spike values exceed established QC limits; post digestion spike is in control.
S	Recovery is outside control limits.
SC	Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
*	The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Page ___ of ___

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: Robin Hamlet
Company: 3 Kings Environmental
Address:

Phone: Fax:

Project No. 212005 Project Name: P.S. Trucking
Project Site Location OR ___ WA X Other ___
Invoice To: RHamlet@3KingsInc.com P.O. No. 12809

Collected By:
Signature: R Hamlet
Printed: R. Hamlet

Signature:
Printed:

Turn Around Time
☐ Normal 5-7 Business Days
☑ Rush 2 Days
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. 1201122
Shipped Via Specialty
Air Bill No.
Temperature On Receipt 6 °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses: NWTPH-Dx/Dx Ext.	Comments	Lab I.D.
1/17/12	1138	TP1-7-011712	Soil	1	✓		
	1150	TP2-8-011712			✓		
	1156	TP3-7-011712			✓		
	1200	TP4-7-011712			✓		
	1206	TP5-7-011712			✓		
	1209	TP6-7-011712			✓		
	1218	TP7-7-011712			✓		
	1226	TP8-7-011712			✓		
	1231	TP9-7-011712			✓		
	1232	TP7-9-011712			✓		
	1331	TP10-7-011712			✓		
	1340	TP11-7-011712			✓		

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
R Hamlet	1/18/12	0823	Nikki Bippus			
Company: 3 Kings			Company: Specialty	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Nikki Bippus — Date: 1/18/12 — Time: 0940

Copies: White-Original Yellow-Project File Pink-Customer Copy

CHAIN OF CUSTODY RECORD

Page ___ of ___

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: Robin Hamlet
Company: 3 Kings Environmental
Address:

Phone: Fax:

Project No. 212005 Project Name P.S. Trucking
Project Site Location OR ___ WA Y Other ___
Invoice To RHamlet@3KingsInc.com P.O. No. 12809

Collected By:
Signature: R Hamlet
Printed: R. Hamlet

Signature:
Printed:

Turn Around Time
☐ Normal 5-7 Business Days
☒ Rush 2 Days
Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. 1201122
Shipped Via Specialty
Air Bill No.
Temperature On Receipt 5 °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	NW TPH-Dx/Dx EXT	Comments	Lab I.D.
1/17/12	1253	TP1 H_2O -011712	H_2O	1			
"	1250	TP7 H_2O -011712	"	1			
"	1246	TP9 H_2O -011712	"	1			
"	1344	TP11 H_2O -011712	"	1			

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
R Hamlet	1/18/12	0823	Nikki Bippes			
Company: 3 Kings			Company: Specialty	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Nikki Bippes Date 1/18/12 Time 0940

Copies: White-Original Yellow-Project File Pink-Customer Copy

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

February 03, 2012

Robin Hamlet
3 Kings Environmental, Inc.
PO Box 280
1311 SE Grace Avenue
Battle Ground, WA 98604

TEL: (360) 666-5464
FAX: (360) 666-8202

RE: PS Trucking / 212005-2

Dear Robin Hamlet:

Order No.: 1202015

Specialty Analytical received 9 samples on 2/2/2012 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Cindy Hillyard
Project Manager

Technical Review

Specialty Analytical

Date: *03-Feb-12*

CLIENT: 3 Kings Environmental, Inc. **Lab Order:** 1202015
Project: PS Trucking / 212005-2

Lab ID: 1202015-01 **Collection Date:** 1/31/2012 8:30:00 AM
Client Sample ID: TP12-7-013112 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	ND	24.2		mg/Kg-dry	1	2/1/2012
Lube Oil	ND	80.5		mg/Kg-dry	1	2/1/2012
Surr: o-Terphenyl	85.8	50-150		%REC	1	2/1/2012

Lab ID: 1202015-02 **Collection Date:** 1/31/2012 8:50:00 AM
Client Sample ID: TP13-7-013112 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	ND	20.7		mg/Kg-dry	1	2/1/2012
Lube Oil	ND	69.0		mg/Kg-dry	1	2/1/2012
Surr: o-Terphenyl	83.4	50-150		%REC	1	2/1/2012

Lab ID: 1202015-03 **Collection Date:** 1/31/2012 9:00:00 AM
Client Sample ID: TP12H2O-013112 **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	3.10	0.0763	A4	mg/L	1	2/2/2012
Lube Oil	ND	0.191		mg/L	1	2/2/2012
Surr: o-Terphenyl	160	50-150	S,MI	%REC	1	2/2/2012

Lab ID: 1202015-04 **Collection Date:** 1/31/2012 9:04:00 AM
Client Sample ID: TP13-H2O-013112 **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	62.7	0.778	A4	mg/L	10	2/2/2012
Lube Oil	ND	0.195	A3	mg/L	1	2/2/2012
Surr: o-Terphenyl	669	50-150	S,MI	%REC	1	2/2/2012

Specialty Analytical

Date: *03-Feb-12*

CLIENT: 3 Kings Environmental, Inc. **Lab Order:** 1202015
Project: PS Trucking / 212005-2

Lab ID: 1202015-05 **Collection Date:** 1/31/2012 11:49:00 AM
Client Sample ID: TP6NW-7-013112 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	ND	19.7		mg/Kg-dry	1	2/1/2012
Lube Oil	ND	65.8		mg/Kg-dry	1	2/1/2012
Surr: o-Terphenyl	72.4	50-150		%REC	1	2/1/2012

Lab ID: 1202015-06 **Collection Date:** 1/31/2012 11:51:00 AM
Client Sample ID: TP6EW-7-013112 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	ND	20.7		mg/Kg-dry	1	2/1/2012
Lube Oil	ND	69.1		mg/Kg-dry	1	2/1/2012
Surr: o-Terphenyl	80.7	50-150		%REC	1	2/1/2012

Lab ID: 1202015-07 **Collection Date:** 2/1/2012 1:35:00 PM
Client Sample ID: TP1EF2-020112 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	1350	22.0	A4	mg/Kg-dry	1	2/1/2012
Lube Oil	ND	73.2		mg/Kg-dry	1	2/1/2012
Surr: o-Terphenyl	163	50-150	S,MI	%REC	1	2/1/2012

Lab ID: 1202015-08 **Collection Date:** 2/1/2012 3:45:00 PM
Client Sample ID: TP1NC3-020112 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	1810	22.2	A4	mg/Kg-dry	1	2/1/2012
Lube Oil	ND	74.1		mg/Kg-dry	1	2/1/2012
Surr: o-Terphenyl	197	50-150	S,MI	%REC	1	2/1/2012

Specialty Analytical

Date: *03-Feb-12*

CLIENT: 3 Kings Environmental, Inc.
Project: PS Trucking / 212005-2
Lab Order: 1202015

Lab ID: 1202015-09
Collection Date: 2/1/2012 3:47:00 PM
Client Sample ID: TP1NC4-020112
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	1460	22.8	A4	mg/Kg-dry	1	2/1/2012
Lube Oil	ND	76.0		mg/Kg-dry	1	2/1/2012
Surr: o-Terphenyl	170	50-150	S,MI	%REC	1	2/1/2012

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202015
Project: PS Trucking / 212005-2

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDX_S

Sample ID: MB-30631	SampType: MBLK	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date: 2/1/2012	Run ID: GC-M_120201B
Client ID: ZZZZZ	Batch ID: 30631	TestNo: NWTPH-Dx		Analysis Date: 2/1/2012	SeqNo: 812224

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	34.14	0	33.33	0	102	50	150	0	0		

Sample ID: LCS-30631	SampType: LCS	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date: 2/1/2012	Run ID: GC-M_120201B
Client ID: ZZZZZ	Batch ID: 30631	TestNo: NWTPH-Dx		Analysis Date: 2/1/2012	SeqNo: 812225

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	196.3	15.0	166.6	0	118	76.3	125	0	0		
Lube Oil	154.7	50.0	166.6	0	92.8	69.9	127	0	0		

Sample ID: 1201252-71ADUP	SampType: DUP	TestCode: NWTPHDX_S	Units: mg/Kg-dry	Prep Date: 2/1/2012	Run ID: GC-M_120201B
Client ID: ZZZZZ	Batch ID: 30631	TestNo: NWTPH-Dx		Analysis Date: 2/1/2012	SeqNo: 812228

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	18.2	0	0	0	0	0	0	0	20	
Lube Oil	ND	60.5	0	0	0	0	0	0	0	20	

Sample ID: CCB	SampType: CCB	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date:	Run ID: GC-M_120201B
Client ID: ZZZZZ	Batch ID: 30631	TestNo: NWTPH-Dx		Analysis Date: 2/1/2012	SeqNo: 812503

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.766	15.0	0	0	0	0	0	0	0		
Lube Oil	1.267	50.0	0	0	0	0	0	0	0		
Surr: o-Terphenyl	34.32	0	33.33	0	103	50	150	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202015
Project: PS Trucking / 212005-2

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDX_S

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: Run ID: **GC-M_120201B**
Client ID: **ZZZZZ** Batch ID: **30631** TestNo: **NWTPH-Dx** Analysis Date: **2/1/2012** SeqNo: **812223**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1476	15.0	1368	0	108	85	115	0	0		
Lube Oil	665.7	50.0	704.5	0	94.5	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: Run ID: **GC-M_120201B**
Client ID: **ZZZZZ** Batch ID: **30631** TestNo: **NWTPH-Dx** Analysis Date: **2/1/2012** SeqNo: **812229**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1145	15.0	1026	0	112	85	115	0	0		
Lube Oil	513.3	50.0	528.4	0	97.2	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: Run ID: **GC-M_120201B**
Client ID: **ZZZZZ** Batch ID: **30631** TestNo: **NWTPH-Dx** Analysis Date: **2/1/2012** SeqNo: **812502**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1146	15.0	1026	0	112	85	115	0	0		
Lube Oil	540.7	50.0	528.4	0	102	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: Run ID: **GC-M_120201B**
Client ID: **ZZZZZ** Batch ID: **30631** TestNo: **NWTPH-Dx** Analysis Date: **2/1/2012** SeqNo: **812511**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1559	15.0	1368	0	114	85	115	0	0		
Lube Oil	691.4	50.0	704.5	0	98.1	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202015
Project: PS Trucking / 212005-2

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDXLL_W

Sample ID: MB-30640	SampType: MBLK	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/2/2012	Run ID: GC-M_120202A
Client ID: ZZZZZ	Batch ID: 30640	TestNo: NWTPH-Dx		Analysis Date: 2/2/2012	SeqNo: 812622

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	0.0800									
Lube Oil	ND	0.200									
Surr: o-Terphenyl	0.1813	0	0.2	0	90.7	50	150	0	0		

Sample ID: LCS-30640	SampType: LCS	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/2/2012	Run ID: GC-M_120202A
Client ID: ZZZZZ	Batch ID: 30640	TestNo: NWTPH-Dx		Analysis Date: 2/2/2012	SeqNo: 812623

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.09	0.0800	1	0	109	60.7	121	0	0		
Lube Oil	0.9772	0.200	1	0	97.7	64	126	0	0		

Sample ID: LCSD-30640	SampType: LCSD	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/2/2012	Run ID: GC-M_120202A
Client ID: ZZZZZ	Batch ID: 30640	TestNo: NWTPH-Dx		Analysis Date: 2/2/2012	SeqNo: 812624

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.9621	0.0800	1	0	96.2	60.7	121	1.09	12.5	20	
Lube Oil	0.8973	0.200	1	0	89.7	64	126	0.9772	8.52	20	

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDXLL	Units: mg/L	Prep Date:	Run ID: GC-M_120202A
Client ID: ZZZZZ	Batch ID: 30640	TestNo: NWTPH-Dx		Analysis Date: 2/2/2012	SeqNo: 812621

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.876	0.0800	6.158	0	112	85	115	0	0		
Lube Oil	3.244	0.200	3.17	0	102	85	115	0	0		

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDXLL	Units: mg/L	Prep Date:	Run ID: GC-M_120202A
Client ID: ZZZZZ	Batch ID: 30640	TestNo: NWTPH-Dx		Analysis Date: 2/2/2012	SeqNo: 812648

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	9.357	0.0800	8.21	0	114	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202015
Project: PS Trucking / 212005-2

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDXLL_W

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_120202A**
Client ID: **ZZZZZ** Batch ID: **30640** TestNo: **NWTPH-Dx** Analysis Date: **2/2/2012** SeqNo: **812648**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lube Oil	4.149	0.200	4.227	0	98.1	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

KEY TO FLAGS

Rev. May 12, 2010

A	This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
A1	This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
A2	This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
A3	The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
A4	The product appears to be aged or degraded diesel.
B	The blank exhibited a positive result great than the reporting limit for this compound.
CN	See Case Narrative.
D	Result is based from a dilution.
E	Result exceeds the calibration range for this compound. The result should be considered as estimate.
F	The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
G	Result may be biased high due to biogenic interferences. Clean up is recommended.
H	Sample was analyzed outside recommended holding time.
HT	At clients request, samples was analyzed outside of recommended holding time.
J	The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
K	Diesel result is biased high due to amount of Oil contained in the sample.
L	Diesel result is biased high due to amount of Gasoline contained in the sample.
M	Oil result is biased high due to amount of Diesel contained in the sample.
MC	Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
MI	Result is outside control limits due to matrix interference.
MSA	Value determined by Method of Standard Addition.
O	Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
Q	Detection levels elevated due to sample matrix.
R	RPD control limits were exceeded.
RF	Duplicate failed due to result being at or near the method-reporting limit.
RP	Matrix spike values exceed established QC limits; post digestion spike is in control.
S	Recovery is outside control limits.
SC	Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
*	The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Page ___ of ___

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: Robin Hamlet
Company: 3 Kings Environmental
Address: PO Box 280
Battle Ground, WA 98604
Phone: 360-907-4519 Fax:
Project No.: 112005-2 Project Name: BS Trucking
Project Site Location OR: ___ WA: X Other:
Invoice To: Robin Hamlet P.O. No.: 12826

Collected By:
Signature: Robin Hamlet
Printed: Robin Hamlet

Signature:
Printed:

Turn Around Time
☐ Normal 5-7 Business Days
☒ Rush 24 Hour - End of day Thursday
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No.: 1202015
Shipped Via: Specialty
Air Bill No.:
Temperature On Receipt ___ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses: NWTPH-Dx (Diesel)	Comments	Lab I.D.
1/31/12	830	TP12-7-013112	SOIL	1	X		
	850	TP13-7-013112	1	1	X		
	900	TP12H2O-013112	WATER	1	X		
	804	TP13H2O-013112	WATER	1	X		
	1149	TP6NW-7-013112	SOIL	1	X		
	1151	TP6EW-7-013112	1	1	X		
2/1/12	1335	TP1EF2-020112	SOIL	1	X		
	1545	TP1NC3-020112	SOIL	1	X		
	1547	TP1NC4-020112	SOIL	1	X		

Relinquished By	Date	Time	Received By	Relinquished By	Date	Time
R Hamlet	1/31/12					
Company: 3 Kings			Company:	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Nikki Phillips
Date: 2/2/12
Time: 0900

Copies: White-Original Yellow-Project File Pink-Customer Copy

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

February 06, 2012

Robin Hamlet
3 Kings Environmental, Inc.
PO Box 280
1311 SE Grace Avenue
Battle Ground, WA 98604

TEL: (360) 666-5464
FAX: (360) 666-8202

RE: PS Trucking / 212005.2

Dear Robin Hamlet:

Order No.: 1202034

Specialty Analytical received 1 sample on 2/3/2012 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Cindy Hillyard
Project Manager

Technical Review

Specialty Analytical

Date: *06-Feb-12*

CLIENT:	3 Kings Environmental, Inc.	**Client Sample ID:**	BT1H2O-020212
Lab Order:	1202034	**Collection Date:**	2/3/2012
Project:	PS Trucking / 212005.2		
Lab ID:	1202034-01	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	ND	0.0760		mg/L	1	2/6/2012
Lube Oil	ND	0.190		mg/L	1	2/6/2012
Surr: o-Terphenyl	74.2	50-150		%REC	1	2/6/2012

Specialty Analytical

Date: *06-Feb-12*

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202034
Project: PS Trucking / 212005.2

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDXLL_W

Sample ID: MB-30655	SampType: MBLK	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/3/2012	Run ID: GC-M_120206B
Client ID: ZZZZZ	Batch ID: 30655	TestNo: NWTPH-Dx		Analysis Date: 2/6/2012	SeqNo: 813159

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	0.0800									
Lube Oil	ND	0.200									
Surr: o-Terphenyl	0.1938	0	0.2	0	96.9	50	150	0	0		

Sample ID: LCS-30655	SampType: LCS	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/3/2012	Run ID: GC-M_120206B
Client ID: ZZZZZ	Batch ID: 30655	TestNo: NWTPH-Dx		Analysis Date: 2/6/2012	SeqNo: 813160

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.9518	0.0800	1	0	95.2	60.7	121	0	0		
Lube Oil	0.8324	0.200	1	0	83.2	64	126	0	0		

Sample ID: LCSD-30655	SampType: LCSD	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/3/2012	Run ID: GC-M_120206B
Client ID: ZZZZZ	Batch ID: 30655	TestNo: NWTPH-Dx		Analysis Date: 2/6/2012	SeqNo: 813161

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.033	0.0800	1	0	103	60.7	121	0.9518	8.13	20	
Lube Oil	0.871	0.200	1	0	87.1	64	126	0.8324	4.53	20	

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDXLL	Units: mg/L	Prep Date:	Run ID: GC-M_120206B
Client ID: ZZZZZ	Batch ID: 30655	TestNo: NWTPH-Dx		Analysis Date: 2/6/2012	SeqNo: 813158

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.576	0.0800	6.158	0	107	85	115	0	0		
Lube Oil	3.062	0.200	3.17	0	96.6	85	115	0	0		

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDXLL	Units: mg/L	Prep Date:	Run ID: GC-M_120206B
Client ID: ZZZZZ	Batch ID: 30655	TestNo: NWTPH-Dx		Analysis Date: 2/6/2012	SeqNo: 813173

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202034
Project: PS Trucking / 212005.2

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDXLL_W

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDXLL	Units: mg/L	Prep Date:	Run ID: GC-M_120206B
Client ID: ZZZZZ	Batch ID: 30655	TestNo: NWTPH-Dx		Analysis Date: 2/6/2012	SeqNo: 813173

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	8.53	0.0800	8.21	0	104	85	115	0	0		
Lube Oil	4.133	0.200	4.227	0	97.8	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

KEY TO FLAGS

Rev. May 12, 2010

A	This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
A1	This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
A2	This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
A3	The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
A4	The product appears to be aged or degraded diesel.
B	The blank exhibited a positive result great than the reporting limit for this compound.
CN	See Case Narrative.
D	Result is based from a dilution.
E	Result exceeds the calibration range for this compound. The result should be considered as estimate.
F	The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
G	Result may be biased high due to biogenic interferences. Clean up is recommended.
H	Sample was analyzed outside recommended holding time.
HT	At clients request, samples was analyzed outside of recommended holding time.
J	The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
K	Diesel result is biased high due to amount of Oil contained in the sample.
L	Diesel result is biased high due to amount of Gasoline contained in the sample.
M	Oil result is biased high due to amount of Diesel contained in the sample.
MC	Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
MI	Result is outside control limits due to matrix interference.
MSA	Value determined by Method of Standard Addition.
O	Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
Q	Detection levels elevated due to sample matrix.
R	RPD control limits were exceeded.
RF	Duplicate failed due to result being at or near the method-reporting limit.
RP	Matrix spike values exceed established QC limits; post digestion spike is in control.
S	Recovery is outside control limits.
SC	Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
*	The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Page ___ of ___

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: Robin Hamlet
Company: 3 Kings Environmental
Address: PO Box 280
Battle Ground WA
Phone: 360-907-4519 Fax:
Project No. 212005, Project Name: PS Trenching
Project Site Location OR ___ WA X Other ___
Invoice To: Robin Hamlet P.O. No. ___

Collected By:
Signature: Robin Hamlet
Printed: Robin Hamlet

Signature ___
Printed ___

Turn Around Time
☐ Normal 5-7 Business Days
☒ Rush 24 Hr By Monday Morning
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses: NWTPH-Dx/Dx EXT	Comments	Lab I.D.
2/3/12		BTIH2O-020212	WATER				

For Laboratory Use
Lab Job No. 1202034
Shipped Via ___
Air Bill No. ___
Temperature On Receipt ___ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
Company: 3 Kings	2/3/12	350	Company:	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Cindy Hollyard Date: 2/3/12 Time: 15:50

Copies: White-Original Yellow-Project File Pink-Customer Copy

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

February 07, 2012

Robin Hamlet
3 Kings Environmental, Inc.
PO Box 280
1311 SE Grace Avenue
Battle Ground, WA 98604

TEL: (360) 666-5464
FAX: (360) 666-8202

RE: PS Trucking / 212005.2

Dear Robin Hamlet:

Order No.: 1202032

Specialty Analytical received 2 samples on 2/3/2012 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Cindy Hillyard
Project Manager

Technical Review

Specialty Analytical

Date: *07-Feb-12*

CLIENT: 3 Kings Environmental, Inc.
Project: PS Trucking / 212005.2
Lab Order: 1202032

Lab ID: 1202032-01
Collection Date: 2/2/2012 9:38:00 AM
Client Sample ID: TP1H2O-020212
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	8.35	0.0760	A4	mg/L	1	2/6/2012
Lube Oil	ND	0.190		mg/L	1	2/6/2012
Surr: o-Terphenyl	192	50-150	S,MI	%REC	1	2/6/2012

Lab ID: 1202032-02
Collection Date: 2/2/2012 10:00:00 AM
Client Sample ID: TP1CF5-8-020212
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	ND	21.7		mg/Kg-dry	1	2/6/2012
Lube Oil	ND	72.5		mg/Kg-dry	1	2/6/2012
Surr: o-Terphenyl	62.9	50-150		%REC	1	2/6/2012

Specialty Analytical

Date: *07-Feb-12*

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202032
Project: PS Trucking / 212005.2

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDX_S

Sample ID: MB-30648	SampType: MBLK	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date: 2/3/2012	Run ID: GC-M_120206A
Client ID: ZZZZZ	Batch ID: 30648	TestNo: NWTPH-Dx		Analysis Date: 2/6/2012	SeqNo: 813152

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	34.5	0	33.33	0	104	50	150	0	0		

Sample ID: LCS-30648	SampType: LCS	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date: 2/3/2012	Run ID: GC-M_120206A
Client ID: ZZZZZ	Batch ID: 30648	TestNo: NWTPH-Dx		Analysis Date: 2/6/2012	SeqNo: 813153

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	196.8	15.0	166.6	0	118	76.3	125	0	0		
Lube Oil	171.1	50.0	166.6	0	103	69.9	127	0	0		

Sample ID: 1201252-42ADUP	SampType: DUP	TestCode: NWTPHDX_S	Units: mg/Kg-dry	Prep Date: 2/3/2012	Run ID: GC-M_120206A
Client ID: ZZZZZ	Batch ID: 30648	TestNo: NWTPH-Dx		Analysis Date: 2/6/2012	SeqNo: 813290

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	20.1	0	0	0	0	0	0	0	20	
Lube Oil	ND	66.9	0	0	0	0	0	0	0	20	

Sample ID: 1201252-54ADUP	SampType: DUP	TestCode: NWTPHDX_S	Units: mg/Kg-dry	Prep Date: 2/3/2012	Run ID: GC-M_120206A
Client ID: ZZZZZ	Batch ID: 30648	TestNo: NWTPH-Dx		Analysis Date: 2/6/2012	SeqNo: 813294

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	18.1	0	0	0	0	0	0	0	20	
Lube Oil	ND	60.3	0	0	0	0	0	0	0	20	

Sample ID: CCB	SampType: CCB	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date:	Run ID: GC-M_120206A
Client ID: ZZZZZ	Batch ID: 30648	TestNo: NWTPH-Dx		Analysis Date: 2/6/2012	SeqNo: 813285

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202032
Project: PS Trucking / 212005.2

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDX_S

Sample ID: **CCB** SampType: **CCB** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: Run ID: **GC-M_120206A**
Client ID: ZZZZZ Batch ID: **30648** TestNo: **NWTPH-Dx** Analysis Date: **2/6/2012** SeqNo: **813285**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	2.476	15.0	0	0	0	0	0	0	0		
Lube Oil	ND	50.0	0	0	0	0	0	0	0		
Surr: o-Terphenyl	34.77	0	33.33	0	104	50	150	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: Run ID: **GC-M_120206A**
Client ID: ZZZZZ Batch ID: **30648** TestNo: **NWTPH-Dx** Analysis Date: **2/6/2012** SeqNo: **813151**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1096	15.0	1026	0	107	85	115	0	0		
Lube Oil	510.4	50.0	528.4	0	96.6	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: Run ID: **GC-M_120206A**
Client ID: ZZZZZ Batch ID: **30648** TestNo: **NWTPH-Dx** Analysis Date: **2/6/2012** SeqNo: **813155**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1421	15.0	1368	0	104	85	115	0	0		
Lube Oil	688.8	50.0	704.5	0	97.8	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: Run ID: **GC-M_120206A**
Client ID: ZZZZZ Batch ID: **30648** TestNo: **NWTPH-Dx** Analysis Date: **2/6/2012** SeqNo: **813301**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1131	15.0	1026	0	110	85	115	0	0		
Lube Oil	533.8	50.0	528.4	0	101	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202032
Project: PS Trucking / 212005.2

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDXLL_W

Sample ID: MB-30655	SampType: MBLK	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/3/2012	Run ID: GC-M_120206B
Client ID: ZZZZZ	Batch ID: 30655	TestNo: NWTPH-Dx		Analysis Date: 2/6/2012	SeqNo: 813159

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	0.0800									
Lube Oil	ND	0.200									
Surr: o-Terphenyl	0.1938	0	0.2	0	96.9	50	150	0	0		

Sample ID: LCS-30655	SampType: LCS	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/3/2012	Run ID: GC-M_120206B
Client ID: ZZZZZ	Batch ID: 30655	TestNo: NWTPH-Dx		Analysis Date: 2/6/2012	SeqNo: 813160

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.9518	0.0800	1	0	95.2	60.7	121	0	0		
Lube Oil	0.8324	0.200	1	0	83.2	64	126	0	0		

Sample ID: LCSD-30655	SampType: LCSD	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/3/2012	Run ID: GC-M_120206B
Client ID: ZZZZZ	Batch ID: 30655	TestNo: NWTPH-Dx		Analysis Date: 2/6/2012	SeqNo: 813161

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.033	0.0800	1	0	103	60.7	121	0.9518	8.13	20	
Lube Oil	0.871	0.200	1	0	87.1	64	126	0.8324	4.53	20	

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDXLL	Units: mg/L	Prep Date:	Run ID: GC-M_120206B
Client ID: ZZZZZ	Batch ID: 30655	TestNo: NWTPH-Dx		Analysis Date: 2/6/2012	SeqNo: 813158

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.576	0.0800	6.158	0	107	85	115	0	0		
Lube Oil	3.062	0.200	3.17	0	96.6	85	115	0	0		

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDXLL	Units: mg/L	Prep Date:	Run ID: GC-M_120206B
Client ID: ZZZZZ	Batch ID: 30655	TestNo: NWTPH-Dx		Analysis Date: 2/6/2012	SeqNo: 813173

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	8.53	0.0800	8.21	0	104	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202032
Project: PS Trucking / 212005.2

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDXLL_W

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDXLL	Units: mg/L	Prep Date:	Run ID: GC-M_120206B
Client ID: ZZZZZ	Batch ID: 30655	TestNo: NWTPH-Dx		Analysis Date: 2/6/2012	SeqNo: 813173

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lube Oil	4.133	0.200	4.227	0	97.8	85	115	0	0		

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

KEY TO FLAGS

Rev. May 12, 2010

A	This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
A1	This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
A2	This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
A3	The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
A4	The product appears to be aged or degraded diesel.
B	The blank exhibited a positive result great than the reporting limit for this compound.
CN	See Case Narrative.
D	Result is based from a dilution.
E	Result exceeds the calibration range for this compound. The result should be considered as estimate.
F	The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
G	Result may be biased high due to biogenic interferences. Clean up is recommended.
H	Sample was analyzed outside recommended holding time.
HT	At clients request, samples was analyzed outside of recommended holding time.
J	The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
K	Diesel result is biased high due to amount of Oil contained in the sample.
L	Diesel result is biased high due to amount of Gasoline contained in the sample.
M	Oil result is biased high due to amount of Diesel contained in the sample.
MC	Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
MI	Result is outside control limits due to matrix interference.
MSA	Value determined by Method of Standard Addition.
O	Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
Q	Detection levels elevated due to sample matrix.
R	RPD control limits were exceeded.
RF	Duplicate failed due to result being at or near the method-reporting limit.
RP	Matrix spike values exceed established QC limits; post digestion spike is in control.
S	Recovery is outside control limits.
SC	Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
*	The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Page 1 of 1

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: Robin Hamlet
Company: 3 Kings Environmental
Address: Po Box 280
Battle Ground WA 98604
Phone: 360-902-4519 Fax:
Project No. 212005-2 Project Name: P.S. Trucking
Project Site Location OR ____ WA Y Other ____
Invoice To: Robin Hamlet P.O. No. 12788

Collected By:
Signature: Robin Hamlet
Printed: Robin Hamlet

Signature:
Printed:

Turn Around Time
☐ Normal 5-7 Business Days
☒ Rush 24 Hr
Specify
Rush Analyses Must Be Scheduled With The Lab in Advance

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses: NWTPH-Dx/Dx Ext	Comments	Lab I.D.
2/2/12	938	TPIH2O-020212	Water	2			
2/2/12	1000	TPICF5-8-020212	Soil	1			

For Laboratory Use
Lab Job No. 1202032
Shipped Via Client
Air Bill No. ____
Temperature On Receipt ____ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
R Hamlet	2/2	1435				
Company: 3 Kings			Company:	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Cindy Ward — Date: 2/3/12 — Time: 1435

Copies: White-Original Yellow-Project File Pink-Customer Copy

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

February 08, 2012

Robin Hamlet
3 Kings Environmental, Inc.
PO Box 280
1311 SE Grace Avenue
Battle Ground, WA 98604

TEL: (360) 666-5464
FAX: (360) 666-8202

RE: PS Trucking / 212005.2

Dear Robin Hamlet: Order No.: 1202045

Specialty Analytical received 3 samples on 2/7/2012 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Cindy Hillyard
Project Manager

Technical Review

Specialty Analytical

Date: *08-Feb-12*

CLIENT: 3 Kings Environmental, Inc.
Project: PS Trucking / 212005.2
Lab Order: 1202045

Lab ID: 1202045-01 **Collection Date:** 2/6/2012 8:58:00 AM
Client Sample ID: WTPS6-3-020612 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	ND	19.5		mg/Kg-dry	1	2/7/2012
Lube Oil	ND	65.0		mg/Kg-dry	1	2/7/2012
Surr: o-Terphenyl	89.0	50-150		%REC	1	2/7/2012

Lab ID: 1202045-02 **Collection Date:** 2/6/2012 8:59:00 AM
Client Sample ID: WTPN7-3-020612 **Matrix:** SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	ND	20.4		mg/Kg-dry	1	2/7/2012
Lube Oil	ND	68.1		mg/Kg-dry	1	2/7/2012
Surr: o-Terphenyl	97.2	50-150		%REC	1	2/7/2012

Lab ID: 1202045-03 **Collection Date:** 2/7/2012 8:40:00 AM
Client Sample ID: SP8-020712 **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	1.04	0.0760	A1	mg/L	1	2/7/2012
Lube Oil	ND	0.190		mg/L	1	2/7/2012
Surr: o-Terphenyl	133	50-150		%REC	1	2/7/2012

Specialty Analytical

Date: *08-Feb-12*

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202045
Project: PS Trucking / 212005.2

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDX_S

Sample ID: MB-30680	SampType: MBLK	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date: 2/7/2012	Run ID: GC-M_120207A
Client ID: ZZZZZ	Batch ID: 30680	TestNo: NWTPH-Dx		Analysis Date: 2/7/2012	SeqNo: 813524

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	34.8	0	33.33	0	104	50	150	0	0		

Sample ID: LCS-30680	SampType: LCS	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date: 2/7/2012	Run ID: GC-M_120207A
Client ID: ZZZZZ	Batch ID: 30680	TestNo: NWTPH-Dx		Analysis Date: 2/7/2012	SeqNo: 813525

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	166.3	15.0	166.6	0	99.8	76.3	125	0	0		
Lube Oil	146.3	50.0	166.6	0	87.8	69.9	127	0	0		

Sample ID: 1202045-01ADUP	SampType: DUP	TestCode: NWTPHDX_S	Units: mg/Kg-dry	Prep Date: 2/7/2012	Run ID: GC-M_120207A
Client ID: WTPS6-3-020612	Batch ID: 30680	TestNo: NWTPH-Dx		Analysis Date: 2/7/2012	SeqNo: 813527

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	19.5	0	0	0	0	0	0	0	20	
Lube Oil	ND	65.0	0	0	0	0	0	0	0	20	

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date:	Run ID: GC-M_120207A
Client ID: ZZZZZ	Batch ID: 30680	TestNo: NWTPH-Dx		Analysis Date: 2/7/2012	SeqNo: 813523

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1092	15.0	1026	0	106	85	115	0	0		
Lube Oil	505.7	50.0	528.4	0	95.7	85	115	0	0		

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date:	Run ID: GC-M_120207A
Client ID: ZZZZZ	Batch ID: 30680	TestNo: NWTPH-Dx		Analysis Date: 2/7/2012	SeqNo: 813529

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202045
Project: PS Trucking / 212005.2

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDX_S

Sample ID: **CCV**	SampType: **CCV**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**		Prep Date:				Run ID: **GC-M_120207A**		
Client ID: **ZZZZZ**	Batch ID: **30680**	TestNo: **NWTPH-Dx**			Analysis Date: **2/7/2012**				SeqNo: **813529**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1492	15.0	1368	0	109	85	115	0	0		
Lube Oil	648.2	50.0	704.5	0	92	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202045
Project: PS Trucking / 212005.2

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDXLL_W

Sample ID: MB-30681	SampType: MBLK	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/7/2012	Run ID: GC-M_120207B
Client ID: ZZZZZ	Batch ID: 30681	TestNo: NWTPH-Dx		Analysis Date: 2/7/2012	SeqNo: 813618

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	0.0800									
Lube Oil	ND	0.200									
Surr: o-Terphenyl	0.2102	0	0.2	0	105	50	150	0	0		

Sample ID: LCS-30681	SampType: LCS	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/7/2012	Run ID: GC-M_120207B
Client ID: ZZZZZ	Batch ID: 30681	TestNo: NWTPH-Dx		Analysis Date: 2/7/2012	SeqNo: 813619

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.009	0.0800	1	0	101	60.7	121	0	0		
Lube Oil	0.8223	0.200	1	0	82.2	64	126	0	0		

Sample ID: LCSD-30681	SampType: LCSD	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/7/2012	Run ID: GC-M_120207B
Client ID: ZZZZZ	Batch ID: 30681	TestNo: NWTPH-Dx		Analysis Date: 2/7/2012	SeqNo: 813620

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.075	0.0800	1	0	108	60.7	121	1.009	6.34	20	
Lube Oil	0.9245	0.200	1	0	92.5	64	126	0.8223	11.7	20	

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDXLL	Units: mg/L	Prep Date:	Run ID: GC-M_120207B
Client ID: ZZZZZ	Batch ID: 30681	TestNo: NWTPH-Dx		Analysis Date: 2/7/2012	SeqNo: 813617

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.551	0.0800	6.158	0	106	85	115	0	0		
Lube Oil	3.035	0.200	3.17	0	95.7	85	115	0	0		

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDXLL	Units: mg/L	Prep Date:	Run ID: GC-M_120207B
Client ID: ZZZZZ	Batch ID: 30681	TestNo: NWTPH-Dx		Analysis Date: 2/7/2012	SeqNo: 813622

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	8.952	0.0800	8.21	0	109	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202045
Project: PS Trucking / 212005.2

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDXLL_W

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDXLL	Units: mg/L	Prep Date:	Run ID: GC-M_120207B
Client ID: ZZZZZ	Batch ID: 30681	TestNo: NWTPH-Dx		Analysis Date: 2/7/2012	SeqNo: 813622

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lube Oil	3.89	0.200	4.227	0	92	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

KEY TO FLAGS

Rev. May 12, 2010

A	This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
A1	This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
A2	This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
A3	The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
A4	The product appears to be aged or degraded diesel.
B	The blank exhibited a positive result great than the reporting limit for this compound.
CN	See Case Narrative.
D	Result is based from a dilution.
E	Result exceeds the calibration range for this compound. The result should be considered as estimate.
F	The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
G	Result may be biased high due to biogenic interferences. Clean up is recommended.
H	Sample was analyzed outside recommended holding time.
HT	At clients request, samples was analyzed outside of recommended holding time.
J	The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
K	Diesel result is biased high due to amount of Oil contained in the sample.
L	Diesel result is biased high due to amount of Gasoline contained in the sample.
M	Oil result is biased high due to amount of Diesel contained in the sample.
MC	Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
MI	Result is outside control limits due to matrix interference.
MSA	Value determined by Method of Standard Addition.
O	Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
Q	Detection levels elevated due to sample matrix.
R	RPD control limits were exceeded.
RF	Duplicate failed due to result being at or near the method-reporting limit.
RP	Matrix spike values exceed established QC limits; post digestion spike is in control.
S	Recovery is outside control limits.
SC	Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
*	The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Page ___ of ___

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: Robin Hamlet
Company: 3 Kings Environmental
Address: PO Box 280
Battle Ground WA 98604
Phone: 360-907-4519 Fax:
Project No: 212005.2 Project Name: PS Trucking
Project Site Location OR: ___ WA: Y Other:
Invoice To: Robin Hamlet P.O. No.: 12803

Collected By:
Signature: Robin Hamlet
Printed: Robin Hamlet

Signature:
Printed:

Turn Around Time
☐ Normal 5-7 Business Days
☑ Rush 24 Hr
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses: Gas (Hydrocarbon)	Comments	Lab I.D.
2/6/12	859	WTP56-3-020612	SOIL	1	X		
	859	WTPN7-3-020612	"	"	X		
2/7/12	840	SPB-020712	H2O	1	X		

For Laboratory Use
Lab Job No.: 1202045
Shipped Via: Client
Air Bill No.:
Temperature On Receipt ___ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
Company: 3 Kings	2/7/12	1020	Company:	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Nikki Rupples Date: 2/7/12 Time: 1020

Copies: White-Original Yellow-Project File Pink-Customer Copy

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

February 16, 2012

Robin Hamlet
3 Kings Environmental, Inc.
PO Box 280
1311 SE Grace Avenue
Battle Ground, WA 98604

TEL: (360) 666-5464
FAX (360) 666-8202

RE: P.S. Trucking / 212005.3

Dear Robin Hamlet:

Order No.: 1202096

Specialty Analytical received 3 samples on 2/13/2012 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Cindy Hillyard
Project Manager

Technical Review

Specialty Analytical

Date: *16-Feb-12*

CLIENT: 3 Kings Environmental, Inc. **Lab Order:** 1202096
Project: P.S. Trucking / 212005.3

Lab ID: 1202096-01 **Collection Date:** 2/10/2012 12:05:00 PM
Client Sample ID: BT1H2O-021012 **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	ND	78.3		µg/L	1	2/14/2012
Lube Oil	ND	196		µg/L	1	2/14/2012
Surr: o-Terphenyl	87.1	50-150		%REC	1	2/14/2012

Lab ID: 1202096-02 **Collection Date:** 2/10/2012 12:09:00 PM
Client Sample ID: BT2H2O-021012 **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	101	77.7		µg/L	1	2/14/2012
Lube Oil	ND	194		µg/L	1	2/14/2012
Surr: o-Terphenyl	96.6	50-150		%REC	1	2/14/2012

Specialty Analytical

Date: *16-Feb-12*

CLIENT: 3 Kings Environmental, Inc. **Lab Order:** 1202096
Project: P.S. Trucking / 212005.3

Lab ID: 1202096-03 **Collection Date:** 2/10/2012 12:15:00 PM
Client Sample ID: SP2H20-021012 **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		**NWTPH-DX**				Analyst: **kh**
Diesel	665	76.2	A1	µg/L	1	2/14/2012
Lube Oil	ND	190		µg/L	1	2/14/2012
Surr: o-Terphenyl	90.5	50-150		%REC	1	2/14/2012
LOW LEVEL PAH BY GC/MS		**8270SIM**				Analyst: **bda**
Acenaphthene	0.542	0.0476		µg/L	1	2/14/2012 4:21:00 PM
Acenaphthylene	0.0666	0.0476		µg/L	1	2/14/2012 4:21:00 PM
Anthracene	ND	0.0476		µg/L	1	2/14/2012 4:21:00 PM
Benz(a)anthracene	ND	0.0476		µg/L	1	2/14/2012 4:21:00 PM
Benzo(a)pyrene	ND	0.0476		µg/L	1	2/14/2012 4:21:00 PM
Benzo(b)fluoranthene	ND	0.0476		µg/L	1	2/14/2012 4:21:00 PM
Benzo(g,h,i)perylene	ND	0.0476		µg/L	1	2/14/2012 4:21:00 PM
Benzo(k)fluoranthene	ND	0.0476		µg/L	1	2/14/2012 4:21:00 PM
Chrysene	ND	0.0476		µg/L	1	2/14/2012 4:21:00 PM
Dibenz(a,h)anthracene	ND	0.0476		µg/L	1	2/14/2012 4:21:00 PM
Fluoranthene	ND	0.0476		µg/L	1	2/14/2012 4:21:00 PM
Fluorene	0.657	0.0476		µg/L	1	2/14/2012 4:21:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.0476		µg/L	1	2/14/2012 4:21:00 PM
Naphthalene	ND	0.0476		µg/L	1	2/14/2012 4:21:00 PM
Phenanthrene	0.0571	0.0476		µg/L	1	2/14/2012 4:21:00 PM
Pyrene	ND	0.0476		µg/L	1	2/14/2012 4:21:00 PM
Surr: 2-Fluorobiphenyl	40.3	18.6-106		%REC	1	2/14/2012 4:21:00 PM
Surr: Nitrobenzene-d5	42.3	17-130		%REC	1	2/14/2012 4:21:00 PM
Surr: p-Terphenyl-d14	49.7	39.6-131		%REC	1	2/14/2012 4:21:00 PM

Specialty Analytical

Date: *16-Feb-12*

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202096
Project: P.S. Trucking / 212005.3

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDXLL_W

Sample ID: MB-30736	SampType: MBLK	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/14/2012	Run ID: GC-M_120214A
Client ID: ZZZZZ	Batch ID: 30736	TestNo: NWTPH-Dx		Analysis Date: 2/14/2012	SeqNo: 815008

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.05574	0.0800									J
Lube Oil	ND	0.200									
Surr: o-Terphenyl	0.161	0	0.2	0	80.5	50	150	0	0		

Sample ID: LCS-30736	SampType: LCS	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/14/2012	Run ID: GC-M_120214A
Client ID: ZZZZZ	Batch ID: 30736	TestNo: NWTPH-Dx		Analysis Date: 2/14/2012	SeqNo: 815009

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.8813	0.0800	1	0	88.1	60.7	121	0	0		
Lube Oil	0.7416	0.200	1	0	74.2	64	126	0	0		

Sample ID: LCSD-30736	SampType: LCSD	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/14/2012	Run ID: GC-M_120214A
Client ID: ZZZZZ	Batch ID: 30736	TestNo: NWTPH-Dx		Analysis Date: 2/14/2012	SeqNo: 815010

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.9417	0.0800	1	0	94.2	60.7	121	0.8813	6.62	20	
Lube Oil	0.8519	0.200	1	0	85.2	64	126	0.7416	13.8	20	

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDXLL	Units: mg/L	Prep Date:	Run ID: GC-M_120214A
Client ID: ZZZZZ	Batch ID: 30736	TestNo: NWTPH-Dx		Analysis Date: 2/14/2012	SeqNo: 815007

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.394	0.0800	6.158	0	104	85	115	0	0		
Lube Oil	3.061	0.200	3.17	0	96.5	85	115	0	0		

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDXLL	Units: mg/L	Prep Date:	Run ID: GC-M_120214A
Client ID: ZZZZZ	Batch ID: 30736	TestNo: NWTPH-Dx		Analysis Date: 2/14/2012	SeqNo: 815015

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202096
Project: P.S. Trucking / 212005.3

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDXLL_W

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_120214A**
Client ID: **ZZZZZ** Batch ID: **30736** TestNo: **NWTPH-Dx** Analysis Date: **2/14/2012** SeqNo: **815015**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	9.12	0.0800	8.21	0	111	85	115	0	0		
Lube Oil	3.881	0.200	4.227	0	91.8	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202096
Project: P.S. Trucking / 212005.3

ANALYTICAL QC SUMMARY REPORT

TestCode: PAHLL_W

Sample ID: MB-30737	SampType: MBLK	TestCode: PAHLL_W	Units: µg/L	Prep Date: 2/14/2012	Run ID: 5975Q_120214C
Client ID: ZZZZZ	Batch ID: 30737	TestNo: 8270SIM		Analysis Date: 2/14/2012	SeqNo: 814896

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.01	0.0500									J
Acenaphthylene	ND	0.0500									
Anthracene	0.01	0.0500									J
Benz(a)anthracene	0.01	0.0500									J
Benzo(a)pyrene	0.02	0.0500									J
Benzo(b)fluoranthene	0.01	0.0500									J
Benzo(g,h,i)perylene	0.03	0.0500									J
Benzo(k)fluoranthene	0.01	0.0500									J
Chrysene	ND	0.0500									
Dibenz(a,h)anthracene	0.03	0.0500									J
Fluoranthene	0.01	0.0500									J
Fluorene	ND	0.0500									
Indeno(1,2,3-cd)pyrene	0.03	0.0500									J
Naphthalene	0.03	0.0500									J
Phenanthrene	0.02	0.0500									J
Pyrene	0.01	0.0500									J
Surr: 2-Fluorobiphenyl	56.98	1.00	100	0	57	18.6	106	0	0		
Surr: Nitrobenzene-d5	66.14	1.00	100	0	66.1	17	130	0	0		
Surr: p-Terphenyl-d14	66.72	1.00	100	0	66.7	39.6	131	0	0		

Sample ID: LCS-30737	SampType: LCS	TestCode: PAHLL_W	Units: µg/L	Prep Date: 2/14/2012	Run ID: 5975Q_120214C
Client ID: ZZZZZ	Batch ID: 30737	TestNo: 8270SIM		Analysis Date: 2/14/2012	SeqNo: 814899

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	3.2	0.0500	5	0	64	35.1	100	0	0		
Benzo(a)pyrene	3.84	0.0500	5	0	76.8	23.4	103	0	0		
Benzo(g,h,i)perylene	3.55	0.0500	5	0	71	20.8	120	0	0		
Chrysene	3.21	0.0500	5	0	64.2	39.1	119	0	0		
Naphthalene	2.8	0.0500	5	0	56	25.6	106	0	0		
Phenanthrene	2.9	0.0500	5	0	58	38.1	106	0	0		
Pyrene	3.14	0.0500	5	0	62.8	41.3	118	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202096
Project: P.S. Trucking / 212005.3

ANALYTICAL QC SUMMARY REPORT

TestCode: PAHLL_W

Sample ID: LCSD-30737	SampType: LCSD	TestCode: PAHLL_W	Units: µg/L	Prep Date: 2/14/2012	Run ID: 5975Q_120214C
Client ID: ZZZZZ	Batch ID: 30737	TestNo: 8270SIM		Analysis Date: 2/16/2012	SeqNo: 815346

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	3.23	0.0500	5	0	64.6	35.1	100	3.2	0.933	20	
Benzo(a)pyrene	3.88	0.0500	5	0	77.6	23.4	103	3.84	1.04	20	
Benzo(g,h,i)perylene	3.77	0.0500	5	0	75.4	20.8	120	3.55	6.01	20	
Chrysene	3.13	0.0500	5	0	62.6	39.1	119	3.21	2.52	20	
Naphthalene	2.72	0.0500	5	0	54.4	25.6	106	2.8	2.90	20	
Phenanthrene	2.91	0.0500	5	0	58.2	38.1	106	2.9	0.344	20	
Pyrene	3.18	0.0500	5	0	63.6	41.3	118	3.14	1.27	20	

Sample ID: CCB-30737	SampType: CCB	TestCode: PAHLL_W	Units: µg/L	Prep Date:	Run ID: 5975Q_120214C
Client ID: ZZZZZ	Batch ID: 30737	TestNo: 8270SIM		Analysis Date: 2/16/2012	SeqNo: 815345

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.01	0.0500	0	0	0	0	0	0	0		
Acenaphthylene	ND	0.0500	0	0	0	0	0	0	0		
Anthracene	ND	0.0500	0	0	0	0	0	0	0		
Benz(a)anthracene	0.01	0.0500	0	0	0	0	0	0	0		
Benzo(a)pyrene	ND	0.0500	0	0	0	0	0	0	0		
Benzo(b)fluoranthene	ND	0.0500	0	0	0	0	0	0	0		
Benzo(g,h,i)perylene	ND	0.0500	0	0	0	0	0	0	0		
Benzo(k)fluoranthene	ND	0.0500	0	0	0	0	0	0	0		
Chrysene	0.01	0.0500	0	0	0	0	0	0	0		
Dibenz(a,h)anthracene	ND	0.0500	0	0	0	0	0	0	0		
Fluoranthene	0.01	0.0500	0	0	0	0	0	0	0		
Fluorene	ND	0.0500	0	0	0	0	0	0	0		
Indeno(1,2,3-cd)pyrene	ND	0.0500	0	0	0	0	0	0	0		
Naphthalene	0.02	0.0500	0	0	0	0	0	0	0		
Phenanthrene	0.01	0.0500	0	0	0	0	0	0	0		
Pyrene	0.01	0.0500	0	0	0	0	0	0	0		
Surr: 2-Fluorobiphenyl	57.31	1.00	100	0	57.3	18.6	106	0	0		
Surr: Nitrobenzene-d5	66.33	1.00	100	0	66.3	17	130	0	0		
Surr: p-Terphenyl-d14	66.83	1.00	100	0	66.8	39.6	131	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202096
Project: P.S. Trucking / 212005.3

ANALYTICAL QC SUMMARY REPORT

TestCode: PAHLL_W

Sample ID: **CCV-30737** SampType: **CCV** TestCode: **PAHLL_W** Units: **µg/L** Prep Date: Run ID: **5975Q_120214C**
Client ID: **ZZZZZ** Batch ID: **30737** TestNo: **8270SIM** Analysis Date: **2/14/2012** SeqNo: **814895**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.99	0.0500	1	0	99	70	130	0	0		
Acenaphthylene	0.99	0.0500	1	0	99	70	130	0	0		
Anthracene	0.97	0.0500	1	0	97	70	130	0	0		
Benz(a)anthracene	0.84	0.0500	1	0	84	70	130	0	0		
Benzo(a)pyrene	1.1	0.0500	1	0	110	70	130	0	0		
Benzo(b)fluoranthene	1.06	0.0500	1	0	106	70	130	0	0		
Benzo(g,h,i)perylene	1.07	0.0500	1	0	107	70	130	0	0		
Benzo(k)fluoranthene	0.97	0.0500	1	0	97	70	130	0	0		
Chrysene	0.86	0.0500	1	0	86	70	130	0	0		
Dibenz(a,h)anthracene	1.14	0.0500	1	0	114	70	130	0	0		
Fluoranthene	0.86	0.0500	1	0	86	70	130	0	0		
Fluorene	0.87	0.0500	1	0	87	70	130	0	0		
Indeno(1,2,3-cd)pyrene	1.12	0.0500	1	0	112	70	130	0	0		
Naphthalene	0.98	0.0500	1	0	98	70	130	0	0		
Phenanthrene	0.89	0.0500	1	0	89	70	130	0	0		
Pyrene	0.89	0.0500	1	0	89	70	130	0	0		

Sample ID: **CCV-30737** SampType: **CCV** TestCode: **PAHLL_W** Units: **µg/L** Prep Date: Run ID: **5975Q_120214C**
Client ID: **ZZZZZ** Batch ID: **30737** TestNo: **8270SIM** Analysis Date: **2/16/2012** SeqNo: **815344**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.98	0.0500	1	0	98	70	130	0	0		
Acenaphthylene	0.94	0.0500	1	0	94	70	130	0	0		
Anthracene	0.9	0.0500	1	0	90	70	130	0	0		
Benz(a)anthracene	0.86	0.0500	1	0	86	70	130	0	0		
Benzo(a)pyrene	1.05	0.0500	1	0	105	70	130	0	0		
Benzo(b)fluoranthene	1.05	0.0500	1	0	105	70	130	0	0		
Benzo(g,h,i)perylene	1	0.0500	1	0	100	70	130	0	0		
Benzo(k)fluoranthene	1.02	0.0500	1	0	102	70	130	0	0		
Chrysene	0.9	0.0500	1	0	90	70	130	0	0		
Dibenz(a,h)anthracene	1.06	0.0500	1	0	106	70	130	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202096
Project: P.S. Trucking / 212005.3

ANALYTICAL QC SUMMARY REPORT

TestCode: PAHLL_W

Sample ID: **CCV-30737** SampType: **CCV** TestCode: **PAHLL_W** Units: **µg/L** Prep Date: Run ID: **5975Q_120214C**
Client ID: **ZZZZZ** Batch ID: **30737** TestNo: **8270SIM** Analysis Date: **2/16/2012** SeqNo: **815344**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoranthene	0.87	0.0500	1	0	87	70	130	0	0		
Fluorene	0.88	0.0500	1	0	88	70	130	0	0		
Indeno(1,2,3-cd)pyrene	1.07	0.0500	1	0	107	70	130	0	0		
Naphthalene	0.96	0.0500	1	0	96	70	130	0	0		
Phenanthrene	0.89	0.0500	1	0	89	70	130	0	0		
Pyrene	0.9	0.0500	1	0	90	70	130	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

KEY TO FLAGS

Rev. May 12, 2010

A	This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
A1	This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
A2	This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
A3	The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
A4	The product appears to be aged or degraded diesel.
B	The blank exhibited a positive result great than the reporting limit for this compound.
CN	See Case Narrative.
D	Result is based from a dilution.
E	Result exceeds the calibration range for this compound. The result should be considered as estimate.
F	The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
G	Result may be biased high due to biogenic interferences. Clean up is recommended.
H	Sample was analyzed outside recommended holding time.
HT	At clients request, samples was analyzed outside of recommended holding time.
J	The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
K	Diesel result is biased high due to amount of Oil contained in the sample.
L	Diesel result is biased high due to amount of Gasoline contained in the sample.
M	Oil result is biased high due to amount of Diesel contained in the sample.
MC	Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
MI	Result is outside control limits due to matrix interference.
MSA	Value determined by Method of Standard Addition.
O	Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
Q	Detection levels elevated due to sample matrix.
R	RPD control limits were exceeded.
RF	Duplicate failed due to result being at or near the method-reporting limit.
RP	Matrix spike values exceed established QC limits; post digestion spike is in control.
S	Recovery is outside control limits.
SC	Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
*	The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Page 1 of 1

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: ROBIN HAMLET
Company: 3 KINGS ENVIRONMENTAL
Address: PO BOX 280
BATTLE GROUND, WA
Phone: 360-907-1519 Fax:
Project No.: 212005-3 Project Name: P.S. TRUCKING
Project Site Location OR: WA: X Other:
Invoice To: ROBIN HAMLET P.O. No.: 12992

Collected By:
Signature: Robin Hamlet
Printed: ROBIN HAMLET

Signature:
Printed:

Turn Around Time
[X] Normal 5-7 Business Days
[ ] Rush _____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses: NWTPH-Dx/Dx EXT	Analyses: PAH's 8270	Comments	Lab I.D.
2/10/12	1205	BT1H2O-021012	H2O	1	X			
	1209	BT2H2O-021012	H2O	1	X			
	1215	SP2H2O-021012	H2O	2	X	X		
	~~1216~~	~~Spare~~						

For Laboratory Use
Lab Job No. 1202016
Shipped Via Specialty
Air Bill No.
Temperature On Receipt 5 °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Relinquished By	Date	Time	Received By	Relinquished By	Date	Time
R Hamlet	2/13/12	1215	Raquel McMoore	Raquel McMoore	2/13/12	1512
Company: 3 Kings			Company: STL	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Nikki Bippes Date: 2/13/12 Time: 1512

Copies: White-Original Yellow-Project File Pink-Customer Copy

Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

February 28, 2012

Robin Hamlet
3 Kings Environmental, Inc.
PO Box 280
1311 SE Grace Avenue
Battle Ground, WA 98604

TEL: (360) 666-5464
FAX: (360) 666-8202

RE: PS Trucking / 212005.3

Order No.: 1202150

Dear Robin Hamlet:

Specialty Analytical received 3 samples on 2/20/2012 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Cindy Hillyard
Project Manager

Technical Review

Specialty Analytical

Date: *28-Feb-12*

CLIENT: 3 Kings Environmental, Inc. **Lab Order:** 1202150
Project: PS Trucking / 212005.3

Lab ID: 1202150-01 **Collection Date:** 2/17/2012 9:10:00 AM
Client Sample ID: BT2H2O-021712 **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	ND	80.4		µg/L	1	2/22/2012
Lube Oil	ND	201		µg/L	1	2/22/2012
Surr: o-Terphenyl	94.7	50-150		%REC	1	2/22/2012

Lab ID: 1202150-02 **Collection Date:** 2/17/2012 9:12:00 AM
Client Sample ID: BT3H2O-021712 **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	99.0	76.8		µg/L	1	2/22/2012
Lube Oil	ND	192		µg/L	1	2/22/2012
Surr: o-Terphenyl	85.7	50-150		%REC	1	2/22/2012

Lab ID: 1202150-03 **Collection Date:** 2/17/2012 9:14:00 AM
Client Sample ID: RR4H2O-021712 **Matrix:** AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: kh
Diesel	ND	77.4		µg/L	1	2/22/2012
Lube Oil	ND	193		µg/L	1	2/22/2012
Surr: o-Terphenyl	95.3	50-150		%REC	1	2/22/2012

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202150
Project: PS Trucking / 212005.3

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDXLL_W

Sample ID: MB-30787	SampType: MBLK	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/20/2012	Run ID: GC-M_120222A
Client ID: ZZZZZ	Batch ID: 30787	TestNo: NWTPH-Dx		Analysis Date: 2/22/2012	SeqNo: 816880

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.05666	0.0800									J
Lube Oil	0.1865	0.200									J
Surr: o-Terphenyl	0.2065	0	0.2	0	103	50	150	0	0		

Sample ID: LCS-30787	SampType: LCS	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/20/2012	Run ID: GC-M_120222A
Client ID: ZZZZZ	Batch ID: 30787	TestNo: NWTPH-Dx		Analysis Date: 2/22/2012	SeqNo: 816881

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.9371	0.0800	1	0	93.7	60.7	121	0	0		
Lube Oil	0.8793	0.200	1	0	87.9	64	126	0	0		

Sample ID: LCSD-30787	SampType: LCSD	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 2/20/2012	Run ID: GC-M_120222A
Client ID: ZZZZZ	Batch ID: 30787	TestNo: NWTPH-Dx		Analysis Date: 2/22/2012	SeqNo: 816882

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.043	0.0771	0.95	0	110	60.7	121	0.9371	10.7	20	
Lube Oil	1.058	0.193	0.95	0	111	64	126	0.8793	18.5	20	

Sample ID: CCB	SampType: CCB	TestCode: NWTPHDXLL	Units: mg/L	Prep Date:	Run ID: GC-M_120222A
Client ID: ZZZZZ	Batch ID: 30787	TestNo: NWTPH-Dx		Analysis Date: 2/22/2012	SeqNo: 817522

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.0108	0.0800	0	0	0	0	0	0	0		
Lube Oil	0.1221	0.200	0	0	0	0	0	0	0		
o-Terphenyl	0.2066	0	0.2	0	103	50	150	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: 3 Kings Environmental, Inc.
Work Order: 1202150
Project: PS Trucking / 212005.3

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDXLL_W

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_120222A**
Client ID: **ZZZZZ** Batch ID: **30787** TestNo: **NWTPH-Dx** Analysis Date: **2/22/2012** SeqNo: **816879**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.947	0.0800	6.138	0	113	85	115	0	0		
Lube Oil	2.971	0.200	3.15	0	94.3	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_120222A**
Client ID: **ZZZZZ** Batch ID: **30787** TestNo: **NWTPH-Dx** Analysis Date: **2/22/2012** SeqNo: **817153**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	9.521	0.0800	8.184	0	116	85	115	0	0		SC
Lube Oil	4.352	0.200	4.2	0	104	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_120222A**
Client ID: **ZZZZZ** Batch ID: **30787** TestNo: **NWTPH-Dx** Analysis Date: **2/22/2012** SeqNo: **817521**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	8.188	0.0800	8.184	0	100	85	115	0	0		
Lube Oil	4.248	0.200	4.2	0	101	85	115	0	0		

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: Run ID: **GC-M_120222A**
Client ID: **ZZZZZ** Batch ID: **30787** TestNo: **NWTPH-Dx** Analysis Date: **2/22/2012** SeqNo: **817961**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.363	0.0800	6.138	0	104	85	115	0	0		
Lube Oil	3.404	0.200	3.15	0	108	85	115	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

KEY TO FLAGS

Rev. May 12, 2010

A	This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
A1	This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
A2	This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
A3	The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
A4	The product appears to be aged or degraded diesel.
B	The blank exhibited a positive result great than the reporting limit for this compound.
CN	See Case Narrative.
D	Result is based from a dilution.
E	Result exceeds the calibration range for this compound. The result should be considered as estimate.
F	The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
G	Result may be biased high due to biogenic interferences. Clean up is recommended.
H	Sample was analyzed outside recommended holding time.
HT	At clients request, samples was analyzed outside of recommended holding time.
J	The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
K	Diesel result is biased high due to amount of Oil contained in the sample.
L	Diesel result is biased high due to amount of Gasoline contained in the sample.
M	Oil result is biased high due to amount of Diesel contained in the sample.
MC	Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
MI	Result is outside control limits due to matrix interference.
MSA	Value determined by Method of Standard Addition.
O	Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
Q	Detection levels elevated due to sample matrix.
R	RPD control limits were exceeded.
RF	Duplicate failed due to result being at or near the method-reporting limit.
RP	Matrix spike values exceed established QC limits; post digestion spike is in control.
S	Recovery is outside control limits.
SC	Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
*	The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Page 1 of 1

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: ROBIN HAMLET
Company: 3 KINGS ENVIRONMENTAL
Address: PO 280
BATTLE GROUND, WA
Phone: 360-907-7519 Fax:
Project No. 42005.3 Project Name: P.S. TRUCKING
Project Site Location OR: WA: X Other:
Invoice To: ROBIN HAMLET P.O. No. 12995

Collected By:
Signature: Robin Hamlet
Printed: ROBIN HAMLET

Signature:
Printed:

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush _____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses: DW THM-EPA 524.2	Comments	Lab I.D.
2/17/12	910	BT2H20-021712	H2O	1	✓	PRESENT RESULTS	
2/17/12	912	BT3H20-021712		1	✓	IN UG/L - PPB	
2/17/12	914	RR4H20-021712		1	✓		

For Laboratory Use
Lab Job No. 1202150
Shipped Via: Specialty
Air Bill No.:
Temperature On Receipt _____ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Relinquished By	Date	Time	Received By	Relinquished By	Date	Time
Company: 3 Kings	2/20/12	0745	Company: Specialty	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Nikki Bippes
Date: 2/20/12 Time: 0820

Copies: White-Original Yellow-Project File Pink-Customer Copy

Specialty Analytical

11711 SE Capps Road, Ste B
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

June 13, 2012

Robin Hamlet
3 Kings Environmental, Inc.
PO Box 280
1311 SE Grace Avenue
Battle Ground, Washington 98604

TEL: (360) 666-5464
FAX: (360) 666-8202
RE: Puget Sound Trucking / 212005.3

Dear Robin Hamlet:

Order No.: 1206036

Specialty Analytical received 2 sample(s) on 6/6/2012 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Marty French
Lab Director

Specialty Analytical

Date Reported: 13-Jun-12

CLIENT: 3 Kings Environmental, Inc.
Project: Puget Sound Trucking / 212005.3

Lab Order: 1206036

Lab ID: 1206036-001
Client Sample ID: B1H2O-060512
Collection Date: 6/5/2012 2:31:00 PM
Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX - RBC		**NWTPH-DX**				Analyst: **kbh**
Diesel	ND	0.080		mg/L	1	6/8/2012 7:26:00 AM
Lube Oil	ND	0.199		mg/L	1	6/8/2012 7:26:00 AM
Surr: o-Terphenyl	104	50-150		%REC	1	6/8/2012 7:26:00 AM

Lab ID: 1206036-002
Client Sample ID: B2H2O-060512
Collection Date: 6/5/2012 3:16:00 PM
Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX - RBC		**NWTPH-DX**				Analyst: **kbh**
Diesel	0.088	0.082		mg/L	1	6/8/2012 7:26:00 AM
Lube Oil	ND	0.206		mg/L	1	6/8/2012 7:26:00 AM
Surr: o-Terphenyl	106	50-150		%REC	1	6/8/2012 7:26:00 AM

QC SUMMARY REPORT

Specialty Analytical

WO#: **1206036**

13-Jun-12

Client: 3 Kings Environmental, Inc.

Project: Puget Sound Trucking / 212005.3

TestCode: **NWTPHDXLL_W**

Sample ID: **CCV**	SampType: **CCV**	TestCode: **NWTPHDXLL**	Units: **mg/L**	Prep Date:	RunNo: **4691**
Client ID: **CCV**	Batch ID: **2765**	TestNo: **NWTPH-Dx**	**SW3510B**	Analysis Date: **6/8/2012**	SeqNo: **62497**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	8.00	0.080	8.083	0	99.0	85	115				
Lube Oil	3.78	0.200	4.254	0	88.9	85	115				

Sample ID: **MB-2765**	SampType: **MBLK**	TestCode: **NWTPHDXLL**	Units: **mg/L**	Prep Date: **6/7/2012**	RunNo: **4691**
Client ID: **PBW**	Batch ID: **2765**	TestNo: **NWTPH-Dx**	**SW3510B**	Analysis Date: **6/8/2012**	SeqNo: **62498**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	0.080									
Lube Oil	ND	0.200									
Surr: o-Terphenyl	0.217		0.2000		109	50	150				

Sample ID: **LCS-2765**	SampType: **LCS**	TestCode: **NWTPHDXLL**	Units: **mg/L**	Prep Date: **6/7/2012**	RunNo: **4691**
Client ID: **LCSW**	Batch ID: **2765**	TestNo: **NWTPH-Dx**	**SW3510B**	Analysis Date: **6/8/2012**	SeqNo: **62502**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.01	0.080	1.000	0	101	60.7	121				
Lube Oil	0.817	0.200	1.000	0	81.7	64	126				

Sample ID: **LCSD-2765**	SampType: **LCSD**	TestCode: **NWTPHDXLL**	Units: **mg/L**	Prep Date: **6/7/2012**	RunNo: **4691**
Client ID: **LCSS02**	Batch ID: **2765**	TestNo: **NWTPH-Dx**	**SW3510B**	Analysis Date: **6/8/2012**	SeqNo: **62503**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.01	0.080	1.000	0	101	60.7	121	1.009	0.0496	20	
Lube Oil	0.852	0.200	1.000	0	85.2	64	126	0.8168	4.26	20	

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: **1206036**

13-Jun-12

Client: 3 Kings Environmental, Inc.

Project: Puget Sound Trucking / 212005.3

TestCode: **NWTPHDXLL_W**

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: RunNo: **4691**

Client ID: **CCV** Batch ID: **2765** TestNo: **NWTPH-Dx** **SW3510B** Analysis Date: **6/8/2012** SeqNo: **62504**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.38	0.080	6.062	0	105	85	115				
Lube Oil	2.97	0.200	3.191	0	93.2	85	115				

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

KEY TO FLAGS

Rev. May 12, 2010

A	This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
A1	This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
A2	This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
A3	The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
A4	The product appears to be aged or degraded diesel.
B	The blank exhibited a positive result great than the reporting limit for this compound.
CN	See Case Narrative.
D	Result is based from a dilution.
E	Result exceeds the calibration range for this compound. The result should be considered as estimate.
F	The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
G	Result may be biased high due to biogenic interferences. Clean up is recommended.
H	Sample was analyzed outside recommended holding time.
HT	At clients request, samples was analyzed outside of recommended holding time.
J	The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
K	Diesel result is biased high due to amount of Oil contained in the sample.
L	Diesel result is biased high due to amount of Gasoline contained in the sample.
M	Oil result is biased high due to amount of Diesel contained in the sample.
MC	Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
MI	Result is outside control limits due to matrix interference.
MSA	Value determined by Method of Standard Addition.
O	Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
Q	Detection levels elevated due to sample matrix.
R	RPD control limits were exceeded.
RF	Duplicate failed due to result being at or near the method-reporting limit.
RP	Matrix spike values exceed established QC limits; post digestion spike is in control.
S	Recovery is outside control limits.
SC	Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
*	The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Page 1 of 1

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: ROBIN HAMLET
Company: 3 KINGS ENVIRONMENTAL
Address: PO BOX 280
BATTLE GROUND WA
Phone: 360-666-5464 Fax: 360-666-8202
Project No.: 212005.3 Project Name: PUGET SOUND TRUCKING
Project Site Location OR: ____ WA: X Other: ____
Invoice To: ROBIN HAMLET P.O. No.: 13409

Collected By:
Signature: Robin Hamlet
Printed: ROBIN HAMLET

Signature: ____
Printed: ____

Turn Around Time
☒ Normal 5-7 Business Days
☐ Rush ____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses: DX/DRO/ORO
6/6/12	1431	B1H20-060512	H2O	1	✓
	1516	B2H20-060512		1	✓

For Laboratory Use
Lab Job No. 120636
Shipped Via: Specialty
Air Bill No. ____
Temperature On Receipt ____ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Comments	Lab I.D.

Relinquished By:	Date	Time	Received By:
R. Hamlet	6/6/12	115	Laurel Moon
Company: 3 KINGS			Company: SA

Relinquished By:	Date	Time
Laurel Moon	6/6/12	1420
Company: SA		

Received For Lab By: Zachary Lucas — Date: 6-6-12 — Time: 8:40

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Copies: White-Original Yellow-Project File Pink-Customer Copy

Specialty Analytical

11711 SE Capps Road, Ste B
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

July 17, 2012

Robin Hamlet
3 Kings Environmental, Inc.
PO Box 280
1311 SE Grace Avenue
Battle Ground, Washington 98604

TEL: (360) 666-5464
FAX (360) 666-8202
RE: PST / 2120053

Dear Robin Hamlet:

Order No.: 1207066

Specialty Analytical received 2 sample(s) on 7/11/2012 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Marty French
Lab Director

Specialty Analytical

Date Reported: 17-Jul-12

CLIENT: 3 Kings Environmental, Inc.
Project: PST / 2120053
Lab ID: 1207066-001
Client Sample ID: B4H2O-071012

Collection Date: 7/10/2012 11:32:00 AM
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX - RBC		**NWTPH-DX**				Analyst: **kbh**
Diesel	1.18	0.140		mg/L	1	7/12/2012 5:48:00 PM
Lube Oil	ND	0.351		mg/L	1	7/12/2012 5:48:00 PM
Surr: o-Terphenyl	115	50-150		%REC	1	7/12/2012 5:48:00 PM
BTEX - RBC		**SW8021B**				Analyst: **jrp**
Benzene	ND	0.300		µg/L	1	7/16/2012 2:19:00 PM
Toluene	ND	0.500		µg/L	1	7/16/2012 2:19:00 PM
Ethylbenzene	1.42	0.500		µg/L	1	7/16/2012 2:19:00 PM
Xylenes, Total	4.74	1.50		µg/L	1	7/16/2012 2:19:00 PM
Surr: 4-Bromofluorobenzene	91.1	74.8-126		%REC	1	7/16/2012 2:19:00 PM
PCB'S IN WATER		**SW 8082A**				Analyst: **jrp**
Aroclor 1016	ND	0.041		µg/L	1	7/16/2012 2:44:00 PM
Aroclor 1221	ND	0.041		µg/L	1	7/16/2012 2:44:00 PM
Aroclor 1232	ND	0.041		µg/L	1	7/16/2012 2:44:00 PM
Aroclor 1242	ND	0.041		µg/L	1	7/16/2012 2:44:00 PM
Aroclor 1248	ND	0.041		µg/L	1	7/16/2012 2:44:00 PM
Aroclor 1254	ND	0.041		µg/L	1	7/16/2012 2:44:00 PM
Aroclor 1260	ND	0.041		µg/L	1	7/16/2012 2:44:00 PM
Aroclor 1262	ND	0.041		µg/L	1	7/16/2012 2:44:00 PM
Aroclor 1268	ND	0.041		µg/L	1	7/16/2012 2:44:00 PM
Surr: Decachlorobiphenyl	63.3	56.9-123		%REC	1	7/16/2012 2:44:00 PM

Specialty Analytical

Date Reported: 17-Jul-12

CLIENT: 3 Kings Environmental, Inc.
Project: PST / 2120053
Lab ID: 1207066-002
Client Sample ID: B5H2O-071012

Collection Date: 7/10/2012 12:10:00 PM
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX - RBC		**NWTPH-DX**				Analyst: **kbh**
Diesel	0.226	0.140		mg/L	1	7/12/2012 6:10:00 PM
Lube Oil	ND	0.350		mg/L	1	7/12/2012 6:10:00 PM
Surr: o-Terphenyl	94.5	50-150		%REC	1	7/12/2012 6:10:00 PM
BTEX - RBC		**SW8021B**				Analyst: **jrp**
Benzene	ND	0.300		µg/L	1	7/16/2012 3:00:00 PM
Toluene	ND	0.500		µg/L	1	7/16/2012 3:00:00 PM
Ethylbenzene	ND	0.500		µg/L	1	7/16/2012 3:00:00 PM
Xylenes, Total	ND	1.50		µg/L	1	7/16/2012 3:00:00 PM
Surr: 4-Bromofluorobenzene	92.4	74.8-126		%REC	1	7/16/2012 3:00:00 PM
PCB'S IN WATER		**SW 8082A**				Analyst: **jrp**
Aroclor 1016	ND	0.041		µg/L	1	7/16/2012 3:00:00 PM
Aroclor 1221	ND	0.041		µg/L	1	7/16/2012 3:00:00 PM
Aroclor 1232	ND	0.041		µg/L	1	7/16/2012 3:00:00 PM
Aroclor 1242	ND	0.041		µg/L	1	7/16/2012 3:00:00 PM
Aroclor 1248	ND	0.041		µg/L	1	7/16/2012 3:00:00 PM
Aroclor 1254	ND	0.041		µg/L	1	7/16/2012 3:00:00 PM
Aroclor 1260	ND	0.041		µg/L	1	7/16/2012 3:00:00 PM
Aroclor 1262	ND	0.041		µg/L	1	7/16/2012 3:00:00 PM
Aroclor 1268	ND	0.041		µg/L	1	7/16/2012 3:00:00 PM
Surr: Decachlorobiphenyl	62.2	56.9-123		%REC	1	7/16/2012 3:00:00 PM

QC SUMMARY REPORT

WO#: 1207066

17-Jul-12

Specialty Analytical

Client: 3 Kings Environmental, Inc.

Project: PST / 2120053 **TestCode:** 8082LL_W

Sample ID: MB-3028	SampType: MBLK	TestCode: 8082LL_W	Units: µg/L	Prep Date: 7/12/2012	RunNo: 5279
Client ID: PBW	Batch ID: 3028	TestNo: SW 8082A	SW3510_PC	Analysis Date: 7/16/2012	SeqNo: 69807

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.020									
Aroclor 1221	ND	0.020									
Aroclor 1232	ND	0.020									
Aroclor 1242	ND	0.020									
Aroclor 1248	ND	0.020									
Aroclor 1254	ND	0.020									
Aroclor 1260	ND	0.020									
Aroclor 1262	ND	0.020									
Aroclor 1268	ND	0.020									
Surr: Decachlorobiphenyl	115		200.0		57.6	56.9	123				

Sample ID: LCS-3028	SampType: LCS	TestCode: 8082LL_W	Units: µg/L	Prep Date: 7/12/2012	RunNo: 5279
Client ID: LCSW	Batch ID: 3028	TestNo: SW 8082A	SW3510_PC	Analysis Date: 7/16/2012	SeqNo: 69808

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	1.10	0.020	2.000	0	55.0	40.4	110				

Sample ID: LCSD-3028	SampType: LCSD	TestCode: 8082LL_W	Units: µg/L	Prep Date: 7/12/2012	RunNo: 5279
Client ID: LCSS02	Batch ID: 3028	TestNo: SW 8082A	SW3510_PC	Analysis Date: 7/16/2012	SeqNo: 69809

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	1.22	0.020	2.000	0	61.0	40.4	110	1.100	10.3	20	

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **1207066**

17-Jul-12

Specialty Analytical

Client: 3 Kings Environmental, Inc.

Project: PST / 2120053 **TestCode:** **8082LL_W**

Sample ID: **CCV**	SampType: **CCV**	TestCode: **8082LL_W**	Units: **µg/L**	Prep Date:	RunNo: **5279**
Client ID: **CCV**	Batch ID: **3028**	TestNo: **SW 8082A**	**SW3510_PC**	Analysis Date: **7/16/2012**	SeqNo: **69812**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	2.06	0.020	2.000	0	103	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

WO#: 1207066

17-Jul-12

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: PST / 2120053 **TestCode:** BTEXRBC_W

Sample ID: CCV SampType: CCV TestCode: BTEXRBC_W Units: µg/L Prep Date: RunNo: 5254
Client ID: CCV Batch ID: R5254 TestNo: SW8021B Analysis Date: 7/16/2012 SeqNo: 69551

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	56.5	0.300	50.00	0	113	85	115				
Toluene	55.5	0.500	50.00	0	111	85	115				
Ethylbenzene	49.5	0.500	50.00	0	98.9	85	115				
Xylenes, Total	166	1.50	150.0	0	111	85	115				

Sample ID: LCS-5254 SampType: LCS TestCode: BTEXRBC_W Units: µg/L Prep Date: RunNo: 5254
Client ID: LCSW Batch ID: R5254 TestNo: SW8021B Analysis Date: 7/16/2012 SeqNo: 69552

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	56.5	0.300	50.00	0	113	75.8	113				SO
Toluene	55.5	0.500	50.00	0	111	77	116				
Ethylbenzene	49.5	0.500	50.00	0	98.9	76.6	118				
Xylenes, Total	166	1.50	150.0	0	111	76.7	118				

Sample ID: MB-5254 SampType: MBLK TestCode: BTEXRBC_W Units: µg/L Prep Date: RunNo: 5254
Client ID: PBW Batch ID: R5254 TestNo: SW8021B Analysis Date: 7/16/2012 SeqNo: 69553

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.300									
Toluene	ND	0.500									
Ethylbenzene	ND	0.500									
Xylenes, Total	ND	1.50									
Surr: 4-Bromofluorobenzene	87.2		100.0		87.2	74.8	126				

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: 1207066

17-Jul-12

Specialty Analytical

Client: 3 Kings Environmental, Inc.

Project: PST / 2120053 **TestCode:** BTEXRBC_W

Sample ID: **1206216-001AMS** SampType: **MS** TestCode: **BTEXRBC_W** Units: µg/L Prep Date: RunNo: **5254**

Client ID: ZZZZZZ Batch ID: **R5254** TestNo: **SW8021B** Analysis Date: **7/16/2012** SeqNo: **69555**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	29.6	0.300	30.00	0	98.8	67.8	118				H
Toluene	29.3	0.500	30.00	0	97.7	74.7	117				H
Ethylbenzene	25.5	0.500	30.00	0	85.0	74.5	115				H
Xylenes, Total	88.0	1.50	90.00	0	97.8	76.8	120				H

Sample ID: **1206216-001AMSD** SampType: **MSD** TestCode: **BTEXRBC_W** Units: µg/L Prep Date: RunNo: **5254**

Client ID: ZZZZZZ Batch ID: **R5254** TestNo: **SW8021B** Analysis Date: **7/16/2012** SeqNo: **69556**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	28.7	0.300	30.00	0	95.7	67.8	118	29.64	3.15	20	H
Toluene	27.3	0.500	30.00	0	91.1	74.7	117	29.31	6.95	20	H
Ethylbenzene	24.6	0.500	30.00	0	82.0	74.5	115	25.49	3.51	20	H
Xylenes, Total	84.0	1.50	90.00	0	93.3	76.8	120	88.01	4.71	20	H

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: 1207066

17-Jul-12

Specialty Analytical

Client: 3 Kings Environmental, Inc.

Project: PST / 2120053 **TestCode:** NWTPHDXLL_W

Sample ID: **MB-3027** SampType: **MBLK** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: **7/12/2012** RunNo: **5227**

Client ID: **PBW** Batch ID: **3027** TestNo: **NWTPH-Dx** **SW3510B** Analysis Date: **7/12/2012** SeqNo: **69271**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	0.080									
Lube Oil	ND	0.200									
Surr: o-Terphenyl	0.227		0.2000		113	50	150				

Sample ID: **LCS-3027** SampType: **LCS** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: **7/12/2012** RunNo: **5227**

Client ID: **LCSW** Batch ID: **3027** TestNo: **NWTPH-Dx** **SW3510B** Analysis Date: **7/12/2012** SeqNo: **69272**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.912	0.080	1.000	0	91.2	60.7	121				
Lube Oil	0.786	0.200	1.000	0	78.6	64	126				

Sample ID: **LCSD-3027** SampType: **LCSD** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: **7/12/2012** RunNo: **5227**

Client ID: **LCSS02** Batch ID: **3027** TestNo: **NWTPH-Dx** **SW3510B** Analysis Date: **7/12/2012** SeqNo: **69273**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1.09	0.080	1.000	0	109	60.7	121	0.9116	17.5	20	
Lube Oil	0.954	0.200	1.000	0	95.4	64	126	0.7855	19.4	20	

Sample ID: **CCV** SampType: **CCV** TestCode: **NWTPHDXLL** Units: **mg/L** Prep Date: RunNo: **5227**

Client ID: **CCV** Batch ID: **3027** TestNo: **NWTPH-Dx** **SW3510B** Analysis Date: **7/13/2012** SeqNo: **69538**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	7.64	0.080	8.083	0	94.6	85	115				
Lube Oil	4.28	0.200	4.254	0	101	85	115				

Qualifiers:

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

KEY TO FLAGS

Rev. May 12, 2010

A	This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
A1	This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
A2	This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
A3	The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
A4	The product appears to be aged or degraded diesel.
B	The blank exhibited a positive result great than the reporting limit for this compound.
CN	See Case Narrative.
D	Result is based from a dilution.
E	Result exceeds the calibration range for this compound. The result should be considered as estimate.
F	The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
G	Result may be biased high due to biogenic interferences. Clean up is recommended.
H	Sample was analyzed outside recommended holding time.
HT	At clients request, samples was analyzed outside of recommended holding time.
J	The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
K	Diesel result is biased high due to amount of Oil contained in the sample.
L	Diesel result is biased high due to amount of Gasoline contained in the sample.
M	Oil result is biased high due to amount of Diesel contained in the sample.
MC	Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
MI	Result is outside control limits due to matrix interference.
MSA	Value determined by Method of Standard Addition.
O	Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
Q	Detection levels elevated due to sample matrix.
R	RPD control limits were exceeded.
RF	Duplicate failed due to result being at or near the method-reporting limit.
RP	Matrix spike values exceed established QC limits; post digestion spike is in control.
S	Recovery is outside control limits.
SC	Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
*	The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

Page ___ of ___

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: Robin Hamlet
Company: 3 Kings Env.
Address: PO Box 280
Battle Ground, WA
Phone: [redacted] Fax:
Project No. 2120053 Project Name: PST
Project Site Location OR ___ WA Y Other:
Invoice To: Robin Hamlet P.O. No. 13420

Collected By:
Signature: Robin Hamlet
Printed: Robin Hamlet

Signature:
Printed:

Turn Around Time
☑ Normal 5-7 Business Days
☐ Rush ___
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

For Laboratory Use
Lab Job No. 1207066
Shipped Via: Specialty
Air Bill No.:
Temperature On Receipt ___ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses: BTEX	PLBs	PAHs *	EDB/EDC/1,2 DCA							Comments	Lab I.D.
7/10/12	1132	B4H20-071012	H20	5	✓	✓	✓	✓							* HOLD PAHs FOR	
	1210	B5H20-071012	H20	5	✓	✓	✓	✓							LATER TESTING	
															IF NEEDED	

Relinquished By: [signature] Date 7/11/12 Time 955
Company: 3 Kings
Received By: [signature]
Company:
Relinquished By: [signature]
Company:
Date 7/11/12 Time 1344
Received For Lab By: Cindy Hillyard
Date 7/11/12 Time 13:44

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Copies: White-Original Yellow-Project File Pink-Customer Copy

Specialty Analytical

Date Reported:

CLIENT: 3 Kings Environmental, Inc.
Project: PSFL / 212005

Lab Order: 1212092

Lab ID: 1212092-004
Client Sample ID: DP-1-W

Collection Date: 12/10/2012 11:15:00 AM
Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX - RBC		**NWTPH-DX**				Analyst: **kbh**
Diesel, SPLP	0.383	0.0809	A1	mg/L	1	12/13/2012 9:32:00 AM
Lube Oil, SPLP	0.425	0.202		mg/L	1	12/13/2012 9:32:00 AM
Surr: o-Terphenyl	51.0	50-150		%REC	1	12/13/2012 9:32:00 AM
BTEX - RBC		**SW8021B**				Analyst: **kbh**
Benzene	ND	0.300		µg/L	1	12/12/2012 6:40:00 PM
Toluene	0.712	0.500		µg/L	1	12/12/2012 6:40:00 PM
Ethylbenzene	ND	0.500		µg/L	1	12/12/2012 6:40:00 PM
Xylenes, Total	ND	1.50		µg/L	1	12/12/2012 6:40:00 PM
Surr: 4-Bromofluorobenzene	88.7	74.8-126		%REC	1	12/12/2012 6:40:00 PM

Lab ID: 1212092-005
Client Sample ID: DP-4-W

Collection Date: 12/10/2012 11:30:00 AM
Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX - RBC		**NWTPH-DX**				Analyst: **kbh**
Diesel, SPLP	0.166	0.0813	A1	mg/L	1	12/13/2012 9:55:00 AM
Lube Oil, SPLP	ND	0.203		mg/L	1	12/13/2012 9:55:00 AM
Surr: o-Terphenyl	106	50-150		%REC	1	12/13/2012 9:55:00 AM
BTEX - RBC		**SW8021B**				Analyst: **kbh**
Benzene	ND	0.300		µg/L	1	12/12/2012 7:04:00 PM
Toluene	ND	0.500		µg/L	1	12/12/2012 7:04:00 PM
Ethylbenzene	ND	0.500		µg/L	1	12/12/2012 7:04:00 PM
Xylenes, Total	ND	1.50		µg/L	1	12/12/2012 7:04:00 PM
Surr: 4-Bromofluorobenzene	93.7	74.8-126		%REC	1	12/12/2012 7:04:00 PM

Specialty Analytical

Date Reported:

CLIENT: 3 Kings Environmental, Inc. **Lab Order:** 1212092
Project: PSFL / 212005

Lab ID: 1212092-007 **Collection Date:** 12/10/2012 12:15:00 PM
Client Sample ID: DP-2-W **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX - RBC		**NWTPH-DX**				Analyst: **kbh**
Diesel, SPLP	174	0.799		mg/L	10	12/13/2012 10:18:00 AM
Lube Oil, SPLP	ND	0.200	A3	mg/L	1	12/13/2012 10:41:00 AM
Surr: o-Terphenyl	1030	50-150	SMI	%REC	1	12/13/2012 10:41:00 AM
BTEX - RBC		**SW8021B**				Analyst: **kbh**
Benzene	ND	0.300		µg/L	1	12/12/2012 7:27:00 PM
Toluene	0.940	0.500		µg/L	1	12/12/2012 7:27:00 PM
Ethylbenzene	ND	0.500		µg/L	1	12/12/2012 7:27:00 PM
Xylenes, Total	8.56	1.50		µg/L	1	12/12/2012 7:27:00 PM
Surr: 4-Bromofluorobenzene	101	74.8-126		%REC	1	12/12/2012 7:27:00 PM

Lab ID: 1212092-009 **Collection Date:** 12/10/2012 1:15:00 PM
Client Sample ID: DP-3-W **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX - RBC		**NWTPH-DX**				Analyst: **kbh**
Diesel, SPLP	0.394	0.0840	A1	mg/L	1	12/13/2012 11:04:00 AM
Lube Oil, SPLP	0.283	0.210		mg/L	1	12/13/2012 11:04:00 AM
Surr: o-Terphenyl	128	50-150		%REC	1	12/13/2012 11:04:00 AM
BTEX - RBC		**SW8021B**				Analyst: **kbh**
Benzene	ND	0.300		µg/L	1	12/12/2012 8:37:00 PM
Toluene	ND	0.500		µg/L	1	12/12/2012 8:37:00 PM
Ethylbenzene	ND	0.500		µg/L	1	12/12/2012 8:37:00 PM
Xylenes, Total	ND	1.50		µg/L	1	12/12/2012 8:37:00 PM
Surr: 4-Bromofluorobenzene	93.4	74.8-126		%REC	1	12/12/2012 8:37:00 PM

CHAIN OF CUSTODY RECORD

Page 1 of 1

Specialty Analytical
11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Contact Person/Project Manager: Brett MacDonald
Company: 3 Kings Environmental Inc.
Address: 1311 SE Cedar Ave
Battle Ground, WA 98604
Phone: (360) 666-3441 Fax: (360) 666-8202
Project No.: 212005 Project Name: PSFL
Project Site Location OR ____ WA ✓ Other ____
Invoice To: 3 Kings Environmental Inc. P.O. No. ____

Collected By: Brett MacDonald
Signature: Brett MacDonald
Printed: Brett MacDonald

Signature ____
Printed ____

Turn Around Time
☑ Normal 5-7 Business Days
☐ Rush ____
Specify
Rush Analyses Must Be Scheduled With The Lab In Advance

Date	Time	Sample I.D.	Matrix	No. of Containers	Analyses: TPH-Dx	Analyses: BTEX	Analyses: PAH	Comments	Lab I.D.
12/10/12	1015	DP-4 @ 5'	S	1				HOLD	
	1045	DP-1 @ 5'	S	1				HOLD	
	1050	DP-1 @ 7'	S	1				HOLD	
	1115	DP-1-W	W	4	X	X		HOLD	
	1130	DP-4-W	W	4	X	X		HOLD	
	1305	DP-2 @ 8'	S	1				HOLD	
	1315	DP-2-W	W	4	X	X			
	1310	DP-3 @ 8'	S	1				HOLD	
	1315	DP-3-W	W	4	X	X			

For Laboratory Use
Lab Job No. ____
Shipped Via ____
Air Bill No. ____
Temperature On Receipt ____ °C
Specialty Analytical Containers? Y / N
Specialty Analytical Trip Blanks? Y / N

Relinquished By:	Date	Time	Received By:	Relinquished By:	Date	Time
Company: 3 Kings	12/10/12	1505	Company:	Company:		

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.
Samples held beyond 60 days subject to storage fee(s)

Received For Lab By: Nikki Phillips Date: 12/10/12 Time: 1515

Copies: White-Original Yellow-Project File Pink-Customer Copy

Groundwater Compliance Sampling and Analysis Plan

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strategy ▪ science ▪ engineering

Two Union Square
601 Union Street, Suite 600
Seattle, WA 98101
tel: 206.292.2078 fax: 206.682.7867

Memorandum

To: Tom Lovejoy, Puget Sound Freight Lines

From: Brett Beaulieu

Date: January 13, 2014

Project No: PSTL-Longview

Re: **Puget Sound Truck Lines, Longview**
Groundwater Compliance Sampling and Analysis Plan

This memorandum is intended to serve as a sampling and analysis plan/quality assurance project plan (SAP/QAPP) in accordance with Washington Administrative Code (WAC) 173-340-820 for demonstrating compliance with Model Toxics Control Act (MTCA) cleanup requirements at the Puget Sound Truck Lines Longview site (Site). Floyd|Snider is conducting compliance monitoring on behalf of the former owner, Puget Sound Freight Lines.

BACKGROUND

The Site is an approximately 3.3-acre parcel located at 146 Industrial Way in Longview, Washington, in an industrial area between the Columbia and Cowlitz Rivers (Figure 1). The site is used as a shipping company with truck storage and maintenance activities.

The Site history briefly summarized herein is based on prior investigations (3 Kings Environmental, Inc. 2012). A petroleum release was identified at the Site in association with a former 10,000-gallon diesel aboveground storage tank (AST). The AST that was the apparent source of the diesel-range organics (DRO) contamination was decommissioned by removal, and soil and groundwater were adequately characterized using direct-push borings and test pits. In January and February 2012, a remedial excavation was undertaken to remove the diesel contamination associated with the former AST. The excavation measured approximately 65 feet by 65 feet and approximately 10 feet deep. Approximately 2,850 tons of soil was excavated and disposed of at a landfill.

Analysis of water accumulating in the excavation and subsequent push-probe sampling of groundwater within the excavation footprint indicated exceedances of the MTCA Method A (MTCA A) groundwater cleanup level for DRO. These samples were collected using methods that are unsuitable for measuring groundwater compliance because they may be unrepresentative and biased high for DRO concentration based on elevated turbidity. More reliable groundwater monitoring data from permanent monitoring wells are needed to assess the groundwater compliance status of the Site.

Based on the investigation, remediation, and monitoring activities at the Site between December 2011 and June 2012, the Washington State Department of Ecology (Ecology) was notified of the release in July 2012, and a subsequent Initial Investigation Report listed the Site on the

Contaminated or Suspected Contaminated Sites List (CSCSL) as cleanup site #12165 under the name Puget Sound Truck Lines. The listing for the Site indicates that DRO concentrations in soil have been remediated to less than the cleanup level, DRO concentrations in groundwater have been confirmed to be greater than the cleanup level, and concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) constituents in groundwater have been confirmed to be less than the cleanup levels.

Conceptual Site Model and Potential Exposure Pathways

The conceptual site model, based on prior investigations, indicates that DRO-contaminated soil at the Site has been excavated, leaving soil with DRO concentrations less than MTCA A cleanup level, but that DRO concentrations may be present in groundwater in the uppermost water-bearing unit at concentrations that exceed the MTCA A groundwater cleanup level of 500 micrograms per liter (µg/L).

The surficial geology of the Site generally consists of approximately 2 feet of gravel fill material, underlain by mixed alluvium floodplain deposits. Alluvial material in the vicinity of the excavation was logged as a silty clay to a depth of approximately 10 feet. Alluvial deposits reportedly extend to at least 100 feet in this area.

Water in the Site vicinity is generally encountered between 3 and 8 feet below ground surface (bgs). Boring logs from Site investigation indicate that water was encountered at approximately 7 to 7.5 feet bgs. The hydraulic conductivity of the shallow water-bearing unit is considered low based on a United States Department of Agriculture (USDA) soil survey (2006) and the observed soil classification. The silty clay was observed to be dry to moist, while a 6-inch-deposit of fractured clay at 7.5 feet was observed as wet in fractures, suggesting that this may be a relatively transmissive layer in an otherwise low-transmissivity unit.

Because the Site is located in a flat, low (approximately 10 feet above mean sea level [MSL]) area within the floodplain of the Cowlitz and Columbia Rivers, the local shallow groundwater flow direction is unknown and may be variable. The broader regional groundwater flow direction is presumed to be northeast, toward the Cowlitz River, though shallow groundwater may not be consistent with this flow direction. Presumed low hydraulic gradients combined with overall low hydraulic conductivity are likely to result in a very slow groundwater seepage velocity and a low potential for DRO transport in groundwater.

There are no apparent pathways of exposure to DRO in groundwater from the Site. The Site is used for industrial purposes and is surrounded by industrial properties. Shallow groundwater in the silty clay alluvium is not a source of drinking water; therefore, no exposure to DRO is expected through drinking water.

Purpose and Objectives of Compliance Monitoring

The objective of groundwater monitoring is to establish compliance with the MTCA A groundwater cleanup level of 500 µg/L at the standard point of compliance. The standard point of compliance (WAC 173-340-720(8)(b)) is throughout the Site in the shallow water-bearing unit that was sampled during and following excavation, approximately 7 to 10 feet bgs as measured in shallow groundwater monitoring wells with screened intervals that span this approximate depth.

The monitoring network and program described in this work plan are intended to meet the requirements of WAC 173-340-410 for performance monitoring and confirmational monitoring; protection monitoring requirements were met during the cleanup action.

GROUNDWATER COMPLIANCE WELL NETWORK AND DATA COLLECTION

This section provides information concerning groundwater monitoring well locations, data collection procedures, field quality assurance and quality control (QA/QC) measures, data validation procedures, laboratory methods, and management of investigation-derived waste (IDW). Additional information about the monitoring program is provided in the following section.

Monitoring Well Locations and Depth Interval

Four 2-inch-diameter monitoring wells will be installed at the Site: MW-1, MW-2, MW-3, and MW-4 (Figure 2). These four monitoring wells will be designed to be representative of potentially affected Site groundwater in the uppermost water-bearing unit and used to assess groundwater compliance. In accordance with Ecology guidance (Ecology 2011), the wells are located outside the footprint of the excavation area to provide information about potential contaminant migration. The four wells are distributed around the edges of the excavation to allow the identification of the local groundwater flow direction. The wells will be constructed with an approximate total depth of 15 feet and approximate 10-foot screened interval spanning the water table.

Well Installation and Development

After notification is given to the property owner, sampling locations will be marked in the field using a global positioning system (GPS). A private utility location service will be used prior to the investigation at the time of location marking. A public utility location notification will be completed in accordance with state law, at least three business days prior to the start of the investigation. Public utility locate information will be provided to the drilling contractor prior to the start of work.

Monitoring wells will be constructed, developed, and surveyed according to standard industry practice and in accordance with all applicable regulations, as summarized below. Underground utilities in the vicinity of borehole locations will be identified and marked prior to drilling. Wells will be drilled using a hollow-stem auger drill rig or equivalent. Soil samples will be collected using a split-spoon sampler and logged by field personnel under the direction of a licensed geologist. All down-hole drilling equipment will be decontaminated before use and between drilling locations. If water is added to the borehole to control heaving, only potable water will be used. All residual soil and water collected during drilling and development (IDW) will be containerized, characterized, and transported off-site for disposal as necessary.

The wells will be constructed of 2-inch-diameter Schedule 40 PVC with a flush threaded riser, including a threaded end plug and machine-slotted well screen. The annular space around the screen zone of each well will be backfilled with clean silica sand or equivalent. The annular space above the sandpack will be sealed with bentonite chips. Bentonite placed above the water table will be hydrated with potable water. All materials will be placed concurrently with auger withdrawal. The surface of each well will be completed with a flush-mounted steel monument, and the well will be secured by a lockable gasket cap.

As-built construction details, including the total depth of each boring and the placement depths of the filter sandpack, the bentonite seal, and the surface completion will be measured to the nearest 0.1 foot. A licensed surveyor will locate the wells after installation and survey the top of well casing to the nearest 0.01 foot in the horizontal and vertical directions. Well coordinates will be reported relative to the in North American Datum of 1983 (NAD 83) Washington State Plane South. Elevations will be reported relative to the North American Vertical Datum of 1988 (NAVD 88). Well logs, including soil sample description and as-built construction details, will be prepared after well completion. Well logs will include the Washington State Plane South coordinates of the well and the top of casing elevation. The coordinate and elevation reference systems will be noted on the well log.

All newly installed wells will be developed by surging with a bailer or surge block followed by well evacuation. All down-hole well development tools will be decontaminated prior to use for each well. Surging and evacuation will be repeated until evacuated water is visibly clean and essentially sand-free. During well evacuation, water samples will be collected for field determination and documentation of temperature, specific conductivity, and pH. Well development will proceed until field parameters stabilize to within ±10 percent on three consecutive measurements or until 10 well volumes have been purged.

Water Level Monitoring

Water level measurements will be collected during each monitoring event. Water levels will be measured to the nearest 0.01 foot using an electronic water level indicator according to standard industry practice. Water level measurements will be used to estimate groundwater flow direction and hydraulic gradient.

Low-flow Groundwater Sampling

Groundwater samples will be collected from newly installed monitoring wells, as shown on Figure 2. Groundwater sampling will be completed approximately 2 weeks or more after well installation and development (refer to the Schedule section below).

Groundwater sampling will be conducted in accordance with standard industry practice and Floyd|Snider Standard Operating Procedures (SOPs) for low-flow sampling as summarized herein. The sampler(s) will wear new nitrile gloves at each location. All wells will be purged and sampled using low-flow procedures to achieve the lowest turbidity practicable with a peristaltic pump and disposable polyethylene tubing. Prior to and during sampling, depth to water will be measured to the nearest 0.01 foot using a water level indicator. The monitoring well will be purged prior to sampling at a maximum rate of 0.5 liters per minute. During purging, field parameters (i.e., temperature, pH, specific conductivity, and turbidity) will be recorded at 3- to 5-minute intervals using a multiparameter groundwater meter. Purging will continue until temperature, pH, turbidity, and specific conductivity are approximately stable (within 10 percent) for three consecutive readings, or 30 minutes have elapsed. Because these field parameters may not reach the stabilization criteria, collection of the groundwater sample will be based on the professional judgment of field personnel at the time of sampling.

If a well is purged for 30 minutes and the minimum purge volume has been removed, the well will be sampled. If well yield is extremely low, it may be necessary to purge the well for more than 30 minutes or to purge to dryness and return later to collect the groundwater sample. The

total volume of water purged from each well will be recorded in a field notebook or on a groundwater sample collection form. The last set of field parameters measured during purging will represent the field parameters in the groundwater sample. All field measurements will be recorded in a field notebook or on a groundwater sample collection form.

After the well has been purged and the sample bottles have been labeled, the groundwater sample will be collected by directly filling the laboratory-provided bottles from the pump discharge line at the same flow rate that was used for purging. Sample containers will be labeled at the time of sampling, and the label will clearly identify the project name, sampler's initials, sample number, analysis to be performed, date, and time. Upon collection, samples will be placed in a cooler maintained at a temperature of approximately 6 degrees Celsius (°C) using ice. Chain-of-Custody Records will be completed. Appropriate precleaned sample containers will be provided by the analytical laboratory. Upon transfer of the sample possession to the laboratory, the Chain-of-Custody Record will be signed by the persons transferring custody of the sample containers.

Field Quality Assurance/Quality Control Samples

Field QC samples will consist of a blind field duplicate collected at a frequency of one per sampling event. Field equipment rinsate blanks will not be collected during sampling events because a peristaltic pump and flow-through cell with disposable tubing will be used instead of reusable sampling equipment.

Laboratory Analyses

Samples will be submitted for DRO analysis to an accredited laboratory using method NWTPH-Dx with silica gel cleanup. The use of silica gel cleanup is intended to remove polar organic compounds that are commonly encountered in shallow alluvial deposits. This method provides a target detection limit of 100 µg/L for diesel-range hydrocarbons, which is less than the applicable regulatory criterion of 500 µg/L.

Data Validation and EIM Submittal

A Level 1 data quality review (compliance screening) will be performed on all the analytical data to ensure that data quality is suitable for compliance evaluation. Floyd|Snider will review the laboratory reports for internal consistency, transmittal errors, laboratory protocols, and adherence to the United States Environmental Protection Agency analytical methods and data validation guidance. Data validation of all analytical data will be performed by Floyd|Snider.

Validated analytical data will be entered into the project database and submitted to Ecology's Environmental Information Management (EIM) System following Ecology approval of the results. The laboratory will submit data supported by enough backup information and QA results to allow a Level 3 independent data validation, if necessary.

Investigation-derived Waste (IDW)

Waste generated as part of the well installation, including soil, water, and sediment, will be contained, transported, disposed of in accordance with applicable laws, and stored in a

designated area until transported off-site for disposal. IDW includes purge water, decontamination water, and soil drill cuttings. IDW may also include a small amount of contaminated disposables.

The approach to handling and disposal of these materials is as follows. For IDW that is containerized (e.g., soil cuttings and groundwater purge water), 55-gallon drums approved by the Washington State Department of Transportation will be used for temporary storage pending profiling and disposal. Each container holding IDW will be sealed and labeled as to its contents (e.g., "soil cuttings"), the dates on which the wastes were placed in the container, the owner's name and contact information for the field person who generated the waste, the site name, and the boring(s) or well(s) from which the wastes were obtained or extracted. At the end of each day, the drums will be transferred to the designated temporary storage area.

IDW containerized within drums will be characterized relative to hazardous waste criteria using data from the sampling locations whenever possible. Material that is designated for off-site disposal will be transported to an off-site facility permitted to accept the waste. Manifests will be used, as appropriate for disposal.

GROUNDWATER COMPLIANCE MONITORING PROGRAM

This section describes the groundwater compliance monitoring program, including the monitoring and reporting frequency, the compliance evaluation procedures, and the anticipated project schedule.

Monitoring Frequency

Sampling of groundwater from the four wells will be conducted quarterly for four quarters, or as needed to demonstrate compliance with the cleanup standard. Additional information regarding data evaluation and evaluation procedures is provided in the Groundwater Compliance Evaluation section.

Reporting

After 1 year of monitoring, a groundwater monitoring report summarizing four quarters of monitoring results will be submitted to Ecology. The report will be submitted electronically as an Adobe Acrobat file (.pdf format) and will include the following:

- Tables summarizing analytical results for groundwater sampling
- Water level measurements including inferred groundwater flow direction
- Comparison of data to cleanup levels
- A narrative description of any deviation from the SAP/QAPP
- Data validation results

The report will also include documentation of the installation of new monitoring wells, including well logs, surveyed locations, and a scaled site map with well locations.

In the event that monitoring extends beyond four quarters, additional annual monitoring reports will be prepared and submitted to Ecology.

Groundwater Compliance Evaluation

When sufficient data have been collected, a demonstration of compliance with the groundwater cleanup level will be submitted to Ecology. It is expected that this demonstration can be made in a manner consistent with the requirements described in WAC 173-340-720 (9)(c), based on four quarters of monitoring results. If determined to be necessary by Ecology, additional monitoring events will be added to provide a data set suitable for demonstrating compliance.

Compliance with the groundwater cleanup level will be determined for each monitoring well in accordance with WAC 173-340-720 (9)(c) and as summarized in this work plan. Compliance data will be evaluated by a direct comparison with the cleanup level of 500 µg/L. This approach is appropriate at the Site, based on Ecology guidance (Ecology 2011), for the following reasons (1) investigation has provided a thorough understanding of the Site and its groundwater system, (2) the monitoring network provides sufficient monitoring locations, (3) sufficient time has elapsed for contamination to reach groundwater, and (4) there are no conditions indicating that future groundwater contaminant concentrations have the potential to be greater than the measured concentrations. The Site will be considered to be in compliance if DRO concentrations in at least four quarterly samples from all four monitoring wells are less than or equal to the cleanup level.

If a further statistical demonstration of compliance is deemed necessary by Ecology, the Site97 module of MTCAStat will be used to determine the distribution of sampling data for DRO and calculate the upper 95th percent confidence limit (UCL95) for DRO for each monitoring well in a manner consistent with the distribution of sampling results for the monitoring well. Nondetect values will be assigned half the value of the detection limit. The UCL95 will be compared to the cleanup level to determine compliance. The Site will be considered to be in compliance if the UCL95 for DRO, based on four or more quarterly events, is less than or equal to the cleanup level. For wells in which the data cannot be determined to be normally or lognormally distributed, the highest value in the data set for the monitoring well will be compared with the cleanup level to determine the compliance status.

Schedule

It is expected that fieldwork will commence in the first quarter of 2014 for well decommissioning, installation, and development, and the first compliance monitoring event.

The annual groundwater monitoring report will be submitted to Ecology within 120 days of receipt of the final laboratory analytical data for the year. Data for each event will be submitted to the EIM System following Ecology approval of the data report.

The following is an approximate anticipated project schedule, subject to change based on input from Ecology, Puget Sound Freight Lines, the property owner, or other factors affecting site conditions:

Task/Deliverable	Completion/Submittal Schedule
Installation, development, survey, and sampling of compliance monitoring well network	First quarter 2014 Sampling to follow well installation and development by approximately 2 weeks
Quarterly groundwater compliance monitoring	Second quarter 2014 through fourth quarter 2014
Annual monitoring report	Within 120 days following receipt of final analytical results from the fourth quarterly monitoring event

REFERENCES

3 Kings Environmental, Inc. 2012. Remedial Investigation and Cleanup Report, Puget Sound Freight Lines Facility, 146 Industrial Way, Longview, Washington. Prepared for Puget Sound Freight Lines. 24 December.

United States Department of Agriculture (USDA). 2006. *Soil Survey of Cowlitz County, Washington*.

Washington State Department of Ecology (Ecology). 2011. *Guidance for Remediation of Petroleum Contaminated Sites*. Publication No 10-09-057. Toxics Cleanup Program. September.

ENCLOSURES

Figure 1 Vicinity Map

Figure 2 Proposed Monitoring Well Locations

Note:
· Othoimage provided by Microsoft 7-08-2010.

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Puget Sound Truck Lines
Sampling and Analysis Plan
Longview, Washington

Figure 1
Vicinity Map

I:\GIS\Projects\PSTL-Longview\MXD\Figure 1 (Vicinity Map).mxd 1/13/2014

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strategy ▪ science ▪ engineering

Puget Sound Truck Lines
Sampling and Analysis Plan
Longview, Washington

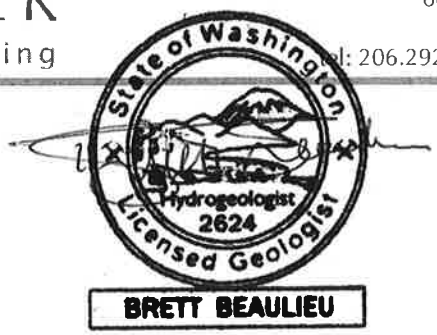
Figure 2
Proposed Monitoring Well Locations

I:\GIS\Projects\PSTL-Longview\MXD\Figure 2 (Proposed Monitoring Wells).mxd 1/13/2014

Groundwater Compliance
Well Installation and Monitoring Results

FLOYD | SNIDER
strategy • science • engineering

Two Union Square
601 Union Street, Suite 600
Seattle, WA 98101
tel: 206.292.2078 fax: 206.682.7867



Memorandum

To: Scott Rose, VCP Unit Manager, Washington State Department of Ecology

Copies: Tom Lovejoy, Puget Sound Truck Lines

From: Brett Beaulieu, LHG

Date: September 3, 2014

Project No: PSTL Longview

Re: **Puget Sound Truck Lines Longview Site—Groundwater Compliance Well Installation and Monitoring Results**

OVERVIEW

This data report summarizes the compliance investigation and groundwater monitoring results to date for the Puget Sound Truck Lines Longview site (Site) in Longview, Washington (Figure 1). This data report is being submitted concurrently with a Voluntary Cleanup Program (VCP) application and agreement.

The objective of the investigation and sampling was to establish monitoring wells suitable for evaluating compliance with the Model Toxics Control Act (MTCA) Method A groundwater standard for diesel-range organics (DRO) and to collect data for use in evaluating compliance. To achieve these objectives, four monitoring wells were installed at the edges of the previously-excavated area and two rounds of groundwater monitoring were completed. Work was completed in accordance with the Groundwater Compliance Sampling and Analysis Plan (SAP; Floyd|Snider 2014). This report summarizes the work completed and presents the results.

WORK COMPLETED

Monitoring Well Installation and Soil Sampling

Four monitoring wells, MW-1 though MW-4, were installed and developed by Cascade Drilling, L.P. on February 20, 2014, using a hollow-stem auger drill rig in accordance with the procedures described in the SAP and state water well regulations (Chapter 173-160 Washington Administrative Code [WAC]). Well construction details were recorded on the monitoring well logs, which are included in Attachment 1. Surging and evacuation were repeated until 10 well volumes had been purged.

During well installation, split-spoon samples were collected at approximately 2, 6.5, and 13 feet below ground surface (bgs) and described and classified according to the Unified Soil Classification System (USCS). Soil samples were collected for chemical analyses during well advancement to characterize soil for waste disposal purposes. Samples were homogenized and submitted to Friedman and Bruya, Inc (FBI) under standard chain-of-custody procedures and analyzed for total petroleum hydrocarbons (TPH) DRO by NWTPH-Dx.

Water Level Measurement

During groundwater sampling events, water level measurements were collected from all four wells prior to well purging to provide an indication of the potentiometric surface.

Groundwater Sampling

Groundwater samples were collected from all four monitoring wells on March 19, 2014 and June 24, 2014. Sample collection and handling was conducted in accordance with the SAP. Groundwater samples were collected using standard low-flow sampling methods, and submitted to FBI under standard chain-of-custody procedures and analyzed for DRO by NWTPH-Dx in accordance with the SAP. Groundwater samples were analyzed for DRO both with and without silica gel cleanup.

Selected groundwater samples collected during the June 24, 2014 event were also submitted for extractable petroleum hydrocarbons (EPH) by NWEPH, naphthalene and carcinogenic polycyclic aromatic hydrocarbons (cPAHs) by EPA Method 8270D SIM, and toluene/ethylbenzene/xylenes (TEX) analysis by EPA Method 8260C.

Investigation-Derived Waste

All soil and water generated during monitoring well installation, groundwater sampling, and equipment decontamination activities was collected and transferred to new, U.S. Department of Transportation-approved 55-gallon steel drums. The drums were lidded, sealed with an indelible marker, and stored on-site while material profiling was completed.

In June 2014, 10 drums containing investigation-derived waste in the form of soil cuttings and water generated during the two sampling events were transported from the Site to the Clean Harbors Grassy Mountain Landfill in Grantsville, Utah, by Clean Harbors Environmental Services, Inc. for disposal.

COMPLIANCE MONITORING RESULTS

Data Validation

For the February and March sampling events, a compliance screening, Tier 1 data quality review was performed on TPH data resulting from laboratory analysis. The analytical data were validated in accordance with the U.S. Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data Review (USEPA 1999, 2008) as applied to the NWTPH-Dx method.

A total of eight soil and five groundwater samples were submitted in two sample delivery groups, FB402302 and FB403277, to FBI for chemical analysis. For all sample delivery groups, the analytical holding times were met and the method blanks had no detections. The surrogate, matrix spike (MS), matrix spike duplicate (MSD), laboratory control sample (LCS), and laboratory control sample duplicate (LCSD) recoveries and MS/MSD and LCS/LCSD relative percent differences all met USEPA requirements.

Data from these events are determined to be of acceptable quality for use as reported by the laboratory.

For the June sampling event, a compliance screening, Tier 1 data quality review was performed on TPH, EPH, and semivolatile organic compounds data resulting from laboratory analysis. The analytical data were validated in accordance with the USEPA CLP National Functional Guidelines for Organic Data Review (USEPA 1999, 2008).

A total of five groundwater samples were submitted in one sample delivery group, FB406422, to FBI for chemical analysis. For all sample delivery groups, the analytical holding times were met and the method blanks had no detections. The surrogate, MS, MSD, LCS, and LCSD recoveries and MS/MSD and LCS/LCSD relative percent differences all met USEPA requirements.

As part of the validation of TPH data, the detectable hydrocarbons and/or organics within the diesel, gasoline, or residual hydrocarbon chromatogram ranges were reviewed relative to the appropriate laboratory standard. If the hydrocarbons were not identifiable based on a poor chromatographic match with the standards, the data were qualified “MP” to reflect a poor match, and the interpretive qualifier used for database entry and project reporting was a “JM” to indicate estimated concentrations. Similarly, if the hydrocarbons provided a good chromatographic match with the standards, the data were qualified “MG” to reflect a good match, and no interpretive qualifier was used for database entry or project reporting.

Samples were analyzed by NWTPH-Dx twice, once following a silica gel cleanup step, and once without. Chromatograms from both analyses were compared to the provided laboratory standard. Following chromatogram review, it was determined that all sample results from the analysis without silica gel cleanup were a poor match to the laboratory-supplied diesel standard and were qualified “JM”. All but one of the samples that did undergo a silica gel cleanup had an adequate standard match. Only sample MW-4-GW-4-14’ from the analysis with silica gel cleanup had a chromatogram that was a poor match to the provided laboratory standard and was qualified “JM”.

Data from this event are determined to be of acceptable quality for use as qualified.

Water Level Measurements and Potentiometric Surface

Water level measurements, elevations, and horizontal hydraulic gradients are reported in Table 1. Groundwater elevations and potentiometric surface contours for each event are illustrated in Figures 2 and 3. The results indicate a southerly groundwater flow direction and low horizontal gradients ranging from 0.004 feet/foot (ft/ft) in the March sampling event to 0.002 ft/ft in the June sampling event, which is consistent with the flat topography in the vicinity.

Soil Results

Analytical soil results are shown in Table 2. The complete analytical data packages are attached in Attachment 2. DRO ranged from non-detect to 1,300 milligrams per kilogram (mg/kg). The highest concentration was found at Monitoring Well MW-4 in the 6 to 6.5 foot interval. At Monitoring Well MW-3, both sampled intervals were non-detect. All concentrations were less than the MTCA Method A cleanup level (CUL) of 2,000 mg/kg.

Groundwater Results

Analytical results for DRO in groundwater are shown in Table 3. The complete analytical data packages are in Attachment 2. During the March event, DRO was detected in groundwater samples analyzed with silica gel cleanup in all four monitoring wells in concentrations ranging

from 180 to 450 micrograms per liter (µg/L). The highest concentration was found at Monitoring Well MW-4. All concentrations were less than the MTCA Method A CUL of 500 µg/L.

During the June event, DRO was detected in groundwater samples analyzed with silica gel cleanup in all four monitoring wells in concentrations ranging from 170 to 360 µg/L. The highest concentration was again found at Monitoring Well MW-4. All concentrations were less than the MTCA Method A CUL of 500 µg/L.

Analytical results that do not include silica gel cleanup are considered less accurate measurements of the concentration of DRO in the samples, because they include some organic compounds that are not hydrocarbons and that should not be quantified as DRO. At the Site, shallow groundwater is present in alluvial deposits that contain naturally occurring organic material. This explains why groundwater samples from the June monitoring event that underwent silica gel cleanup prior to analysis were a better match with the chromatographic standard for diesel. Laboratory qualifiers in the attached laboratory report (Attachment 2), indicate that samples analyzed without silica gel cleanup result in concentrations that are estimated due to a poor match to the chromatographic standard for diesel. When groundwater extract is passed through a column of silica gel, polar non-hydrocarbon compounds are adsorbed to the silica gel, while the non-polar hydrocarbons in the extract pass through the column. The silica gel is then rinsed with an elution solvent to remove any remaining hydrocarbons. This method ensures that only non-polar hydrocarbons remain in the extract to be analyzed and quantified using a diesel- or heavy oil-range standard. Therefore, the sample results using silica gel cleanup are more representative of true concentrations remaining in groundwater at the Site, and are appropriate for comparison to MTCA CULs.

NEXT STEPS

Analytical results presented in this data report will be submitted to Ecology's Environmental Information Management system.

Groundwater monitoring from the four monitoring wells at the Site will continue for two additional quarters. Groundwater will be analyzed for DRO with and without silica gel cleanup. An additional monitoring report summarizing the four quarterly monitoring events will be prepared and submitted to Ecology. It is expected that the results from these four quarterly monitoring events will be used to demonstrate compliance with the MTCA Method A CUL for DRO, and will support a request for a "no further action" (NFA) letter from Ecology.

The VCP application and agreement that are being submitted with this report include a request for an NFA-likely opinion letter. We look forward to working with our Ecology case manager to meet MTCA requirements and bring this site to closure.

REFERENCES

Floyd|Snider. 2014. Memorandum to Tom Lovejoy, Puget Sound Freight Lines. Re: Puget Sound Truck Lines, Longview Groundwater Compliance Sampling and Analysis Plan. 13 January.

U.S. Environmental Protection Agency (USEPA). 1999. *Contract Laboratory Program National Functional Guidelines for Organic Data Review*. EPA 540/R-99/008. October.

———. 2008. *Contract Laboratory Program National Functional Guidelines for Superfund Organics Methods Data Review Final*. USEPA-540-R-08-01. July.

LIST OF ATTACHMENTS

Table 1	Water Level Elevations and Horizontal Gradients
Table 2	Soil Analytical Results for Diesel Range Organics (DRO)
Table 3	Groundwater Analytical Results for Diesel Range Organics (DRO)
Figure 1	Vicinity Map
Figure 2	Potentiometric Surface and Groundwater Elevations March 19, 2014
Figure 3	Potentiometric Surface and Groundwater Elevations June 24, 2014
Attachment 1	Monitoring Well Logs
Attachment 2	Laboratory Analytical Data (Provided on Disc)

Tables

Table 1
Water Level Elevations and Horizontal Gradients

Well	Total Depth (feet from top of casing)	Top of Well Casing (feet NAVD 88)	Depth to Water (feet)	Groundwater Elevation (feet NAVD 88)	Horizontal Gradient (feet/foot)
March 19, 2014					
MW-1	13.44	14.24	1.14	13.10	0.004
MW-2	13.35	14.08	1.06	13.02	
MW-3	14.12	14.05	1.20	12.85	
MW-4	14.42	14.24	1.23	13.01	
June 24, 2014					
MW-1	13.44	14.24	3.85	10.39	0.002
MW-2	13.35	14.08	3.76	10.32	
MW-3	14.12	14.05	3.80	10.25	
MW-4	14.42	14.24	3.93	10.31	

Abbreviation:
NAVD 88 North American Vertical Datum of 1988

Table 2
Soil Analytical Results for Diesel-Range Organics (DRO)

Well	Depth (feet bgs)	Date	Diesel-Range Organics (mg/kg) by NWTPH-Dx
MTCA Method A			2,000
MW-1	7.5–8	2/20/2014	380
MW-2	7.5–8	2/20/2014	240
	13–13.5	2/20/2014	610
	14–14.5	2/20/2014	50 U
MW-3	7.5–8	2/20/2014	50 U
	14–14.5	2/20/2014	50 U
MW-4	6–6.5	2/20/2014	1,300
	14–14.5	2/20/2014	79

Abbreviations:

bgs Below ground surface
mg/kg Milligrams per kilogram
MTCA Model Toxics Control Act

Qualifier:

U Analyte was not detected at the given reporting limit.

Table 3
Groundwater Analytical Results for Diesel-Range Organics (DRO)

Well	Date	Diesel-Range Organics (µg/L)	
		By NWTPH-Dx with Silica Gel Cleanup	By NWTPH-Dx
MTCA Method A		500	500
MW-1	6/24/2014	210	390 JM
	3/19/2014	250	390
	3/19/2014 (DUP)	220	490
MW-2	6/24/2014	270	**540** JM
	6/24/2014 (DUP)	270	**540** JM
	3/19/2014	370	**700**
MW-3	6/24/2014	170	470 JM
	3/19/2014	180	**560**
MW-4	6/24/2014	360 JM	**560** JM
	3/19/2014	450	**680**

Notes:

Bold Indicates result exceeds MTCA Method A.

Abbreviations:

DUP Field duplicate sample
µg/L Micrograms per liter
MTCA Model Toxics Control Act

Qualifier:

JM Analyte was detected.The concentration is considered an estimate due to a poor chromatographic match to the standard.
U Analyte was not detected at the given reporting limit.

Figures

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Groundwater Compliance Well Installation and Monitoring Results
Puget Sound Truck Lines Site
Longview, Washington

Figure 1
Vicinity Map

I:\GIS\Projects\PSTL-Longview\MXD\Figure 1 Vicinity Map.mxd 8/28/2014

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Groundwater Compliance Well Installation and Monitoring Results
Puget Sound Truck Lines Site
Longview, Washington

Figure 2
Potentiometric Surface
Groundwater Elevations
March 19, 2014

I:\GIS\Projects\PSTL-Longview\MXD\Figure 2 Potentiometric Surface Map Groundwater Elevations March 19 2014.mxd 8/28/2014

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Groundwater Compliance Well Installation and Monitoring Results
Puget Sound Truck Lines Site
Longview, Washington

Figure 3
Potentiometric Surface
Groundwater Elevations
June 24, 2014

I:\GIS\Projects\PSTL-Longview\MXD\Figure 3 Potentiometric Surface Map Groundwater Elevations June 24 2014.mxd 8/28/2014

Attachment 1
Monitoring Well Logs

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Monitoring Well ID: MW-1

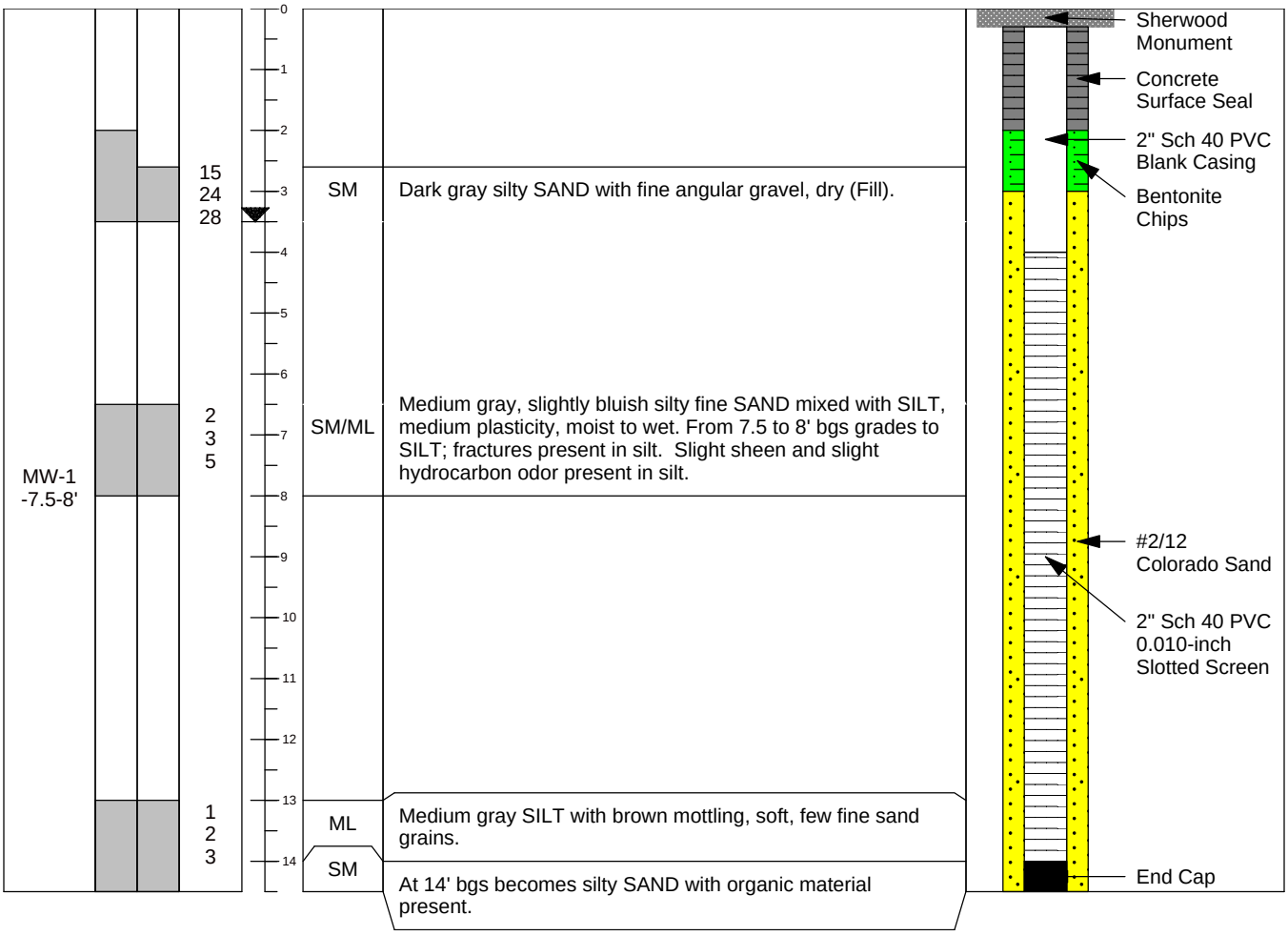
Installation Date: 2/20/2014
Logged By: Erin Murray
Drilled By: Josh Marsh, Cascade Drilling
Drill Type: Hollow Stem Auger
Sample Method: 2" x 18" Split-spoon
Boring Diameter: 8.25 inches
Boring Depth (ft bgs): 14.5 feet
Groundwater ATD (ft bgs): ~3.5 ft

Ground Surface Elevation: 14.88'
Vertical Datum: NAVD88
Casing Elevation: 14.24'
Latitude/Northing: 294919.048
Longitude/Easting: 1026126.794
Coordinate System: NAD83

Client: Tom Lovejoy
Project: PSTL-Longview
Task Number: Task 1
Site Location: 146 Industrial Way
Longview, WA

Remarks:

SAMPLE ID	DRIVE / RECOVERY	BLOW COUNT	DEPTH FT BGS	USCS SYMBOL	SOIL DESCRIPTION AND OBSERVATIONS: (color, texture, moisture, MAJOR CONSTITUENT, odor, staining, sheen, debris, etc.)	MONITORING WELL DETAIL
MW-1 -7.5-8'		15 24 28	3	SM	Dark gray silty SAND with fine angular gravel, dry (Fill).	
		2 3 5	7	SM/ML	Medium gray, slightly bluish silty fine SAND mixed with SILT, medium plasticity, moist to wet. From 7.5 to 8' bgs grades to SILT; fractures present in silt. Slight sheen and slight hydrocarbon odor present in silt.	
		1 2 3	13	ML	Medium gray SILT with brown mottling, soft, few fine sand grains.	
			14	SM	At 14' bgs becomes silty SAND with organic material present.	



Notes:
FT BGS = feet below ground surface
ppm = parts per million

--- Dashed contact line in soil description indicates a gradational contact
USCS = Unified Soil Classification System
▼ = denotes groundwater occurrence based on soil saturation observation

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Monitoring Well ID: MW-2

Installation Date: 2/20/2014
Logged By: Erin Murray
Drilled By: Josh Marsh, Cascade Drilling
Drill Type: Hollow Stem Auger
Sample Method: 2" x 18" Split-spoon
Boring Diameter: 8.25 inches
Boring Depth (ft bgs): 14.5 feet
Groundwater ATD (ft bgs): ~3.5 ft

Ground Surface Elevation: 14.74'
Vertical Datum: NAVD88
Casing Elevation: 14.08'
Latitude/Northing: 294879.482
Longitude/Easting: 1026163.695
Coordinate System: NAD83

Client: Tom Lovejoy
Project: PSTL-Longview
Task Number: Task 1
Site Location: 146 Industrial Way
Longview, WA

Remarks:

SAMPLE ID	DRIVE / RECOVERY	BLOW COUNT	DEPTH FT BGS	USCS SYMBOL	SOIL DESCRIPTION AND OBSERVATIONS: (color, texture, moisture, MAJOR CONSTITUENT, odor, staining, sheen, debris, etc.)	MONITORING WELL DETAIL
		7 7 9	0–3	SP	Brown poorly graded fine SAND with silt and fine angular gravels, dry (Fill).	Sherwood Monument; Concrete Surface Seal; 2" Sch 40 PVC Blank Casing; Bentonite Chips
MW-2 -7.5-8'		1 2 2	3–7	SM/ML	Dark gray silty fine SAND grading to medium gray SILT, soft to medium. Fractures present in silt with slight sheen and hydrocarbon odor present. Trace interbedded organic material. Wet.	
			7–13			#2/12 Colorado Sand; 2" Sch 40 PVC 0.010-inch Slotted Screen
MW-2-13.5-13.5' MW-2-14-14.5'		1 1 3	13–14	SILT	Dark grayish blue SILT, soft, moist.	
				SM	Grading to medium grayish blue silty fine SAND. Slight sheen in water at 13.5' bgs with a faint hydrocarbon odor. Sand seam at 13.5' for 0.25 inches.	End Cap

Notes:
FT BGS = feet below ground surface
ppm = parts per million

--- Dashed contact line in soil description indicates a gradational contact
USCS = Unified Soil Classification System
▼ = denotes groundwater occurrence based on soil saturation observation

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Monitoring Well ID: MW-3

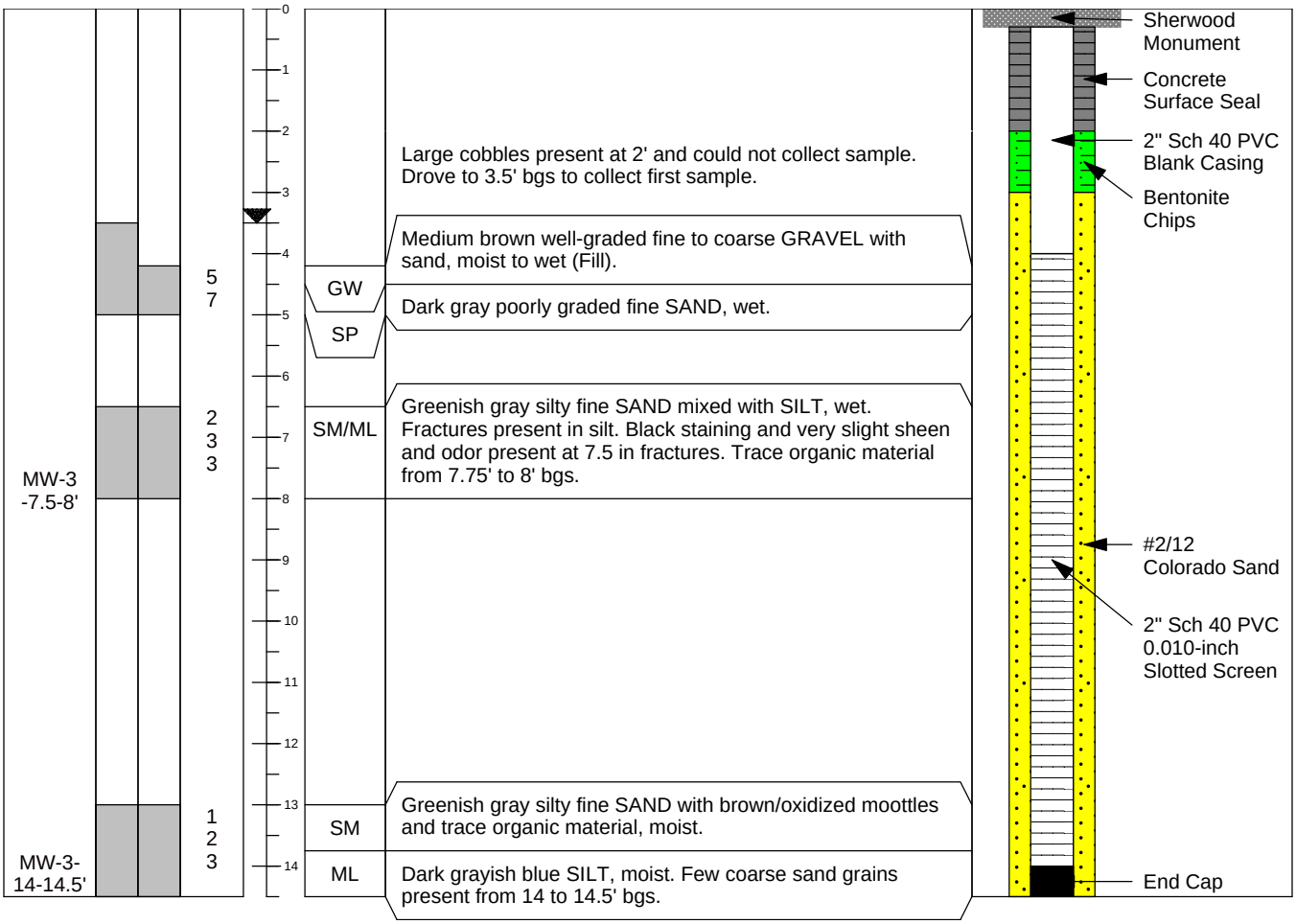
Installation Date: 2/20/2014
Logged By: Erin Murray
Drilled By: Josh Marsh, Cascade Drilling
Drill Type: Hollow Stem Auger
Sample Method: 2" x 18" Split-spoon
Boring Diameter: 8.25 inches
Boring Depth (ft bgs): 14.5 feet
Groundwater ATD (ft bgs): ~3.5 ft

Ground Surface Elevation: 14.86'
Vertical Datum: NAVD88
Casing Elevation: 14.05'
Latitude/Northing: 294847.767
Longitude/Easting: 1026121.457
Coordinate System: NAD83

Client: Tom Lovejoy
Project: PSTL-Longview
Task Number: Task 1
Site Location: 146 Industrial Way
Longview, WA

Remarks:

SAMPLE ID	DRIVE / RECOVERY	BLOW COUNT	DEPTH FT BGS	USCS SYMBOL	SOIL DESCRIPTION AND OBSERVATIONS: (color, texture, moisture, MAJOR CONSTITUENT, odor, staining, sheen, debris, etc.)	MONITORING WELL DETAIL
MW-3 -7.5-8'		5 7	4	GW	Medium brown well-graded fine to coarse GRAVEL with sand, moist to wet (Fill).	
			5	SP	Dark gray poorly graded fine SAND, wet.	
		2 3 3	7	SM/ML	Greenish gray silty fine SAND mixed with SILT, wet. Fractures present in silt. Black staining and very slight sheen and odor present at 7.5 in fractures. Trace organic material from 7.75' to 8' bgs.	
MW-3- 14-14.5'		1 2 3	13	SM	Greenish gray silty fine SAND with brown/oxidized moottles and trace organic material, moist.	
			14	ML	Dark grayish blue SILT, moist. Few coarse sand grains present from 14 to 14.5' bgs.	



Notes:
FT BGS = feet below ground surface
ppm = parts per million

--- Dashed contact line in soil description indicates a gradational contact
USCS = Unified Soil Classification System
▼ = denotes groundwater occurrence based on soil saturation observation

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Monitoring Well ID: MW-4

Installation Date: 2/20/2014
Logged By: Erin Murray
Drilled By: Josh Marsh, Cascade Drilling
Drill Type: Hollow Stem Auger
Sample Method: 2" x 18" Split-spoon
Boring Diameter: 8.25 inches
Boring Depth (ft bgs): 15 feet
Groundwater ATD (ft bgs): ~3.5 ft

Ground Surface Elevation: 14.88'
Vertical Datum: NAVD88
Casing Elevation: 14.24'
Latitude/Northing: 294883.024
Longitude/Easting: 1026090.289
Coordinate System: NAD83

Client: Tom Lovejoy
Project: PSTL-Longview
Task Number: Task 1
Site Location: 146 Industrial Way
Longview, WA

Remarks:

SAMPLE ID	DRIVE / RECOVERY	BLOW COUNT	DEPTH FT BGS	USCS SYMBOL	SOIL DESCRIPTION AND OBSERVATIONS: (color, texture, moisture, MAJOR CONSTITUENT, odor, staining, sheen, debris, etc.)	MONITORING WELL DETAIL
MW-4 -6-6.5'		2 2 3	0–15	GW	Large cobble present at 2' and could not collect sample. Drove to 3' bgs to collect first sample. Brownish gray poorly graded fine GRAVEL with sand, moist to wet.	Sherwood Monument; Concrete Surface Seal; 2" Sch 40 PVC Blank Casing; Bentonite Chips
				SM/ML	Greenish gray, silty fine SAND mixed with SILT, wet. Fractures present in silt from 6.3 to 6.6' bgs. Sheen and slight hydrocarbon odor present in fractures.	
				ML	Medium gray sandy SILT, soft. No visible sheen.	#2/12 Colorado Sand; 2" Sch 40 PVC 0.010-inch Slotted Screen
MW-4-14-14.5'		1 1 4		ML	Same as above. Sheen on side of split-spoon. Slight to moderate hydrocarbon odor present.	End Cap

Notes:
FT BGS = feet below ground surface
ppm = parts per million

--- Dashed contact line in soil description indicates a gradational contact
USCS = Unified Soil Classification System
▼ = denotes groundwater occurrence based on soil saturation observation

Attachment 2
Laboratory Analytical Data

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

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fbi@isomedia.com
www.friedmanandbruya.com

March 4, 2014

Brett Beaulieu, Project Manager
Floyd/Snider
Two Union Square, Suite 600
601 Union St
Seattle, WA 98101

Dear Mr. Beaulieu:

Included are the results from the testing of material submitted on February 21, 2014 from the PSTL-Longview, F&BI 402302 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
FDS0304R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on February 21, 2014 by Friedman & Bruya, Inc. from the Floyd/Snider PSTL-Longview, F&BI 402302 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Floyd/Snider
402302 -01	MW-1-7.5-8'
402302 -02	MW-2-7.5-8'
402302 -03	MW-2-13-13.5'
402302 -04	MW-2-14-14.5'
402302 -05	MW-4-6-6.5'
402302 -06	MW-4-14-14.5'
402302 -07	MW-3-7.5-8'
402302 -08	MW-3-14-14.5'

All quality control requirements were acceptable.

Date of Report: 03/04/14
Date Received: 02/21/14
Project: PSTL-Longview, F&BI 402302
Date Extracted: 02/25/14
Date Analyzed: 02/26/14 and 02/27/14

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Surrogate (% Recovery) (Limit 53-144)
MW-1-7.5-8' 402302-01	380	116
MW-2-7.5-8' 402302-02	240	117
MW-2-13-13.5' 402302-03	610	122
MW-2-14-14.5' 402302-04	<50	113
MW-4-6-6.5' 402302-05	1,300	123
MW-4-14-14.5' 402302-06	79	113
MW-3-7.5-8' 402302-07	<50	112
MW-3-14-14.5' 402302-08	<50	121
Method Blank 04-392 MB	<50	114

Date of Report: 03/04/14
Date Received: 02/21/14
Project: PSTL-Longview, F&BI 402302
Date Extracted: 02/25/14
Date Analyzed: 02/26/14

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx
Sample Extracts Passed Through a Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Surrogate (% Recovery) (Limit 53-144)
MW-1-7.5-8' 402302-01	380	121
MW-2-7.5-8' 402302-02	290	130
MW-2-13-13.5' 402302-03	680	128
MW-4-6-6.5' 402302-05	1,300	124
MW-4-14-14.5' 402302-06	<50	125
Method Blank 04-392 MB	<50	112

Date of Report: 03/04/14
Date Received: 02/21/14
Project: PSTL-Longview, F&BI 402302

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx

Laboratory Code: 402302-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel	mg/kg (ppm)	5,000	260	103	105	64-133	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel	mg/kg (ppm)	5,000	105	58-147

Date of Report: 03/04/14
Date Received: 02/21/14
Project: PSTL-Longview, F&BI 402302

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx

Laboratory Code: 402302-01 (Matrix Spike) Silica Gel

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel	mg/kg (ppm)	5,000	260	127	114	64-133	11

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel	mg/kg (ppm)	5,000	107	58-147

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

402302

SAMPLE CHAIN OF CUSTODY

ML 02-21-14 C02

Page # 1 of 1

Send Report To Brett Beaulieu
Company Floyd | Snider
Address 601 Union St. Ste. 600
City, State, ZIP Seattle, WA 98103
Phone # 206-292-2078 Fax #

SAMPLERS (signature)
PROJECT NAME/NO. PSTL-Longview
PO#
REMARKS

TURNAROUND TIME
☑ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	* See Notes						Notes
MW-1-7.5-8'	01	2/20/14	0950	S	1	X						*						* Please
MW-2-7.5-8'	02		1110		1	X						*						do acid/gel
MW-2-13-13.5'	03		1130		1	X						*						silica cleanup
MW-2-14-14.5'	04		1135		1	X						*						& without
MW-4-6-6.5'	05		1320		1	X						*						on every
MW-4-14-14.5'	06		1330		1	X						*						sample with
MW-3-7.5-8'	07		1505		1	X						*						a detection.
MW-3-14-14.5'	08		1525		1	X						*						

Samples received at 3 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Erin Murray	Floyd/Snider	2/21/14	0730
Received by:	B. Hodges	Postal Express	2/21/14	12:43
Relinquished by:				
Received by:	Nhan Phan	FEBI	2/21/14	1243

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

March 27, 2014

Brett Beaulieu, Project Manager
Floyd/Snider
Two Union Square, Suite 600
601 Union St
Seattle, WA 98101

Dear Mr. Beaulieu:

Included are the results from the testing of material submitted on March 20, 2014 from the PSTL-Longview, F&BI 403277 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
FDS0327R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 20, 2014 by Friedman & Bruya, Inc. from the Floyd/Snider PSTL-Longview, F&BI 403277 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Floyd/Snider
403277 -01	MW-1-GW-4-14'
403277 -02	MW-13-GW-4-14'
403277 -03	MW-2-GW-4-14'
403277 -04	MW-3-GW-4-14'
403277 -05	MW-4-GW-4-14'

All quality control requirements were acceptable.

Date of Report: 03/27/14
Date Received: 03/20/14
Project: PSTL-Longview, F&BI 403277
Date Extracted: 03/21/14
Date Analyzed: 03/21/14

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Surrogate (% Recovery) (Limit 47-140)
MW-1-GW-4-14' 403277-01	390	73
MW-13-GW-4-14' 403277-02	490	91
MW-2-GW-4-14' 403277-03	700	98
MW-3-GW-4-14' 403277-04	560	96
MW-4-GW-4-14' 403277-05	680	85
Method Blank 04-576 MB2	<50	90

Date of Report: 03/27/14
Date Received: 03/20/14
Project: PSTL-Longview, F&BI 403277
Date Extracted: 03/21/14
Date Analyzed: 03/25/14

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx
Sample Extracts Passed Through a Silica Gel Column Prior to Analysis
Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Surrogate (% Recovery) (Limit 57-134)
MW-1-GW-4-14' 403277-01	250	70
MW-13-GW-4-14' 403277-02	220	68
MW-2-GW-4-14' 403277-03	370	71
MW-3-GW-4-14' 403277-04	180	65
MW-4-GW-4-14' 403277-05	450	70
Method Blank 04-576 MB2	<50	66

Date of Report: 03/27/14
Date Received: 03/20/14
Project: PSTL-Longview, F&BI 403277

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel	ug/L (ppb)	2,500	86	84	58-134	2

Date of Report: 03/27/14
Date Received: 03/20/14
Project: PSTL-Longview, F&BI 403277

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel	ug/L (ppb)	2,500	73	77	58-134	5

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

403277

SAMPLE CHAIN OF CUSTODY

ME 03-20-14 E04

Page 1 of 1

Send Report To Brett Beaulieu
Company Floyd|Snider
Address 601 Union St. Ste. 600
City, State, ZIP Seattle, WA 98101
Phone # 206-292-2078 Fax #

SAMPLERS (signature)

PROJECT NAME/NO.: PSTL-Longview

PO#

REMARKS

TURNAROUND TIME
☑ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by

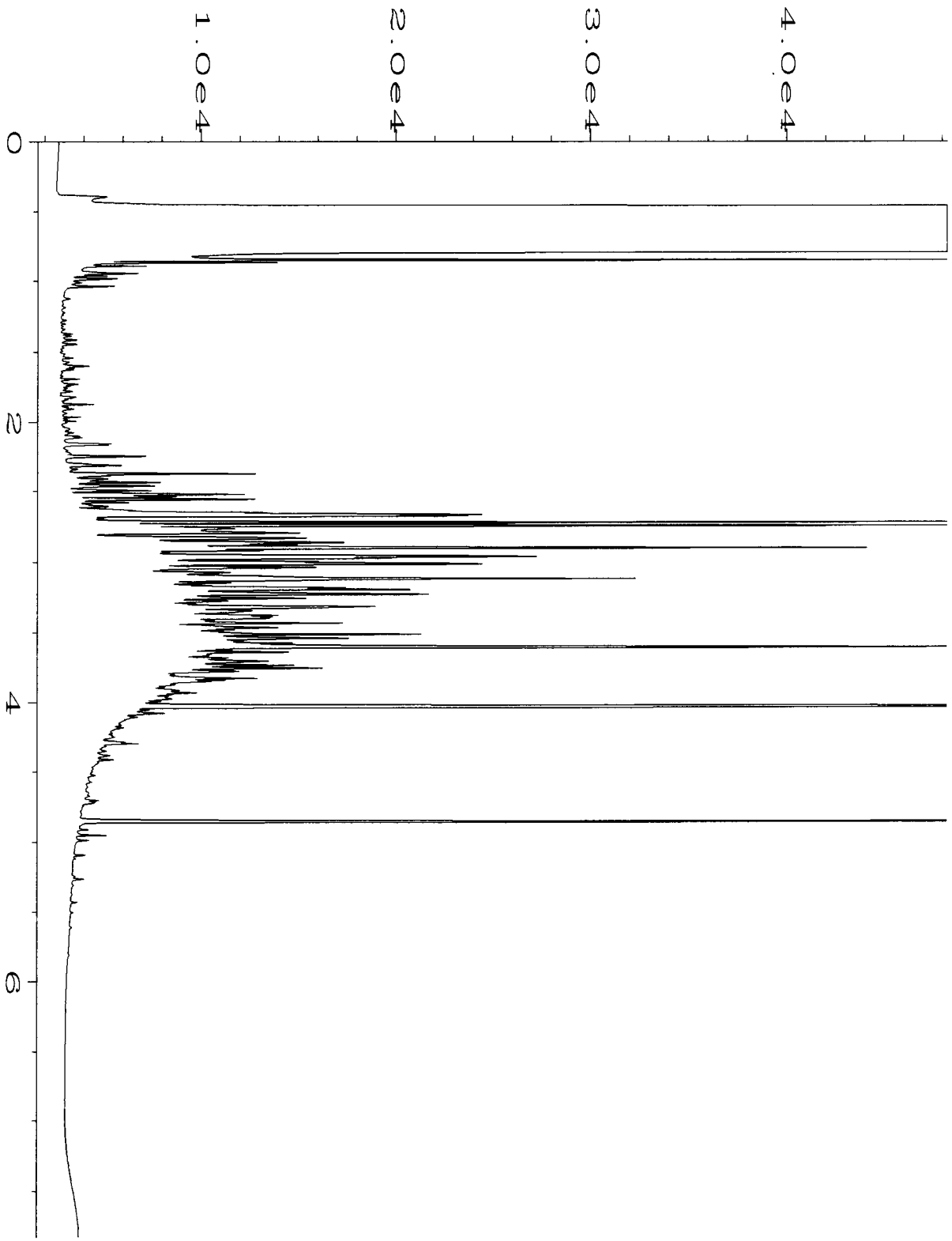
SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	* see Notes						Notes
MW-1-GW-4-14'	01	3/19/14	1135	GW	1	X						X						* Please
MW-13-GW-4-14'	02		0830	GW	1	X						X						only report
MW-2-GW-4-14'	03		1245	GW	1	X						X						diesel range organ
MW-3-GW-4-14'	04		1340	GW	1	X						X						and do acid/
MW-4-GW-4-14'	05		1445	GW	1	X						X						gel silica (# without
																		cleanup on
																		every sample
																		with a
																		detection.

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Erin Murray	Floyd|Snider	3/20/14	0930
Received by:	Eric Glover	FCB	3/20/14	1400
Relinquished by:				
Received by:		Samples received at	5 °C	

FORMS\COC\COC.DOC



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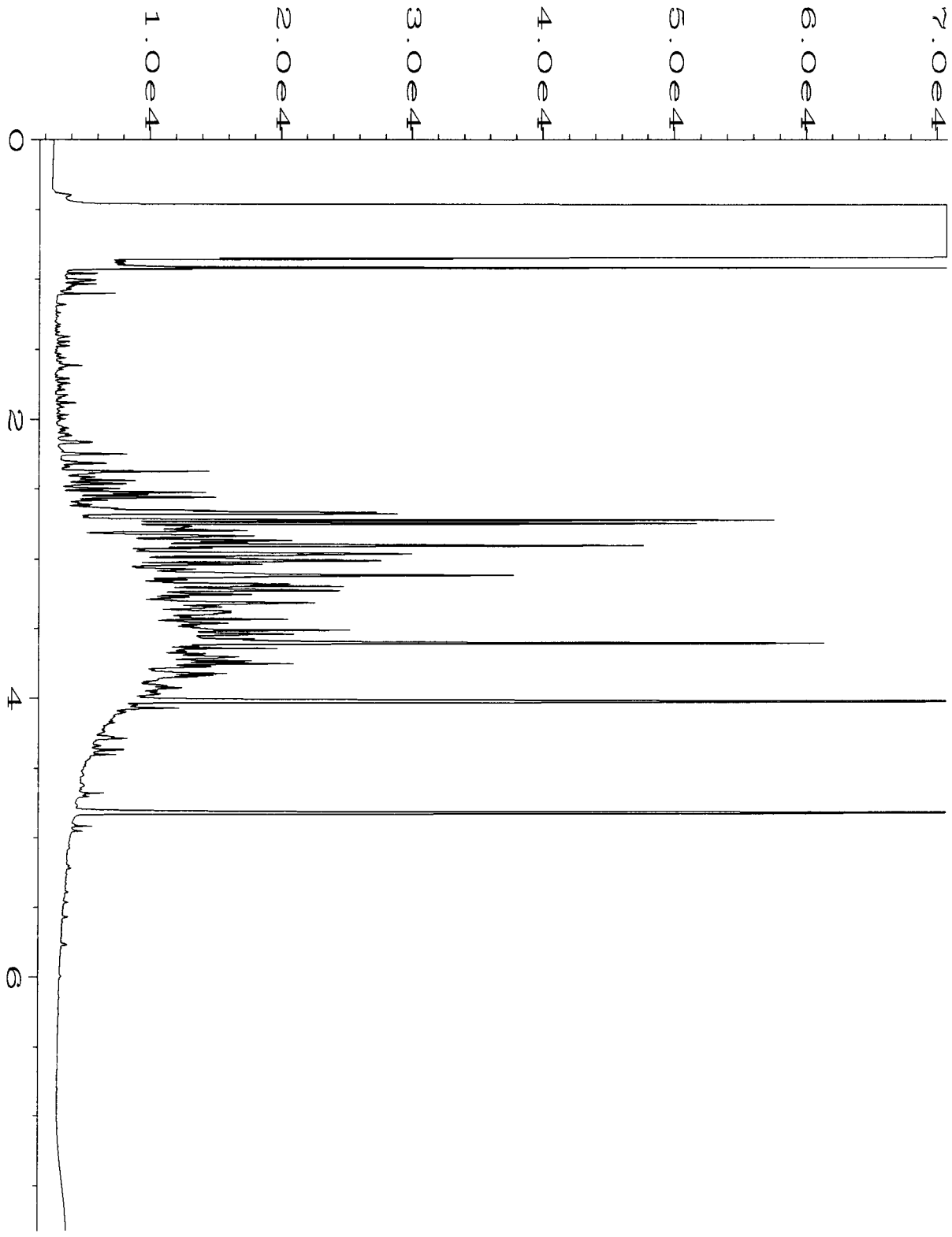
Operator	: mwdl	Page Number	: 1
Instrument	: GC#4	Vial Number	: 19
Sample Name	: 403277-01	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 21 Mar 14 04:07 PM	Instrument Method	: DX.MTH
Report Created on	: 28 Mar 14 02:13 PM	Analysis Method	: END.MTH



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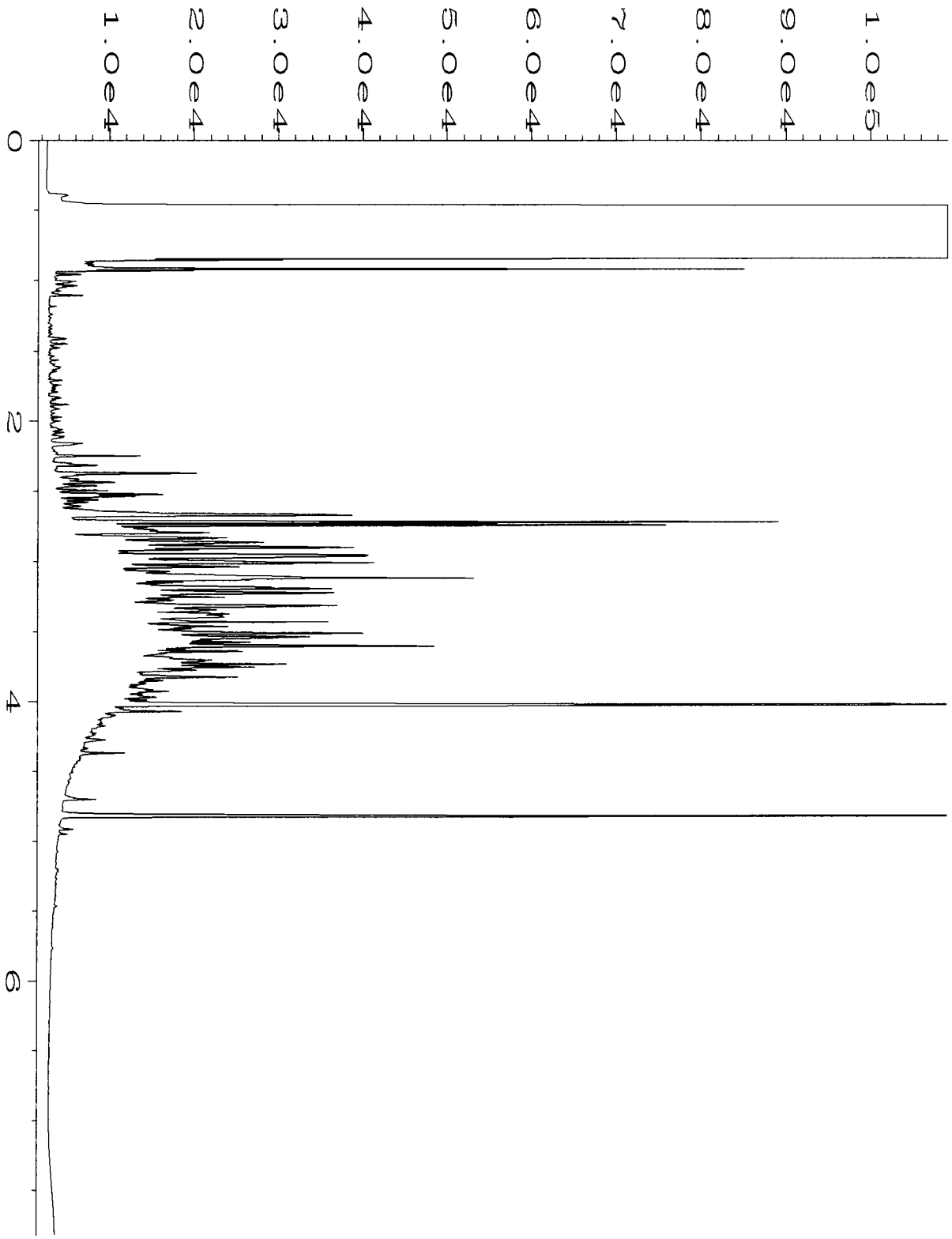
Operator	: mwdl	Page Number	: 1
Instrument	: GC#4	Vial Number	: 20
Sample Name	: 403277-02	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 21 Mar 14 04:17 PM	Instrument Method	: DX.MTH
Report Created on	: 28 Mar 14 02:04 PM	Analysis Method	: END.MTH



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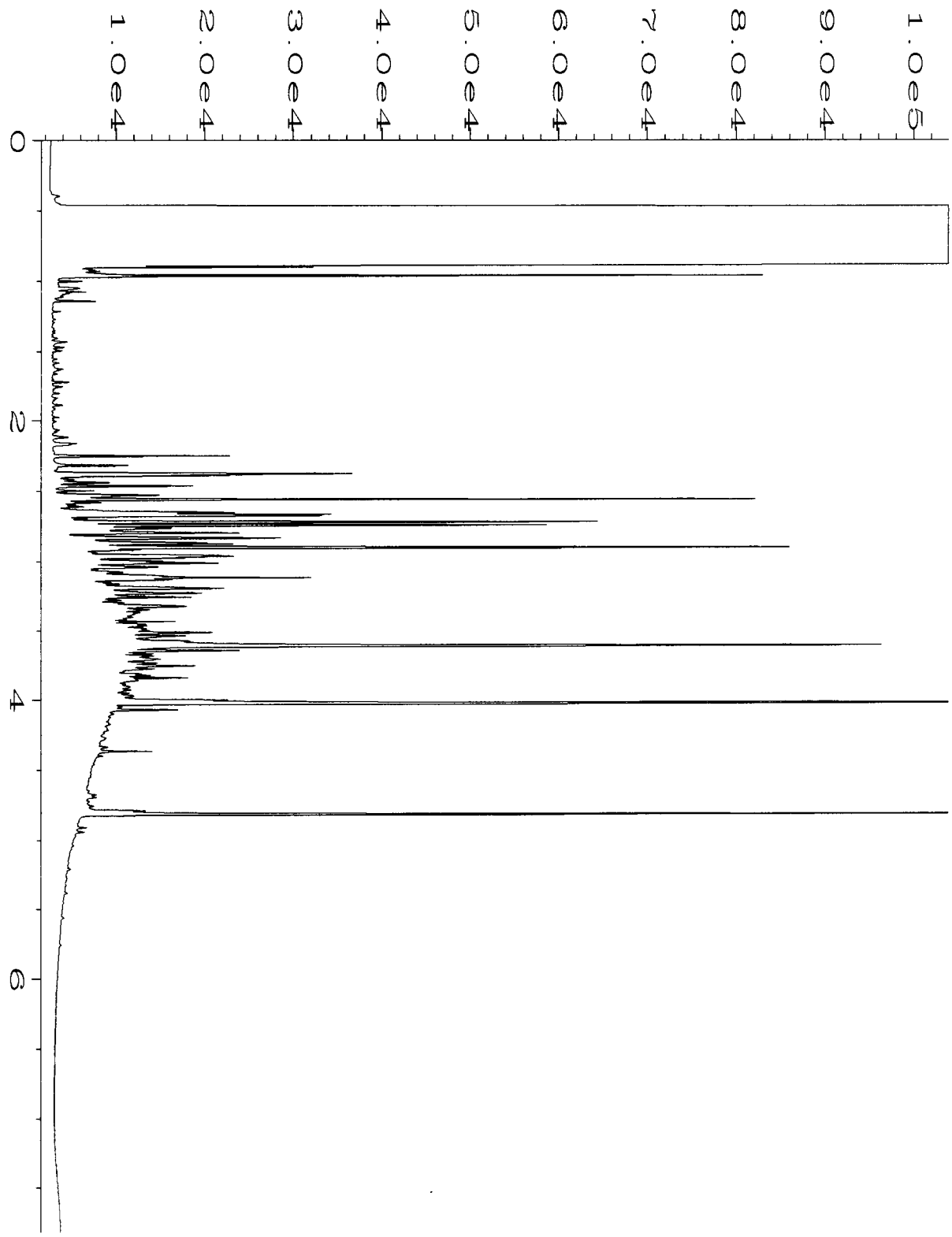
Operator	: mwdl	Page Number	: 1
Instrument	: GC#4	Vial Number	: 21
Sample Name	: 403277-03	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 21 Mar 14 04:30 PM	Instrument Method	: DX.MTH
Report Created on	: 28 Mar 14 02:04 PM	Analysis Method	: END.MTH



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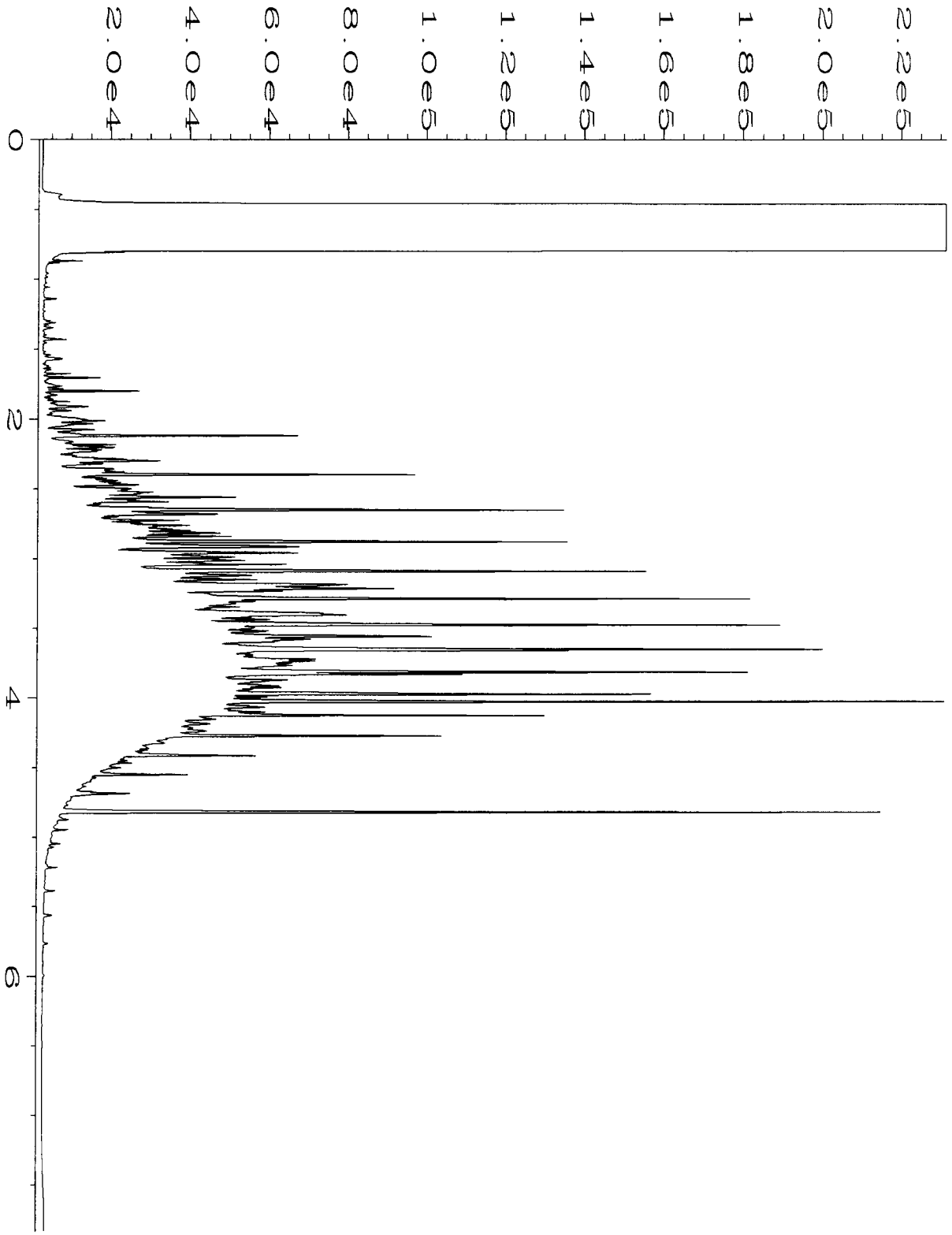
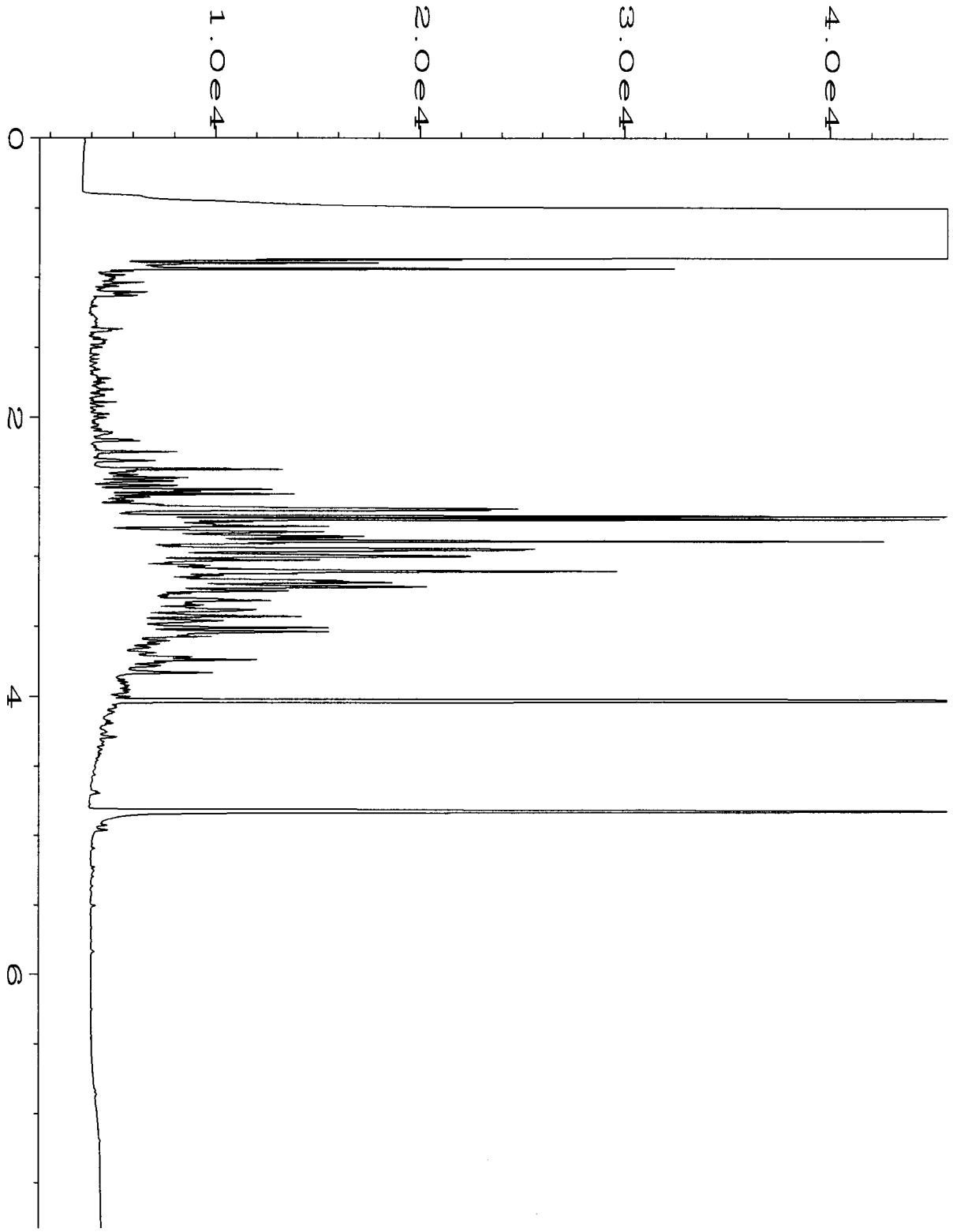
Operator	: mwdl	Page Number	: 1
Instrument	: GC#4	Vial Number	: 22
Sample Name	: 403277-04	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 21 Mar 14 04:43 PM	Instrument Method	: DX.MTH
Report Created on	: 28 Mar 14 02:04 PM	Analysis Method	: END.MTH

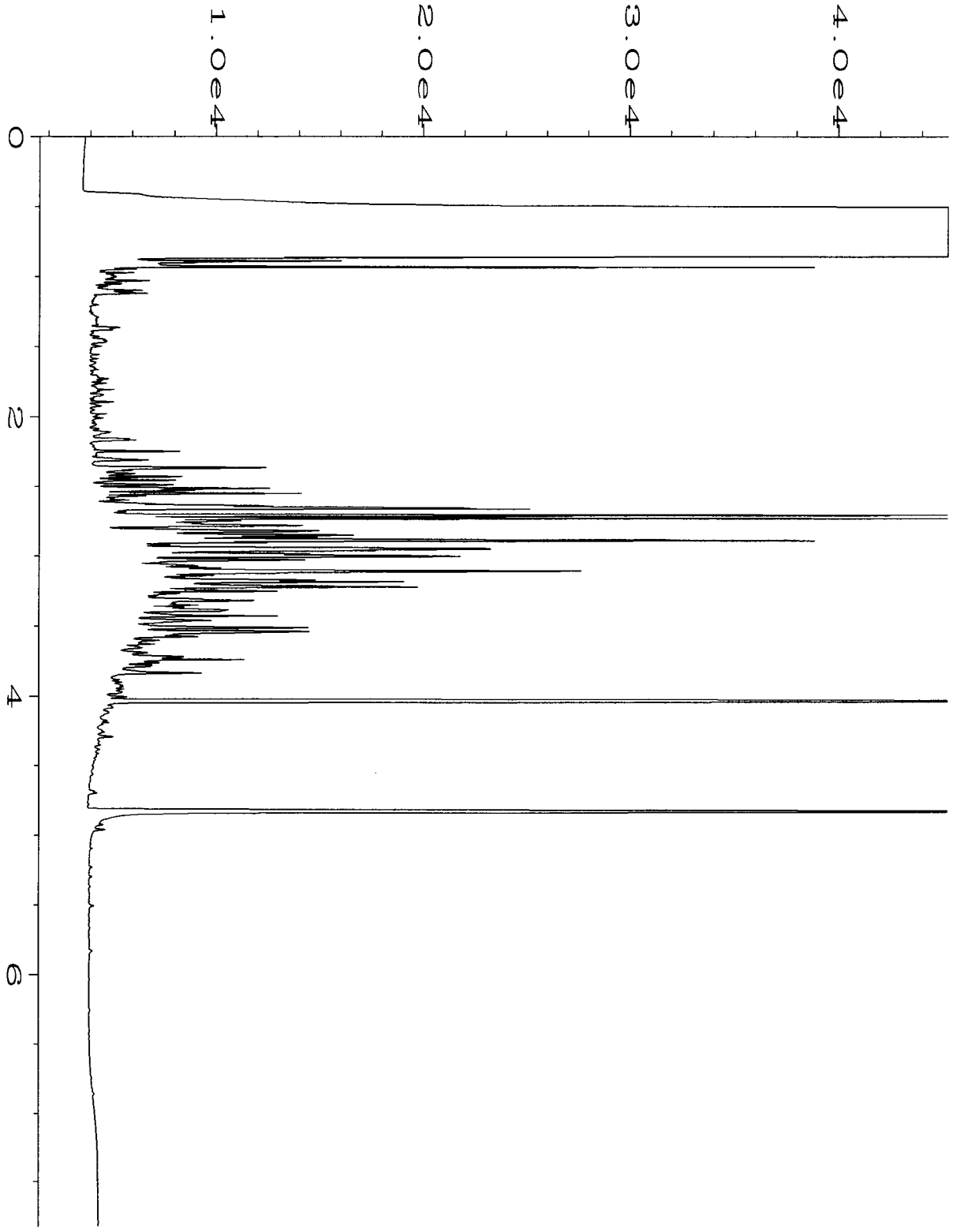


Data File Name	: C:\HPCHEM\4\DATA\03-21-14\003F0201.D		
Operator	: mwdl	Page Number	: 1
Instrument	: GC#4	Vial Number	: 3
Sample Name	: 500 Dx 42-113D	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
Acquired on	: 21 Mar 14 09:47 AM	Instrument Method	: DX.MTH
Report Created on	: 28 Mar 14 02:05 PM	Analysis Method	: END.MTH

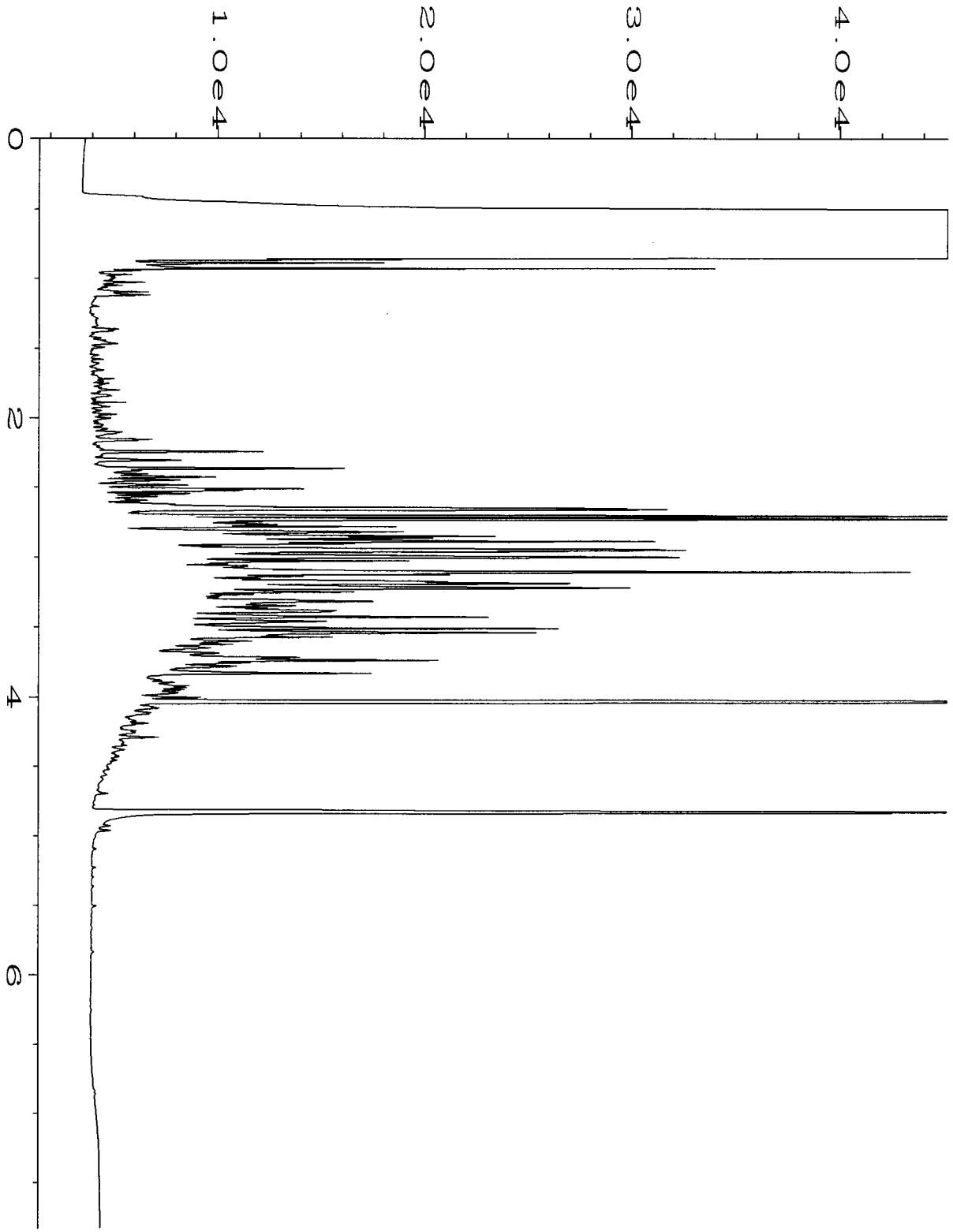


Data File Name : C:\HPCHEM\6\DATA\03-25-14\028F0801.D
Operator : mwdl
Instrument : GC #6
Sample Name : 403277-01 sg
Run Time Bar Code:
Acquired on : 25 Mar 14 03:56 PM
Report Created on: 28 Mar 14 02:07 PM

Page Number : 1
Vial Number : 28
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : BAKEOUT.MTH



Data File Name	: C:\HPCHEM\6\DATA\03-25-14\029F0801.D		
Operator	: mwdl	Page Number	: 1
Instrument	: GC #6	Vial Number	: 29
Sample Name	: 403277-02 sg	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 25 Mar 14 04:08 PM	Instrument Method	: DX.MTH
Report Created on	: 28 Mar 14 02:07 PM	Analysis Method	: BAKEOUT.MTH



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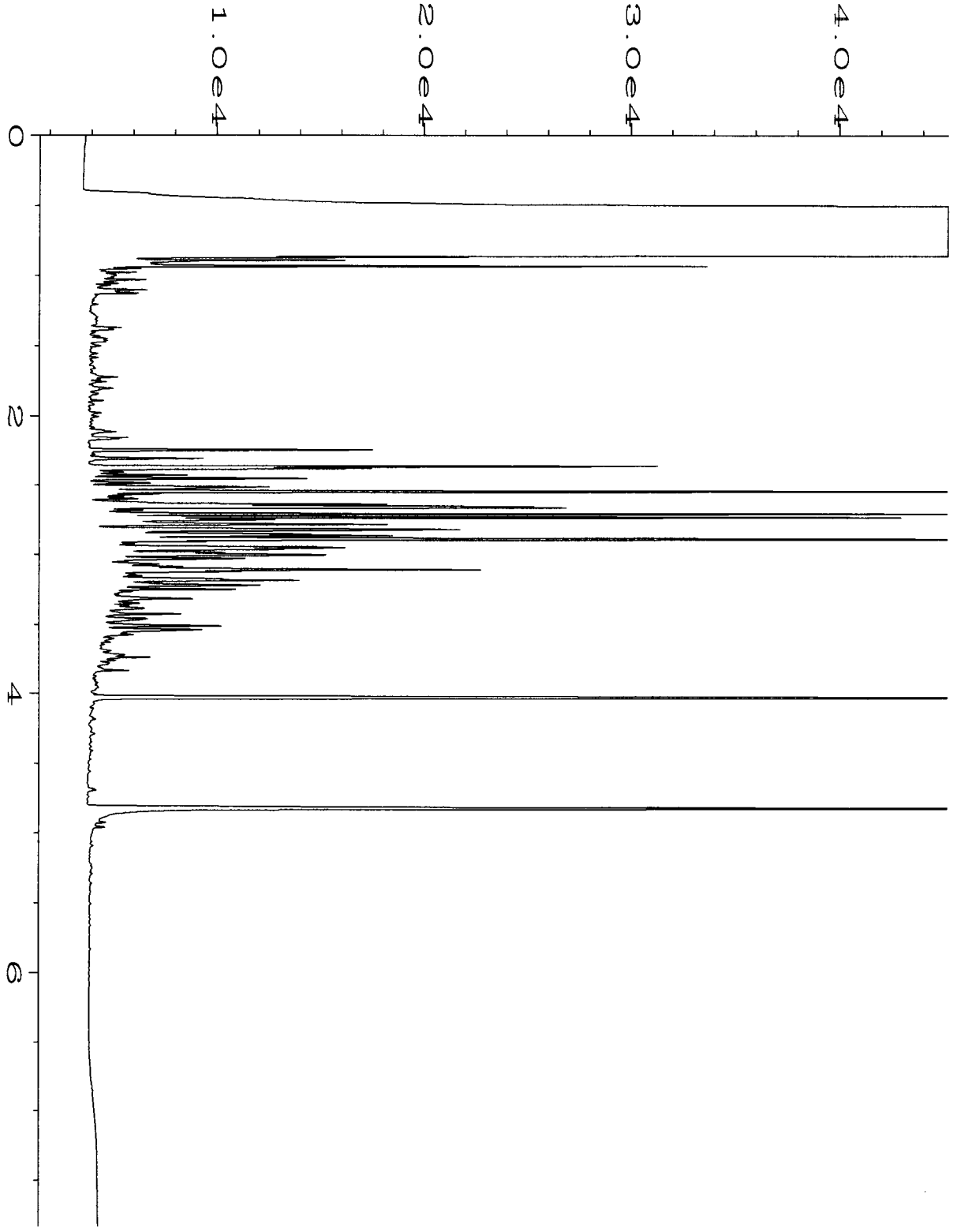
Operator	: mwdl	Page Number	: 1
Instrument	: GC #6	Vial Number	: 30
Sample Name	: 403277-03 sg	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 25 Mar 14 04:21 PM	Instrument Method	: DX.MTH
Report Created on	: 28 Mar 14 02:07 PM	Analysis Method	: BAKEOUT.MTH



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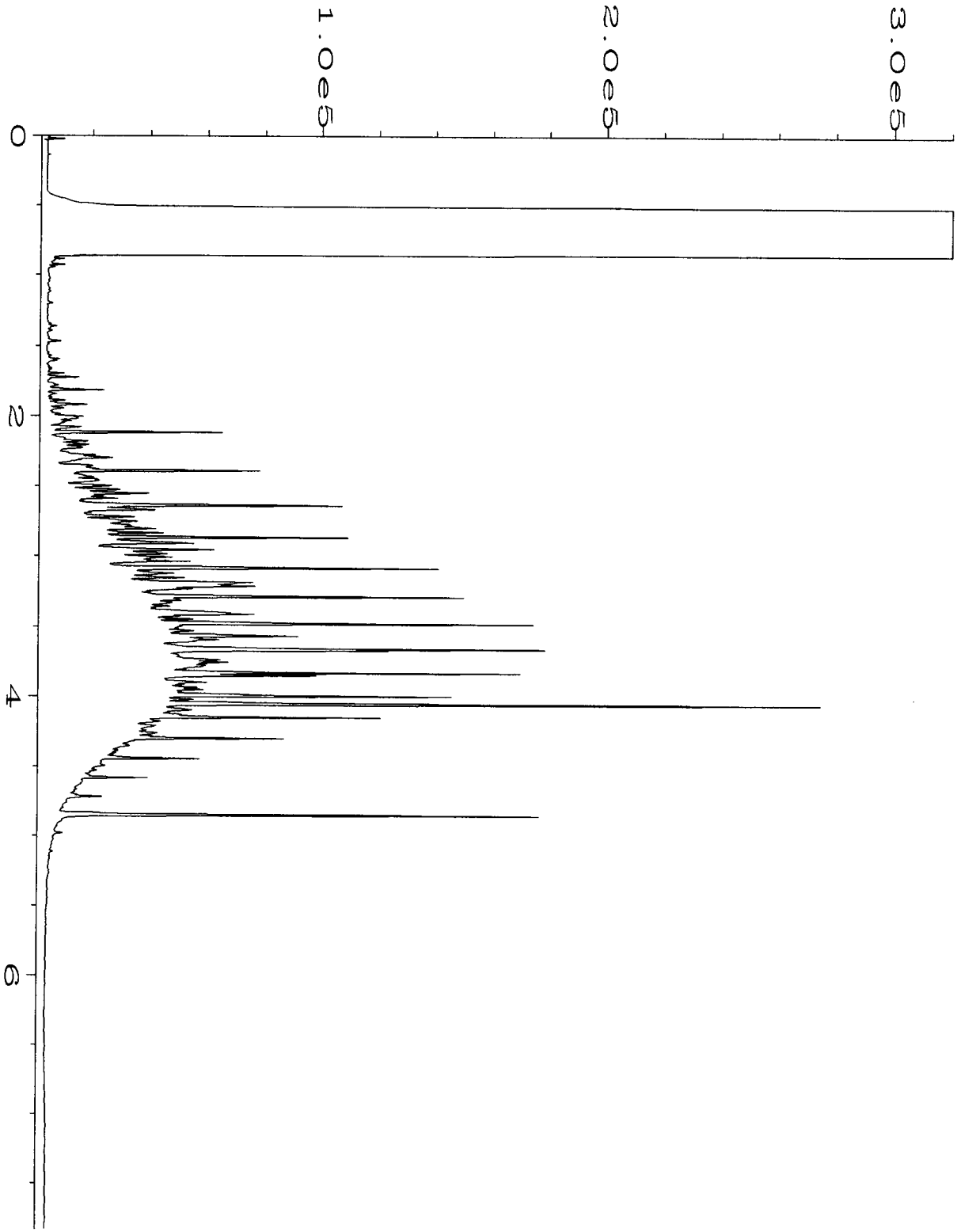
Operator	: mwdl	Page Number	: 1
Instrument	: GC #6	Vial Number	: 31
Sample Name	: 403277-04 sg	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 25 Mar 14 04:33 PM	Instrument Method	: DX.MTH
Report Created on	: 28 Mar 14 02:07 PM	Analysis Method	: BAKEOUT.MTH



Data File Name	: C:\HPCHEM\6\DATA\03-25-14\003F0201.D		
Operator	: mwdl	Page Number	: 1
Instrument	: GC #6	Vial Number	: 3
Sample Name	: 500 Dx 42-27B	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
Acquired on	: 25 Mar 14 08:57 AM	Instrument Method	: DX.MTH
Report Created on	: 28 Mar 14 02:08 PM	Analysis Method	: BAKEOUT.MTH

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 14, 2014

Brett Beaulieu, Project Manager
Floyd/Snider
Two Union Square, Suite 600
601 Union St
Seattle, WA 98101

Dear Mr. Beaulieu:

Included are the results from the testing of material submitted on June 25, 2014 from the PSTL-Longview, F&BI 406442 project. There are 17 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
FDS0714R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 25, 2014 by Friedman & Bruya, Inc. from the Floyd/Snider PSTL-Longview, F&BI 406442 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Floyd/Snider
406442 -01	MW-1-GW-4-14'
406442 -02	MW-2-GW-4-14'
406442 -03	MW-21-GW-4-14'
406442 -04	MW-3-GW-4-14'
406442 -05	MW-4-GW-4-14'

The samples were sent to Fremont for EPH analysis. Review of the enclosed report indicates that all quality assurance were acceptable.

All quality control requirements were acceptable.

Date of Report: 07/14/14
Date Received: 06/25/14
Project: PSTL-Longview, F&BI 406442
Date Extracted: 06/26/14
Date Analyzed: 07/07/14 and 07/08/14

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx
Sample Extracts Passed Through a Silica Gel Column Prior to Analysis
Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 41-152)
MW-1-GW-4-14' 406442-01	210	<250	82
MW-2-GW-4-14' 406442-02	350	<250	80
MW-21-GW-4-14' 406442-03	270	<250	68
MW-3-GW-4-14' 406442-04	170	<250	73
MW-4-GW-4-14' 406442-05	360	<250	81
Method Blank 04-1317 MB	<50	<250	83

Date of Report: 07/14/14
Date Received: 06/25/14
Project: PSTL-Longview, F&BI 406442
Date Extracted: 06/26/14
Date Analyzed: 06/30/14

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 41-152)
MW-1-GW-4-14' 406442-01	390 x	<250	90
MW-2-GW-4-14' 406442-02	540 x	<250	84
MW-21-GW-4-14' 406442-03	540 x	<250	88
MW-3-GW-4-14' 406442-04	470 x	<250	91
MW-4-GW-4-14' 406442-05	560 x	<250	96
Method Blank 04-1317 MB	<50	<250	94

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-2-GW-4-14'	Client:	Floyd/Snider
Date Received:	06/25/14	Project:	PSTL-Longview, F&BI 406442
Date Extracted:	07/02/14	Lab ID:	406442-02
Date Analyzed:	07/02/14	Data File:	070212.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	97	60	133

Compounds:	Concentration ug/L (ppb)
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-4-GW-4-14'	Client:	Floyd/Snider
Date Received:	06/25/14	Project:	PSTL-Longview, F&BI 406442
Date Extracted:	07/02/14	Lab ID:	406442-05
Date Analyzed:	07/02/14	Data File:	070214.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Floyd/Snider
Date Received:	Not Applicable	Project:	PSTL-Longview, F&BI 406442
Date Extracted:	07/02/14	Lab ID:	04-1357 mb
Date Analyzed:	07/02/14	Data File:	070207.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	102	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	MW-1-GW-4-14'	Client:	Floyd/Snider
Date Received:	06/25/14	Project:	PSTL-Longview, F&BI 406442
Date Extracted:	06/26/14	Lab ID:	406442-01 1/2
Date Analyzed:	06/27/14	Data File:	062729.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	50	150
Benzo(a)anthracene-d12	102	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
2-Methylnaphthalene	<0.1
1-Methylnaphthalene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	MW-2-GW-4-14'	Client:	Floyd/Snider
Date Received:	06/25/14	Project:	PSTL-Longview, F&BI 406442
Date Extracted:	06/26/14	Lab ID:	406442-02 1/2
Date Analyzed:	06/28/14	Data File:	062734.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	88	50	150
Benzo(a)anthracene-d12	99	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
2-Methylnaphthalene	<0.1
1-Methylnaphthalene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	MW-21-GW-4-14'	Client:	Floyd/Snider
Date Received:	06/25/14	Project:	PSTL-Longview, F&BI 406442
Date Extracted:	06/26/14	Lab ID:	406442-03 1/2
Date Analyzed:	06/28/14	Data File:	062735.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	50	150
Benzo(a)anthracene-d12	97	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
2-Methylnaphthalene	<0.1
1-Methylnaphthalene	0.11
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	MW-3-GW-4-14'	Client:	Floyd/Snider
Date Received:	06/25/14	Project:	PSTL-Longview, F&BI 406442
Date Extracted:	06/26/14	Lab ID:	406442-04 1/2
Date Analyzed:	06/27/14	Data File:	062730.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	86	50	150
Benzo(a)anthracene-d12	103	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
2-Methylnaphthalene	<0.1
1-Methylnaphthalene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	MW-4-GW-4-14'	Client:	Floyd/Snider
Date Received:	06/25/14	Project:	PSTL-Longview, F&BI 406442
Date Extracted:	06/26/14	Lab ID:	406442-05 1/2
Date Analyzed:	06/27/14	Data File:	062731.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	50	150
Benzo(a)anthracene-d12	107	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
2-Methylnaphthalene	<0.1
1-Methylnaphthalene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	Floyd/Snider
Date Received:	Not Applicable	Project:	PSTL-Longview, F&BI 406442
Date Extracted:	06/26/14	Lab ID:	04-1315 mb 1/2
Date Analyzed:	06/27/14	Data File:	062726A.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	88	50	150
Benzo(a)anthracene-d12	104	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
2-Methylnaphthalene	<0.1
1-Methylnaphthalene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1

Date of Report: 07/14/14
Date Received: 06/25/14
Project: PSTL-Longview, F&BI 406442

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 406442-05 (Matrix Spike) Silica Gel

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	350	108	99	50-150	9

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	94	93	63-142	1

Date of Report: 07/14/14
Date Received: 06/25/14
Project: PSTL-Longview, F&BI 406442

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 406442-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	570	116	110	50-150	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	105	106	63-142	1

Date of Report: 07/14/14
Date Received: 06/25/14
Project: PSTL-Longview, F&BI 406442

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 406442-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Toluene	ug/L (ppb)	50	<1	93	76-122
Ethylbenzene	ug/L (ppb)	50	<1	94	69-135
m,p-Xylene	ug/L (ppb)	100	<2	95	69-135
o-Xylene	ug/L (ppb)	50	<1	98	60-140

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Toluene	ug/L (ppb)	50	94	96	72-122	2
Ethylbenzene	ug/L (ppb)	50	95	97	77-124	2
m,p-Xylene	ug/L (ppb)	100	97	98	83-125	1
o-Xylene	ug/L (ppb)	50	101	103	81-121	2

Date of Report: 07/14/14
Date Received: 06/25/14
Project: PSTL-Longview, F&BI 406442

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR PNA'S BY EPA METHOD 8270D SIM

Laboratory Code: 406442-05 1/2 (Matrix Spike) 1/2

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	ug/L (ppb)	1	<0.1	96	111	23-153	14
2-Methylnaphthalene	ug/L (ppb)	1	<0.1	91	91	48-124	0
1-Methylnaphthalene	ug/L (ppb)	1	<0.1	99	100	10-214	1
Benz(a)anthracene	ug/L (ppb)	1	<0.1	86	89	60-93	3
Chrysene	ug/L (ppb)	1	<0.1	92	93	60-102	1
Benzo(b)fluoranthene	ug/L (ppb)	1	<0.1	89	95 vo	62-91	7
Benzo(k)fluoranthene	ug/L (ppb)	1	<0.1	87	85	51-98	2
Benzo(a)pyrene	ug/L (ppb)	1	<0.1	86	94 vo	60-86	9
Indeno(1,2,3-cd)pyrene	ug/L (ppb)	1	<0.1	83	101 vo	10-98	20
Dibenz(a,h)anthracene	ug/L (ppb)	1	<0.1	78	75	10-97	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	ug/L (ppb)	1	83	83	67-116	0
2-Methylnaphthalene	ug/L (ppb)	1	88	87	63-122	1
1-Methylnaphthalene	ug/L (ppb)	1	88	87	65-122	1
Benz(a)anthracene	ug/L (ppb)	1	83	85	60-118	2
Chrysene	ug/L (ppb)	1	91	94	66-125	3
Benzo(b)fluoranthene	ug/L (ppb)	1	90	94	55-135	4
Benzo(k)fluoranthene	ug/L (ppb)	1	88	92	62-125	4
Benzo(a)pyrene	ug/L (ppb)	1	86	88	58-127	2
Indeno(1,2,3-cd)pyrene	ug/L (ppb)	1	90	94	36-142	4
Dibenz(a,h)anthracene	ug/L (ppb)	1	84	86	37-133	2

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

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info@fremontanalytical.com

Friedman & Bruya
Michael Erdahl
3012 16th Ave. W.
Seattle, WA 98119

RE: 406442
Lab ID: 1406255

July 10, 2014

Attention Michael Erdahl:

Fremont Analytical, Inc. received 5 sample(s) on 6/25/2014 for the analyses presented in the following report.

Extractable Petroleum Hydrocarbons by NWEPH

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Michael Dee
Sr. Chemist / Principal

Date: *07/10/2014*

CLIENT: Friedman & Bruya
Project: 406442
Lab Order: 1406255

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1406255-001	MW-1-GW-4-14'	06/24/2014 12:18 PM	06/25/2014 12:02 PM
1406255-002	MW-2-GW-4-14'	06/24/2014 1:00 PM	06/25/2014 12:02 PM
1406255-003	MW-21-GW-4-14'	06/24/2014 11:25 AM	06/25/2014 12:02 PM
1406255-004	MW-3-GW-4-14'	06/24/2014 1:55 PM	06/25/2014 12:02 PM
1406255-005	MW-4-GW-4-14'	06/24/2014 2:40 PM	06/25/2014 12:02 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **1406255**
Date: **7/10/2014**

CLIENT: Friedman & Bruya
Project: 406442

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Analytical Report

WO#: **1406255**
Date Reported: **7/10/2014**

Client: Friedman & Bruya
Collection Date: 6/24/2014 12:18:00 PM
Project: 406442
Lab ID: 1406255-001
Matrix: Groundwater
Client Sample ID: **MW-1-GW-4-14'**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Extractable Petroleum Hydrocarbons by NWEPH				Batch ID: 7964		Analyst: EC
Aliphatic Hydrocarbon (C10-C12)	15.9	0.0200		µg/L	1	7/2/2014 5:20:00 AM
Aliphatic Hydrocarbon (C12-C16)	27.3	0.0200		µg/L	1	7/2/2014 5:20:00 AM
Aliphatic Hydrocarbon (C16-C21)	23.5	0.0200		µg/L	1	7/2/2014 5:20:00 AM
Aliphatic Hydrocarbon (C21-C34)	47.6	0.0200		µg/L	1	7/2/2014 5:20:00 AM
Aliphatic Hydrocarbon (C8-C10)	71.1	0.0200		µg/L	1	7/2/2014 5:20:00 AM
Aromatic Hydrocarbon (C10-C12)	ND	0.0200		µg/L	1	7/2/2014 2:54:00 PM
Aromatic Hydrocarbon (C12-C16)	109	0.0200		µg/L	1	7/2/2014 2:54:00 PM
Aromatic Hydrocarbon (C16-C21)	8.66	0.0200		µg/L	1	7/2/2014 2:54:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	0.0200		µg/L	1	7/2/2014 2:54:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	0.0200		µg/L	1	7/2/2014 2:54:00 PM
Surr: 1-Chlorooctadecane	34.6	65-140	S	%REC	1	7/2/2014 5:20:00 AM
Surr: o-Terphenyl	94.1	65-140		%REC	1	7/2/2014 2:54:00 PM

NOTES:
Low Recovery for Surrogate 1-Chlorooctadecane.

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1406255**
Date Reported: **7/10/2014**

Client: Friedman & Bruya
Collection Date: 6/24/2014 1:00:00 PM
Project: 406442
Lab ID: 1406255-002
Matrix: Groundwater
Client Sample ID: **MW-2-GW-4-14'**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Extractable Petroleum Hydrocarbons by NWEPH				Batch ID: 7964		Analyst: EC
Aliphatic Hydrocarbon (C10-C12)	18.4	0.0200		µg/L	1	7/2/2014 6:04:00 AM
Aliphatic Hydrocarbon (C12-C16)	36.2	0.0200		µg/L	1	7/2/2014 6:04:00 AM
Aliphatic Hydrocarbon (C16-C21)	28.7	0.0200		µg/L	1	7/2/2014 6:04:00 AM
Aliphatic Hydrocarbon (C21-C34)	34.8	0.0200		µg/L	1	7/2/2014 6:04:00 AM
Aliphatic Hydrocarbon (C8-C10)	74.7	0.0200		µg/L	1	7/2/2014 6:04:00 AM
Aromatic Hydrocarbon (C10-C12)	ND	0.0200		µg/L	1	7/2/2014 3:41:00 PM
Aromatic Hydrocarbon (C12-C16)	146	0.0200		µg/L	1	7/2/2014 3:41:00 PM
Aromatic Hydrocarbon (C16-C21)	35.9	0.0200		µg/L	1	7/2/2014 3:41:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	0.0200		µg/L	1	7/2/2014 3:41:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	0.0200		µg/L	1	7/2/2014 3:41:00 PM
Surr: 1-Chlorooctadecane	68.3	65-140		%REC	1	7/2/2014 6:04:00 AM
Surr: o-Terphenyl	108	65-140		%REC	1	7/2/2014 3:41:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1406255**
Date Reported: **7/10/2014**

Client: Friedman & Bruya
Collection Date: 6/24/2014 11:25:00 AM
Project: 406442
Lab ID: 1406255-003
Matrix: Groundwater
Client Sample ID: **MW-21-GW-4-14'**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Extractable Petroleum Hydrocarbons by NWEPH				Batch ID: 7964		Analyst: EC
Aliphatic Hydrocarbon (C10-C12)	32.2	0.0200		µg/L	1	7/2/2014 6:49:00 AM
Aliphatic Hydrocarbon (C12-C16)	58.9	0.0200		µg/L	1	7/2/2014 6:49:00 AM
Aliphatic Hydrocarbon (C16-C21)	32.7	0.0200		µg/L	1	7/2/2014 6:49:00 AM
Aliphatic Hydrocarbon (C21-C34)	39.3	0.0200		µg/L	1	7/2/2014 6:49:00 AM
Aliphatic Hydrocarbon (C8-C10)	78.5	0.0200		µg/L	1	7/2/2014 6:49:00 AM
Aromatic Hydrocarbon (C10-C12)	51.4	0.0200		µg/L	1	7/2/2014 4:28:00 PM
Aromatic Hydrocarbon (C12-C16)	147	0.0200		µg/L	1	7/2/2014 4:28:00 PM
Aromatic Hydrocarbon (C16-C21)	55.9	0.0200		µg/L	1	7/2/2014 4:28:00 PM
Aromatic Hydrocarbon (C21-C34)	51.8	0.0200		µg/L	1	7/2/2014 4:28:00 PM
Aromatic Hydrocarbon (C8-C10)	70.8	0.0200		µg/L	1	7/2/2014 4:28:00 PM
Surr: 1-Chlorooctadecane	86.5	65-140		%REC	1	7/2/2014 6:49:00 AM
Surr: o-Terphenyl	136	65-140		%REC	1	7/2/2014 4:28:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1406255**
Date Reported: **7/10/2014**

Client: Friedman & Bruya
Collection Date: 6/24/2014 1:55:00 PM
Project: 406442
Lab ID: 1406255-004
Matrix: Groundwater
Client Sample ID: **MW-3-GW-4-14'**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Extractable Petroleum Hydrocarbons by NWEPH				Batch ID: 7964		Analyst: EC
Aliphatic Hydrocarbon (C10-C12)	32.2	0.0200		µg/L	1	7/2/2014 7:33:00 AM
Aliphatic Hydrocarbon (C12-C16)	32.2	0.0200		µg/L	1	7/2/2014 7:33:00 AM
Aliphatic Hydrocarbon (C16-C21)	30.8	0.0200		µg/L	1	7/2/2014 7:33:00 AM
Aliphatic Hydrocarbon (C21-C34)	31.4	0.0200		µg/L	1	7/2/2014 7:33:00 AM
Aliphatic Hydrocarbon (C8-C10)	72.6	0.0200		µg/L	1	7/2/2014 7:33:00 AM
Aromatic Hydrocarbon (C10-C12)	5.15	0.0200		µg/L	1	7/3/2014 8:19:00 PM
Aromatic Hydrocarbon (C12-C16)	129	0.0200		µg/L	1	7/3/2014 8:19:00 PM
Aromatic Hydrocarbon (C16-C21)	22.3	0.0200		µg/L	1	7/3/2014 8:19:00 PM
Aromatic Hydrocarbon (C21-C34)	19.7	0.0200		µg/L	1	7/3/2014 8:19:00 PM
Aromatic Hydrocarbon (C8-C10)	1.72	0.0200		µg/L	1	7/3/2014 8:19:00 PM
Surr: 1-Chlorooctadecane	67.0	65-140		%REC	1	7/2/2014 7:33:00 AM
Surr: o-Terphenyl	98.4	65-140		%REC	1	7/3/2014 8:19:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Analytical Report

WO#: **1406255**
Date Reported: **7/10/2014**

Client: Friedman & Bruya
Collection Date: 6/24/2014 2:40:00 PM
Project: 406442
Lab ID: 1406255-005
Matrix: Groundwater
Client Sample ID: **MW-4-GW-4-14'**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Extractable Petroleum Hydrocarbons by NWEPH				Batch ID: 7964		Analyst: EC
Aliphatic Hydrocarbon (C10-C12)	29.5	0.0200		µg/L	1	7/2/2014 8:17:00 AM
Aliphatic Hydrocarbon (C12-C16)	46.5	0.0200		µg/L	1	7/2/2014 8:17:00 AM
Aliphatic Hydrocarbon (C16-C21)	33.9	0.0200		µg/L	1	7/2/2014 8:17:00 AM
Aliphatic Hydrocarbon (C21-C34)	36.7	0.0200		µg/L	1	7/2/2014 8:17:00 AM
Aliphatic Hydrocarbon (C8-C10)	66.6	0.0200		µg/L	1	7/2/2014 8:17:00 AM
Aromatic Hydrocarbon (C10-C12)	ND	0.0200		µg/L	1	7/3/2014 9:03:00 PM
Aromatic Hydrocarbon (C12-C16)	144	0.0200		µg/L	1	7/3/2014 9:03:00 PM
Aromatic Hydrocarbon (C16-C21)	19.4	0.0200		µg/L	1	7/3/2014 9:03:00 PM
Aromatic Hydrocarbon (C21-C34)	ND	0.0200		µg/L	1	7/3/2014 9:03:00 PM
Aromatic Hydrocarbon (C8-C10)	ND	0.0200		µg/L	1	7/3/2014 9:03:00 PM
Surr: 1-Chlorooctadecane	81.0	65-140		%REC	1	7/2/2014 8:17:00 AM
Surr: o-Terphenyl	97.9	65-140		%REC	1	7/3/2014 9:03:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Date: *7/10/2014*

Work Order: 1406255
CLIENT: Friedman & Bruya
Project: 406442

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: **LCS-7964 ALI** SampType: **LCS** Units: **µg/L** Prep Date: **7/2/2014** RunNo: **15467**
Client ID: **LCSW** Batch ID: **7964** Analysis Date: **7/2/2014** SeqNo: **313169**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C10-C12)	78.4	0.0200	200.0	0	78.4	70	130				
Aliphatic Hydrocarbon (C12-C16)	185	0.0200	200.0	0	92.3	70	130				
Aliphatic Hydrocarbon (C16-C21)	224	0.0200	200.0	0	112	70	130				
Aliphatic Hydrocarbon (C21-C34)	179	0.0200	200.0	0	89.7	70	130				
Aliphatic Hydrocarbon (C8-C10)	399	0.0200	400.0	0	99.8	70	130				
Surr: 1-Chlorooctadecane	51.3		50.00		103	65	140				

Sample ID: **LCSD-7964 ALI** SampType: **LCSD** Units: **µg/L** Prep Date: **7/2/2014** RunNo: **15467**
Client ID: **LCSW02** Batch ID: **7964** Analysis Date: **7/2/2014** SeqNo: **313170**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C10-C12)	194	0.0200	200.0	0	96.9	70	130	156.7	21.1	20	R
Aliphatic Hydrocarbon (C12-C16)	184	0.0200	200.0	0	92.0	70	130	184.6	0.334	20	
Aliphatic Hydrocarbon (C16-C21)	232	0.0200	200.0	0	116	70	130	224.2	3.23	20	
Aliphatic Hydrocarbon (C21-C34)	185	0.0200	200.0	0	92.5	70	130	179.5	3.03	20	
Aliphatic Hydrocarbon (C8-C10)	433	0.0200	400.0	0	108	70	130	399.3	8.10	20	
Surr: 1-Chlorooctadecane	56.7		50.00		113	65	140		0		

NOTES:
R - High RPD noted. Recoveries were within range.

Sample ID: **MB-7964 ALI** SampType: **MBLK** Units: **µg/L** Prep Date: **7/2/2014** RunNo: **15467**
Client ID: **MBLKW** Batch ID: **7964** Analysis Date: **7/2/2014** SeqNo: **313171**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C10-C12)	ND	0.0200		0	0						
Aliphatic Hydrocarbon (C12-C16)	ND	0.0200		0	0						
Aliphatic Hydrocarbon (C16-C21)	ND	0.0200		0	0						
Aliphatic Hydrocarbon (C21-C34)	ND	0.0200		0	0						

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1406255
CLIENT: Friedman & Bruya
Project: 406442

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: **MB-7964 ALI**	SampType: **MBLK**			Units: **µg/L**		Prep Date: **7/2/2014**		RunNo: **15467**			
Client ID: **MBLKW**	Batch ID: **7964**					Analysis Date: **7/2/2014**		SeqNo: **313171**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	ND	0.0200		0	0						
Surr: 1-Chlorooctadecane	30.0		40.00		75.0	65	140				

Sample ID: **1406255-001ADUP**	SampType: **DUP**			Units: **µg/L**		Prep Date: **7/3/2014**		RunNo: **15467**			
Client ID: **MW-1-GW-4-14'**	Batch ID: **7964**					Analysis Date: **7/3/2014**		SeqNo: **313338**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C10-C12)	15.4	0.0200		0	0			0	200	30	
Aromatic Hydrocarbon (C12-C16)	156	0.0200		0	0			0	200	30	
Aromatic Hydrocarbon (C16-C21)	29.8	0.0200		0	0			0	200	30	
Aromatic Hydrocarbon (C21-C34)	ND	0.0200		0	0			0		30	
Aromatic Hydrocarbon (C8-C10)	ND	0.0200		0	0			0		30	
Surr: o-Terphenyl	45.1		50.00		90.2	65	140		0		

Sample ID: **LCS-7964 ARO**	SampType: **LCS**			Units: **µg/L**		Prep Date: **7/2/2014**		RunNo: **15467**			
Client ID: **LCSW**	Batch ID: **7964**					Analysis Date: **7/2/2014**		SeqNo: **313352**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C10-C12)	36.9	0.0200	100.0	0	73.8	70	130				
Aromatic Hydrocarbon (C12-C16)	44.1	0.0200	100.0	0	88.2	70	130				
Aromatic Hydrocarbon (C16-C21)	35.7	0.0200	100.0	0	71.3	70	130				
Aromatic Hydrocarbon (C21-C34)	46.8	0.0200	100.0	0	93.6	70	130				
Aromatic Hydrocarbon (C8-C10)	37.5	0.0200	100.0	0	75.0	70	130				
Surr: o-Terphenyl	57.5		50.00		115	65	140				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Work Order: 1406255
CLIENT: Friedman & Bruya
Project: 406442

QC SUMMARY REPORT

Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: **LCSD-7964 ARO** SampType: **LCSD** Units: **µg/L** Prep Date: **7/2/2014** RunNo: **15467**
Client ID: **LCSW02** Batch ID: **7964** Analysis Date: **7/2/2014** SeqNo: **313353**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C10-C12)	40.1	0.0200	100.0	0	80.2	70	130	73.79	8.28	20	
Aromatic Hydrocarbon (C12-C16)	39.5	0.0200	100.0	0	79.1	70	130	88.20	10.9	20	
Aromatic Hydrocarbon (C16-C21)	88.6	0.0200	100.0	0	88.6	70	130	71.32	21.6	20	R
Aromatic Hydrocarbon (C21-C34)	41.9	0.0200	100.0	0	83.8	70	130	93.56	11.0	20	
Aromatic Hydrocarbon (C8-C10)	34.6	0.0200	100.0	0	69.3	70	130	75.04	8.00	20	S
Surr: o-Terphenyl	38.5		50.00		76.9	65	140		0		

NOTES:
Low Recovery for EPH Carbon Range C8-C10 Aromatic Hydrocarbons. The LCS was within range.
R - High RPD noted. Recoveries were within range.

Sample ID: **MB-7964 ARO** SampType: **MBLK** Units: **µg/L** Prep Date: **7/2/2014** RunNo: **15467**
Client ID: **MBLKW** Batch ID: **7964** Analysis Date: **7/2/2014** SeqNo: **313354**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C10-C12)	ND	0.0200		0	0						
Aromatic Hydrocarbon (C12-C16)	ND	0.0200		0	0						
Aromatic Hydrocarbon (C16-C21)	ND	0.0200		0	0						
Aromatic Hydrocarbon (C21-C34)	ND	0.0200		0	0						
Aromatic Hydrocarbon (C8-C10)	ND	0.0200		0	0						
Surr: o-Terphenyl	46.7		50.00		93.3	65	140				

Qualifiers:

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Sample Log-In Check List

Client Name:	**FB**	Work Order Number:	**1406255**
Logged by:	**Erica Silva**	Date Received:	**6/25/2014 12:02:00 PM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	Client		

Log In

3.	Coolers are present?	Yes ☑	No ☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐	
5.	Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Required ☑
6.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
7.	Were all coolers received at a temperature of >0°C to 10.0°C	Yes ☑	No ☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
9.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
10.	Are samples properly preserved?	Yes ☑	No ☐	
11.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
12.	Is the headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
13.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
14.	Does paperwork match bottle labels?	Yes ☑	No ☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
16.	Is it clear what analyses were requested?	Yes ☑	No ☐	
17.	Were all holding times able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified:		Date:	
By Whom:		Via:	☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:			
Client Instructions:			

19. Additional remarks:

Item Information

Item #	Temp °C	Condition
Cooler	11.2	Good
Sample	7.3	Good

1706233

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

Page # 1 of 1

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER Fremont

PROJECT NAME/NO. 406442

PO # C-993

REMARKS

Please Email Results

TURNAROUND TIME

☐ Standard (2 Weeks)

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Return samples

☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	Dioxins and Furans by 8290	EPH	VPH	Nitrate	Sulfate	Alkalinity					Notes
MW-1-GW-4-14'		6/24/14	1218	GW	1		X									
MW-2-GW-4-14'			1300		1		X									
MW-21-GW-4-14'			1125		1		X									
MW-3-GW-4-14'			1355		1		X									
MW-4-GW-4-14'			1440		3		X									MS/MD

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Michael Erdahl	Friedman & Bruya	6/25/14	10:48
Received by:		Kerra Ziegler	FAI	6/25/14	12:02
Relinquished by:					
Received by:					

406442

SAMPLE CHAIN OF CUSTODY

ME 06/25/14 V4/C04

Page # 1 of 1

Send Report To Brett Beaulieu

Company Floyd/Snider

Address 601 Union St. Ste 600

City, State, ZIP Seattle, WA 98101

Phone # 206-292-2078 Fax #

SAMPLERS (signature)

PROJECT NAME/NO. PSTL - Longview

PO#

REMARKS
Dx with & w/o sg.
per BB 07/01 @

TURNAROUND TIME
☑ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by

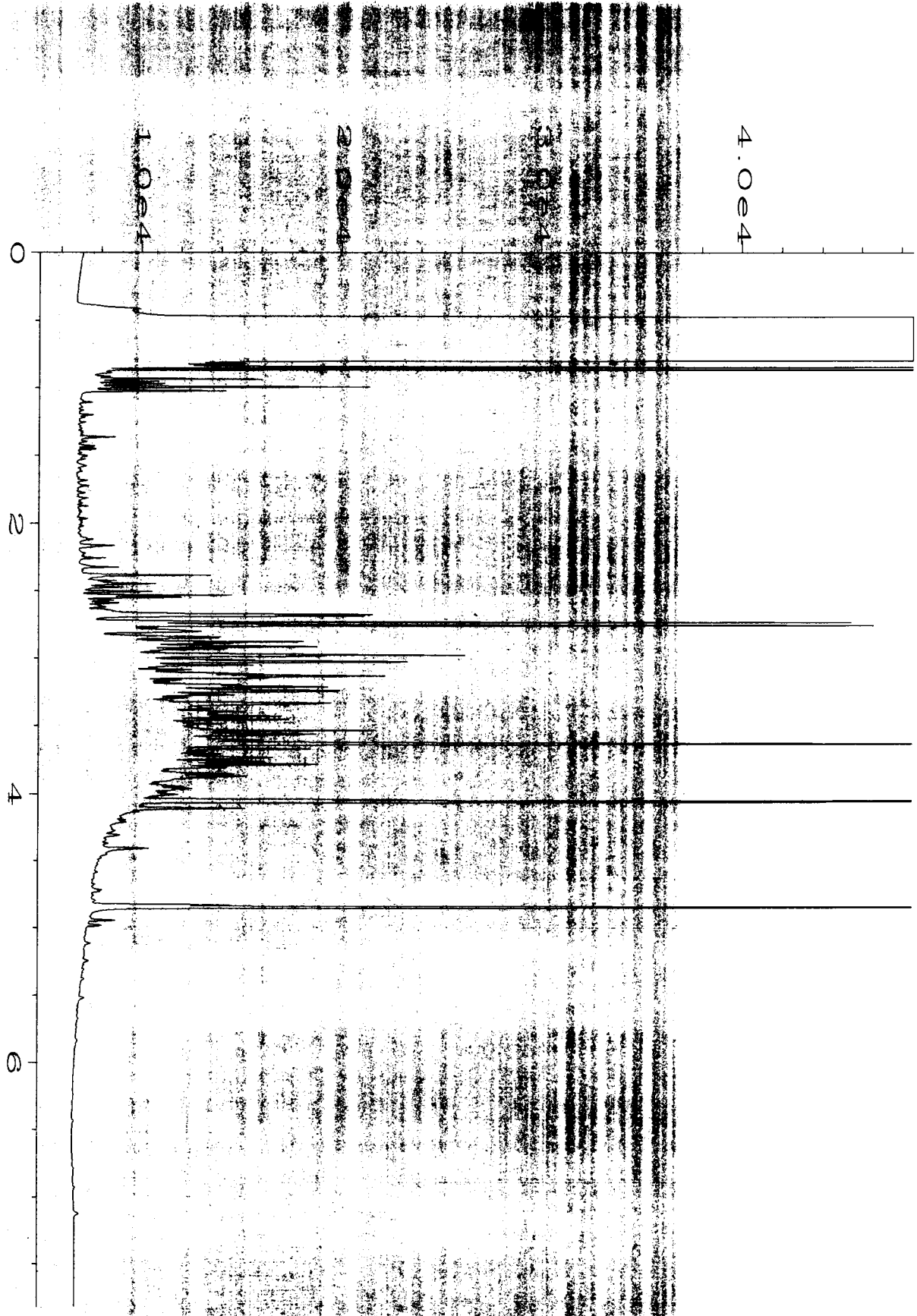
SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	~~Naphthalene~~ SVOCs by 8270	HFS	EPH TPH Policy method	TEX by 8260	CPAHs				Notes
MW-1-GW-4-14'	01 A-F	4/24/14	1218	GW	6	✓				~~✓~~ ✓ EM		✓		⊗				(K) - per BB 07/01 @ ~~Hold~~ BTEX
MW-2-GW-4-14'	02		1300	GW	6	✓				✓		✓	⊗	⊗				" "
MW-21-GW-4-14'	03		1125	GW	6	✓				✓		✓		⊗				" "
MW-3-GW-4-14'	04		1355	GW	6	✓				✓		✓	⊗	⊗				" "
MW-4-GW-4-14'	05 R		1440	GW	18	✓				✓		✓	(K)	⊗				MS/MSD ~~Hold~~ BTEX @ 07/01
														Samples received at		2	°C	

ANALYSES REQUESTED

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Erin Murray	Floyd/Snider	6/25/14	0845
Received by:	Eric Yount	F&S	6/25/14	0845
Relinquished by:				
Received by:				



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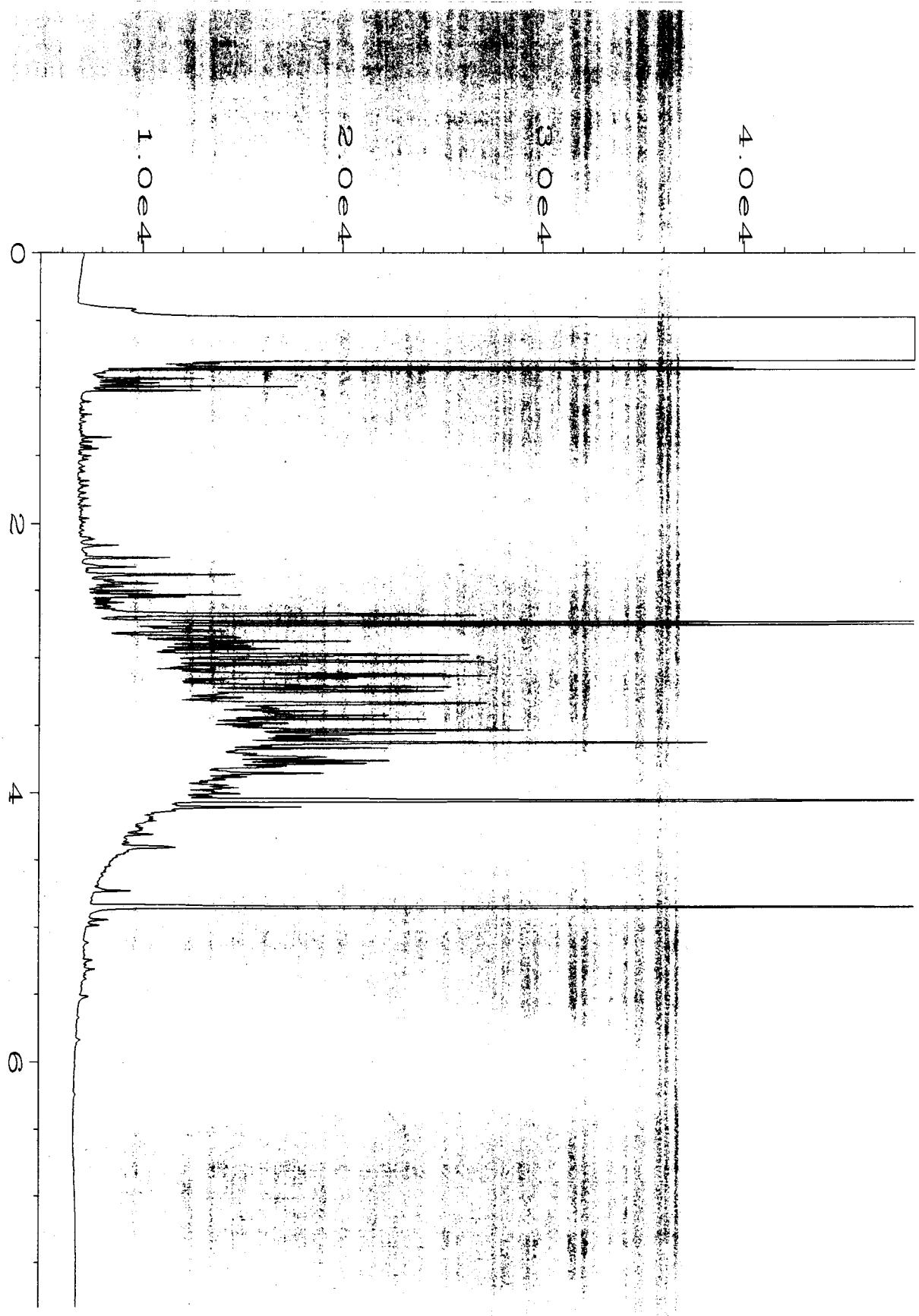
Operator : mwdl
Instrument : GC1
Sample Name : 406442-01
Run Time Bar Code:
Acquired on : 30 Jun 14 07:36 PM
Report Created on: 01 Jul 14 08:50 AM

Page Number : 1
Vial Number : 49
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : END.MTH



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Instrument	: GC1	Vial Number	: 50
Sample Name	: 406442-02	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
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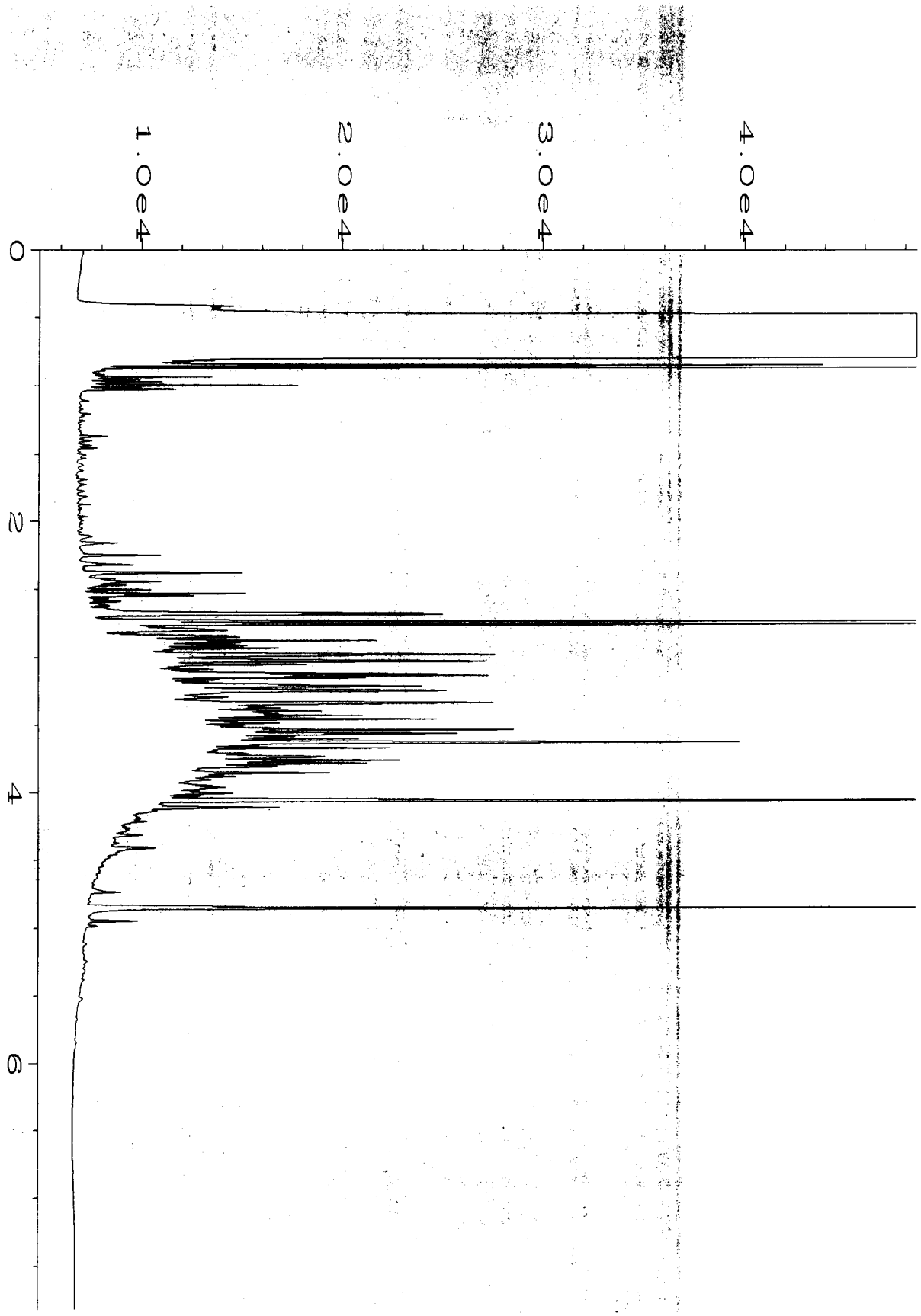
Report Created on:	01 Jul 14 08:50 AM	Analysis Method	: END.MTH



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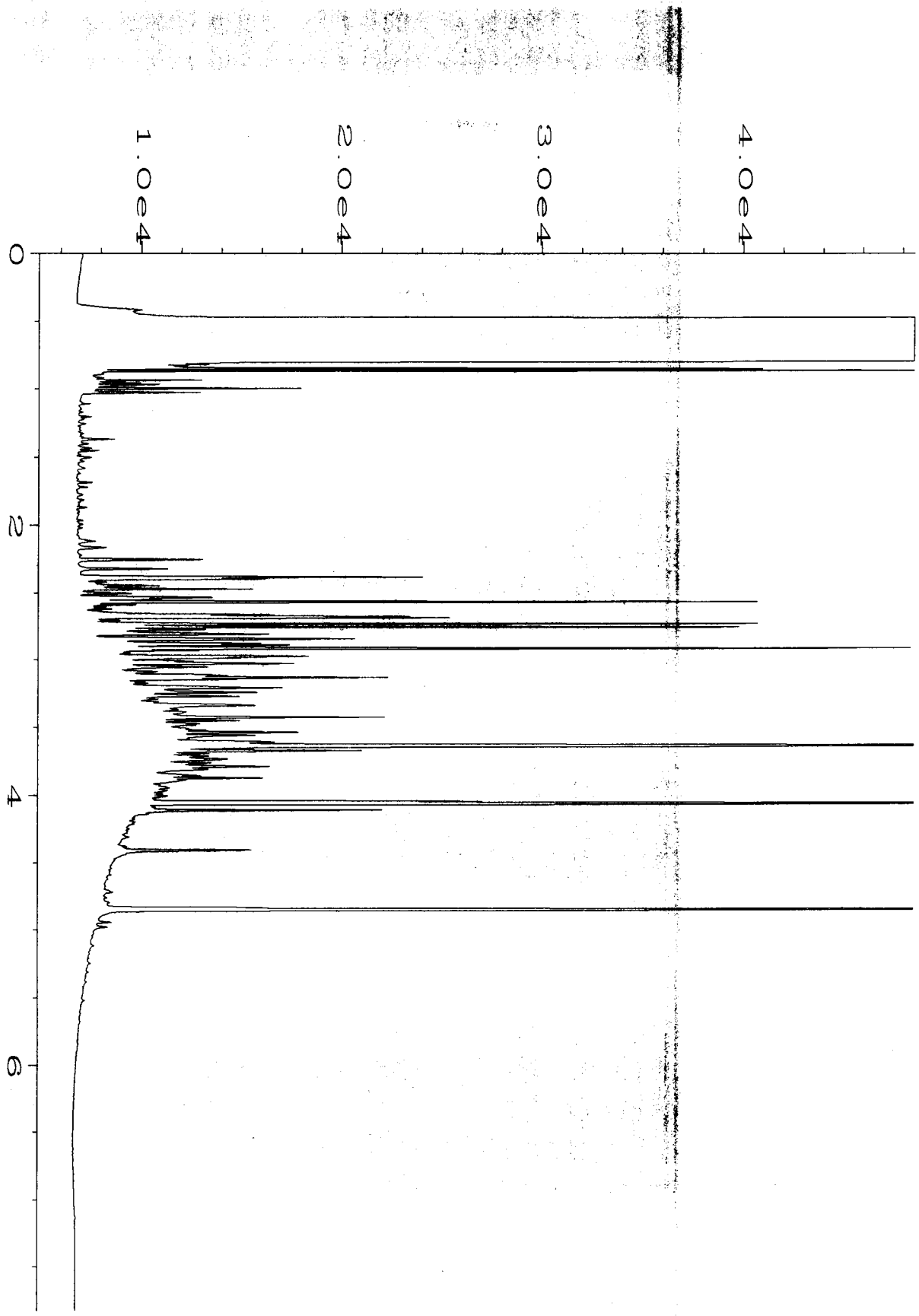
Operator	: mwdl	Page Number	: 1
Instrument	: GC1	Vial Number	: 51
Sample Name	: 406442-03	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 30 Jun 14 08:02 PM	Instrument Method	: DX.MTH
Report Created on	: 01 Jul 14 08:50 AM	Analysis Method	: END.MTH



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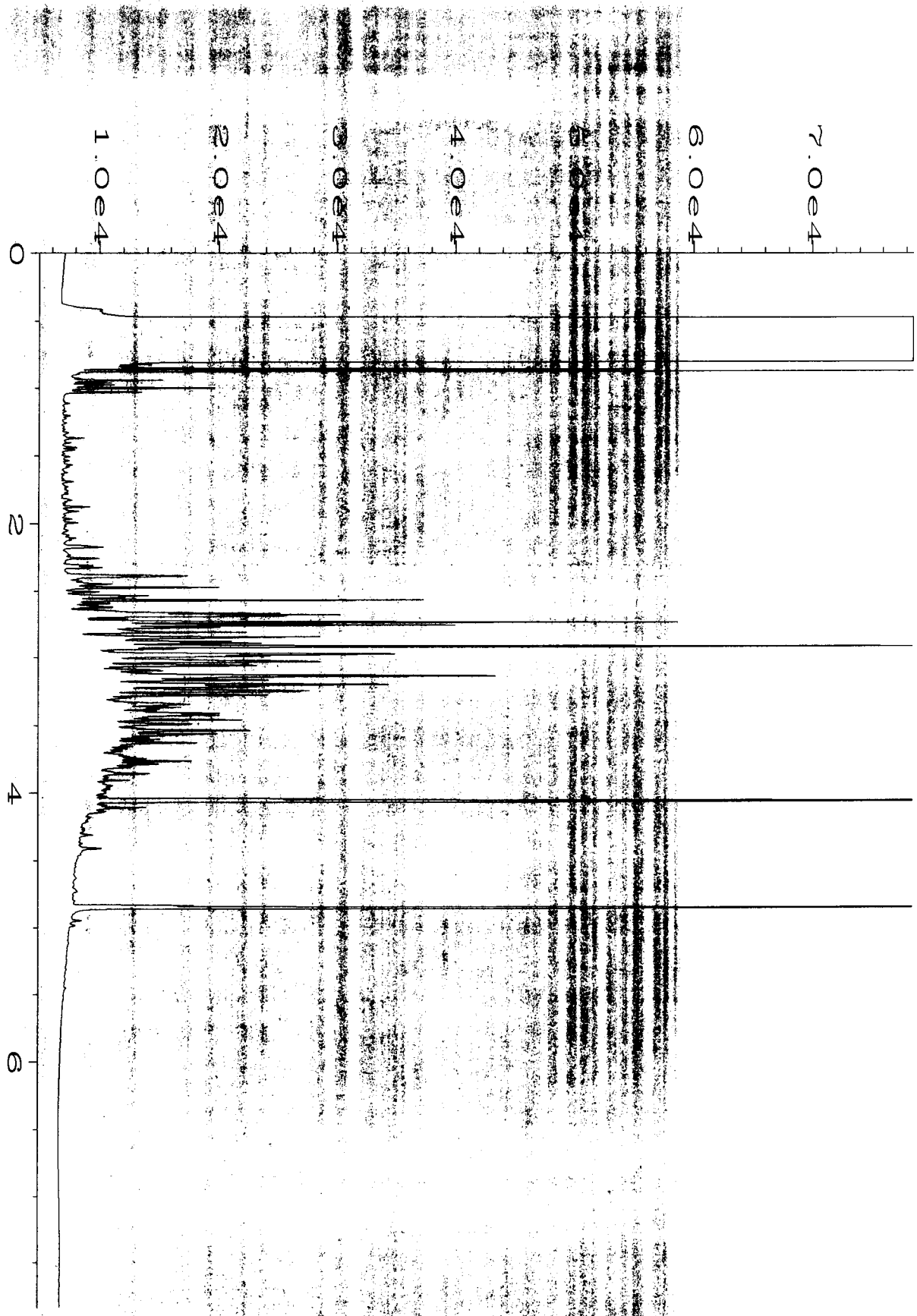
Operator	: mwdl	Page Number	: 1
Instrument	: GC1	Vial Number	: 52
Sample Name	: 406442-04	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 30 Jun 14 08:15 PM	Instrument Method	: DX.MTH
Report Created on	: 01 Jul 14 08:50 AM	Analysis Method	: END.MTH



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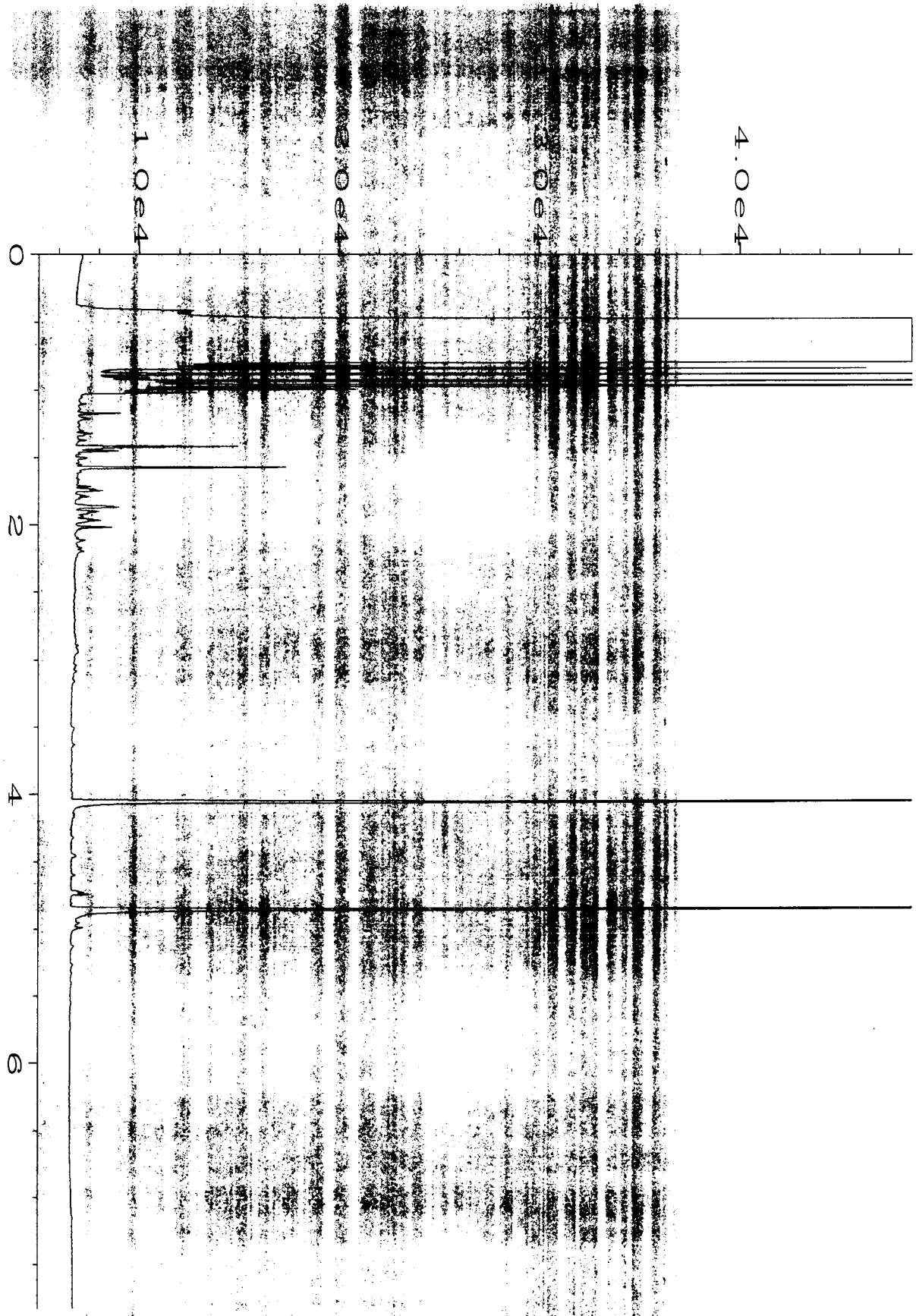
Operator : mwdl
Instrument : GC1
Sample Name : 406442-05
Run Time Bar Code:
Acquired on : 30 Jun 14 08:28 PM
Report Created on: 01 Jul 14 08:50 AM

Page Number : 1
Vial Number : 53
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : END.MTH



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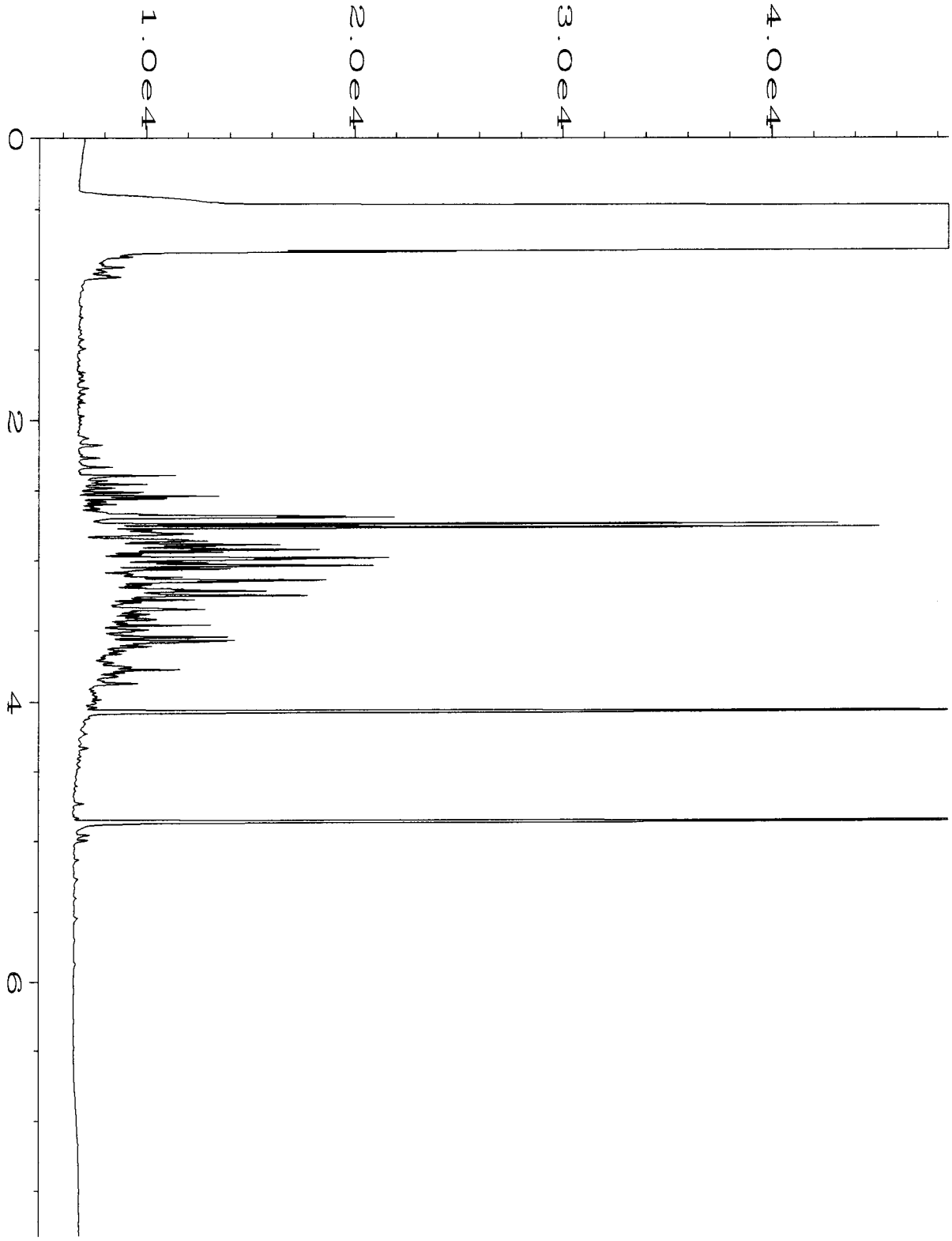
Instrument : [illegible] Vial Number : 21
Sample Name : [illegible] Injection Number : 1
Run Time Bar Code: [illegible] Sequence Line : 4
Acquired on : [illegible] Quantitation Method: DX.MTH
Report Created on: 01 Jul [illegible] Analysis Method : END.MTH



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Operator	: mwdl	Page Number	: 1
Instrument	: GC1	Vial Number	: 38
Sample Name	: 406442-01 sg	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 6
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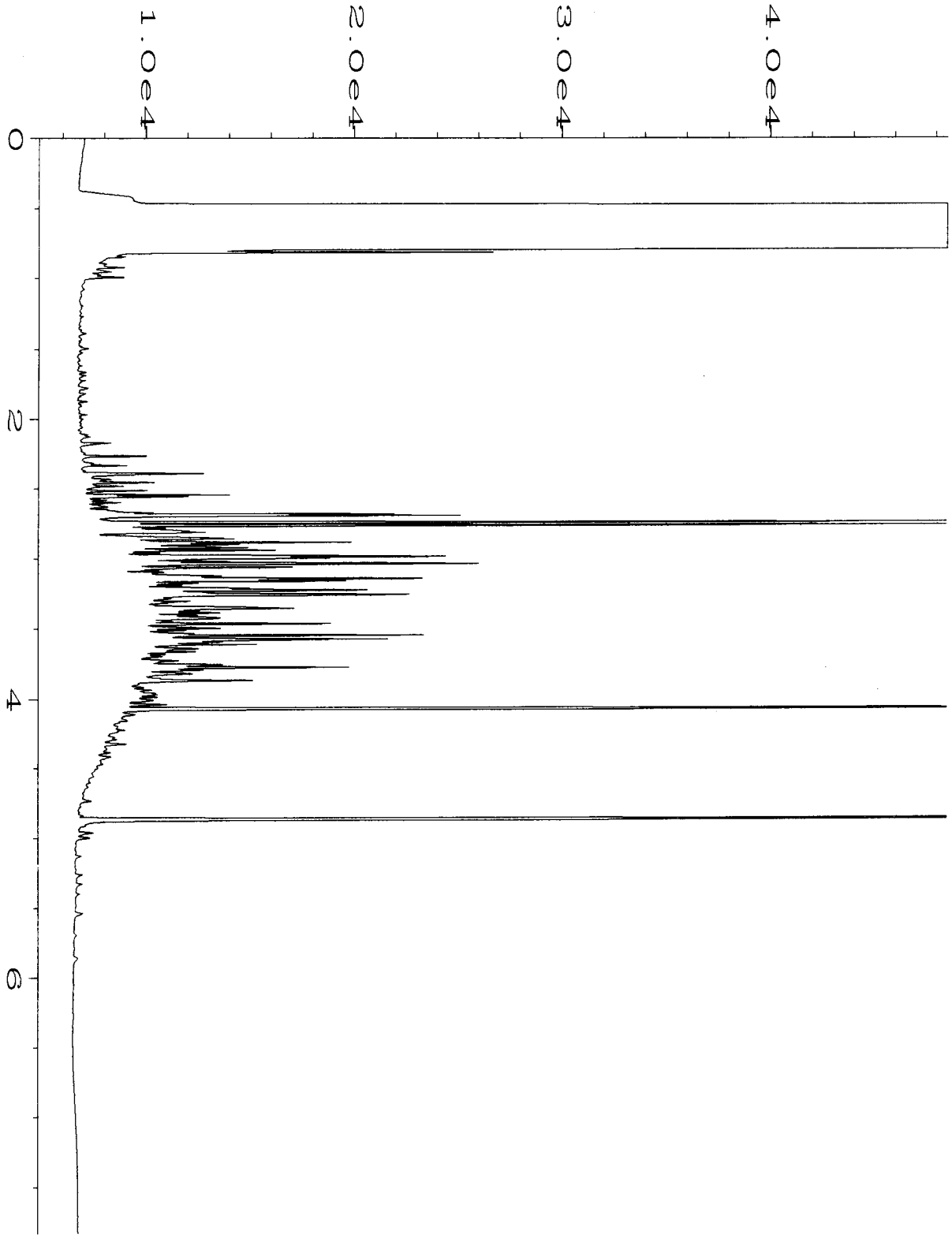
Report Created on	: 08 Jul 14 09:48 AM	Analysis Method	: END.MTH



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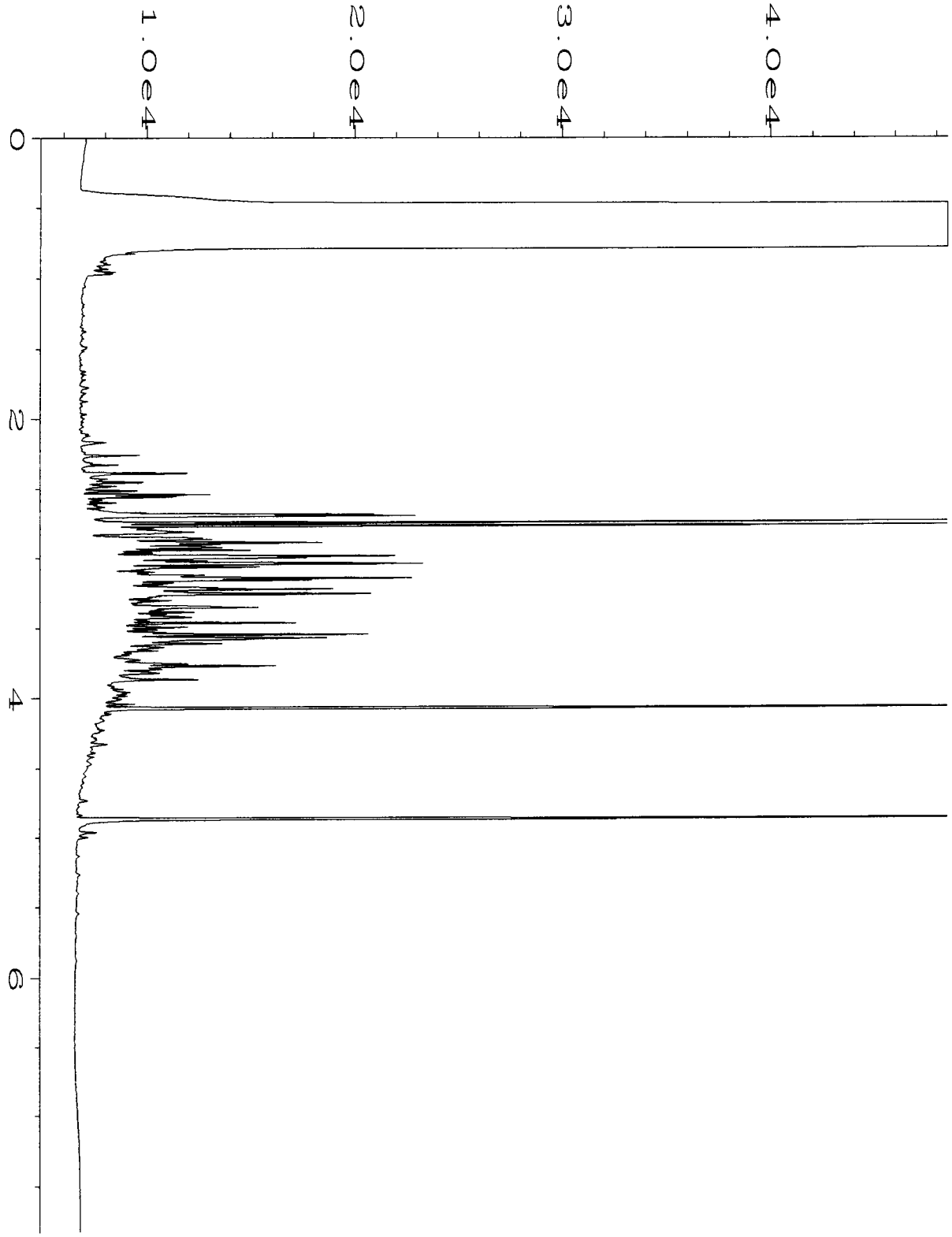
Operator : mwdl
Instrument : GC1
Sample Name : 406442-02 sg
Run Time Bar Code:
Acquired on : 07 Jul 14 07:24 PM
Report Created on: 08 Jul 14 09:48 AM

Page Number : 1
Vial Number : 39
Injection Number : 1
Sequence Line : 6
Instrument Method: DX.MTH
Analysis Method : END.MTH



Data File Name	: C:\HPCHEM\1\DATA\07-07-14\040F0601.D		
Operator	: mwdl	Page Number	: 1
Instrument	: GC1	Vial Number	: 40
Sample Name	: 406442-03 sg	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 6
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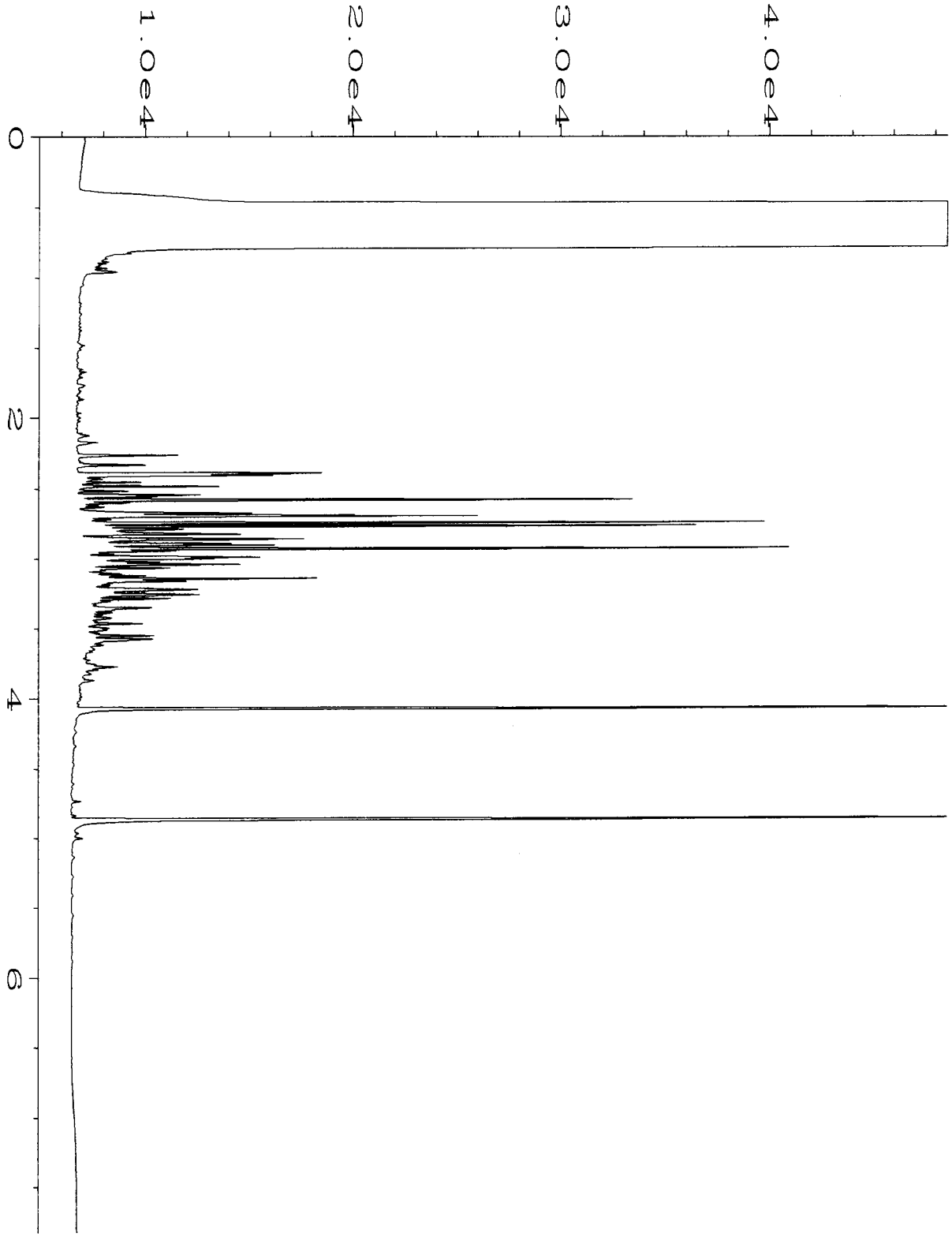
Report Created on	: 08 Jul 14 09:49 AM	Analysis Method	: END.MTH



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Operator	: mwdl	Page Number	: 1
Instrument	: GC1	Vial Number	: 41
Sample Name	: 406442-04 sg	Injection Number	: 1
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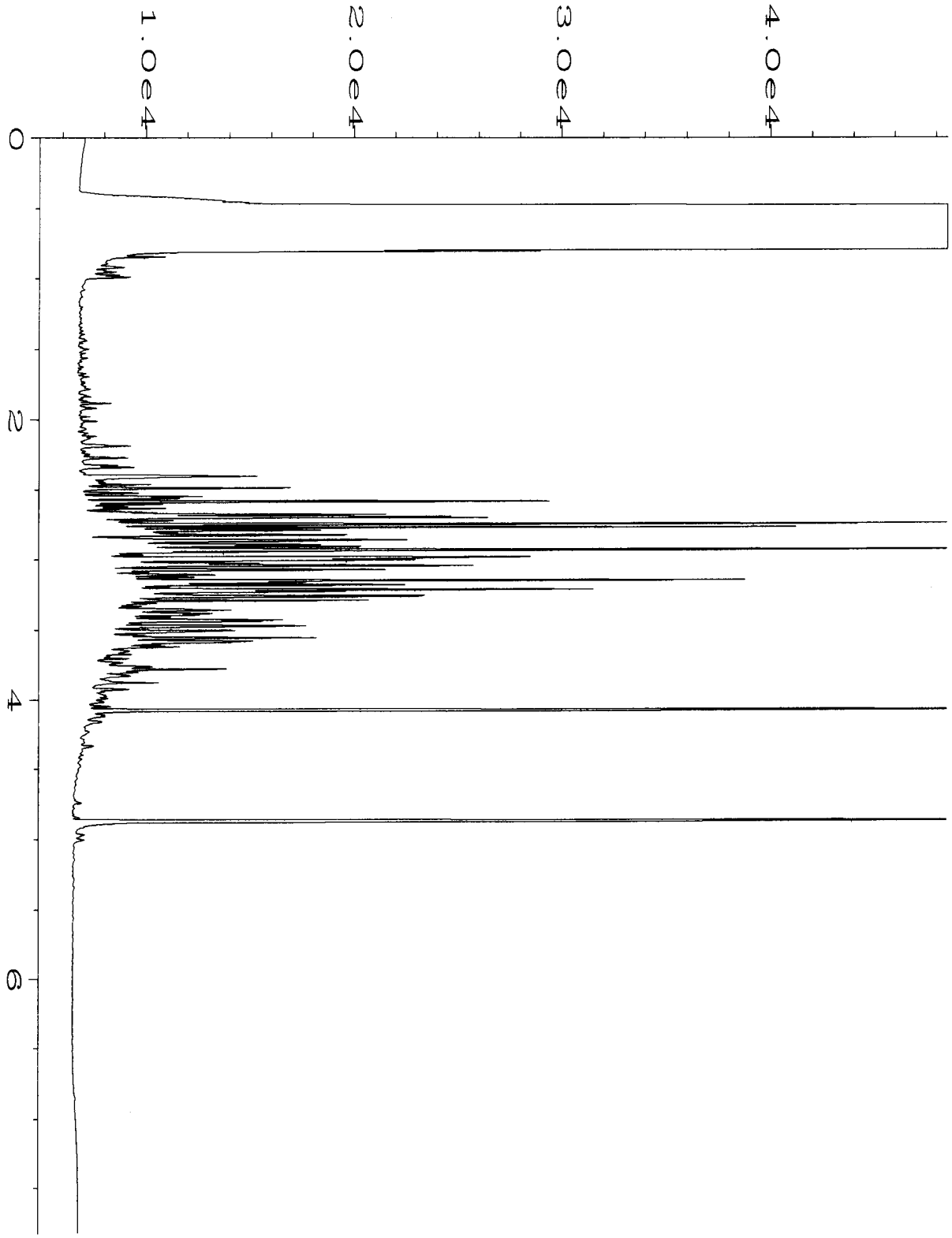
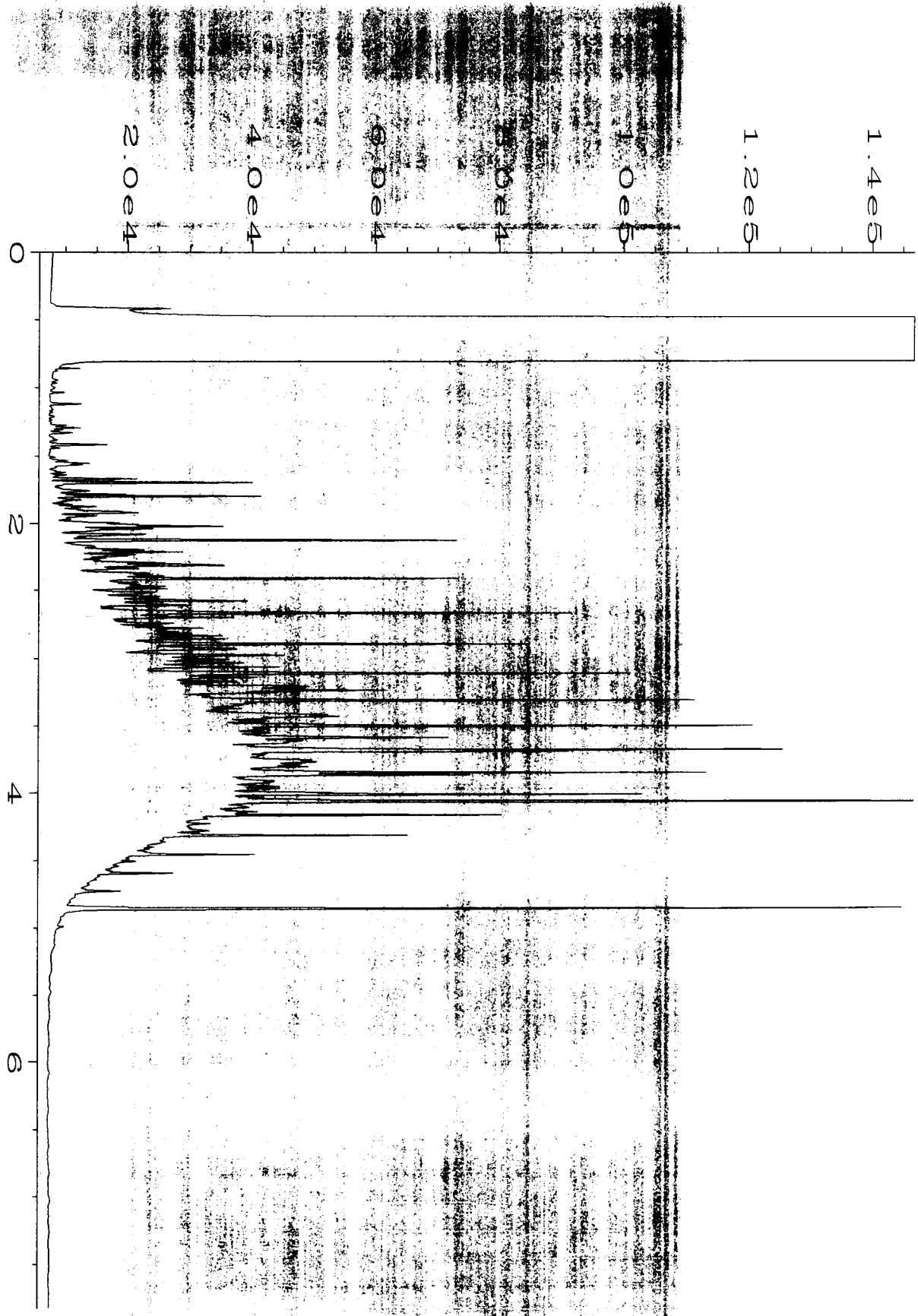
Report Created on	: 08 Jul 14 09:49 AM	Analysis Method	: END.MTH



Data File Name	: C:\HPCHEM\1\DATA\07-08-14\006F0301.D		
Operator	: mwdl	Page Number	: 1
Instrument	: GC1	Vial Number	: 6
Sample Name	: 406442-05 sg	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 08 Jul 14 09:02 AM	Instrument Method	: DX.MTH
Report Created on	: 08 Jul 14 09:49 AM	Analysis Method	: END.MTH



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Operator : mwdl
Instrument : GC1
Sample Name : 500 Dx 42-27B
Run Time Bar Code:
Acquired on : 30 Jun 14 08:40 AM
Report Created on: 01 Jul 14 08:51 AM

Page Number : 1
Vial Number : 3
Injection Number : 1
Sequence Line : 2
Instrument Method: DX.MTH
Analysis Method : END.MTH