MEMORANDUM

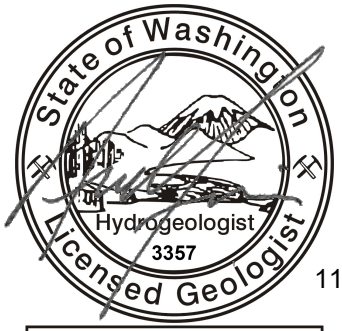
Project No. 160315

November 23, 2020

To: Washington State Department of Ecology, Underground Storage Tank Program

cc: Marisa Floyd, Reserve Industries

From:



11/23/2020

Andrew J. Yonkofski

Andrew Yonkofski, LHG[1]
Project Hydrogeologist
ayonkofski@aspectconsulting.com

11/23/2020

CARLA E. BROCK

Carla Brock, LHG
Associate Geologist
cbrock@aspectconsulting.com

Re: **Underground Storage Tank Site Assessment**
Reserve Silica Plant Site
28131 Ravensdale-Black Diamond Road
Ravensdale, Washington 98051

Aspect Consulting, LLC (Aspect) conducted the Underground Storage Tank (UST) Site Assessment at the Reserve Silica Plant Site, located at 28131 Ravensdale-Black Diamond Road in Ravensdale, Washington (herein referred to as the Plant Site), during permanent closure and removal of UST 620442[2]. Aspect oversaw Clearcreek Contractors, Inc. who removed one approximately 10,000-gallon capacity diesel-fuel UST from the Plant Site on October 20, 2020. The UST Site Assessment was completed by an International Code Council-certified UST Site Assessor (Andrew Yonkofski) during the removal of the UST in accordance with the Guidance for Site Checks and Site Assessments for Underground Storage Tanks[3] (Guidance). The UST Site Check/Site Assessment Checklist that Aspect completed for this tank removal is included as Attachment 1. This memo presents additional information pertaining to numbered items 1 through 12 in Section VI of the Checklist.

[1] UST Site Check/Assessor Certification #8773124
[2] Washington State Department of Ecology (Ecology) UST identification number.
[3] Washington State Department of Ecology, 2003, Guidance for Site Checks and Site Assessments for Underground Storage Tanks, Publication #90-52, February 1991 (Revised April 2003).

Responses to UST Site Assessment Checklist Items Numbered 1-12:

1. **UST Location:** A map depicting the Reserve Silica Plant Site and the location of the UST is attached (Attachment 2).

2. **Site Inspection Results:** Inspection of the UST at the time of removal indicates that the dispenser resided directly over the UST, and the vent pipe rose directly from the UST. Therefore, no conveyance piping runs associated with the UST were assessed. Soil samples were collected from each of the four sidewalls and the from the bottom of the UST excavation in accordance with the site assessment requirements in the UST regulations, Washington Administrative Code (WAC) 173-360A-0730.

   Decommissioning records, including the King County fire permit for tank removal, the King County fire inspection report card, the marine chemists' certificate confirming the tank was inert, and the UST disposal certificate are included as Attachment 3.

3. **UST System Data:** The UST was an approximately 10,000-gallon capacity steel tank, measuring 28 feet long by 8 feet in diameter. The tank was positioned in a northeast-southwest orientation. The fill port and a port for a dispenser pump were located at the southwest end of the UST. Two vent ports were located at the northeast end of the UST. The UST location and relevant features are shown on Attachment 4. The UST was originally installed in the 1980s and was used for the storage and distribution of diesel fuel related to Plant Site operations. Plant Site operations consisted of the sorting, screening and drying of silica sand that was mined from the south-adjacent property and transported to the Plant Site for processing. The UST was emptied and taken out of service when these operations ceased in approximately the mid-2000s. The UST was permanently decommissioned through removal on October 20, 2020. The Permanent Closure Notice is included in Attachment 5.

4. **Soil Characteristics:** The observed soils in the UST excavation ranged from well-graded sands (SW) to low plasticity silts with some sand (ML) with coal tailings. The coal tailings were primarily present along the southeast sidewall of the UST excavation from approximately 1 to 6 feet below ground surface (bgs). The distinction between fill material placed around the UST and native soils was not readily apparent, but previous investigations on the Plant Site have identified native soil near the UST location at approximately 6.5 feet bgs. During the UST excavation, the excavation reached to 10 feet bgs with 6- to 7- foot nearly vertical sidewalls on each side. Photographs of the excavation, including soil sidewalls, are included in Attachment 6.

5. **Groundwater Observations:** During excavation, groundwater was observed seeping from the excavation sidewalls at approximately 6 feet bgs (Attachment 6).

6. **Land Use:** The Plant Site covers approximately 8.5 acres of land within an approximately 52.5-acre tax parcel that is zoned by King County as Mineral-Resource Related. The remaining portion of the tax parcel is vegetated and vacant land. The Plant Site is bordered to the south by Black Diamond-Ravensdale Road and to the north by Ravensdale Lake. Ravensdale Lake drains to Ravensdale Creek, which flows west-southwest to Lake Sawyer. Surrounding land use is primarily King County recreational open space to the north and west, undeveloped forest land and historical mining areas (zoned Mineral-Resource Related) to the south, and historical mining areas to the east.

7. **Laboratory Methods:** A total of five confirmation soil samples were collected from the final limits of the excavation following the removal of the UST, including four from the sidewalls and one from beneath the UST (see Attachment 7). Additionally, four soil samples were collected from two separate stockpiles of soil removed during the UST excavation (see Attachment 7).

   The first stockpile (Stockpile #1, Attachment 4) was generated on September 8, 2020 during the initial uncovering of the UST and consisted of soil excavated from between the ground surface and a depth of approximately 3 feet bgs. The second stockpile (Stockpile #2; Attachment 4) was generated on the day of the UST removal and consisted of soil excavated from around all four sides of the UST to facilitate its removal from the ground. During each of these soil removal activities, soil was field screened using a combination of water sheen testing, physical observations (odors and staining), and headspace testing of volatile organic vapors using a photoionization detector (PID). The first stockpile did not contain soil that exhibited any field screening indications of petroleum hydrocarbons and three samples were collected to confirm the soil is clean and suitable for reuse on the property (Attachment 7). The second stockpile contained soil that exhibited petroleum-like odors, slight- to moderate-sheen and elevated concentrations of volatile organic vapors measured by the PID and one sample was collected for waste profiling and disposal purposes.

   Excavation soil samples were collected from the base and sidewalls using the excavator bucket, and stockpile samples were collected from a depth of about a foot into the stockpile using a clean stainless-steel trowel. The samples were collected from relatively undisturbed soil in the excavator bucket and transferred into 40-mililiter VOA vials using disposable syringes in accordance with U.S. Environmental Protection Agency (EPA) Sampling Method 5035A. An additional 4-oz sample jar was collected from the same location from the excavation sidewalls and base by using the excavator bucket as the VOA vials. Samples were immediately placed on ice and delivered to Friedman and Bruya, Inc., a state-certified laboratory in Seattle, Washington, under chain of custody.

   Soil samples were submitted for laboratory analysis of benzene, toluene, ethylbenzene, total xylenes by EPA method 8260D, gasoline-range total petroleum hydrocarbons by Ecology method NWTPH-Gx, and diesel- and oil-range total petroleum hydrocarbons by Ecology method NWPTH-Dx. Additionally, a stockpile sample from stockpile #2 was submitted for analysis of carcinogenic polycyclic aromatic hydrocarbons (cPAHs) by EPA method 8270D for waste profiling and disposal purposes.

8. **Graphical Depiction:** A figure showing the location of the UST, soil stockpiles, soil samples, utilities, and other relevant features is included as Attachment 4.

9. **Sampling Procedures:** The field sampling procedures conducted for the UST Site Assessment are consistent with the sampling requirements specified in the Guidance.

10. **Laboratory Results:** A tabular summary of analytical results for the soil samples and stockpile soil samples compared to the Model Toxics Control Act (MTCA) Method A cleanup levels is presented in Attachment 7, and the laboratory report is included in Attachment 8.

11. **Data Quality:** No known factors compromised data quality or validity of the results.
12. **Site Assessment Results:** Diesel-range petroleum hydrocarbons were detected at concentrations above the MTCA Method A cleanup levels in two of the four sidewall samples, collected from the southwest and northeast walls of the excavation (UST-SW-SW and UST-SW-NE; Attachment 4). Diesel-range hydrocarbons were not detected in the soil sample obtained from the base of the excavation (at a depth of 10 feet bgs) (Attachment 7).

    The laboratory results for samples collected from Stockpile #1 did not detect petroleum hydrocarbons above laboratory detection limits and the soil will be reused on the Plant Site (Attachment 7). The soil sample collected from Stockpile #2 contained diesel-range TPH above the MTCA Method A cleanup level (Attachment 7) and the soil will be transported to the Republic Services Roosevelt Regional Landfill in Roosevelt, Washington for disposal.

    Further investigation and assessment of soil and groundwater will be used to define the extents of impacts from the release, in accordance with the WAC Table 830-1 requirements, and develop a cleanup approach to meet the requirements of MTCA.

Limitations

Work for this project was performed for the Reserve Silica Corporation (Client), and this memorandum was prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. This memorandum does not represent a legal opinion. No other warranty, expressed or implied, is made.

All reports prepared by Aspect Consulting for the Client apply only to the services described in the Agreement(s) with the Client. Any use or reuse by any party other than the Client is at the sole risk of that party, and without liability to Aspect Consulting. Aspect Consulting's original files/reports shall govern in the event of any dispute regarding the content of electronic documents furnished to others.

Please refer to Attachment 9 titled "Report Limitations and Guidelines for Use" for additional information governing the use of this report.

Attachments:
Attachment 1 – UST Site Check/Site Assessment Checklist
Attachment 2 – Facility Map
Attachment 3 – Decommissioning Records
Attachment 4 – Confirmation Soil Sampling Map
Attachment 5 – Permanent Closure Notice
Attachment 6 – Photograph Log
Attachment 7 – Analytical Results for Soil
Attachment 8 – Laboratory Reports
Attachment 9 – Report Limitations and Guidelines for Use

ATTACHMENT 1

UST Site Check/Site Assessment Checklist

DEPARTMENT OF ECOLOGY
State of Washington

UST ID #: _____

County: _____

SITE CHECK/SITE ASSESSMENT CHECKLIST

FOR UNDERGROUND STORAGE TANKS

This checklist certifies that site check or site assessment activities were performed in accordance with Chapter 173-360A WAC. Instructions are found on the last page.

I. UST FACILITY	II. OWNER/OPERATOR INFORMATION
Facility Compliance Tag #: N/A	Owner/Operator Name: Frank Melfi
UST ID #: 620442	Business Name: Reserve Silica Corporation
Site Name: Reserve Silica Corporation	Address: 20 First Plaza Center NW, Suite 308
Site Address: 28131 Black DIamond-Ravensdale Road	City: Albuquerque State:NM Zip: 87102
City: Ravensdale	Phone: (505) 247-2384
Phone: (425) 432-1241	Email: fmelfi@swcp.com

III. CERTIFIED SITE ASSESSOR	
Service Provider Name: Andrew Yonkofski	Company Name: Aspect Consulting, LLC
Cell Phone: 404-272-3488 Email: ayonkofski@aspectconsulting.com	Address: 710 Second Ave, Suite 550
Certification #: 8773124 Exp. Date: 05/24/2021	City: Seattle State: WA Zip: 98104

IV. TANK INFORMATION

TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	DATE SITE CHECK OR ASSESSMENT CONDUCTED
1	Approx. 10,000 gallons	Diesel #2	10/20/2020

V. REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT (check one)

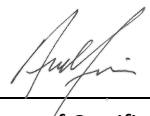
- ☒ Release investigation following permanent UST system closure (i.e. tank removal or closure-in-place).
- ☐ Release investigation following a failed tank and/or line tightness test.
- ☐ Release investigation following discovery of contaminated soil and/or groundwater.
- ☐ Release investigation directed by Ecology to determine if the UST system is the source of offsite impacts.
- ☐ UST system is undergoing a "change-in-service", which is changing from storing a regulated substance (e.g. gasoline) to storing a non-regulated substance (e.g. water).
- ☐ Directed by Ecology for UST system permanently closed or abandoned before 12/22/1988.
- ☐ Other (describe):

VI. CHECKLIST

The site assessor must check each of the following items and include it in the report. Sections referenced below can be found in the Ecology publication *Guidance for Site Checks and Site Assessments for Underground Storage Tanks*.	YES	NO
1. The location of the UST site is shown on a vicinity map.	☒	☐
2. A brief summary of information obtained during the site inspection is provided (Section 3.2)	☒	☐
3. A summary of UST system data is provided (Section 3.1)	☒	☐
4. The soils characteristics at the UST site are described. (Section 5.2)	☒	☐
5. Is there any apparent groundwater in the tank excavation?	☒	☐
6. A brief description of the surrounding land use is provided. (Section 3.1)	☒	☐
7. The name and address of the laboratory used to perform analyses is provided. The methods used to collect and analyze the samples, including the number and types of samples collected, are also documented in the report. The data from the laboratory is appended to the report.	☒	☐
8. The following items are provided in one or more sketches:		
• Location and ID number for all field samples collected	☒	☐
• If applicable, groundwater samples are distinguished from soil samples	☐	☐
• Location of samples collected from stockpiled excavated soil	☒	☐
• Tank and piping locations and limits of excavation pit	☒	☐
• Adjacent structures and streets	☒	☐
• Approximate locations of any on-site and nearby utilities	☒	☐
9. If sampling procedures are different from those specified in the guidance, has justification for using these alternative sampling procedures been provided? (Section 3.4)	☐	☐
10. A table is provided showing laboratory results for each sample collected including; sample ID number, constituents analyzed for and corresponding concentration, analytical method, and detection limit for that method. Any sample exceeding MTCA Method A cleanup standards are highlighted or bolded.	☒	☐
11. Any factors that may have compromised the quality of the data or validity of the results are described.	☒	☐
12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred. The requirements for reporting confirmed releases can be found in WAC 173-360-372.	☒	☐

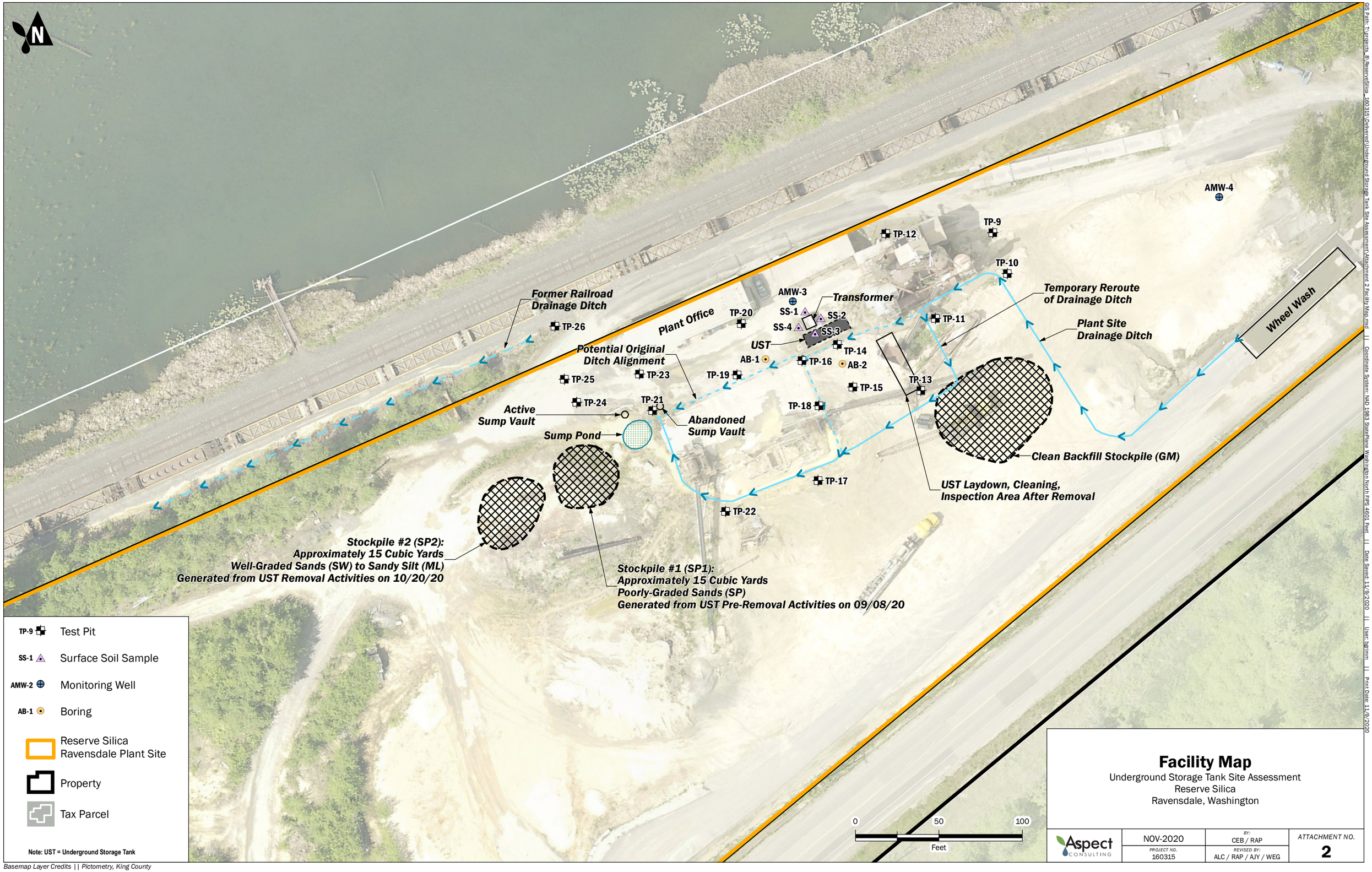
VII. REQUIRED SIGNATURES

Signature acknowledges the Site Check or Site Assessment complies with UST regulations WAC 173-360A-0730 through 0750.

Andrew Yonkofski		November 2, 2020
Print or Type Name	Signature of Certified Site Assessor	Date

ATTACHMENT 2

Facility Map



Facility Map

Underground Storage Tank Site Assessment
Reserve Silica
Ravensdale, Washington

Aspect Consulting	NOV-2020	BY: CEB / RAP	ATTACHMENT NO. 2
	PROJECT NO. 160315	REVISED BY: ALC / RAP / AJY / WEG	

Basemap Layer Credits || Pictometry, King County

ATTACHMENT 3

Decommissioning Records

Department of Local Services
Permitting Division
35030 SE Douglas St., Ste. 210
Snoqualmie, WA 98065-9266
206-296-6600 TTY Relay 711

FIRE PERMIT - SYSTEMS & EVENTS

Permit type, Subtype:	Fire Permit Systems, Tank
Title:	1st EXT ISS-(MBP) GRDE15-0011 Diesel UST Removal- Reserve Silica Underground Tank
Description:	Pump, rinse and inert UST. Decommission; 1 - 10,000 diesel underground tank
Permit Number:	FIRP19-0403
Date Issued:	08/30/2019
Expiration Date:	8/29/2021
Permit Status:	Permit Extended
List of Parcels:	3522069018
Site Address:	28131 BLACK DIAMOND RAVENSDALE RD SE, RAVENSDALE, WA 98051
Valuation:	$0.00
Applicant Name:	Orlando Alvarez
Applicant Address:	3203 15th St S Everett, WA 98201

Comments and Conditions

1. **Work Subject to Approved Plans and Conditions.** Work Authorized by this permit is subject to the approved plans and corrections shown thereon and the attached conditions of permit approval. Failure to comply with all conditions once construction is begun may necessitate an immediate work stoppage until such time as compliance with the stipulated conditions is attained.

2. **Posting on the job site.** This permit must be posted on the job site at all times in a visible and readily accessible location.

3. **Permit Status & Inspections; Scheduling, Est. Arrival Times* & Results.** (*Building only)

Online: aca.accela.com/kingcounty

Inspection cutoff: 3:00 pm for next day inspections. Fire Inspection and land use requests will be confirmed and scheduled by a return phone call. Additional inspection information including IVR/Web info: http://www.kingcounty.gov/property/permits/info/inspections.aspx. Written inspection results left at the job site will be phased out.

IVR: 1-888-546-7728 - **Inspection Help: 206-296-6630**

4. **Expiration**. Please note the expiration date on this permit located in the upper right corner. Permits are valid for one year from date of issuance or date of extension. Work must be substantially commenced within two years of permit issuance. Extensions beyond the third year shall only be granted to allow completion of the structure.

5. **Compliance with State and Federal laws and the Endangered Species Act.** The applicant is responsible for making a diligent inquiry regarding the need for concurrent state or federal permits to engage in the Work requested under this permit, and to obtain the required permits prior to issuance of this permit. It is understood that the granting of this permit shall not be construed as satisfying the requirements of other applicable Federal, State or Local laws or regulations. In addition this permit does not authorize the violation of regulations. In addition, the granting of this permit does not authorize the violation such "take" restrictions would be violated by work done pursuant to this permit, and is precluded by Federal law from undertaking work authorized by this permit if that work would violate the "take" restrictions set forth at 16 U.S.C. 8, 50 C.F.R. §17.21, 50 C.F.R. §223 and 50 C.F.R §224.

King County

Department of Local Services
Permitting Division
35030 SE Douglas St., Ste. 210
Snoqualmie, WA 98065-9266
206-296-6600 TTY Relay 711

Permit: FIRP19-0403
Date Issued: 08/30/2019
Expiration Date: 8/29/2021
Permit Status: Permit Extended

FIRE INSPECTION REPORT CARD

New Construction Fire Inspection 24-Hour Request Line **1-888-546-7728**
New Construction Fire Inspection General Information 206-296-6630

APPROVALS: (Followed by 3-digit inspection codes for use with the inspection Request Line)

1. Placement - Tank (291) Removed	**2. Device Placement (259)**	**3. Nozzle/Head Placement (283)**	**4. Flow/Trip Test (273)**
By: [signature] 10-20-20	By:	By:	By:
5. Device/Panel Test (261)	**6. Flush Test (274)**	**7. Run Test (191)**	**8. Pressure Test (168)**
By:	By:	By:	By:
9. Insulation Cover (280)	**10. Rack/Pile Inspection (298)**	**11. Emergency Shut Off (067)**	**12. Underground (235)**
By:	By:	By:	By:
13. Hydrant/Watermain (245)	**14. Other (134)**	**15. Final Acceptance (077)** 10-20-20	
By:	By:	By: [signature]	

Notes:
Tank going to Everett WA today Email all Info Regarding Tank to add to File

[signature]

10-20-20

ALL PERMITS:

a) Responsibility for the building's compliance with the provisions of the applicable King County Codes and for maintenance of the building rests exclusively with the permit applicants and their agents and the property owners.

b) King County inspection of the building and real property are spot checks designed to foster and encourage compliance with the applicable codes. Neither the approvals above nor the issuance of a Certificate of Occupancy guarantees or assures compliance with all applicable codes.

c) The Owner/Applicant's copy of any applicable manufacturer's installation instructions, the approved set of plans, and the permit shall be available at the time of inspection.

George D. Blair - Northwest Marine Chemist, Inc.
P.O. Box 7084, Tacoma, WA 98417
Office: 253-752-0149 Fax:
Email: gbcmc637@gmail.com

MARINE CHEMIST CERTIFICATE

Serial 637-01101

Clearcreek Contractors	Reserve Silica	Oct 20, 2020
Survey Requested by	Vessel Owner Agent	Date
Processing Plant	Underground Storage Tank	28131 Ravensdale Way
Vessel	Type of Vessel	Specific Location of Vessel
Diesel (3x)	O_2, LEL, Visual	9:43
Last Three 3 Loadings	Tests Performed	Time Survey Completed

Inspected Spaces:

Group 1. 1-10,000 Gal. UST

Safety Designations:

NOT SAFE FOR WORKERS

SAFE FOR LIMITED HOT WORK

LIMITATIONS:

Specific Location: *At job site.*

Hot Work Type: *This tank has been purged with CO2 to less than 8% Oxygen, and is safe for excavation and transportation.*

INERTED

Inert Medium: *Carbon Dioxide (CO2)*

Method for maintaining safe conditions: *All openings are and must remain secured.*

Measures for safe disposal of inert gas: *Ventilate and test for 20.8% Oxygen to properly dispose of inerting gas.*

Test Results	**% O_2**	**% LEL**
Inspected spaces group 1	7.2%	N/A

In the event of physical or atmospheric changes affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, this certificate is voided; spaces not listed on the Certificate are not to be entered unless authorized on another Certificate and/or maintained in accordance with OSHA 29 CFR 1915; or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist. Unless otherwise stated on the Certificate, all spaces and affected adjacent spaces are to be reinspected daily or more often as necessary by the competent person or the authority having jurisdiction as applicable in support of work prior to entry or recommencement of work.

QUALIFICATIONS: Transfer of ballast, cargo, fuel or manipulation of valves or closure equipment tending to alter conditions in pipelines, tanks, or compartments subject to gas accumulation, unless specifically approved on this Certificate, requires inspection and a new Certificate for spaces so affected. All lines, vents, heating coils, valves, and similar enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated. Movement of the vessel from its specific location voids the Certificate unless shifting of the vessel within the facility has been specifically authorized on this certificate.
STANDARD SAFETY DESIGNATIONS: (partial list, paraphrased from NFP 306, Subsections 4.3.1 through 4.3.6)
ATMOSPHERE SAFE FOR WORKERS: In the compartment or space so designated (a) the oxygen content of the atmosphere shall be at least 19.5 percent and not greater than 22 percent by volume; (b) the concentration of flammable materials is below 10 percent of the lower explosive limit; (c) any toxic materials in the atmosphere associated with cargo, fuel, tank coatings, inerting mediums, or fumigants are within permissible concentrations at the time of the inspection.
NOT SAFE FOR WORKERS: In the compartment or space so designated, entry shall not be permitted.
ENTER WITH RESTRICTIONS: In the compartment or space so designated, entry for work is permitted only if conditions of proper protective equipment, or clothing, or time, or all of the aforementioned, as appropriate, are as specified.
SAFE FOR HOT WORK: In the compartment or space so designated (a) the oxygen content of the atmosphere is not greater than 22 percent by volume; (b) the concentration of flammable materials in the atmosphere is less than 10 percent of the lower explosive limit; (c) the residues, scale, or preservative coatings are cleaned sufficiently to prevent the spread of fire and are not be capable of producing a higher concentration than permitted by (a) or (b); (d) all adjacent spaces, containing or having contained flammable or combustible materials shall be sufficiently cleaned of residues, scale, or preservative coatings to prevent the spread of fire; or they are inerted. Ship's fuel tanks, lube tanks, or engine room or fire room bilges, or other machinery spaces, are treated in accordance with the Marine Chemist's requirements.
SAFE FOR LIMITED HOT WORK: In the compartment or space so designated (a) portions of the space meet the requirements Safe for Hot Work and Partial Cleaning, as applicable, or (b) the space is inerted, adjacent spaces meet the requirements for Safe for Hot Work, and hot work is restricted to specific locations; (c) portions of the space shall meet the requirements for Safe for Hot Work, as applicable; and the nature or type of hot work shall be limited or restricted.
NOT SAFE FOR HOT WORK: In the compartment or space so designated, hot is not permitted.

CHEMISTS ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation.

"The undersigned acknowledges receipt of this Certificate under NFPA 306 and understands conditions and limitations under which it was issued, and the requirements for maintaining its validity."

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Authorized Representative	Clearcreek Contractors	Oct 20, 2020	Signed Marine Chemist	637
	Company	Date		CMC No.

2657

Clearcreek CONTRACTORS Environmental/Civil

3203 15th Street
Everett, WA 98201

Ph. (425) 252-5800
Fx. (425) 252-1093

Clearcreek CONTRACTORS Environmental/Civil

JOB #	JOB NAME	SITE ADDRESS
219084	RESERVE SILICA	28131 BLACK DIAMOND RAVENSDALE Road SE RAVENSDALE

GENERATOR NAME	GENERATOR MAILING ADDRESS	GENERATOR CONTACT INFORMATION
RESERVE SILICA.	SAME	FRED WHITE

PUMP & RINSE / CLEANING CERTIFICATE

DATE	SIZE & DIMENSIONS OF TANK OR STRUCTURE	DESCRIBE CONTENTS	PUMP/RINSE	LIQUID QTY	SOLIDS QTY
9/8/20	10.000 GAL STEEL	DIESEL	YES NO	60 gal	2 gal
10/22/20	10.000 GAL STEEL	DIESEL	CLEANED YES NO	50 gal	2 gal
DATE	SIZE & DIMENSIONS OF TANK OR STRUCTURE	DESCRIBE CONTENTS	PUMP/RINSE YES NO CLEANED YES NO	LIQUID QTY	SOLIDS QTY
DATE	SIZE & DIMENSIONS OF TANK OR STRUCTURE	DESCRIBE CONTENTS	PUMP/RINSE YES NO CLEANED YES NO	LIQUID QTY	SOLIDS QTY

NOTES TANK WAS NOT REMOVED ON 9/8/20 BECAUSE PSE CANCELED.
TANK WAS REMOVED ON 10/20/20

WORK PERFORMED BY RAUL CURNETT

WORKER SIGNATURE

LIQUID / SOLIDS BILL OF LADING

DATE	TRUCK #	DRIVER	LIQUID DESCRIPTION AND QUANTITY	SOLID DESCRIPTION AND QUANTITY
	TRLR #	DISPOSAL/RECYCLING FACILITY: EMERALD SERVICES.	LIQUID PROFILE #	SOLIDS PROFILE #

NOTES

GENERATOR'S SIGNATURE CONFIRMS THIS MATERIAL IS NOT REGULATED UNDER WAC-173-303 OR 40CFR PART 261 & 40CFR PART 760
GENERATOR SIGNATURE

DRIVER SIGNATURE

FACILITY SIGNATURE

UST CORRECTIVE ACTION CERTIFICATION

I certify that the petroleum contaminated debris and media that fail the test for Toxicity Characteristic Waste codes D018-D043 is exempt under 40CFR 261.4 and is subject to the corrective action regulation under 40 CFR 280.

GENERATOR NAME _____ GENERATOR SIGNATURE _____ DATE _____

DISPOSAL CERTIFICATE

DATE	TRUCK #	DRIVER	ITEM(S) DESCRIPTION
	TRLR #	DISPOSAL/RECYCLING FACILITY: SEATTLE IRON & METAL	10.000 GAL STEEL UST

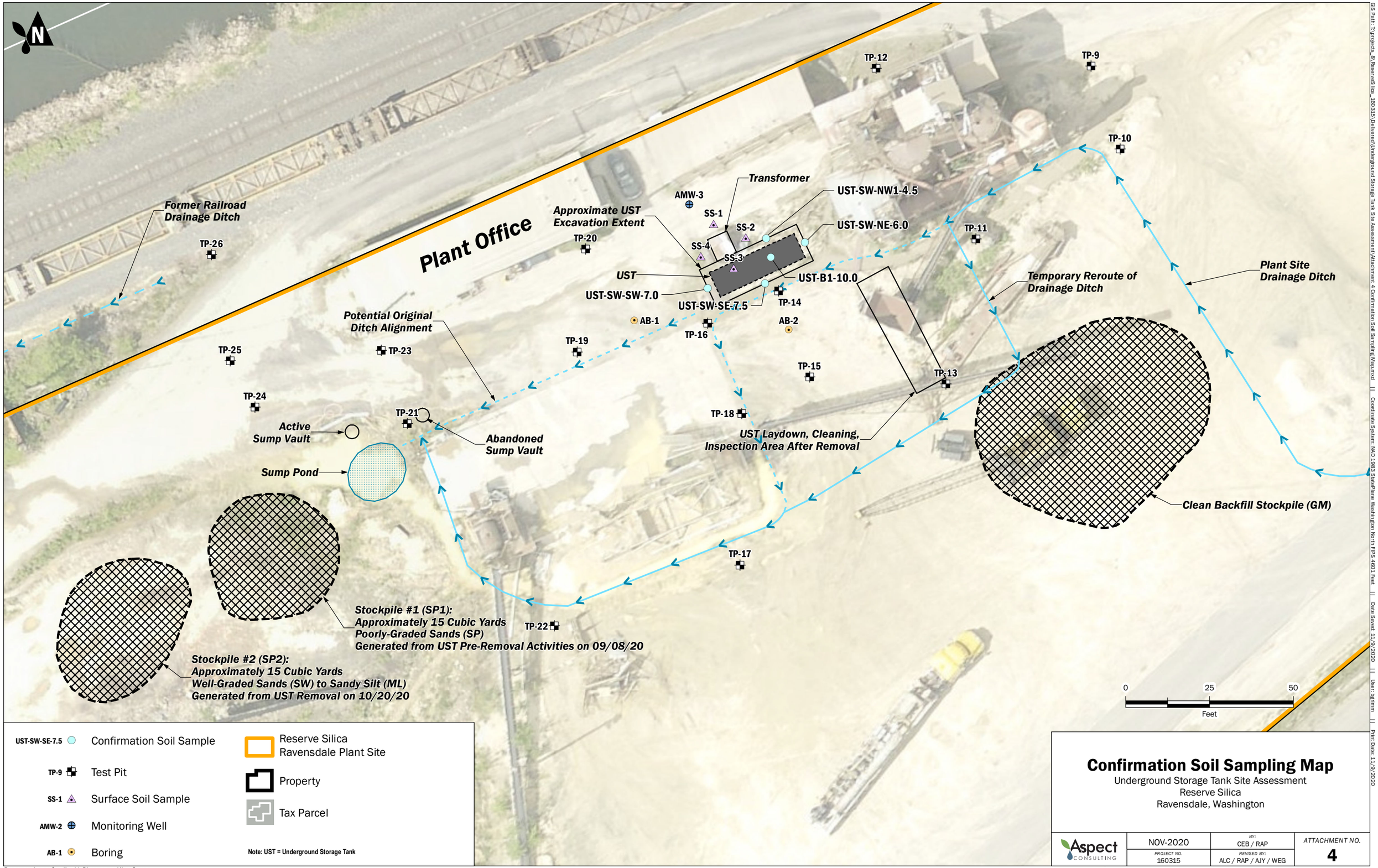
NOTES TANK WILL BE SCRAPED ONCE THE EPOXY IS REMOVED.

DRIVER SIGNATURE

FACILITY SIGNATURE

ATTACHMENT 4

Confirmation Soil Sampling Map



UST-SW-SE-7.5 Confirmation Soil Sample

TP-9 Test Pit

SS-1 Surface Soil Sample

AMW-2 Monitoring Well

AB-1 Boring

Reserve Silica Ravensdale Plant Site

Property

Tax Parcel

Note: UST = Underground Storage Tank

Basemap Layer Credits || Pictometry, King County

Confirmation Soil Sampling Map

Underground Storage Tank Site Assessment
Reserve Silica
Ravensdale, Washington

Aspect Consulting	NOV-2020	BY: CEB / RAP	ATTACHMENT NO. 4
	PROJECT NO. 160315	REVISED BY: ALC / RAP / AJY / WEG	

GIS Path: T:\projects_8\ReserveSilica_160315\Delivered\Underground Storage Tank Site Assessment\Attachment 4 Confirmation Soil Sampling Map.mxd || Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet || Date Saved: 11/9/2020 || User: bgrimm || Print Date: 11/9/2020

ATTACHMENT 5

Permanent Closure Notice

DEPARTMENT OF ECOLOGY
State of Washington

PERMANENT CLOSURE NOTICE
FOR UNDERGROUND STORAGE TANKS

UST ID #: _____

County: _____

This notice certifies that permanent closure activities were performed and conducted in accordance with Chapter 173-360A WAC. Instructions are found on the back page.

I. UST FACILITY	II. OWNER/OPERATOR INFORMATION
Facility Compliance Tag #:	Owner/Operator Name: Frank Melfi
UST ID #:	Business Name: Reserve Silica Corp.
Site Name: Reserve Silica Corp.	Address: 20 First Plaza Ctr. NW, Suite 308
Site Address: 28131 Black Diamond-Ravensdale Rd	City: Albuquerque State: NM Zip: 87102
City: Ravensdale	Phone: (505) 247-2384
Phone: (425) 432-1241	Email: fmelfi@swcp.com

III. CERTIFIED UST DECOMMISSIONER

Company Name: Clearcreek Construction	Service Provider Name: Paul Curnett
Address: 3203 15th Street	Certification Type: UST Decommissioning
City: Everett State: WA Zip: 98201	Cert. No.: 8905593 Exp. Date: 9/8/2020
Provider Phone: (360) 659-2459	Provider Email: paulc@clearcreekcon.com
Provider Signature: Paul R. Curnett	***Date:*** 11/24/20

IV. TANK INFORMATION

TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	CLOSURE METHOD			CLOSURE DATE
			removal	closed-in-place	change-in-service	
NA	10,000-gal	Diesel	☒	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	

V. REQUIRED SIGNATURE

Signature acknowledges UST(s) comply with UST regulation WAC 173-360A-0810 Permanent Closure Requirements.

Date	Signature of Tank Owner/Operator or Authorized Representative	Print or Type Name
11/30/2020	Marisa L Floyd	Marisa L. Floyd

ATTACHMENT 6

Photograph Log

Photograph 1. Standing at east corner of excavation and oriented facing west. At the southwest end of the tank (closest), the fill port and fuel dispenser ports are visible. The two vent ports are at the far end of the tank by the two workers. In the photo, the transformer vault is being cleaned using a vacuum truck and will be eventually supported by the crane present in the left side of the photo during UST removal.

Photograph 2. The UST as it was removed from the tank pit. Photograph taken from the eastern corner of the excavation facing southeast.

Photograph 3. The tank excavation after removal. Groundwater has begun infiltrating at a depth of approximately 6 to 7 feet below ground surface. The sloughing soil from the northwest sidewall (left hand side of photo) was removed prior to collecting the bottom sample.

Photograph 4. UST condition on removal. Some scale buildup and small pitting in the steel surface. No visible cracks or holes were noted.

ATTACHMENT 7

Analytical Results for Soil

Attachment 7. Analytical Results for Soil

Project No. 160315, Reserve Silica, Ravensdale, Washington

			Site Assessment Area	UST Excavation Samples					UST Stockpile Samples			
			Location Name	UST-SW-NE	UST-SW-NW1	UST-SW-SE	UST-SW-SW	UST-B1	UST-SP1			UST-SP2
			Date	10/20/2020	10/20/2020	10/20/2020	10/20/2020	10/20/2020	10/20/2020	10/20/2020	10/20/2020	10/20/2020
			Sample ID	UST-SW-NE-6.0	UST-SW-NW1-4.6	UST-SW-SE-7.5	UST-SW-SW-7.0	UST-B1-10.0	UST-SP1-1	UST-SP1-2	UST-SP1-3	UST-SP2-1
			Depth Below Ground Surface	6 ft	4.6 ft	7.5 ft	7 ft	10 ft	N/A	N/A	N/A	N/A
Analyte	CAS_RN	Unit	MTCA Method A Cleanup Level									
Total Petroleum Hydrocarbons												
Diesel Range Organics	TPH-DRO	mg/kg	2,000	**5,100**	< 50 U	< 50 U	**5,600**	< 50 U	< 50 U	< 50 U	< 50 U	**3,500**
Motor Oil Range Organics	TPH-ORO	mg/kg	2,000	< 250 U	< 250 U	< 250 U	**370 X**	< 250 U	< 250 U	< 250 U	< 250 U	**680 X**
Benzene, Toluene, Ethylbenzene, and Total Xylenes												
Benzene	71-43-2	mg/kg	0.03	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	< 0.02 U
Toluene	108-88-3	mg/kg	7	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	< 0.02 U
Ethylbenzene	100-41-4	mg/kg	6	**0.52**	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	--	--	< 0.02 U
Total Xylenes	1330-20-7	mg/kg	9	**0.5**	< 0.06 U	< 0.06 U	< 0.06 U	< 0.06 U	--	--	--	< 0.06 U
Polcyclic Aromatic Hydrocarbons												
1-Methylnaphthalene	90-12-0	mg/kg	34	--	--	--	--	--	--	--	--	**0.54**
2-Methylnaphthalene	91-57-6	mg/kg	320	--	--	--	--	--	--	--	--	**0.39**
Naphthalene	91-20-3	mg/kg	5	--	--	--	--	--	--	--	--	**0.15**
Benz(a)anthracene	56-55-3	mg/kg		--	--	--	--	--	--	--	--	< 0.05 U
Benzo(a)pyrene	50-32-8	mg/kg	0.1	--	--	--	--	--	--	--	--	< 0.05 U
Benzo(b)fluoranthene	205-99-2	mg/kg		--	--	--	--	--	--	--	--	< 0.05 U
Benzo(k)fluoranthene	207-08-9	mg/kg		--	--	--	--	--	--	--	--	< 0.05 U
Chrysene	218-01-9	mg/kg		--	--	--	--	--	--	--	--	< 0.05 U
Dibenzo(a,h)anthracene	53-70-3	mg/kg		--	--	--	--	--	--	--	--	< 0.05 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg		--	--	--	--	--	--	--	--	< 0.05 U

Notes:

Bold - Detected

Blue Shaded - Detected result exceeds MTCA Method A Cleanup Level

U - Analyte not detected at or above Reporting Limit (RL) shown

X - Chromatographic pattern does not match fuel standard used for quantitation

ATTACHMENT 8

Laboratory Reports

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 29, 2020

Carla Brock, Project Manager
Aspect Consulting, LLC
710 2nd Ave S, Suite 550
Seattle, WA 98104

Dear Ms Brock:

Included are the results from the testing of material submitted on October 21, 2020 from the Reserve Silica PO 160215, F&BI 010368 project. There are 11 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Aspect Data, Ali Cochrane
ASP1029R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on October 21, 2020 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Reserve Silica PO 160215, F&BI 010368 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Aspect Consulting, LLC
010368 -01	UST-SW-NW1-4.6
010368 -02	UST-SW-SE-7.5
010368 -03	UST-SW-NE-6.0
010368 -04	UST-SW-SW-7.0
010368 -05	UST-B1-10.0
010368 -06	UST-SP2-1
010368 -07	UST-SP2-2
010368 -08	UST-SP2-3
010368 -09	UST-SP1-1
010368 -10	UST-SP1-2
010368 -11	UST-SP1-3

All quality control requirements were acceptable.

Date of Report: 10/29/20
Date Received: 10/21/20
Project: Reserve Silica PO 160215, F&BI 010368
Date Extracted: 10/23/20
Date Analyzed: 10/26/20

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES USING METHOD 8021B

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Surrogate (% Recovery) (Limit 50-150)
UST-SW-NW1-4.6 010368-01	<0.02	<0.02	<0.02	<0.06	71
UST-SW-SE-7.5 010368-02	<0.02	<0.02	<0.02	<0.06	80
UST-SW-NE-6.0 010368-03	<0.02	<0.02	0.52	0.50	109
UST-SW-SW-7.0 010368-04	<0.02	<0.02	<0.02	<0.06	76
UST-B1-10.0 010368-05	<0.02	<0.02	<0.02	<0.06	81
UST-SP2-1 010368-06	<0.02	<0.02	<0.02	<0.06	82
Method Blank 00-2302 MB	<0.02	<0.02	<0.02	<0.06	82

Date of Report: 10/29/20
Date Received: 10/21/20
Project: Reserve Silica PO 160215, F&BI 010368
Date Extracted: 10/22/20 and 10/23/20
Date Analyzed: 10/22/20 and 10/23/20

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL 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})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 48-168)
UST-SW-NW1-4.6 010368-01	<50	<250	98
UST-SW-SE-7.5 010368-02	<50	<250	102
UST-SW-NE-6.0 010368-03	5,100	<250	101
UST-SW-SW-7.0 010368-04	5,600	370 x	91
UST-B1-10.0 010368-05	<50	<250	93
UST-SP2-1 010368-06	3,500	680 x	100
UST-SP1-1 010368-09	<50	<250	97
UST-SP1-2 010368-10	<50	<250	100
UST-SP1-3 010368-11	<50	<250	92

Date of Report: 10/29/20
Date Received: 10/21/20
Project: Reserve Silica PO 160215, F&BI 010368
Date Extracted: 10/22/20 and 10/23/20
Date Analyzed: 10/22/20 and 10/23/20

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL 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})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 48-168)
Method Blank 00-2371 MB	<50	<250	92
Method Blank 00-2376 MB	<50	<250	89

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	UST-SP2-1	Client:	Aspect Consulting, LLC
Date Received:	10/21/20	Project:	Reserve Silica PO 160215
Date Extracted:	10/27/20	Lab ID:	010368-06 1/25
Date Analyzed:	10/27/20	Data File:	102705.D
Matrix:	Soil	Instrument:	GCMS8
Units:	mg/kg (ppm) Dry Weight	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	70 d	36	114
Phenol-d6	77 d	47	116
Nitrobenzene-d5	94 d	38	117
2-Fluorobiphenyl	94 d	50	150
2,4,6-Tribromophenol	89 d	25	187
Terphenyl-d14	95 d	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.15
2-Methylnaphthalene	0.39
1-Methylnaphthalene	0.54
Benz(a)anthracene	<0.05
Chrysene	<0.05
Benzo(a)pyrene	<0.05
Benzo(b)fluoranthene	<0.05
Benzo(k)fluoranthene	<0.05
Indeno(1,2,3-cd)pyrene	<0.05
Dibenz(a,h)anthracene	<0.05

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	Reserve Silica PO 160215
Date Extracted:	10/27/20	Lab ID:	00-2433 mb 1/5
Date Analyzed:	10/27/20	Data File:	102704.D
Matrix:	Soil	Instrument:	GCMS8
Units:	mg/kg (ppm) Dry Weight	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	68	36	114
Phenol-d6	73	47	116
Nitrobenzene-d5	77	38	117
2-Fluorobiphenyl	87	50	150
2,4,6-Tribromophenol	75	25	187
Terphenyl-d14	94	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.01
2-Methylnaphthalene	<0.01
1-Methylnaphthalene	<0.01
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

Date of Report: 10/29/20
Date Received: 10/21/20
Project: Reserve Silica PO 160215, F&BI 010368

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES USING METHOD 8021B

Laboratory Code: 010368-06 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	0.034	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	90	69-120
Toluene	mg/kg (ppm)	0.5	92	70-117
Ethylbenzene	mg/kg (ppm)	0.5	92	65-123
Xylenes	mg/kg (ppm)	1.5	93	66-120

Date of Report: 10/29/20
Date Received: 10/21/20
Project: Reserve Silica PO 160215, F&BI 010368

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 010398-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	99	95	64-133	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	97	58-147

Date of Report: 10/29/20
Date Received: 10/21/20
Project: Reserve Silica PO 160215, F&BI 010368

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 010372-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	670	95	97	73-135	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	92	74-139

Date of Report: 10/29/20
Date Received: 10/21/20
Project: Reserve Silica PO 160215, F&BI 010368

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.83	87	91	58-108	4
2-Methylnaphthalene	mg/kg (ppm)	0.83	91	93	70-130	2
1-Methylnaphthalene	mg/kg (ppm)	0.83	89	91	70-130	2
Benz(a)anthracene	mg/kg (ppm)	0.83	96	98	70-130	2
Chrysene	mg/kg (ppm)	0.83	94	97	70-130	3
Benzo(a)pyrene	mg/kg (ppm)	0.83	98	101	70-130	3
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	98	107	70-130	9
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	98	99	70-130	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	102	105	70-130	3
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	103	110	70-130	7

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 analyte 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 due to sample matrix effects.

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.

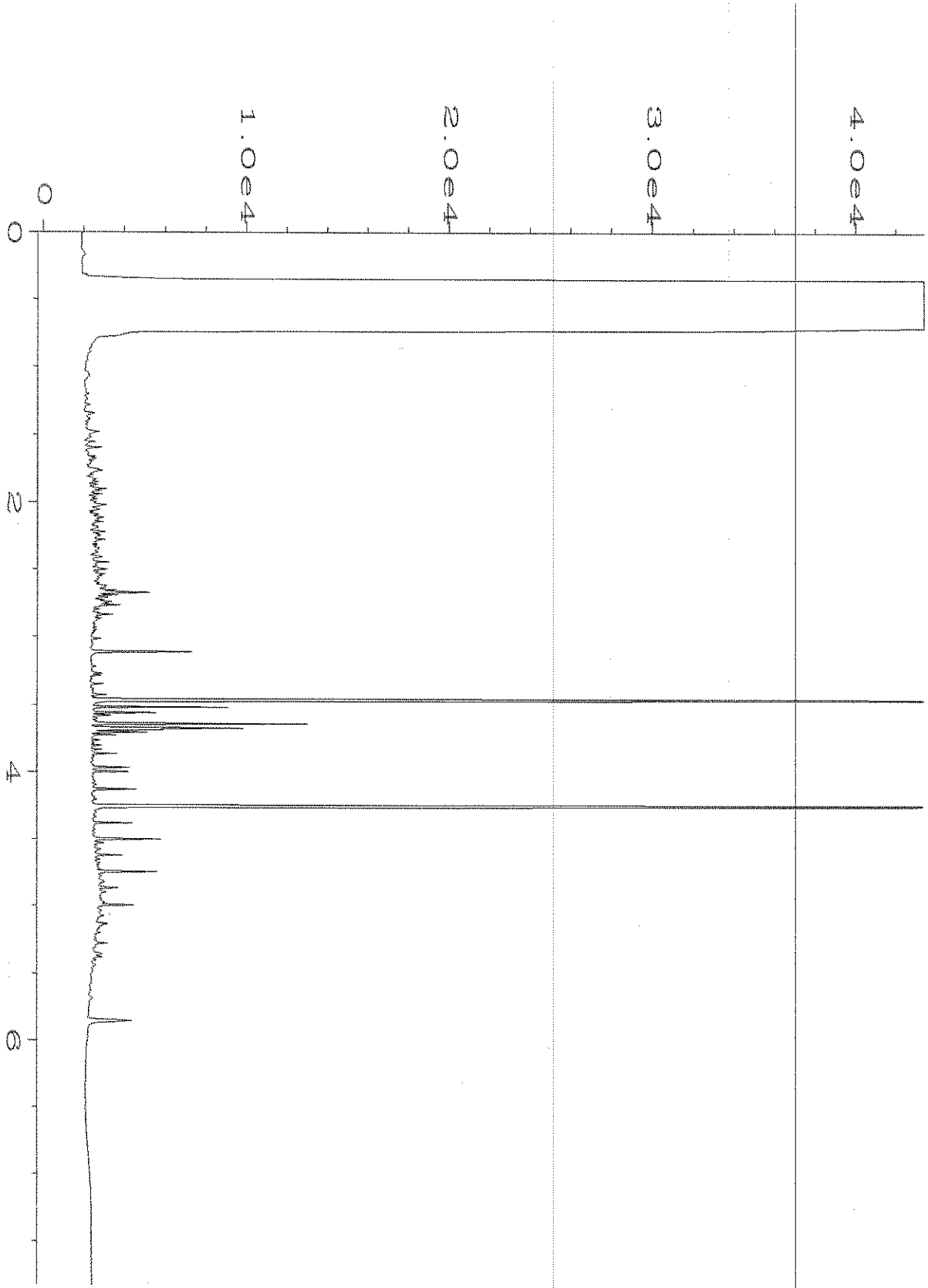
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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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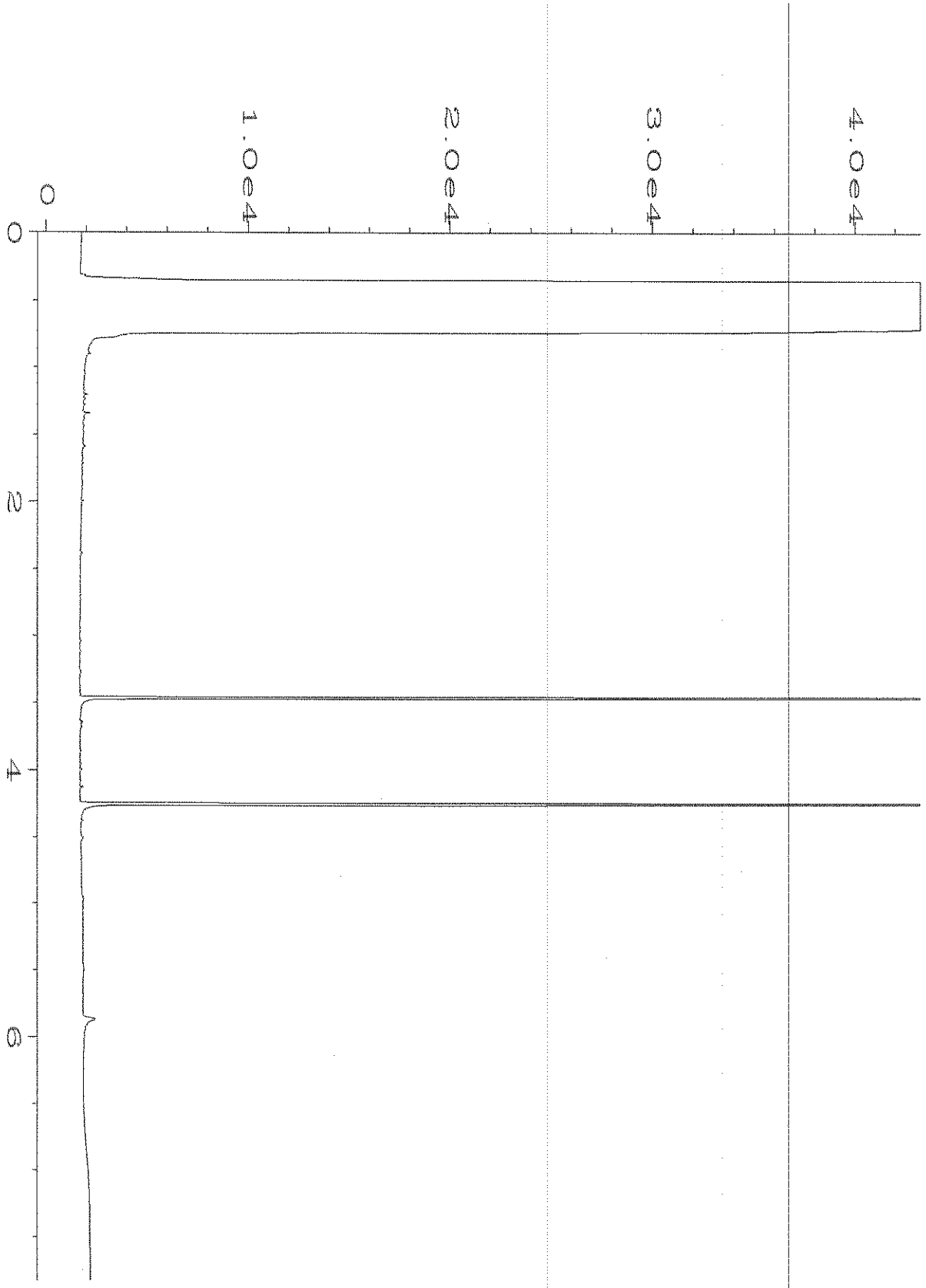
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 14
Sample Name	: 010368-01	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 4
Acquired on	: 22 Oct 20 10:37 AM	Instrument Method	: DX.MTH
Report Created on:	23 Oct 20 10:37 AM	Analysis Method	: DEFAULT.MTH



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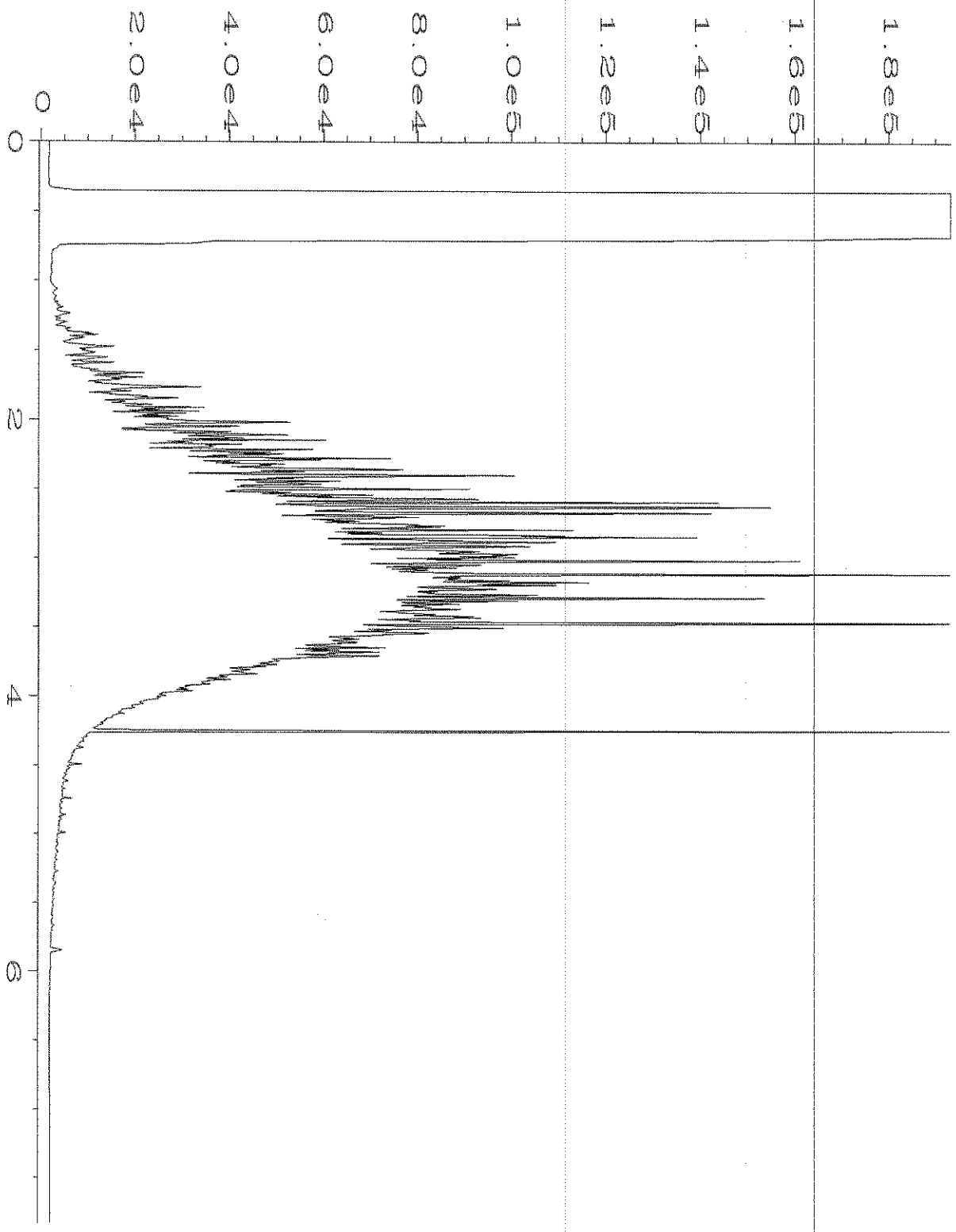
Operator : TL
Instrument : GC#4
Sample Name : 010368-02
Run Time Bar Code:
Acquired on : 22 Oct 20 01:17 PM
Report Created on: 23 Oct 20 10:37 AM

Page Number : 1
Vial Number : 16
Injection Number : 1
Sequence Line : 6
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



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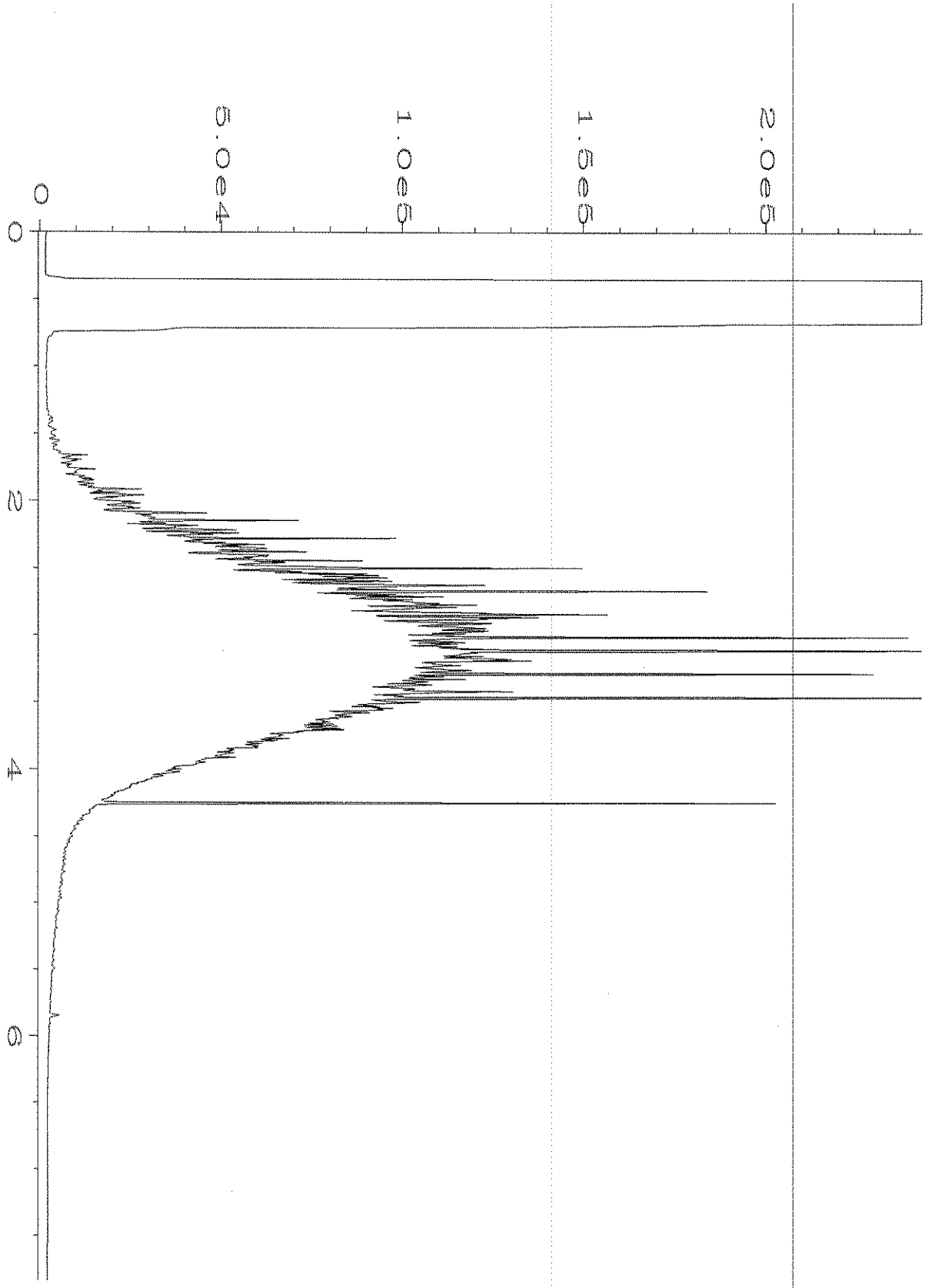
Operator : TL
Instrument : GC#4
Sample Name : 010368-03
Run Time Bar Code:
Acquired on : 22 Oct 20 01:29 PM
Report Created on: 23 Oct 20 10:38 AM

Page Number : 1
Vial Number : 17
Injection Number : 1
Sequence Line : 6
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



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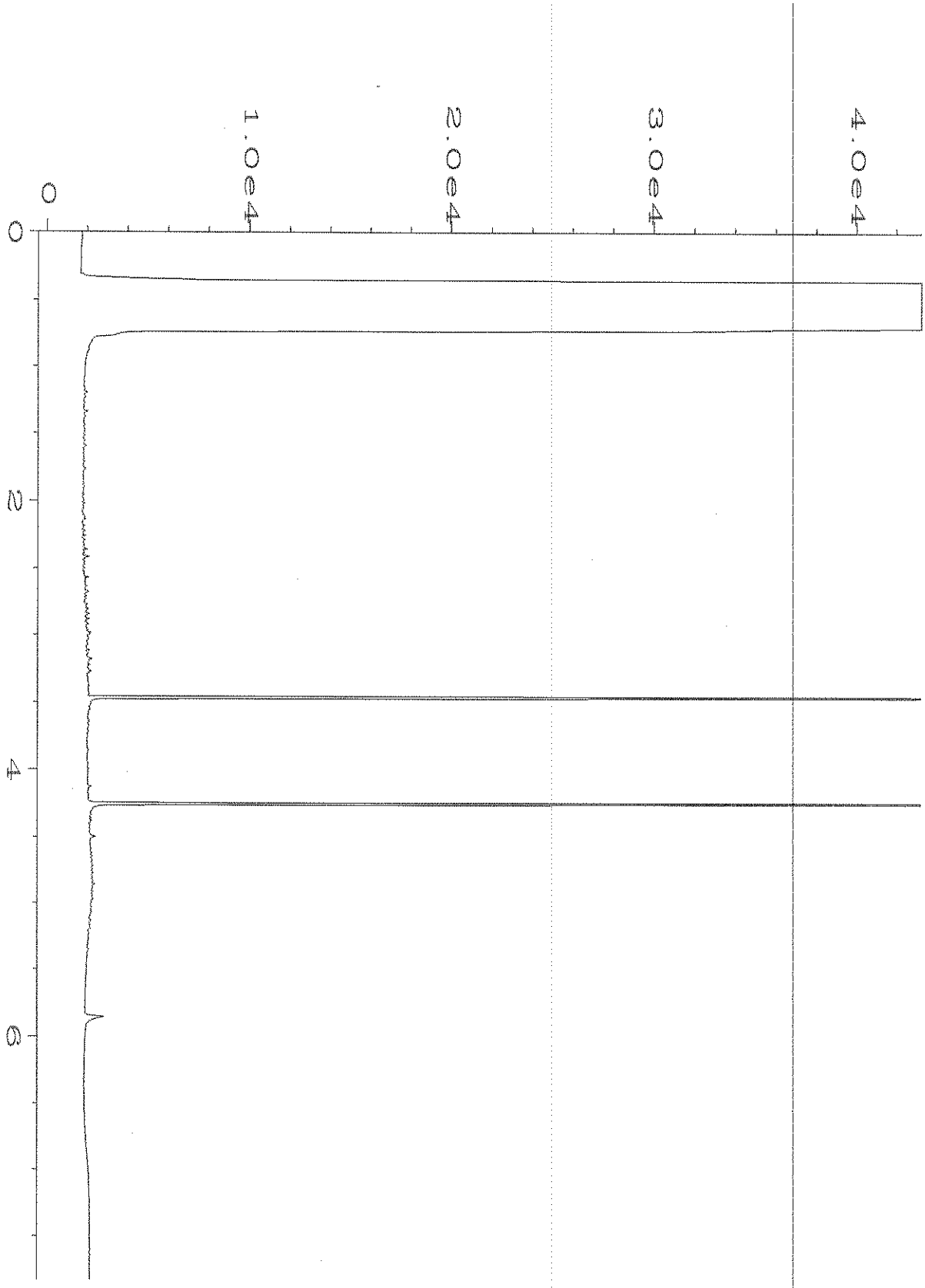
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 18
Sample Name	: 010368-04	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 6
Acquired on	: 22 Oct 20 01:41 PM	Instrument Method	: DX.MTH
Report Created on	: 23 Oct 20 10:38 AM	Analysis Method	: DEFAULT.MTH



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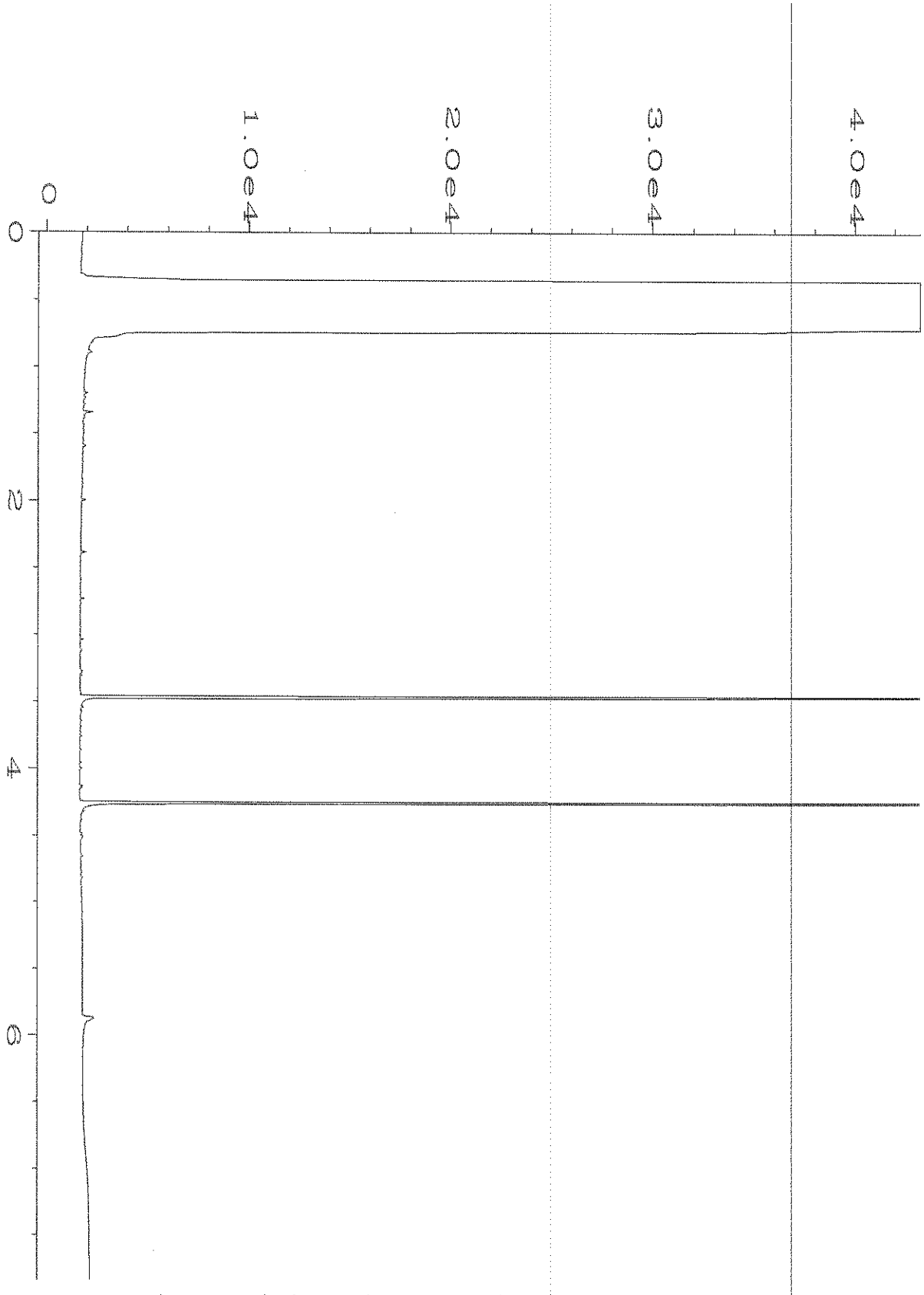
Operator : TL
Instrument : GC#4
Sample Name : 010368-05
Run Time Bar Code:
Acquired on : 22 Oct 20 01:54 PM
Report Created on: 23 Oct 20 10:38 AM

Page Number : 1
Vial Number : 19
Injection Number : 1
Sequence Line : 6
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



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Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 20
Sample Name	: 010368-09	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 6
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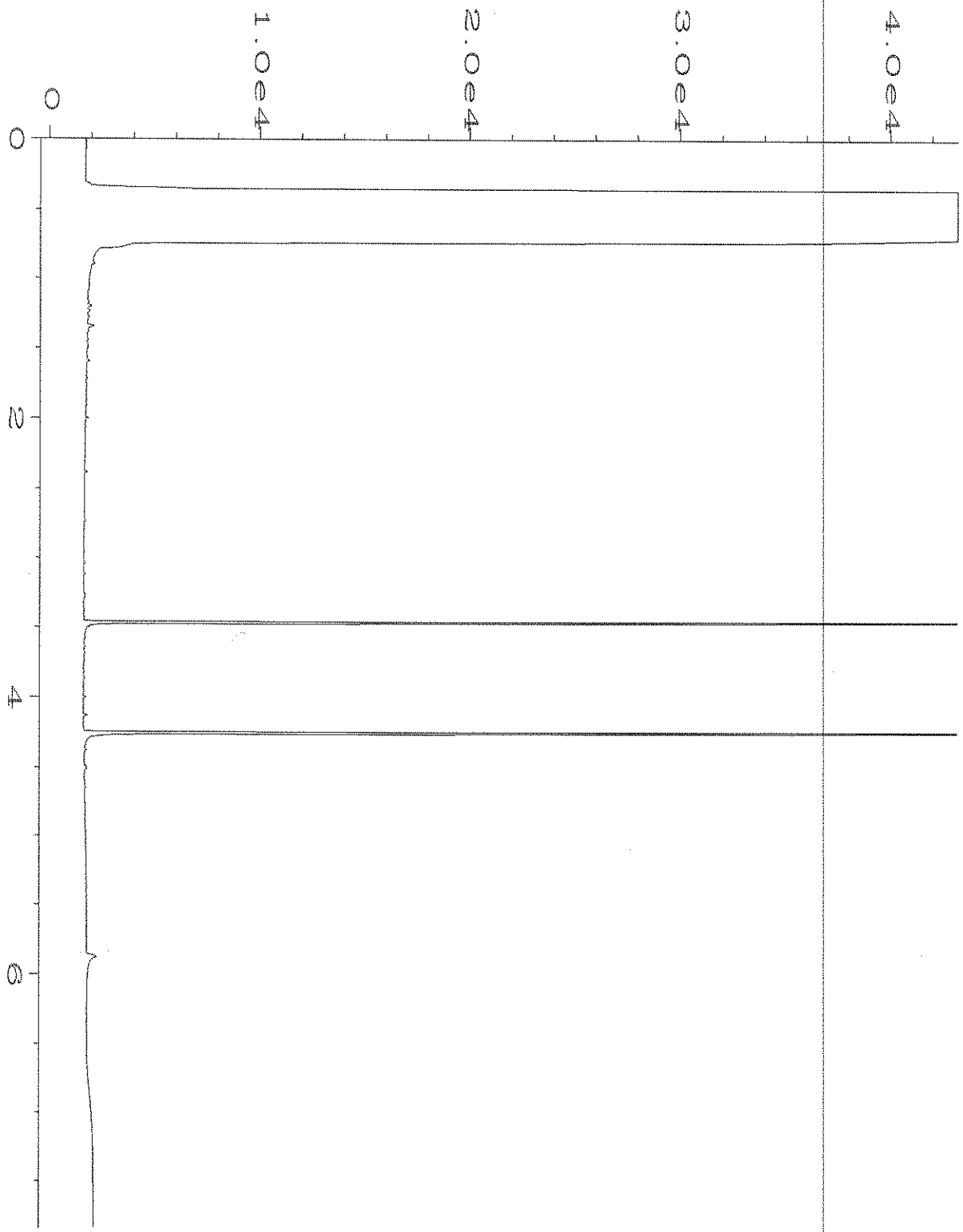
Report Created on:	23 Oct 20 10:38 AM	Analysis Method	: DEFAULT.MTH



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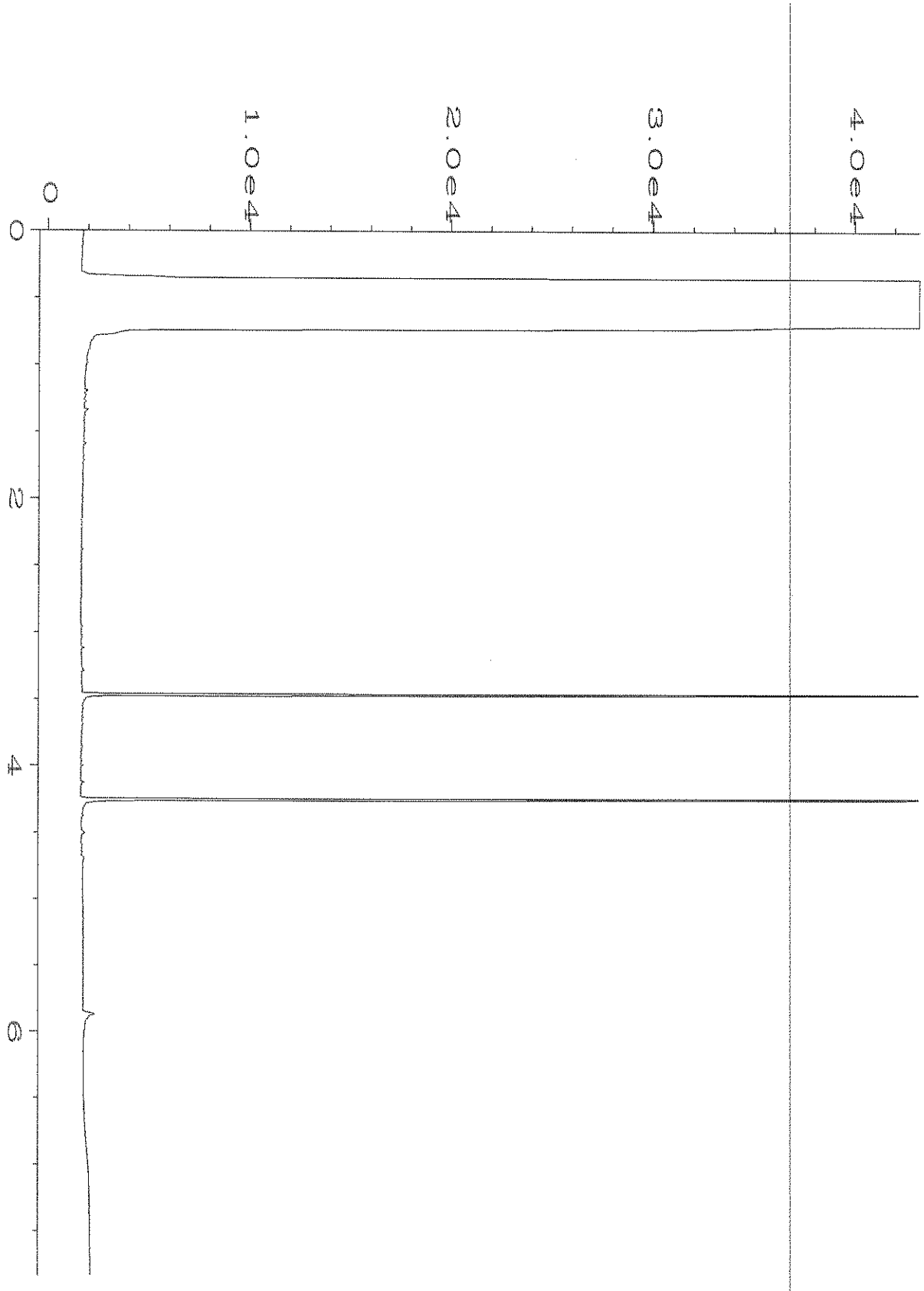
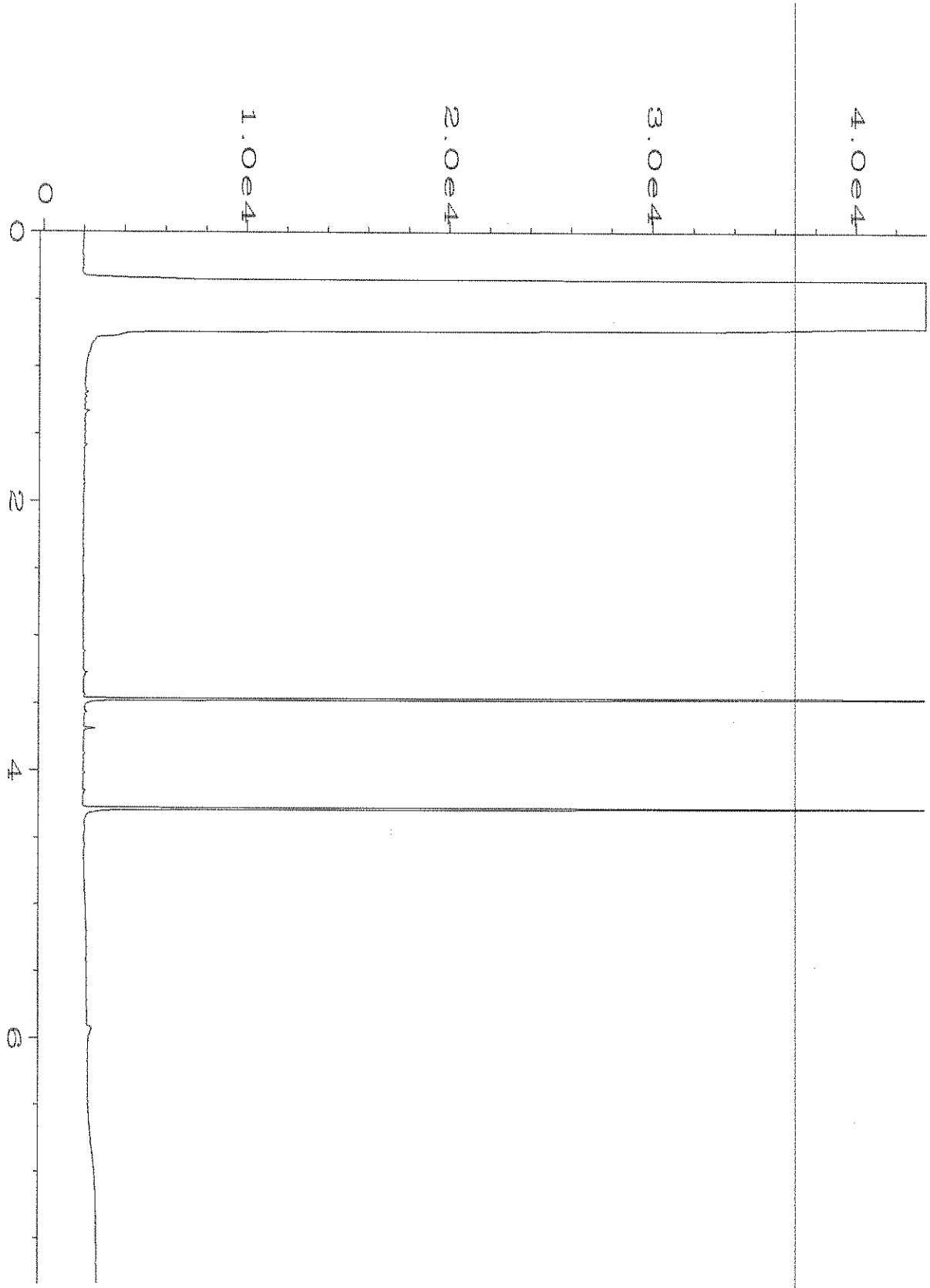
Operator : TL
Instrument : GC#4
Sample Name : 010368-10
Run Time Bar Code:
Acquired on : 22 Oct 20 02:19 PM
Report Created on: 23 Oct 20 10:39 AM

Page Number : 1
Vial Number : 21
Injection Number : 1
Sequence Line : 6
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH

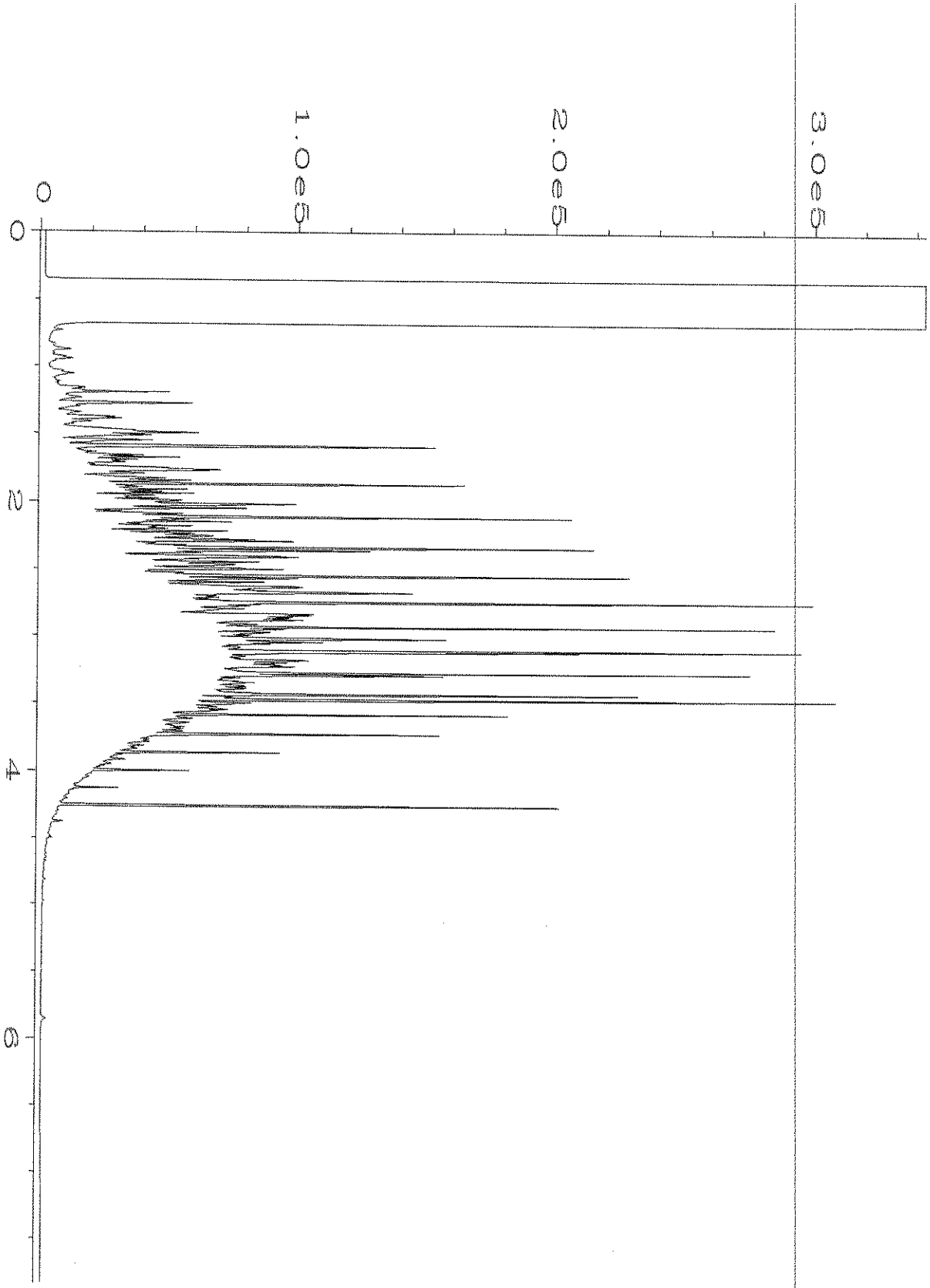


Data File Name	: C:\HPCHEM\4\DATA\10-22-20\022F0601.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 22
Sample Name	: 010368-11	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 6
Acquired on	: 22 Oct 20 02:31 PM	Instrument Method	: DX.MTH
Report Created on:	23 Oct 20 10:39 AM	Analysis Method	: DEFAULT.MTH



Data File Name : C:\HPCHEM\4\DATA\10-22-20\006F0401.D
Operator : TL
Instrument : GC#4
Sample Name : 00-2371 mb
Run Time Bar Code:
Acquired on : 22 Oct 20 09:02 AM
Report Created on: 23 Oct 20 10:37 AM

Page Number : 1
Vial Number : 6
Injection Number : 1
Sequence Line : 4
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



Data File Name	: C:\HPCHEM\4\DATA\10-22-20\005F0701.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 5
Sample Name	: 1000 Dx 60-170B	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 7
Acquired on	: 22 Oct 20 02:56 PM	Instrument Method	: DX.MTH
Report Created on:	23 Oct 20 10:37 AM	Analysis Method	: DEFAULT.MTH

010368

SAMPLE CHAIN OF CUSTODY

ME 10/21/20 1003/1054/1013

Page # 1 of 2

Report To C. Brock, A. Cochrane

Company Aspect Consulting

Address 710 2nd Ave, #550

City, State, ZIP Seattle, WA 98104

Phone _____ Email as above

SAMPLERS (*signature*)

PROJECT NAME: Reserve Silica

PO #: 160215

REMARKS

Project specific RLs? - Yes / No

INVOICE TO: AP

TURNAROUND TIME
- [x] Standard turnaround
- [ ] RUSH _____
- Rush charges authorized by: _____

SAMPLE DISPOSAL
- [ ] Archive samples
- [ ] Other _____
- Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Naphthalenes (AW)	HOLD	cPAHs + Naphthalenes		Notes
UST-SW-NW1-4.5	01 A-E	10/20/20	1050	SOIL	5	X		X					X				
UST-SW-SE-7.5	02	10/20/20	1246	SOIL	5												
UST-SW-NE-6.0	03	10/20/20	1250	SOIL	6												
UST-SW-SW-7.0	04	10/20/20	1255	SOIL	6												
UST-B1-10.0	05	10/20/20	1300	SOIL	6												
UST-SP2-1	06	10/20/20	1330	SOIL	6	[redacted]		[redacted]	AW				X		[redacted]		[redacted] - per AC
UST-SP2-2	07		1335										X				10/22/20 ME
UST-SP2-3	08		1340										X				
UST-SP1-1	09		1345			X											
UST-SP1-2	10		1345			X											

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Andrew Yonkofski	Aspect	10/21/20	1455
Received by:	Khoi Hoang	FBL	10/21/20	1455
Relinquished by:				
Received by:		Samples received at 4 °C		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

010368

SAMPLE CHAIN OF CUSTODY

ME 10/21/20 CT D03/V84/CT

Page # 2 of 2

Report To C. Brock, A. Cochrane

Company Aspect

Address 710 2nd Ave, #550

City, State, ZIP Seattle, WA 98104

Phone _____ Email as above

SAMPLERS (*signature*)

PROJECT NAME: Reserve Silica

PO #

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

TURNAROUND TIME
- ☒ Standard turnaround
- ☐ RUSH _____
- Rush charges authorized by: _____

SAMPLE DISPOSAL
- ☐ Archive samples
- ☐ Other _____
- Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
UST-SP1-3	11A-A-B	10/20/20	1350	Soil	5	X											

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Andrew Yonkofski	Aspect	10/21/20	1455
Received by:	Khoi Hoang	FEDEX	10/21/20	1455
Relinquished by:				
Received by:		Samples received at 4 °C		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
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ATTACHMENT 9

Report Limitations and Guidelines for Use

REPORT LIMITATIONS AND USE GUIDELINES

Reliance Conditions for Third Parties

This report was prepared for the exclusive use of the Client. No other party may rely on this report or the product of our services without the express written consent of Aspect Consulting, LLC (Aspect). This limitation is to provide our firm with reasonable protection against liability claims by third parties with whom there would otherwise be no contractual conditions or limitations and guidelines governing their use of the report. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement with the Client and recognized standards of professionals in the same locality and involving similar conditions.

Services for Specific Purposes, Persons and Projects

Aspect has performed the services in general accordance with the scope and limitations of our Agreement. This report has been prepared for the exclusive use of the Client and their authorized third parties, approved in writing by Aspect. This report is not intended for use by others, and the information contained herein is not applicable to other properties.

This report is not, and should not, be construed as a warranty or guarantee regarding the presence or absence of hazardous substances or petroleum products that may affect the subject property. The report is not intended to make any representation concerning title or ownership to the subject property. If real property records were reviewed, they were reviewed for the sole purpose of determining the subject property's historical uses. All findings, conclusions, and recommendations stated in this report are based on the data and information provided to Aspect, current use of the subject property, and observations and conditions that existed on the date and time of the report.

Aspect structures its services to meet the specific needs of our clients. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and subject property. This report should not be applied for any purpose or project except the purpose described in the Agreement.

This Report Is Project-Specific

Aspect considered a number of unique, project-specific factors when establishing the Scope of Work for this project and report. You should not rely on this report if it was:

- Not prepared for you
- Not prepared for the specific purpose identified in the Agreement
- Not prepared for the specific real property assessed
- Completed before important changes occurred concerning the subject property, project or governmental regulatory actions

If changes are made to the project or subject property after the date of this report, Aspect should be retained to assess the impact of the changes with respect to the conclusions contained in the report.

Geoscience Interpretations

The geoscience practices (geotechnical engineering, geology, and environmental science) require interpretation of spatial information that can make them less exact than other engineering and natural science disciplines. It is important to recognize this limitation in evaluating the content of the report. If you are unclear how these "Report Limitations and Use Guidelines" apply to your project or site, you should contact Aspect.

Discipline-Specific Reports Are Not Interchangeable

The equipment, techniques and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually address any environmental findings, conclusions or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding the subject property.

Environmental Regulations Are Not Static

Some hazardous substances or petroleum products may be present near the subject property in quantities or under conditions that may have led, or may lead, to contamination of the subject property, but are not included in current local, state or federal regulatory definitions of hazardous substances or petroleum products or do not otherwise present potential liability. Changes may occur in the standards for appropriate inquiry or regulatory definitions of hazardous substance and petroleum products; therefore, this report has a limited useful life.

Property Conditions Change Over Time

This report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time (for example, Phase I ESA reports are applicable for 180 days), by events such as a change in property use or occupancy, or by natural events, such as floods, earthquakes, slope failure or groundwater fluctuations. If more than six months have passed since issuance of our report, or if any of the described events may have occurred following the issuance of the report, you should contact Aspect so that we may evaluate whether changed conditions affect the continued reliability or applicability of our conclusions and recommendations.

Phase I ESAs – Uncertainty Remains After Completion

Aspect has performed the services in general accordance with the scope and limitations of our Agreement and the current version of the “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process”, ASTM E1527, and U.S. Environmental Protection Agency (EPA)'s Federal Standard 40 CFR Part 312 "Innocent Landowners, Standards for Conducting All Appropriate Inquiries".

No ESA can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with subject property. Performance of an ESA study is intended to reduce, but not eliminate, uncertainty regarding the potential for environmental conditions affecting the subject property. There is always a potential that areas with contamination that were not identified during this ESA exist at the subject property or in the study area. Further evaluation of such potential would require additional research, subsurface exploration, sampling and/or testing.

Historical Information Provided by Others

Aspect has relied upon information provided by others in our description of historical conditions and in our review of regulatory databases and files. The available data does not provide definitive information with regard to all past uses, operations or incidents affecting the subject property or adjacent properties. Aspect makes no warranties or guarantees regarding the accuracy or completeness of information provided or compiled by others.

Exclusion of Mold, Fungus, Radon, Lead, and HBM

Aspect’s services do not include the investigation, detection, prevention or assessment of the presence of molds, fungi, spores, bacteria, and viruses, and/or any of their byproducts. Accordingly, this report does not include any interpretations, recommendations, findings, or conclusions regarding the detection, assessment, prevention or abatement of molds, fungi, spores, bacteria, and viruses, and/or any of their byproducts. Aspect’s services also do not include the investigation or assessment of hazardous building materials (HBM) such as asbestos, polychlorinated biphenyls (PCBs) in light ballasts, lead based paint, asbestos-containing building materials, urea-formaldehyde insulation in on-site structures or debris or any other HBMs. Aspect’s services do not include an evaluation of radon or lead in drinking water, unless specifically requested.