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November 16, 2023

Mr. Conor Hansen
SRM Development
720 6th Street South, Suite 100
Kirkland, WA 98033

Re: Data Gaps Investigation Report
Former Eastside Disposal Site
969 118th Avenue SE
Bellevue, Washington 98005

TRC Project Number: 471241.0

Dear Mr. Hansen:

TRC Environmental Corporation (TRC) is pleased to present this *Data Gaps Investigation Report* (DGI Report) for the former Eastside Disposal Property located at 969 118th Avenue SE in Bellevue, Washington (subject property). The location of the subject property is indicated on Figure 1. A representation of the subject property is indicated on Figure 2.

The purpose of this DGI Report is to document the results and findings of the Data Gaps Investigation (DGI) completed at the subject property between July 2022 and June 2023.

BACKGROUND

Within the boundary of the subject property are two separate Washington State Model Toxics Control Act (MTCA) Sites. The locations of these two MTCA Sites are depicted on Figure 2:

- Former Storage Building Site (Cleanup Site ID [CSID] 7835)
- Former Main Building Site (CSID 7836)

Numerous assessment and characterization activities as well as remediation activities, have been conducted at the subject property beginning in the 1990s through 2016. A summary of all remedial actions completed on the subject property are documented in the March 11, 2020 *Cleanup Action Report, Former Eastside Disposal Property, 969 118th Avenue SE, Bellevue, WA* (CAR), prepared by TRC (TRC 2020).

The CAR was reviewed by the Washington State Department of Ecology (Ecology). Based on a review of the CAR, Ecology noted they would agree to manage the Former Storage Building Site and the Former Main Building Site as two separate MTCA Sites if it could be demonstrated that impacts to soil or groundwater do not commingle.

Following consultation with Ecology, TRC prepared the *Data Gaps Investigation Work Plan, Former Eastside Disposal Property, 969 118th Avenue SE, Bellevue, Washington 98005* (DGI Work Plan), dated August 2, 2021 (TRC 2021). The objective of the DGI Work Plan was to document the procedures and methods to obtain and evaluate additional soil and groundwater data from the area of the subject property between the Former Storage Building Site and Former Main Building Site the. A copy of the DGI Work Plan is provided in Attachment A.

On November 18, 2021, Ecology issued an opinion letter based on their review of both the CAR and the DGI Work Plan. In the opinion letter, Ecology agreed that the scope of the DGI Work Plan was sufficient to determine whether the two MTCA Sites are commingled via unknown soil impacts and/or a groundwater plume. Additionally, if it could be demonstrated that groundwater is not impacted at the Former Main Building Site, the Former Main Building Site could qualify for a No Further Action (NFA) determination. A copy of Ecology's Opinion Letter is provided in Attachment B.

The additional investigation, described herein, was performed in accordance with the DGI Work Plan.

Subject Property Location and Description

The subject property is in a residential/urban area immediately west of Interstate 405 (I-405) in Bellevue, Washington. The subject property encompasses approximately 3.58 acres and is currently being redeveloped for multi-family residential use.

Historical Land Use

The subject property formerly consisted of three contiguous King County parcels (Parcel Numbers. 042405-9038, 042405-9057, and 939970-0820) that were accessed from one driveway off 118th Avenue SE. The three parcels were consolidated into King County Parcel Number 939970-0820 during redevelopment activities.

The subject property was first developed in 1959 and was used as an operating base for garbage collection service companies (Rabanco, Eastside Disposal, and Republic) until 2011.

Site Description

Former Storage Building Site

The Former Storage Building Site was developed with a 2,800-square-foot storage building constructed in 1965. The building was historically used for equipment and material storage and vehicle maintenance. A 2,000-gallon gasoline underground storage tank (UST) and 500-gallon gasoline UST were formerly located on the north side of the building. A 1,000-gallon diesel fuel UST was formerly located near the

southeast corner of the building. All three USTs were removed in 1989 and in 2011, the Former Storage Building was demolished. A representation of the Former Storage Building Site is depicted on Figure 2.

Soil at the Former Storage Building Site was previously impacted with petroleum hydrocarbons (gasoline-range organics [GRO], diesel-range organics [DRO], and oil-range organics [ORO]) and benzene. Together, these compounds comprise the contaminants of concern (COCs) for this Site. The apparent COC sources in soil at the Former Storage Building Site were the former USTs, an oil-water separator (OWS), and the concrete washdown pad and drain.

Former Main Building Site

The Former Main Building Site was developed with an approximately 4,489-square-foot building (Main Building) constructed in 1959, formerly located on the eastern side of the subject property. The Main Building included office space, four vehicle service bay areas, storage rooms, and one 10,000-gallon UST. This UST, formerly located along the west side of the building, was decommissioned by removal in 1993. The Main Building was demolished in 2016 as a part of redevelopment and ongoing soil remediation work in that area. A representation of the Former Main Building Site is depicted on Figure 2.

Soil at the Former Main Building Site was previously impacted with petroleum hydrocarbons (GRO, DRO, ORO), benzene, and naphthalene. Together, these compounds comprise the COCs for this Site. The apparent COC sources in soil at the Former Main Building Site were the former USTs and releases from drains within vehicle service pits.

Natural Conditions

The following sections discuss the natural conditions at the subject property.

Topography

The nearest surface water body to the subject property is the Mercer Slough. The Mercer Slough drains the area between two north-to-south trending ridges located east and west of the subject property. These hills and ridges are indicative of the last Vashon Glaciation (see Geology Section below). The Mercer Slough is located approximately 225 feet west of the subject property. The Mercer Slough flows to the south, through the City of Bellevue Mercer Slough Nature Park (MSNP) to Lake Washington.

Elevations at the subject property range from approximately 51 feet above mean sea level (AMSL) along the road frontage on the east to 27 feet AMSL along the subject property western boundary. Drainage is to the west where precipitation infiltrates the subsurface, recharging groundwater, or flows toward the west by overland flow and enters the Mercer Slough at an approximate elevation of 22 feet AMSL.

Geology

Surficial and near surface geological deposits in the area are heavily influenced by the Vashon Glaciation. Generally, the advancing glacier scoured the land surface and upon retreat, left a heterogenous soil profile consisting of silt, sands, gravel, and cobble sized materials. Several non-glaciated areas to the

east of the subject property were not as affected by the glaciation and older native, sedimentary deposits (i.e., coal) are still evident at the Issaquah Alps (i.e., Tiger, Squak, and Cougar Mountains). After the glacier retreated, precipitation runoff and aeolian deposits began to remove and rework deposits from the north-to-south trending hills and ridges and redeposit them to depressions and valleys. Subsequent windblown flora re-vegetated the area after the glaciation as evidenced by lower elevation, riparian locations exhibiting highly organic peat deposits.

These types of deposits were identified at the subject property during the installation of monitoring wells MW-4 and MW-5. During the installation of these wells, a layer of peat with observable roots was encountered at depths ranging from approximately 8 to 13 feet. The observed peat is consistent with organic-rich deposits expected near bogs and low energy bodies of water (i.e., Mercer Slough).

Peat deposits are defined by highly organic, acidic, and anaerobic conditions, hence the retarded decay of the organics. If organic-rich soils are encountered with groundwater, the lower pH and anaerobic geochemistry of the aquifer increase the solubility and mobility of some metals species. This increased solubility and mobility of metals results in elevated concentrations of naturally occurring inorganic elements, such as arsenic, in local groundwater.

DATA GAPS INVESTIGATION

The following sections summarize the methodology and findings of the data gaps investigation.

Methodology

Soil

On July 18, 2022, TRC mobilized to the subject property to advance a total of six soil borings (TSB-1 through TSB-6) using direct-push technology (DPT) drilling and sampling methods. On August 22, 2022, TRC returned to the subject property to advance and sample three additional soil borings (TSB-7 through TSB-9) using hollow-stem auger (HSA) techniques. These borings were converted to monitoring wells MW-6 through MW-8, respectively. All drilling was performed by a Washington-state licensed driller under the supervision and direction of an experienced environmental professional from TRC. Soil boring and monitoring well locations are depicted on Figure 2.

During drilling at each location, soil samples were screened in the field for the presence of volatile organic compounds (VOCs) using a photoionization detector (PID) and field methods such as visual and olfactory inspection.

Soil conditions at each location were logged using the Unified Soil Classification System with visual-manual procedures (ASTM Method 2488D). Soil conditions and field screening results are presented on soil boring logs in Attachment C.

Soil borings were advanced to total depths ranging from 14 to 20 feet below ground surface (bgs). Soil sampling depths targeted 1 foot, 5 feet, 15 feet, and 20 feet bgs. Sampling depths were adjusted based

upon field screening results, terminal boring depth, and groundwater depths. Samples were placed in clean, unused, laboratory-supplied containers, and labeled with pertinent sampling information. All soil samples were immediately placed on ice in a cooler upon collection. All samples were transported under standard chain-of-custody procedures to Friedman & Bruya, Inc., a Washington State accredited analytical laboratory located in Seattle, Washington. Soil samples were submitted for one or more of the following analyses:

- GRO by Northwest Total Petroleum Hydrocarbons as Gasoline Extended (NWTPH-Gx) method
- DRO and ORO by Northwest Total Petroleum Hydrocarbons as Diesel Extended (NWTPH-Dx) method; with and without silica gel cleanup (SGC)
- Benzene, toluene, ethylene, total xylenes (BTEX) by U.S. Environmental Protection Agency (EPA) Method 8021B

Groundwater

The following sections discuss the methodology for groundwater monitoring well installation, development, and groundwater sampling.

Temporary Direct-Push Technology Well Installation

Reconnaissance groundwater samples were collected at each of the six DPT boring locations (TSB-1 through TSB-6). Temporary wells were constructed using a 1-inch diameter, threaded Schedule 40 polyvinyl chloride (PVC) 0.010-inch screen and riser pipe.

Monitoring Well Installation and Development

Monitoring wells MW-6 through MW-8 were constructed with 10 feet of 0.010-inch factory slotted screen and appropriate sand filter pack, bentonite well seal, and traffic-rated flush mount monuments. Well screen intervals were selected based on depth-to-water observations recorded during the installation of temporary wells. The specific construction details of monitoring wells MW-6 through MW-8 are included in the bore logs, provided in Attachment C. Following installation, each monitoring well was developed to the satisfaction of the on-site geologist.

Wellhead Survey

The wellhead elevations of all monitoring wells located on the subject property (MW-1 through MW-8) were surveyed on September 2, 2022, by Pace Engineering, a Washington State licensed land surveyor. Vertical coordinates were measured at the northernmost point on the top of each well casing to the nearest 0.01 foot, relative to the North American Vertical Datum of 1988 (NAVD88). Horizontal coordinates of each of the wells were measured relative to the North American Datum of 1983 (NAD 83). A copy of the wellhead survey data is presented in Attachment D.

Groundwater Monitoring and Sampling Procedures

All groundwater samples were collected using a peristaltic pump equipped with new, single use polyethylene tubing that was changed between each well location using low-flow purging and sampling techniques.

Prior to sampling, all monitoring wells on the subject property (MW-1 through MW-8) were opened and allowed to equilibrate. Depth to water was then measured to the nearest 0.01 foot relative to the top of the well casing at each well location. Groundwater samples were only collected from the three new monitoring wells (MW-6 through MW-8) as part of the DGI.[1]

All groundwater samples were pumped directly from the pump discharge tubing into sample containers provided by the laboratory. Each groundwater sample was handled and transported by the same methods described above. Groundwater samples were submitted for one or more of the following analyses:

- GRO by NWTPH-Gx method
- DRO and ORO by NWPTH-Dx method with and without SGC
- Select VOCs, including BTEX, and methyl tertiary butyl ether (MTBE) by EPA Method 8260D
- 1,2-dibromomethane (EDB) by EPA Method 8011 Modified
- Resource Conservation and Recovery Act (RCRA) 8 metals by EPA Method 6020B.

Silica Gel Cleanup

The NWTPH-Dx method does not distinguish between organics associated with naturally occurring organic matter (polar metabolites) and organics associated with petroleum hydrocarbons (non-polar). Both soil and groundwater samples were submitted for SGC. In accordance with Ecology's Publication, "*Guidance for Remediation of Petroleum Contaminated Sites, Toxics Cleanup Program Publication No. 10-09-057, REVISED June 2016*" (Ecology 2016), SGC may be used to adsorb those polar metabolites associated with non-petroleum organic matter, such as peat.

Ecology produced "*Draft Guidance for Silica Gel Cleanup in Washington State, Toxics Cleanup Program Publication No. 22-09-059*" in September 2022 (Ecology 2022b). This document provides additional guidance for use of SGC and was followed during the groundwater assessment portion of the DGI and documented herein.

The subject property is located within 225 feet of the Mercer Slough and previous investigations have indicated the presence of a significant peat layer at depths ranging between approximately 8 and 13 feet, which correspond to an elevation of 13.7 to 32.4 feet AMSL. The peat layer depths are in close vertical proximity to the shallow groundwater table depths. Based on these data, SGC was performed on all groundwater samples with detectable concentrations of DRO or ORO.

[1] The DGI was completed in concert with quarterly groundwater sampling at the Former Storage Building Site. The results of the quarterly groundwater sampling at the Former Storage Building Site are documented under separate cover.

Findings

The following sections discuss the findings of the DGI performed at the subject property.

Subsurface Conditions

Additional evidence of a subsurface enriched in organic matter was observed during the installation of temporary wells TSB-1, TSB-2, and TSB-5 and monitoring well MW-8. Organic matter deposits were observed at variable depths in these locations ranging from 0 to 20 feet. Groundwater was observed at depths ranging from 10 feet to 18.9 feet (approximately 1.8 to 30.4 AMSL) during the installation of temporary wells TSB-1 through TSB-6 and monitoring wells MW-6 through MW-8.

Analytical Results

Analytical results were compared against applicable MTCA Method A cleanup levels (CULs). Copies of the laboratory analytical reports are provided in Attachment E. A summary of the soil and groundwater analytical results is provided below.

Soil

A total of 19 soil samples collected during the DGI were submitted for analysis. The analytical results are provided in Table 1 and discussed below:

- **Petroleum Hydrocarbons**
  - GRO were not detected at concentrations exceeding the laboratory reporting limit (RL) of 5 milligrams per kilogram (mg/kg).
  - DRO analyzed with and without SGC were not detected at concentrations exceeding the RL of 50 mg/kg.
  - ORO analyzed with and without SGC were not detected at concentrations exceeding the RL of 250 mg/kg.
- **Volatile Organic Compounds**
  - Benzene, toluene, and ethylbenzene were not detected at concentrations exceeding the RL of 0.02 mg/kg.
  - Total xylenes were not detected at concentrations exceeding the RL of 0.06 mg/kg.

Groundwater

A total of nine groundwater samples collected during the DGI were submitted for analysis. The analytical results are provided in Table 2 and discussed below:

- **Petroleum Hydrocarbons**

- GRO were not detected at concentrations exceeding the RL of 100 micrograms per liter (µg/L).

- DRO analyzed without SGC were not detected at concentrations exceeding the MTCA Method A CUL of 500 µg/L. DRO analyzed Dx with SGC were not detected at concentrations exceeding the RL of 50 µg/L.

- ORO analyzed without SGC were not detected at concentrations exceeding the MTCA Method A CUL of 500 µg/L. ORO analyzed with SGC were not detected at concentrations exceeding the RL of 250 µg/L.

- All DRO and ORO concentrations that exceeded the RL were flagged with an "X" qualifier. An “X” qualifier indicates the sample results did not match the standard chromatographic pattern for these compounds. Neither DRO nor ORO were detected in any of the samples analyzed with SGC at concentrations exceeding their respective RLs. Based on the “X” qualifier in the analytical results and the reduction in concentrations of DRO and ORO following the use of SGC, detections of ORO and DRO in on-site groundwater are the result of organic matter interference.

- **Volatile Organic Compounds**
  - Benzene was not detected at concentrations exceeding the RL that ranged from 0.35 µg/L to 1 µg/L.

  - Toluene and ethylbenzene were not detected at concentrations exceeding the RL of 1 µg/L.

  - Total xylenes were not detected at concentrations exceeding the RL that ranged from 1 µg/L to 3 µg/L.

  - MTBE was not detected at concentrations exceeding the RL of 1 µg/L.

- **1,2-Dibromomethane**
  - EDB was not detected at concentrations exceeding the RL of 0.01 µg/L.

- **RCRA 8 Metals**
  - Arsenic was detected at a concentration of 9.81 µg/L, which exceeds the MTCA Method A CUL of 5 µg/L, in the duplicate sample collected from MW-6 (MW-6:GW DUP-1). Arsenic was also detected in MW-7 and MW-8, but concentrations did not exceed the MTCA Method A CUL of 5 µg/L.

  - Barium was not detected at concentrations exceeding the MTCA Method A CUL of 3,200 µg/L. Barium was detected in MW-7 at 25.7 µg/L and in MW-8 at 35.7 µg/L.

  - Cadmium was not detected at concentrations exceeding the RL of 1 µg/L.

- Chromium was not detected at concentrations exceeding the MTCA Method A CUL of 50 µg/L. Chromium was detected in one sample (MW-8:GW) at a concentration of 1.07 µg/L.
- Lead was not detected at concentrations exceeding the RL of 1 µg/L.
- Mercury was not detected at concentrations exceeding the RL of 1 µg/L.
- Selenium was not detected at concentrations exceeding the MTCA Method A CUL of 80 µg/L. Selenium was detected in one sample (MW-8:GW) at a concentration of 1.24 µg/L.
- Silver was not detected at concentrations exceeding the RL of 1 µg/L.

Quarterly Groundwater Sampling

In their 2021 Opinion Letter, Ecology indicated the following:

> *"If there are detections in groundwater, then quarterly sampling will need to be done to understand the concentrations in time throughout the year. A minimum of four consecutive quarters of groundwater results demonstrating concentrations below MTCA Method A cleanup levels will then be required before the Main Building Site can be issued a No Further Action determination."*

In accordance with Ecology's directive, TRC conducted three additional rounds of groundwater sampling at monitoring wells MW-6 through MW-8. Monitoring events occurred on December 15, 2022, March 15, 2023, and June 21, 2023. The following sections provide a summary of the findings from the quarterly groundwater sampling events.

Piezometric Conditions

The groundwater elevation data are presented in Table 3. Quarterly piezometric groundwater contours for are included on Figure 3. These data indicated that the groundwater flow direction is predominantly to the west/south-west with an approximate average gradient of 0.0095 foot/foot. The groundwater table generally occurred between 22 and 25 feet AMSL on the eastern portion of the property and between 20 and 22 feet on the western side of the subject property, near the slough.

Groundwater Analytical Results

The analytical results are provided in Table 2. A summary of the analytical results is depicted on Figure 4. Copies of the analytical reports are included in Attachment E. The results of these quarterly groundwater sampling events are summarized below:

- **Petroleum Hydrocarbons**
  - GRO were not detected at concentrations exceeding the RL of 100 µg/L

- DRO analyzed by NWTPH-Dx without SGC were not detected at concentrations exceeding the MTCA Method A CUL of 500 µg/L. DRO analyzed by NWTPH-Dx with SGC were not detected at concentrations exceeding the RL of 50 µg/L.

  All detections of DRO were flagged with an "X" qualifier in the data indicating the sample results did not match the standard chromatographic pattern. As described above in the DGI groundwater analytical results section, the “X” qualifier in the data indicates the presence organic matter interference.

- ORO analyzed by NWTPH-Dx with and without SGC were not detected at concentrations exceeding the RL of 250 µg/L.

- **Volatile Organic Compounds**
  - Benzene was not detected at concentrations exceeding the RL that ranged from 0.35 µg/L to 1 µg/L.

  - Toluene and ethylbenzene were not detected at concentrations exceeding the RL of 1 µg/L.

  - Total xylenes were not detected at concentrations exceeding the RL that ranged from 1 µg/L to 3 µg/L.

  - MTBE was not detected at concentrations exceeding the RL of 1 µg/L.

- **EDB**
  - EDB was not detected at concentrations exceeding the RL of 0.01 µg/L.

- **RCRA 8 Metals**
  - Arsenic was detected in a sample taken from MW-8 on March 15, 2023 at a concentration of 7.18 µg/L, which exceeds the MTCA Method A CUL of 5 µg/L.

    The concentrations exceeding the MTCA Method A CUL for arsenic (documented in the September 2, 2022, and March 15, 2023, sampling events) are consistent with naturally occurring background conditions and are not indicative of a release of arsenic at the subject property. Elevated concentrations of arsenic have been reported throughout western Washington in soils and groundwater, as documented in the following Ecology publications:

    - October 1994. *Natural Background Soil Metals Concentrations in Washington State* (publication No. 94-115), prepared by Ecology (Ecology 1994)

    - January 2022. *Natural Background Groundwater Arsenic Concentrations in Washington State: Study Results* (Publication No. 14-09-044), prepared by Ecology (Ecology 2022a).

Based on a review of these publications, the calculated 90th percentile background concentrations for arsenic in groundwater in the Puget Sound Lowlands is 8.0 µg/L, with a standard deviation of 4.2 µg/L. The concentrations of arsenic detected in MW-6 through MW-8 between September 2022 and June 2023 ranged from non-detect to 9.81 µg/L, which is consistent with Ecology's findings for background conditions.

As discussed earlier, arsenic solubility increases in water with anaerobic (lower dissolved oxygen) and acidic (pH values less than 7.0) conditions. Groundwater samples exhibited low dissolved oxygen (between than 0.18 and 1.81 milligrams per liter [mg/L]) across all four quarters. pH values ranged from 5.88 to 7.82, with an average pH value of 6.7. These conditions are consistent with deposits rich in organic matter, such as peat deposits, which have been documented on the subject property[2].

- Barium was not detected at concentrations exceeding the MTCA Method A CUL of 3,200 µg/L. Barium was detected at concentrations ranging from 20.1 to 69.7 µg/L.
- Cadmium was not detected at concentrations exceeding the RL of 1 µg/L.
- Chromium was not detected at concentrations exceeding the MTCA Method A CUL of 50 µg/L. Chromium was detected at concentrations ranging from 1.07 to 1.30 µg/L.
- Lead was not detected at concentrations exceeding the RL of 1 µg/L.
- Mercury was not detected at concentrations exceeding the RL of 1 µg/L.
- Selenium was not detected at concentrations exceeding the MTCA Method A CUL of 80 µg/L. Selenium was detected at concentrations ranging from 1.07 to 2.05 µg/L.
- Silver was not detected at concentrations exceeding the RL of 1 µg/L.

CONCLUSIONS

TRC provides the following conclusions and recommendations based on the information presented above:

- The subject property includes two separate MTCA Sites: the Former Storage Building Site (Ecology Cleanup Site ID 7835) and the Former Main Building Site (Ecology Cleanup Site ID 7836). These two sites are located approximately 300 feet apart on the subject property.

[2] As described in the **Natural Conditions** section, organic materials were observed at depths ranging from 0 to 20 feet in soil borings TSB-1, TSB-2, TSB-5 and monitoring well MW-8.

- All impacted soils at the Former Storage Building Site and the Former Main Building Site have been fully remediated, as documented in TRC's 2020 *Cleanup Action Report* (TRC 2020).

- Detectable concentrations of petroleum hydrocarbons (GRO, DRO, and ORO) and BTEX were not identified in the soils located between the Former Storage Building Site and the Former Main Building Site.

- There is no evidence that a release to groundwater at the Former Main Building Site has occurred. This is supported by the following:

    - BTEX, MTBE, and EDB were not detected in groundwater:

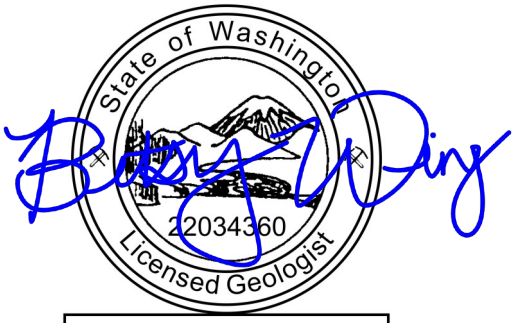
    - Petroleum hydrocarbons (GRO, DRO and ORO) were not detected in groundwater at concentrations exceeding applicable MTCA Method A CULs. All detections of DRO and ORO without the use of SGC were flagged with an "X" qualifier indicating the sample results did not match the standard chromatographic pattern. DRO and ORO were not detected in any of the groundwater samples analyzed with SGC at concentrations exceeding the respective method RLs. Based on the "X" qualifier in the data and the reduction in concentrations of DRO and ORO following the use of SGC, detections of DRO and ORO in on-site groundwater are the result of organic matter interference and not a release to the subsurface.

    - Elevated arsenic concentrations are representative of naturally occurring background concentrations typical in western Washington. There is no documented historical source of arsenic at either the Former Storage Building Site or the Former Main Building Site. The observed arsenic concentrations are attributed to the presence of the subsurface peat layer and associated increased solubility of naturally occurring arsenic in soil resulting from on-site anaerobic (reducing) conditions in groundwater.

- There is no evidence of a commingled plume in soil or groundwater between the Former Storage Building Site and the Former Main Building Site.

Based on the results of the DGI, TRC respectfully requests that Ecology continue to manage the Former Storage Building Site and the Former Main Building Site as separate sites. TRC also requests that Ecology grant a No Further Action (NFA) determination for the Former Main Building Site (Ecology Cleanup Site ID 7836).

Sincerely,



JEAN M. WING

Prepared by:
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ENCLOSURES

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Attachments

Attachment A	Data Gaps Investigation Work Plan
Attachment B	2021 Ecology Opinion Letter
Attachment C	Bore Logs
Attachment D	Wellhead Survey Data
Attachment E	Laboratory Analytical Results

REFERENCES

TRC Environmental Corporation (TRC). 2020. *Cleanup Action Report, Former Eastside Disposal Property, 969 118th Avenue SE, Bellevue, WA.* Prepared for Pioneer Development Corporation, Inc. 11 March.

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Washington State Department of Ecology (Ecology). 1994. *Natural Background Soil Metals Concentrations in Washington State (publication No. 94-115).* October.

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———. 2022a. *Natural Background Groundwater Arsenic Concentrations in Washington State: Study Results. Publication No. 14-09-044*. January.

———. 2022b. *Draft Guidance for Silica Gel Cleanup in Washington State, Toxics Cleanup Program. Publication No. 22-09-059*. September.

LIMITATIONS

To the extent that preparation of this DGI Report required the application of best professional judgment and the application of scientific principles, certain results of this work were based on subjective interpretation. TRC makes no warranties, express or implied, including and without limitation warranties as to merchantability or fitness for a particular purpose. The information provided in this DGI Report is not to be construed as legal advice.

Tables

Table 1
Soil Analytical Resuls
Data Gaps Investigation Report
Former Eastside Disposal Site
969 118th Avenue SE, Bellevue, WA 98005

Sample ID	Sample Depth (feet)	Sample Date	Petroleum Hydrocarbons					BTEX[d]			
			GRO[a]	DRO[b]		ORO[b]		Benzene	Toluene	Ethyl-benzene	Total Xylenes
				(with silica gel)[c]	(without silica gel)	(with silica gel)[c]	(without silica gel)				
TSB-1:9	9	7/18/2022	<5	--	--	--	--	<0.02	<0.02	<0.02	<0.06
TSB-1:15	15	7/18/2022	<5	--	--	--	--	<0.02	<0.02	<0.02	<0.06
TSB-2:8	8	7/18/2022	<5	--	--	--	--	<0.02	<0.02	<0.02	<0.06
TSB-2:13	13	7/18/2022	<5	--	--	--	--	<0.02	<0.02	<0.02	<0.06
TSB-3:7	7	7/18/2022	--	<50	<50	<250	<250	--	--	--	--
TSB-3:12	12	7/18/2022	--	<50	<50	<250	<250	--	--	--	--
TSB-4:5	5	7/18/2022	--	<50	<50	<250	<250	--	--	--	--
TSB-4:10	10	7/18/2022	--	<50	<50	<250	<250	--	--	--	--
TSB-5:9	9	7/18/2022	--	<50	<50	<250	<250	--	--	--	--
TSB-5:15	15	7/18/2022	--	<50	<50	<250	<250	--	--	--	--
TSB-6:2	2	7/18/2022	--	<50	<50	<250	<250	--	--	--	--
TSB-6:9	9	7/18/2022	--	<50	<50	<250	<250	--	--	--	--
TSB-6:16	16	7/18/2022	--	<50	<50	<250	<250	--	--	--	--
TSB-07/MW-6:5	5	8/22/2022	<5	<50	<50	<250	<250	<0.02	<0.02	<0.02	<0.06
TSB-07/MW-6:10	10	8/22/2022	<5	<50	<50	<250	<250	<0.02	<0.02	<0.02	<0.06
TSB-08/MW-7:5	5	8/22/2022	<5	<50	<50	<250	<250	--	--	--	--
TSB-08/MW-7:10	10	8/22/2022	<5	<50	<50	<250	<250	--	--	--	--
TSB-09/MW-8:5	5	8/22/2022	<5	<50	<50	<250	<250	--	--	--	--
TSB-09/MW-8:15*	15	8/22/2022	<5	<50	<50	<250	<250	--	--	--	--
MTCA Method A Soil Cleanup Level for Unrestricted Land Uses[e]			**30/100[f]**	**2,000**		**2,000**		**0.03**	**7**	**6**	**9**

Notes:
All results presented in milligrams per kilogram (mg/kg).
a Analyzed by NWTPH-Gx.
b Analyzed by NWTPH-Dx.
c Sample extracts passed through a silica gel column prior to analysis.
d Analyzed by EPA Method 8021B.
e Model Toxics Control Act (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1, Washington Administrative Code (WAC) 173-340-900.
f MTCA Method A Soil Cleanup Level is 30 mg/kg when benzene is present and 100 mg/kg when benzene is not detected.
* The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
-- Sample was not analyzed for this compound.
< Result is less than laboratory reporting limit.

Compounds:
GRO Gasoline-range organics
DRO Diesel-range organics
ORO Oil-range organics
BTEX Benzene, toluene, ethylbenzene and total xylenes

Table 2
Groundwater Analytical Resuls
Data Gaps Investigation Report
Former Eastside Disposal Site
696 118th Avenue SE, Bellevue, WA 98005

Event	Sample Location	Sample ID	Sample Date	Petroleum Hydrocarbons					BTEX[d,e]				Methyl t-butyl ether (MTBE)[d]	1,2-Dibromo-ethane (EDB)[f]	Total Metals[g]							
				GRO[a]	DRO[b]		ORO[b]		Benzene	Toluene	Ethyl-benzene	Total Xylenes			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
					(with silica gel)[c]	(without silica gel)	(with silica gel)[c]	(without silica gel)														
Data Gaps Investigation	TSB-1	TSB-1:GW	7/18/2022	<100	--	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--	--	--	--	--
	TSB-2	TSB-2:GW	7/18/2022	<100	--	--	--	--	<1	<1	<1	<3	--	--	--	--	--	--	--	--	--	--
	TSB-3	TSB-3:GW	7/18/2022	--	--	**170 x**	--	<250	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	TSB-4	TSB-4:GW	7/18/2022	--	--	**59 x**	--	<250	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	TSB-5	TSB-5:GW	7/18/2022	--	--	**130 x**	--	<250	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	TSB-6	TSB-6:GW	7/18/2022	--	--	**300 x**	--	**330 x**	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW-6	MW-6:GW	9/2/2022	<100	<50	**150 x**	<250	<250	<1	<1	<1	<3	--	--	**1.94**	--	--	--	--	--	--	--
	MW-6	MW-6:GW DUP-1	9/2/2022	<100	<50	**120 x**	<250	<250	<1	<1	<1	<3	--	--	**9.81**	--	--	--	--	--	--	--
	MW-7	MW-7:GW	9/2/2022	--	<50	<50	<250	<250	<0.35	<1	<1	<1	<1	<0.01	**1.30**	**25.7**	<1	<1	<1	<1	<1	<1
	MW-8	MW-8:GW	9/2/2022	<100	<50	**200 x**	<250	<250	<0.35	<1	<1	<1	<1	<0.01	**3.93**	**35.7**	<1	**1.07**	<1	<1	**1.24**	<1
Quarterly Groundwater Sampling	MW-6	MW-6:GW	12/15/2022	<100	<50	**74 x**	<250	<250	<0.35	<1	<1	<1	--	--	**1.81**	--	--	--	--	--	--	--
	MW-6	MW-6:GW DUP-1	12/15/2022	<100	<50	**77 x**	<250	<250	<0.35	<1	<1	<1	--	--	**1.73**	--	--	--	--	--	--	--
	MW-6	MW-6:GW	3/15/2023	<100	<50	**110 x**	<250	<250	<0.35	<1	<1	<3	--	--	**1.51**	--	--	--	--	--	--	--
	MW-6	MW-6:GW	6/21/2023	<100	<50	**100 x**	<250	<250	<0.35	<1	<1	<3	--	--	<1	--	--	--	--	--	--	--
	MW-7	MW-7:GW	12/15/2022	<100	<50	**97 x**	<250	<250	<0.35	<1	<1	<1	<1	<0.01	<1	**33.1**	<1	**1.24**	<1	<1	<1	<1
	MW-7	MW-7:GW	3/15/2023	<100	<50	**55 x**	<250	<250	<0.35	<1	<1	<3	<1	<0.01	<1	**20.1**	<1	<1	<1	<1	<1	<1
	MW-7	MW-7:GW	6/21/2023	<100	<50	<50	<250	<250	<0.35	<1	<1	<3	<1	<0.01	<1	**28.8**	<1	<1	<1	<1	<1	<1
	MW-8	MW-8:GW	12/15/2022	<100	<50	**220 x**	<250	<250	<0.35	<1	<1	<1	<1	<0.01	**8.17**	**69.7**	<1	**1.30**	<1	<1	**2.05**	<1
	MW-8	MW-8:GW	3/15/2023	<100	<50	**230 x**	<250	<250	<0.35	<1	<1	<3	<1	<0.01	**7.18**	**59.6**	<1	**1.07**	<1	<1	**1.07**	<1
	MW-8	MW-8:GW	6/21/2023	<100	<50	**190 x**	<250	<250	<0.35	<1	<1	<3	<1	<0.01	**4.96**	**46.8**	<1	<1	<1	<1	**1.07**	<1
	MTCA Method A Cleanup Levels for Groundwater[h]			**800/1,000[i]**	**500**		**500**		**5**	**1,000**	**700**	**1,000**	**20**	**0.01**	**5**	**3,200[j]**	**5**	**50**	**15**	**2**	**80[j]**	**80[j]**

Notes:
All results presented in micrograms per liter (µg/L).
Bold Bold result exceeds laboratory reporting limit.
Shaded result exceeds the cleanup level.
a Analyzed by NWTPH-Gx.
b Analyzed by NWTPH-Dx.
c Sample extracts passed through a silica gel column prior to analysis.
d Analyzed by EPA Method 8260D Series.
e Samples collected in 2022 were analyzed by EPA Method 8021B.
f Analyzed by EPA Method 6020B.
g Analyzed by EPA Method 8011 Modified.
h Model Toxics Control Act (MTCA) Method A Cleanup Levels for Groundwater, Table 720-1, Washington Administrative Code (WAC) 173-340-900, July 2023.
i MTCA Method A Groundwater Cleanup Level is 800 µg/L when benzene is present and 1,000 µg/L when benzene is not detected.
j MTCA Method B Groundwater Cleanup Levels from Cleanup Levels and Risk Calculations (CLARC). Where cleanup levels based on carcinogenic and non-carcinogenic risk were available, the lower value was listed.
-- Sample was not analyzed for this compound.
< Result is less than laboratory reporting limit.

Qualifier:
x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Compounds:
GRO Gasoline-range organics
DRO Diesel-range organics
ORO Oil-range organics
BTEX Benzene, toluene, ethylbenzene and total xylenes

Table 3
Groundwater Piezometric Data
Data Gaps Investigation Report
Former Eastside Disposal Site
969 118th Avenue SE, Bellevue, WA 98005

Well	Date	Depth to Water	Top of Casing Elevation[a]	Groundwater Elevation
MW-1	9/2/2022	8.03	28.6	20.57
	12/15/2022	7.17	28.6	21.43
	3/15/2023	6.98	28.6	21.62
	6/21/2023	7.25	28.6	21.35
MW-2	9/2/2022	6.3	27.01	20.71
	12/15/2022	5.30	27.01	21.71
	3/15/2023	5.02	27.01	21.99
	6/21/2023	5.42	27.01	21.59
MW-3	9/2/2022	DRY	26.53	NA
	12/15/2022	NM	26.53	NA
	3/15/2023	NM	26.53	NA
	6/21/2023	NM	26.53	NA
MW-4R	9/2/2022	10.41	31.03	20.62
	12/15/2022	9.26	31.03	21.77
	3/15/2023	8.95	31.03	22.08
	6/21/2023	9.59	31.03	21.44
MW-5R	9/2/2022	7.03	27.43	20.4
	12/15/2022	6.70	27.43	20.73
	3/15/2023	6.60	27.43	20.83
	6/21/2023	6.80	27.43	20.63
MW-6	9/2/2022	10.75	31.73	20.98
	12/15/2022	9.55	31.73	22.18
	3/15/2023	9.31	31.73	22.42
	6/21/2023	9.84	31.73	21.89
MW-7	9/2/2022	10.05	31.47	21.42
	12/15/2022	7.04	31.47	24.43
	3/15/2023	7.05	31.47	24.42
	6/21/2023	8.74	31.47	22.73
MW-8	9/2/2022	17.48	39.67	22.19
	12/15/2022	13.41	39.67	26.26
	3/15/2023	13.93	39.67	25.74
	6/21/2023	15.62	39.67	24.05

Notes:

a Wells surveyed by Pace on September 7, 2022 referenced to North American Vertical Datum of 1988 (NAVD88).

DRY Well was dry.

NA Not applicable.

NM Not measured.

Figures

0 1,000 2,000

FEET

1:24,000 1" = 2,000'

BASE MAP: USGS COLOR ORTHO IMAGERY
DATA SOURCES: TRC

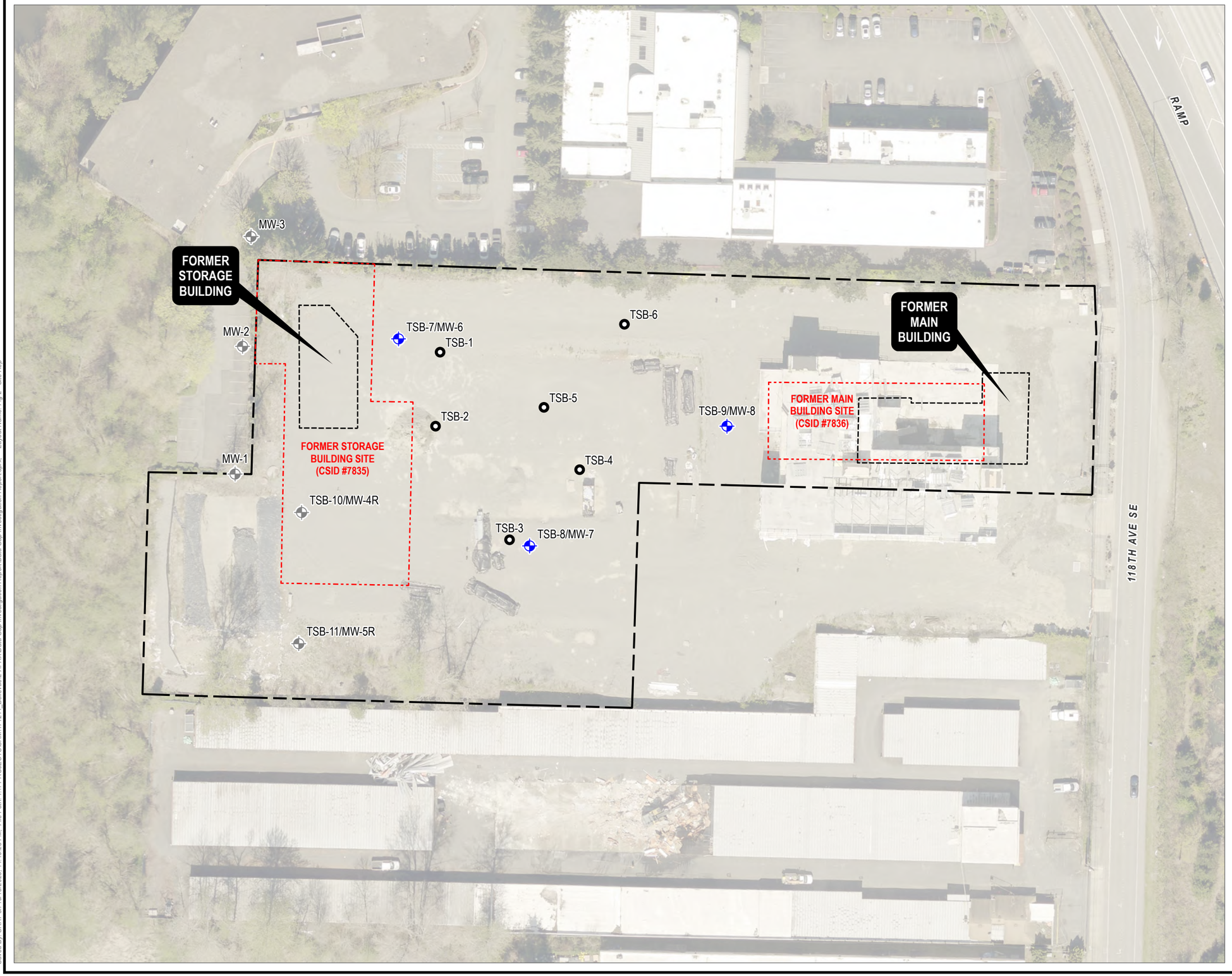
PROJECT: SRM DEVELOPMENT
FORMER EASTSIDE DISPOSAL SITE
969 118TH AVENUE SOUTHEAST
BELLEVUE, WASHINGTON

TITLE: GENERAL VICINITY MAP
DATA GAPS INVESTIGATION REPORT

DRAWN BY:	S. RAY	PROJ. NO.:	471241.0000.0000
CHECKED BY:	J. WINDSOR		
APPROVED BY:	J. SHERROD		FIGURE 1
DATE:	OCTOBER 2023		

TRC
1180 NW MAPLE STREET, SUITE 310
ISSAQUAH, WA 98027
PHONE: 425.395.0010

FILE: DATA GAP INVESTIGATION REPORT



- MONITORING WELL LOCATION
- MONITORING WELL LOCATION (USED FOR EVALUATION OF PIEZOMETRIC CONDITIONS ONLY)
- DIRECT-PUSH TECHNOLOGY (DPT) SOIL BORING LOCATION
- APPROXIMATE SUBJECT PROPERTY BOUNDARY
- FORMER BUILDING FOOTPRINT
- MTCA SITE BOUNDARY

NOTES:
CSID = CLEANUP SITE ID.
MTCA = MODEL TOXICS CONTROL ACT.

BASE MAP: KING COUNTY, ARCGIS ONLINE (2021).
DATA SOURCES: TRC, PROPERTY BOUNDARY AND STREET NAMES FROM KING COUNTY, ARCGIS ONLINE (2021).

1:840
1" = 70'
0 70 140 FEET

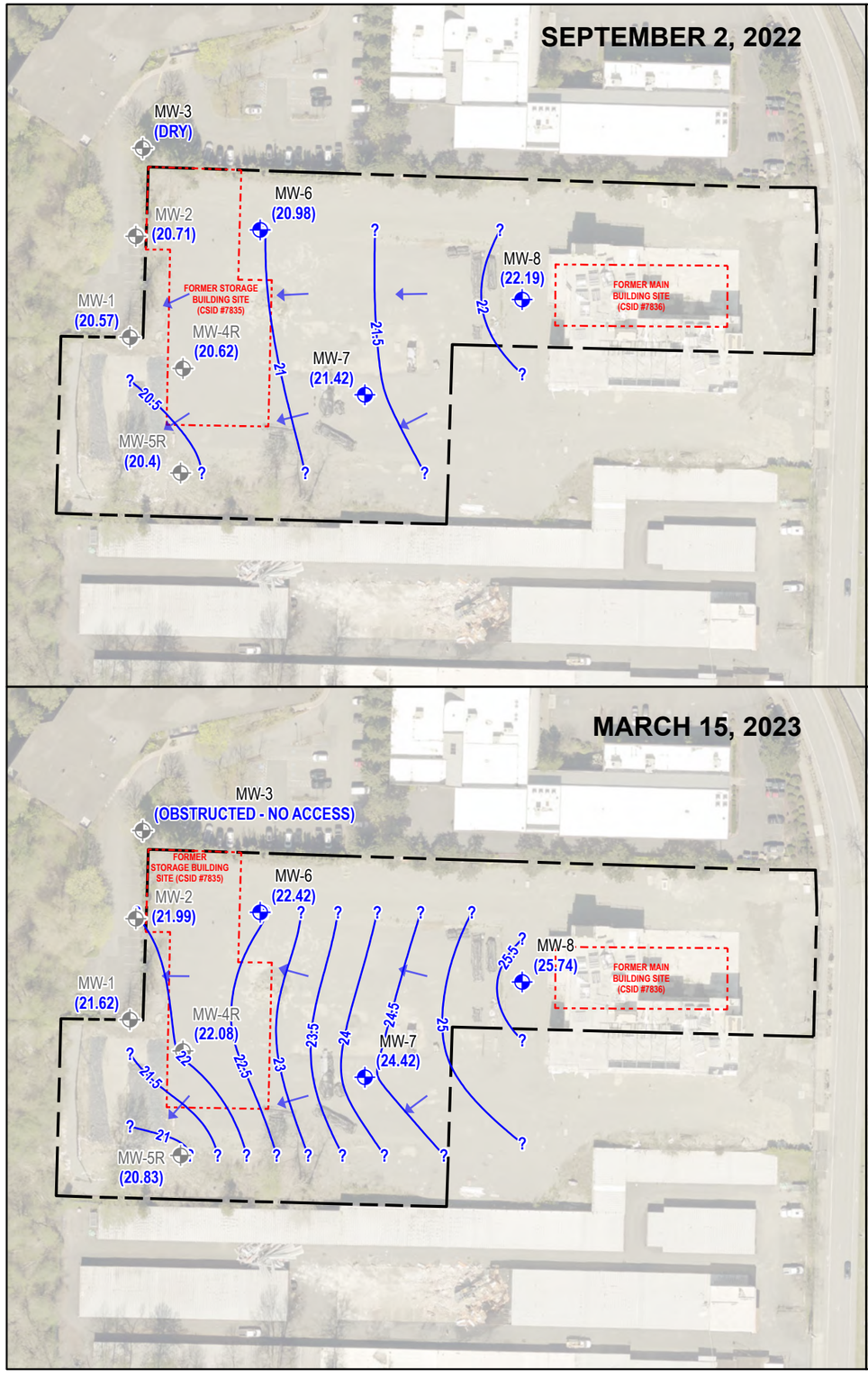
PROJECT: SRM DEVELOPMENT
FORMER EASTSIDE DISPOSAL SITE
969 118TH AVENUE SOUTHEAST
BELLEVUE, WASHINGTON

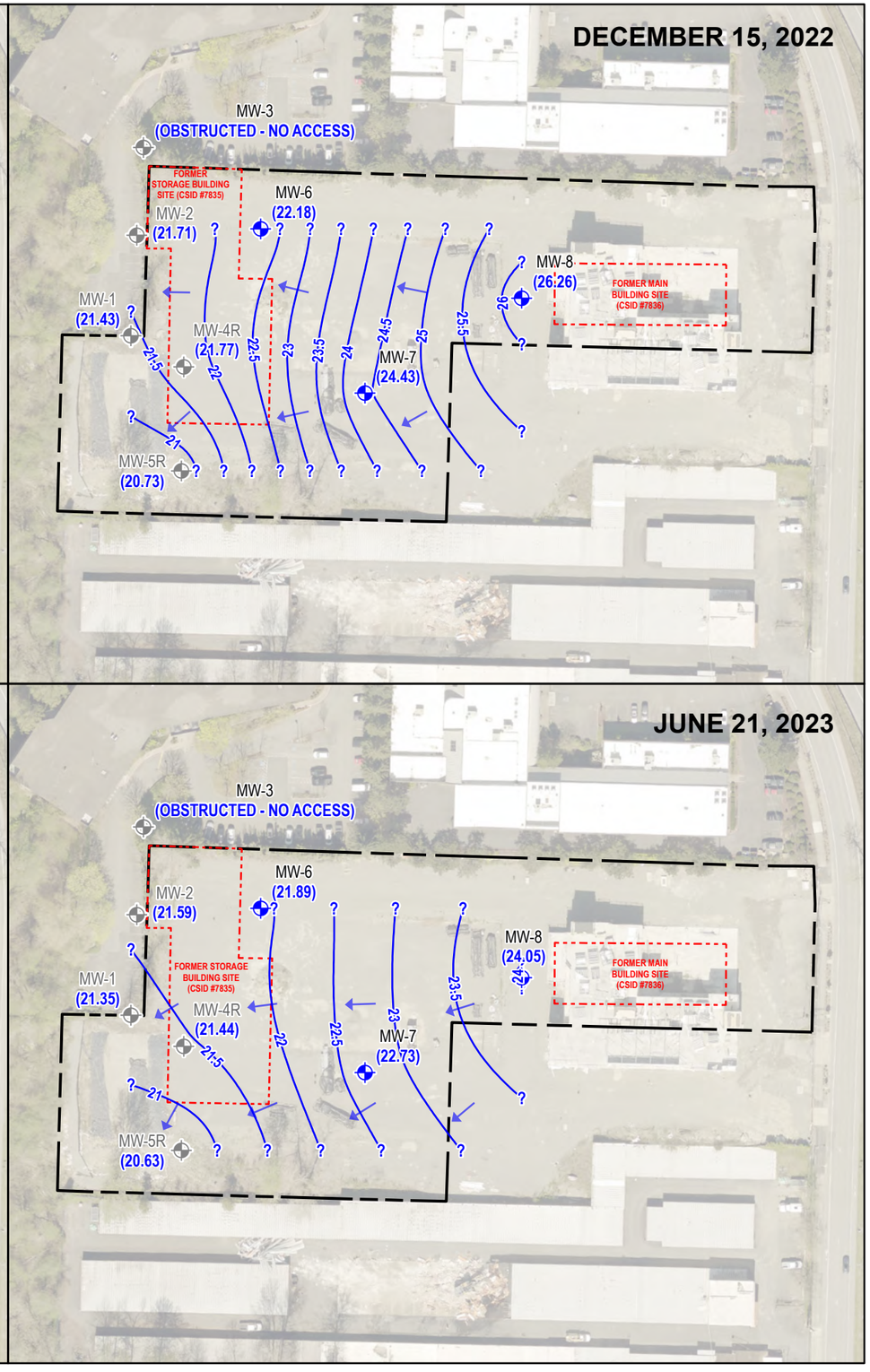
TITLE: SUBJECT PROPERTY REPRESENTATION
DATA GAPS INVESTIGATION REPORT

DRAWN BY:	S. RAY	PROJ. NO.:	471241.0000.0000
CHECKED BY:	J. WINDSOR		FIGURE 2
APPROVED BY:	J. SHERROD		
DATE:	OCTOBER 2023		

TRC
1180 NW MAPLE STREET, SUITE 310
ISSAQUAH, WA 98027
PHONE: 425.395.0010

FILE: Data Gap Investigation Report.aprx





MONITORING WELL LOCATION

MONITORING WELL LOCATION (USED FOR EVALUATION OF PIEZOMETRIC CONDITIONS ONLY)

GROUNDWATER CONTOUR (0.5 FOOT INTERVAL), QUERIED WHERE UNCERTAIN

INFERRED GROUNDWATER FLOW DIRECTION

APPROXIMATE SUBJECT PROPERTY BOUNDARY

MTCA SITE BOUNDARY

NOTES:
(24.05) = GROUNDWATER ELEVATION, FEET ABOVE MEAN SEA LEVEL.
CSID = CLEANUP SITE ID.
MTCA = MODEL TOXICS CONTROL ACT.

BASE MAP: KING COUNTY, ARCGIS ONLINE (2021).
DATA SOURCES: TRC, PROPERTY BOUNDARY AND STREET NAMES FROM KING COUNTY, ARCGIS ONLINE (2021).

N

1:1,500
1" = 125'

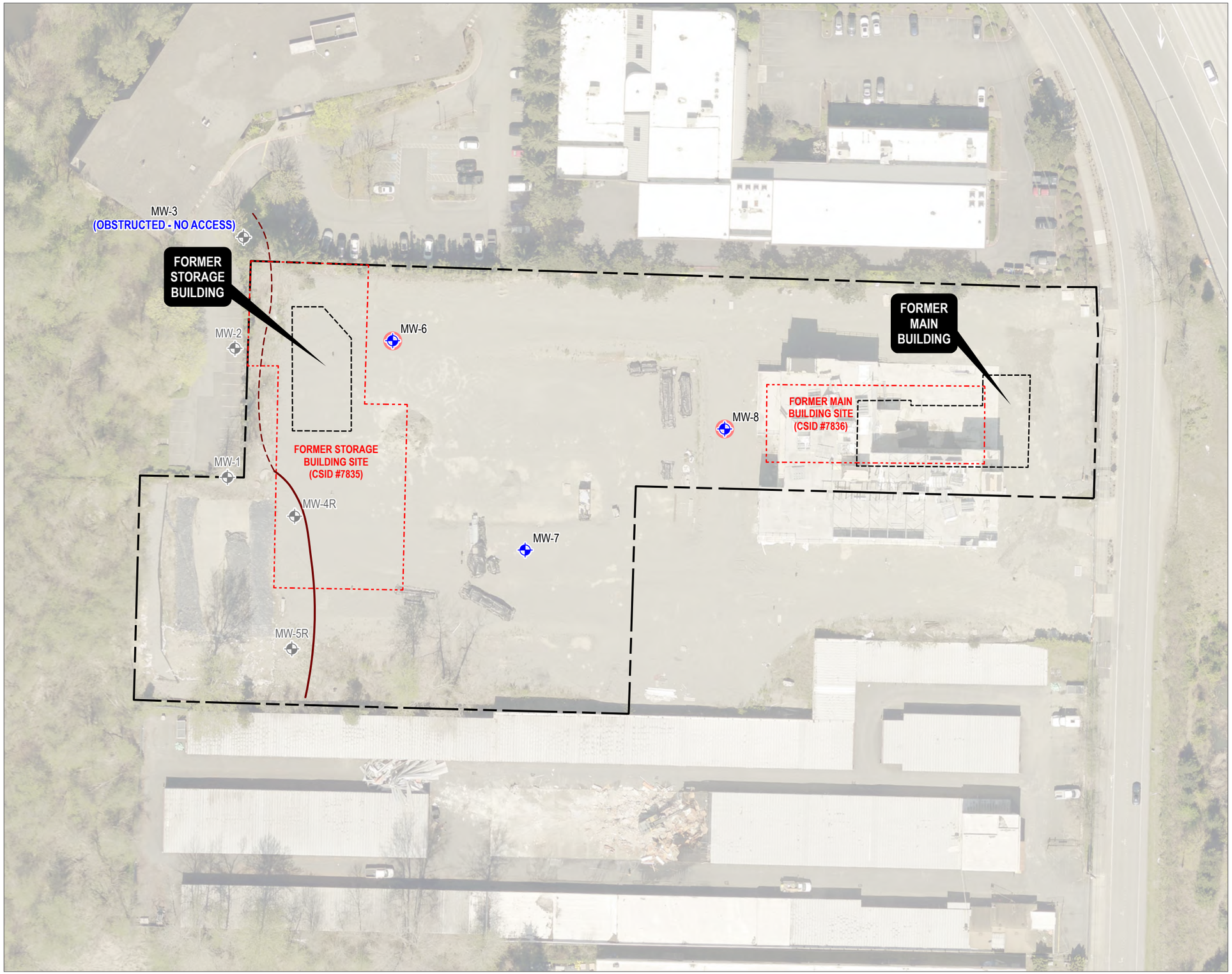
0 62.5 125 FEET

PROJECT:	SRM DEVELOPMENT FORMER EASTSIDE DISPOSAL SITE 969 118TH AVENUE SOUTHEAST BELLEVUE, WASHINGTON
TITLE	QUARTERLY GROUNDWATER ELEVATION CONTOURS FOR SEPTEMBER 2022 THROUGH JUNE 2023 DATA GAPS INVESTIGATION REPORT
DRAWN BY:	S. RAY
CHECKED BY:	J. WINDSOR
APPROVED BY:	B. WING
DATE:	AUGUST 2023
PROJ. NO.:	471241.0000.0000
	FIGURE 3

TRC
1180 NW MAPLE STREET, SUITE 310
ISSAQUAH, WA 98027
PHONE: 425.395.0010

FILE: Data Gap Investigation Report.aprx

Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet; Map Rotation: 0
Saved By: SRAY on 10/18/2023 14:46:22 PM; File Path: T:\1-PROJECTS\SRM\471241_Bellevue\2-ARRX\Data Gap Investigation Report\Data Gap Investigation Report.aprx; Layout Name: Fig 3 - GW Contours June 2023



MONITORING WELL LOCATION

MONITORING WELL LOCATION (USED FOR EVALUATION OF PIEZOMETRIC CONDITIONS ONLY)

INDICATES ONE OR MORE EXCEEDANCE OF MTCA METHOD A GROUNDWATER CLEANUP LEVEL FOR ARSENIC OVER FOUR MONITORING EVENTS

EVIDENCE OF SUBSURFACE PEAT DEPOSITS, DASHED WHERE INFERRED

APPROXIMATE SUBJECT PROPERTY BOUNDARY

FORMER BUILDING FOOTPRINT

MTCA SITE BOUNDARY

NOTES:
CSID = CLEANUP SITE ID.
MTCA = MODEL TOXICS CONTROL ACT.

BASE MAP: KING COUNTY, ARCGIS ONLINE (2021).
DATA SOURCES: TRC, PROPERTY BOUNDARY AND STREET NAMES FROM KING COUNTY, ARCGIS ONLINE (2021).

N

1:840
1" = 70'
0 35 70 FEET

PROJECT:	SRM DEVELOPMENT FORMER EASTSIDE DISPOSAL SITE 969 118TH AVENUE SOUTHEAST BELLEVUE, WASHINGTON
TITLE:	ARSENIC GROUNDWATER ANALYTICAL RESULTS DATA GAPS INVESTIGATION REPORT
DRAWN BY:	S. RAY
CHECKED BY:	J. WINDSOR
APPROVED BY:	B. WING
DATE:	AUGUST 2023
PROJ. NO.:	471241.0000.0000
	FIGURE 4

TRC
1180 NW MAPLE STREET, SUITE 310
ISSAQUAH, WA 98027
PHONE: 425.395.0010

FILE: Data Gap Investigation Report.aprx

Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet; Map Rotation: 0
Saved By: SRAY on 10/16/2023 - 1:46:23 PM; File Path: T:\PROJECTS\SRM\471241 - Bellevue\2-APRX\Data Gap Investigation Report\Data Gap Investigation Report.aprx; Layout Name: Fig 4 - GW Analytical Results

Attachment A
Data Gaps Investigation Work Plan

1180 NW Maple St., Suite 310
Issaquah, WA 98027

T 425.395.0010
TRCcompanies.com

Data Gaps Investigation Work Plan

Former Eastside Disposal Property
969 118th Avenue SE
Bellevue, Washington 98005

Voluntary Cleanup Program No. NW3267
Facility Site Identification No. 92711227
Cleanup Site Identification No. 7835

Prepared For:

Pioneer Development Corporation, Inc.
11010 NE 8th Street, Suite 465
Bellevue, Washington 98004

August 2, 2021

Prepared By:

TRC Environmental Corporation
1180 NW Maple Street, Suite 310
Issaquah, Washington 98027
(425) 395-0010

(Electronically Submitted)

Prepared by:
Douglas Kunkel, LHG
Principal Hydrogeologist

Reviewed and approved by:
Jerry Boyd, LG
Senior Geologist

TRC Project Number: 424088

QR _____ TR _____

TABLE OF CONTENTS

TABLES

FIGURES

ATTACHMENTS

ABBREVIATIONS AND ACRONYMS

Abbreviation/ Acronym	Definition
BTEX	Benzene, toluene, ethylbenzene, and total xylenes
DOT	United States Department of Transportation
DPT	Direct-push technology
DRO	Diesel-range organics
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
FBI	Friedman & Bruya, Inc.
HASP	Health and Safety Plan
HSA	Hollow-stem auger
IDW	Investigation-derived waste
MTCA	Model Toxics Control Act
NFA	No Further Action
NWTPH-Dx	Northwest Total Petroleum Hydrocarbons – Diesel Range Extended
NWTPH-Gx	Northwest Total Petroleum Hydrocarbons – Gasoline Range
ORO	Oil-range organics
PID	Photoionization detector
PVC	Polyvinyl chloride
SGC	Silica gel cleanup
TRC	TRC Environmental Corporation
USCS	Unified Soil Classification System
VCP	Voluntary Cleanup Program
WAC	Washington Administrative Code

1.0 BACKGROUND

TRC Environmental Corporation (TRC)[1] is pleased to submit the following Data Gaps Investigation Work Plan to document the purpose, methods, and procedures used to perform a Data Gaps Investigation, prepare a Data Gaps Investigation Summary Report, and request a No Further Action (NFA) determination from the Washington State Department of Ecology (Ecology) for the former Eastside Disposal Property located at 969 118th Avenue SE in Bellevue, Washington (subject property). The location of the subject property is depicted on Figure 1.

The subject property is enrolled in Ecology's Voluntary Cleanup Program (VCP) as number NW3267, Facility/Site ID 92711227, and Cleanup Site ID 7835. TRC understands that a historical release of petroleum hydrocarbon compounds occurred at the subject property. The subject property is currently being redeveloped as a hotel facility with on-site underground parking and that property development work has likely removed residual soil contamination that had been located under a former building that was demolished during redevelopment activities.

2.0 PURPOSE

The Cleanup Action Report (CAR) submitted to Ecology in March 2020 identified two separate Model Toxics Control Act (MTCA) Sites within the subject property. The two MTCA Sites are identified as the Former Main Building Site and the Former Storage Building Site as depicted on Figure 2. Ecology noted that they will agree to manage the Former Storage Building Site and the Former Main Building Site as two separate MTCA Sites if it can be demonstrated that impacts to soil or groundwater do not commingle, which would require that the two MTCA Sites be combined into a larger single MTCA Site. The purpose of this Data Gaps Investigation Work Plan is to provide the procedures and methods that will be used to obtain and evaluate additional soil and groundwater data from the area of the subject property between the Former Main Building Site and the Former Storage Building Site to address the specific data gaps identified by Ecology.

3.0 PRE-FIELD TASKS

Pre-field activities that must be completed prior to mobilization for the Data Gaps Investigation activities are presented in the following sections.

3.1 Health and Safety Plan

Prior to commencing any field activities, TRC field staff will review the existing Site-specific Health and Safety Plan (HASP) for investigation activities as required by the Code of Federal Regulations (CFR) Title 29 1910.120 and by the Washington State Department of Labor and Industries. The HASP is a

[1] Environmental Partners, Inc. (EPI) performed prior work on this project. EPI was acquired by TRC on December 27, 2019. For the purposes of this document and project, EPI and TRC may be used interchangeably.

document that establishes site objectives, anticipates job hazards, provides implementation of a hazard communication and injuries/illness prevention program, and establishes policies and procedures to be followed in both routine and emergency situations. A copy of the Site-specific HASP is included in Attachment A.

3.2 Utility Locating

Prior to performing subsurface (i.e., drilling, probing) work at the Site TRC will notify Washington One Call Service to identify publicly owned subsurface utilities at the subject property. The notification will be initiated a minimum of 3 business days prior to scheduled field activities. In addition, TRC will have a private utility locator clear each sampling location prior to advancing borings. TRC is not responsible for damage to utilities that cannot be located and are not identified.

4.0 FIELD METHODS

Soil and groundwater samples will be obtained from the area between the two MTCA Sites using a full-size, truck-mounted direct-push technology (DPT) probe rig. In addition, three permanent groundwater monitoring wells will be installed using a full-size, truck-mounted hollow-stem auger (HSA) drilling and will be sampled following well development. Field methods for DPT soil and groundwater sampling, HSA soil sampling, well installation, development, and sampling, and surveying are described in the following sections.

4.1 Direct-Push Soil Sampling

Soil samples will be collected at 5-foot intervals at each of the six DPT boring locations. Soils encountered will be classified using the Unified Soil Classification System (USCS) per the American Standards and Testing Method: Standard Practice Description and Identification of Soils (ASTM 2488D-00). Physical properties to be documented on the soil boring logs generally include: USCS name, color, moisture content, density or stiffness, dilatancy and plasticity for fine-grained soils, and odor or other field screening indications of potential contamination such as photoionization detector (PID) measurements. A portion of soil from each sample interval will be placed in a new resealable plastic bag, disaggregated, and allowed to degas for approximately 10 minutes after which time the headspace within the bag will be measured for the presence and relative concentration of volatile organic compounds (VOCs) using a calibrated PID. PID measurements will be recorded on the soil boring logs. At borings completed as soil vapor probes or monitoring wells the construction details of those completions will also be recorded on the logs. The completed logs will be provided in the project reports.

Soil intervals that, based on field screening, are potentially impacted will be sampled for laboratory analysis. Samples will be submitted for the following laboratory analyses:

- Diesel-range organics (DRO) and oil-range organics (ORO) by Northwest Total Petroleum Hydrocarbon – Diesel Range Extended (NWTPH-Dx) with silica gel cleanup (SGC).

Samples from the two sample locations near AOPC-1 (i.e., borings SB-1 and MW-6) will also be analyzed for the following constituents based on historical detections of gasoline range organics (GRO) and benzene in samples from AOPC-1. These samples will be collected using U.S. Environmental Protection Agency (EPA) Method 5035 for volatiles in soil.

- Gasoline range organics (GRO) by Northwest Total Petroleum Hydrocarbon – Gasoline Range (NWTPH-Gx); and

- Benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA Method 8021B.

If there are no field screening indications of contaminated soil, one soil sample will be collected from the interval above the top of the water table and will be submitted for the constituents listed above.

Soil samples will be placed into new, laboratory-supplied sample jars using new, single use, decontaminated stainless-steel spoons. Samples will be placed into iced coolers with an internal temperature of 6 degrees Celsius or lower and transported to Friedman & Bruya, Inc. (FBI) in Seattle, Washington, a State of Washington-accredited laboratory, following standard chain-of-custody procedures. Sample analyses, container types, preservatives, and holding times for soil samples from DPT probes are summarized in Table 1.

4.2 Direct-Push Groundwater Sampling

Reconnaissance groundwater samples will be collected at six DPT boring locations using temporary well screens and a peristaltic pump equipped with new single use tubing that will be changed between sample locations. Each boring will be sampled using low flow-purging and sampling techniques at the time of drilling.

All sampling devices will ideally be dedicated to a specific well or use new, single use tubing to prevent the need for decontamination between well locations. Low-flow purging will be conducted in general accordance with procedures described in Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures (EPA 1996). Field parameters will be measured and recorded during purging, but stabilization is not required for temporary DPT wells.

To the extent possible, DPT temporary wells will not be purged to dryness. However, if a well exhibits very slow water level recovery and is purged to dryness, groundwater samples at that well will be collected upon sufficient recovery. Sufficient recovery is defined as recovery to at least 80 percent of original static water level prior to purging.

The DPT groundwater samples will be submitted for the following laboratory analyses:

- DRO and ORO by NWTPH-Dx.

Samples from the two DPT sample locations near AOPC-1 (i.e., borings SB-01 and MW-6) will also be analyzed for the following constituents based on historical detections of GRO and benzene in samples from AOPC-1.

- GRO by NWTPH-Gx; and
- BTEX by EPA Method 8021B.

Sample analyses, container types, preservatives, and holding times for groundwater samples from DPT probes are summarized in Table 1.

4.3 Monitoring Well Drilling, Soil Sampling, Installation, and Development

Three sampling locations will be completed as 2-inch diameter groundwater monitoring wells (i.e., wells MW-6, MW-7, and MW-8). The wells will be installed in borings drilled using a full-size, truck-mounted HSA drilling rig. All wells will be drilled and constructed consistent with Ecology resource protection well construction requirements in Washington Administrative Code (WAC) 173-160.

Soil samples will be collected at 5-foot intervals at each of the three HSA boring locations. The soil samples will be field screened for the potential presence of contaminants using visual and olfactory indicators, sheen testing, and field screened using a PID.

Soil intervals that, based on field screening, are potentially impacted will be sampled for laboratory analysis. Samples from all three well locations will be submitted for the following laboratory analyses:

- DRO and ORO by NWTPH-Dx with SGC.

Soil samples from the well location near AOPC-1 will also be analyzed for the following constituents based on historical detections of GRO and benzene in samples from AOPC-1. These samples will be collected using EPA Method 5035 for volatiles in soil.

- GRO by NWTPH-Gx; and
- BTEX by EPA Method 8021B.

Sample analyses, container types, preservatives, and holding times for soil samples collected from monitoring well boreholes are summarized in Table 1.

Monitoring wells will be screened with 10-foot sections of 0.010-inch machine-slotted Schedule 40 polyvinyl chloride (PVC) well screen and the screen interval will be selected so that the screens straddle the water table with 2 to 3 feet of screen above the top of the water table and the remainder of the screen set below the water table at the time of drilling. The bottom of the screen will be sealed with a flush-threaded end cap. A silica sand filter pack consisting of 10-20 silica sand, or equivalent, will be installed around the well screen from the bottom of the boring to approximately 1 foot above the top of the well screen. The remainder of the wells will be constructed using blank, flush-threaded Schedule 40 PVC casing and a watertight locking well cap. The remaining well annulus above the sand filter pack will be

sealed with hydrated bentonite chips and completed with flush-completion traffic-rated steel monuments set in concrete.

New wells will be developed using dedicated single use polyethylene bailers to surge and bail groundwater and solids from each well. Development water will be retained in Department of Transportation (DOT)-approved, steel 55-gallon drums, which will be properly labeled and temporarily stored on-site pending results of laboratory analysis for waste characterization.

4.4 Monitoring Well Surveying

The three new monitoring wells and existing monitoring wells MW-1, MW-2, and MW-3, which were confirmed to be present at the Site, will be surveyed for horizontal and vertical control by Pace Engineers, a State of Washington-licensed land surveyor, under the oversight of TRC field staff. Vertical control will establish measuring point elevations for each well and will be tied to the North American Vertical Datum of 1988 (NAVD88) so all wells have a common elevation datum, which will facilitate preparation of groundwater elevation contour maps and evaluation of groundwater flow directions.

4.5 Monitoring Well Groundwater Sampling

Prior to sampling, depth to static water will be measured in monitoring wells MW-1, MW-2, MW-3, MW-6, MW-7, and MW-8. The three new monitoring wells (MW-6, MW-7, and MW-8) will be sampled using a peristaltic pump equipped with new, single use polyethylene and silicon tubing that will be changed between each well location. Groundwater sampling will be performed using low-flow purging and sampling techniques. Purging will be performed until groundwater stabilization criteria are achieved for three successive measurements taken at approximately 3- to 5-minute intervals.

Purging will be accomplished by starting the pump system at a low flow rate, (approximately 0.2 to 0.5 liters per minute) and slowly increasing the pumping rate. The water level in the well will be checked to maintain a drawdown of less than or equal to 0.33 feet (EPA 1996). If drawdown is greater than 0.33 feet, the flow rate will be decreased. The goal of 0.33 feet or less of drawdown may be difficult to achieve at some locations due to low-permeability formations and may require adjustment based on site-specific conditions and the professional experience of the field personnel. Purge water will be discharged through a flow cell for field parameter measurements and into 5-gallon buckets (or equivalent) before temporary storage in labelled on-site DOT-approved, steel 55-gallon drums, pending analytical results for waste characterization.

At a minimum, temperature, pH, specific conductance, dissolved oxygen (DO), oxidation-reduction potential (ORP), and turbidity will be measured and recorded during purging. DO and ORP measurements will be obtained but these parameters will not be used to determine stabilization. In addition, notes will be taken describing the appearance and/or odor of the water. Purging will be performed until field parameters stabilize to within the following ranges:

- pH ± 0.1 pH units

- Specific conductance ± 3 percent
- Turbidity ± 10 percent (when turbidity is greater than 10 nephelometric turbidity units (NTUs)
- Temperature ± 0.1°C

Upon stabilization groundwater samples from new well MW-6 will be collected for the following laboratory analyses.

- DRO and ORO by NWTPH-Dx
- GRO by NWTPH-Gx, and
- BTEX by EPA Method 8021B.

Groundwater samples from MW-7 and MW-8 will be analyzed for additional constituents based on their potential presence based on historical operations:

- DRO and ORO by NWTPH-Dx
- GRO by NWTPH-Gx
- Volatile organic compounds (VOCs), BTEX, and methyl tertiary butyl ether (MTBE) by EPA Method 8260C
- 1,2-dibromomethane (EDB) by EPA Method 8011B, and
- RCRA 8 metals by EPA Methods 200.8, 6020A, and 1613E.

Sample analyses, container types, preservatives, and holding times for groundwater samples collected from the new monitoring wells are summarized in Table 1.

4.6 Sample Identification

Soil and groundwater samples collected as part of this data gaps investigation will be assigned a unique identification code based on a consistent sample designation scheme. A sample tracking record will be kept as each sample is collected.

4.6.1 Direct-Push Sample Identification

Soil and groundwater samples from DPT temporary wells will be designated with unique alphanumeric sample identifiers (sample numbers) as follows:

ED-DP-01-M:(Depth)

Where:

ED	Eastside Disposal
DP	Direct-Push
01	DP sequential number (e.g., DP-01, DP-02, etc.)
M	Media: S = soil and W = water
(Depth)	Depth in feet below ground surface (i.e. ":5")

4.6.2 Hollow-Stem Auger Sample Identification

Soil and groundwater samples from HSA wells will be designated with unique alphanumeric sample identifiers (sample numbers) as follows:

ED-MW-06-M:(Depth)

Where:

ED	Eastside Disposal
MW	Monitoring Well
06	Monitoring well number (e.g., MW-6, MW-7, and MW-8)
M	Media: S = soil and W = water
(Depth)	Depth in feet below ground surface (i.e. ":5")

Sample numbers will be recorded in the field notebook, on sample container labels, and chain-of-custody forms. Other information recorded on the sample container label includes:

- Time and date of sample collection
- Initials of sampler(s)
- Laboratory analyses to be performed
- Preservatives used

4.7 Sample Handling

After collection, all samples will be placed in coolers with enough bagged ice to maintain an internal temperature of 4°C for the duration of the sampling and transportation to the laboratory. Samples will be delivered to FBI for analysis after each day of sampling following the procedures outlined in the previous section. FBI's address is:

Friedman & Bruya, Inc.
3012 16th Ave. West
Seattle, WA 9119-2029
Contact: Mr. Michael Erdahl, (206) 285-8282 (office)

4.8 Equipment Decontamination

Purging and sampling equipment that comes into direct contact with sample media, sample containers, or the inside of a probe or monitoring well will ideally be single-use, disposable equipment that is replaced between each sampling event, or will be dedicated equipment, assigned to and used at only one well or probe location. If non-dedicated, multiple-use sampling equipment is used for soil or groundwater sampling it will be decontaminated prior to use and between each sample location following the steps noted below:

1. Wash in a solution of Liquinox™ (or equivalent) and potable tap water.

1. Rinse with potable tap water.
2. Spray-rinse with distilled or de-ionized water.

4.9 Investigation-Derived Waste

DPT and HSA soil cuttings, decontamination fluids, development water, purge water and other investigation-derived waste (IDW) will be retained on-site in properly labeled 55-gallon DOT-approved steel drums, pending characterization for disposal. TRC personnel will coordinate characterization of drum contents and disposal according to established procedures. Disposal of soil cuttings, well development water, and purge water will be coordinated with client representatives. Hazardous wastes will be managed per the requirements in *Dangerous Wastes Regulations*, Chapter 173-303 WAC. IDW will be manifested to a treatment, storage, and disposal (TSD) facility permitted to accept the material by a waste disposal subcontractor.

5.0 REPORTING AND DATA UPLOAD TO ENVIRONMENTAL INFORMATION MANAGEMENT SYSTEM

Upon receipt of all analytical data, field data, and survey coordinates TRC will prepare a brief Data Gap Investigation Letter Report (DGI Report) describing the work performed, sampling methods, data evaluations, recommendations, and conclusions. The report will contain data summary tables, boring logs and as-built well diagrams, figures showing sampling locations, data, groundwater elevations, elevation contours, and groundwater flow directions. The letter report will be submitted to the Ecology VCP Site Manager with a request for an unconditional NFA determination.

Ecology also requires that all Site data must be uploaded to their Electronic Information Management (EIM) database as a condition of receiving the final NFA. TRC will upload historical and current analytical data from the subject property to Ecology's EIM database and will work with Ecology to correct any deficiencies during their review process.

Table

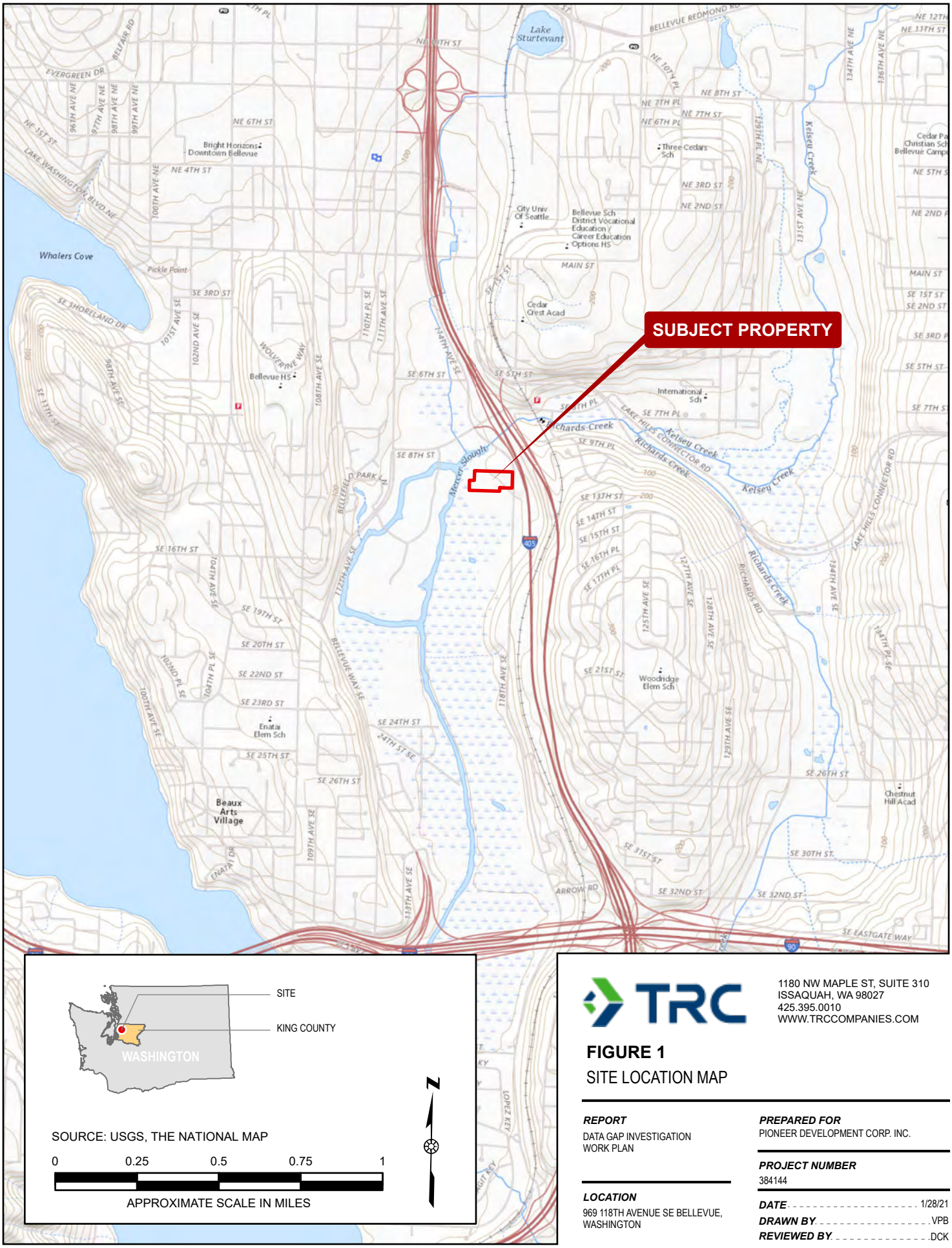
Table 1
Analyses for Soil Boring and Monitoring Well Samples
Data Gaps Investigation Work Plan
Former Eastside Disposal Property
969 118th Avenue SE, Bellevue, Washington

Boring ID	Probe or Well	Analyses and Methods				Sample Container		Preservation	Holding Time	
		Soil		Water		Soil	Water		Soil	Water
DP-1	Probe	DRO/ORO	NWTPH-Dx (SGC)	DRO/ORO	NWTPH-Dx	8 oz WMG	(2) 500 mL AG	Cool <6°C	14 days	7 days
		GRO/BTEX	EPA 5035 NWTPH-Gx EPA 8021B	GRO/BTEX	NWTPH-Gx EPA 8021B	(2) 40 mL AG vials	(2) 40 mL AG vials	HCl to pH <2, cool <6°C	14 days	7 days
DP-2	Probe	DRO/ORO	NWTPH-Dx (SGC)	DRO/ORO	NWTPH-Dx	8 oz WMG	(2) 500 mL AG	Cool <6°C	14 days	7 days
DP-3	Probe	DRO/ORO	NWTPH-Dx (SGC)	DRO/ORO	NWTPH-Dx	8 oz WMG	(2) 500 mL AG	Cool <6°C	14 days	7 days
DP-4	Probe	DRO/ORO	NWTPH-Dx (SGC)	DRO/ORO	NWTPH-Dx	8 oz WMG	(2) 500 mL AG	Cool <6°C	14 days	7 days
DP-5	Probe	DRO/ORO	NWTPH-Dx (SGC)	DRO/ORO	NWTPH-Dx	8 oz WMG	(2) 500 mL AG	Cool <6°C	14 days	7 days
DP-6	Probe	DRO/ORO	NWTPH-Dx (SGC)	DRO/ORO	NWTPH-Dx	8 oz WMG	(2) 500 mL AG	Cool <6°C	14 days	7 days
MW-6	Well	DRO/ORO	NWTPH-Dx (SGC)	DRO/ORO	NWTPH-Dx	8 oz WMG	(2) 500 mL AG	Cool <6°C	14 days	7 days
		GRO/BTEX	EPA 5035 NWTPH-Gx EPA 8021B	GRO/BTEX	NWTPH-Gx EPA 8021B	(2) 40 mL AG vials	(2) 40 mL AG vials	HCL to pH <2, cool <6°C	14 days	7 days
MW-7	Well	DRO/ORO	NWTPH-Dx (SGC)	DRO/ORO	NWTPH-Dx	8 oz WMG	(2) 500 mL AG	Cool <6°C	14 days	7 days
				GRO	NWTPH-Gx	--	(2) 40 mL AG vials	HCl to pH <2, cool <6°C	--	7 days
				EDB	EPA 8011B	--	(2) 40 mL AG vials	75 ug/L $Na_2S_2O_3$ sol. cool <6°C	--	14 days
				VOCs/BTEX/ MTBE	EPA 8260C	--	(3) 40 mL AG vials	HCl to pH <2, cool <6°C	--	14 days
				RCRA 8 Metals	EPA 200.8, 6020A, 1613E	--	500 mL poly	HNO3 to pH<2, cool <6°C	--	6 months
MW-8	Well	DRO/ORO	NWTPH-Dx (SGC)	DRO/ORO	NWTPH-Dx	8 oz WMG	(2) 500 mL AG	Cool <6°C	14 days	7 days
				GRO	NWTPH-Gx	--	(2) 40 mL AG vials	HCl to pH <2, cool <6°C	--	7 days
				EDB	EPA 8011B	--	(2) 40 mL AG vials	75 ug/L $Na_2S_2O_3$ sol. cool <6°C	--	14 days
				VOCs/BTEX/ MTBE	EPA 8260C	--	(3) 40 mL AG vials	HCl to pH <2, cool <6°C	--	14 days
				RCRA 8 Metals	EPA 200.8, 6020A, 1613E	--	500 mL poly	HNO3 to pH<2, cool <6°C	--	6 months

Notes:

°C	Degrees Celsius.
AG	Amber glass.
BTEX	Benzene, toluene, ethylbenzene, and xylenes.
DRO	Diesel range organics.
EPA	U.S. Environmental Protection Agency.
GRO	Gasoline range organics.
HCl	Hydrochloric acid.
mL	Milliliter.
NWTPH-Dx	Northwest Total Petroleum Hydrocarbons as Diesel.
NWTPH-Gx	Northwest Total Petroleum Hydrocarbons as Gasoline.
ORO	Oil range organics.
SGC	Silica Gel Cleanup used for NWTPH-DX analysis (soils only).
WMG	Wide mouth glass.

Figures



1180 NW MAPLE ST, SUITE 310
ISSAQUAH, WA 98027
425.395.0010
WWW.TRCCOMPANIES.COM

FIGURE 1

SITE LOCATION MAP

REPORT
DATA GAP INVESTIGATION
WORK PLAN

LOCATION
969 118TH AVENUE SE BELLEVUE, WASHINGTON

PREPARED FOR
PIONEER DEVELOPMENT CORP. INC.

PROJECT NUMBER
384144

DATE 1/28/21
DRAWN BY VPB
REVIEWED BY DCK

DRAFT
FOR REVIEW

GREENBAUM'S FURNITURE

MW-3

FORMER STORAGE BUILDING SITE

MW-6

MW-2

FORMER STORAGE BUILDING

DP-01

DP-04

DP-06

DP-03

MW-8

DP-05

FORMER MAIN BUILDING SITE

118TH AVENUE SE

MW-1

DP-02

FORMER MAIN BUILDING

MW-7

HOTEL (CURRENTLY UNDER CONSTRUCTION)

MW-4

MW-5

SELF STORAGE WAREHOUSES

NOTES:

DP-01	PROPOSED DIRECT-PUSH PROBE SOIL BORING LOCATION
MW-6	PROPOSED MONITORING WELL LOCATION
MW-1	EXISTING MONITORING WELL LOCATION
	APPROXIMATE PROPERTY BOUNDARY
	MTCA SITE BOUNDARY

AERIAL UNDERLAY: NEARMAP, 8/28/20

N

0 12.5 25 50

SCALE: 1" = 50

TRC
1180 NW MAPLE ST, SUITE 310
ISSAQUAH, WA 98027
WWW.TRCCOMPANIES.COM
425.395.0010

FIGURE 2
PROPOSED SAMPLE LOCATIONS

REPORT
DATA GAP INVESTIGATION WORK PLAN

LOCATION
969 118TH AVENUE SE
BELLEVUE, WASHINGTON

PREPARED FOR
PIONEER DEVELOPMENT CORP. INC.

PROJECT NUMBER
384144

DATE 1/28/21
DRAWN BY ..... VPB
REVIEWED BY ..... DCK

Attachment B
2021 Ecology Opinion Letter

Electronic Copy

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • PO Box 330316 • Shoreline, Washington 98133-9716 • (206) 594-0000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

November 18, 2021

Chi Tsung Pong
NBK, LLC
11010 NE 8th Street, Suite 465
Bellevue, WA 98004
(wenchupong@hotmail.com)

Re: Opinion pursuant to WAC 173-340-515(5) on Remedial Action for the following Hazardous Waste Site:

- **Site Name:** Eastside Disposal James Busse
- **Site Address:** 969 118th Ave SE, Bellevue, WA
- **Facility/Site No.:** 9271127
- **Cleanup Site IDs:** 7836
- **VCP Project No.:** NW3267

Dear Chi Tsung Pong:

The Washington State Department of Ecology (Ecology) received your request for an opinion on work planned for the Eastside Disposal James Busse facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70A.305 RCW.

Issue Presented and Opinion

Does the proposed Work Plan (*Data Gaps Investigation Work Plan*, by TRC Environmental Corporation, dated August 2, 2021) meet the stated objectives with respect to Site data gaps?

YES. Ecology has determined that the proposed sampling work is adequate to investigate soil and groundwater conditions in the specified area.

Description of the Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following releases:

- Gasoline, diesel, and oil range hydrocarbons (TPHg, TPHd, TPHo), benzene, toluene, ethylbenzene, xylenes (BTEX), 1,2-dibromoethane (EDB), methyl tertiary butyl ether (MTBE), halogenated volatile organic compounds (HVOCs), and metals (arsenic, lead, barium, cadmium, chromium, mercury, silver, and selenium) into the Soil.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. TRC Environmental Corporation, *Data Gaps Investigation Work Plan*, August 2, 2021.

2. TRC Environmental Corporation, *Cleanup Action Report*, March 11, 2020.

Some of these documents are accessible in electronic form from the Site Web page. The complete records are kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. Visit our Public Records Request page to submit a public records request or get more information about the process. If you require assistance with this process, you may contact the Public Records Officer by email at publicrecordsofficer@ecy.wa.gov or by phone at (360) 407-6040.

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis and Opinion

Based on a review of the *Data Gaps Investigation Work Plan*, Ecology has determined:

- The former Eastside Disposal Property is 3.58 acres in size. The Property was first developed in 1959 and utilized as an operating base for garbage-collection service companies (Rabanco, Eastside Disposal, and Republic) until 2011. The operating base comprised office space, and facilities to fuel, repair, maintain, and clean a fleet of garbage trucks. Subsequently, the facilities and structures within the Property were demolished, and investigation and cleanup actions ensued.

- Given the locations and purposes of the facilities within the Property, and through the ongoing remedial investigation and cleanup actions, the contaminated soil within the Property was found to occur in two separate areas approximately 300 feet apart.

- One area of contamination is located at the eastern edge of the Property and is designated in reports as the "Main Building Site". The other area of contamination is located at the western edge of the Property adjacent to Mercer Slough (a large urban wetland area), and is designated as the "Storage Building Site". Ecology has identified these two separate areas of contamination within the Property by separate names and Cleanup Site ID numbers: The Main Building Site is "East Side Disposal James Busse" (CSID #7836) and the Storage Building Site is "East Side Disposal" (CSID #7835). See **Figure 2**. These two locations were on separate tax parcels at one time. The Property was initially comprised of three tax parcels that were later combined into one tax parcel (939970-3820) when the Property was purchased and redevelopment began during 2011.

- Soil contamination has been cleaned up at the Main Building Site by remedial excavation work. Contaminated soil was excavated to applicable Method A soil cleanup levels, and 1,400 cubic yards of contaminated soil were removed from the Property. Groundwater was not encountered at the depth of the excavation approximately 10 feet below ground surface (bgs). However, groundwater was encountered at 10 feet bgs at the Storage Building Site to the west (approximately 15 feet lower in elevation), and it is possible that groundwater is present at shallow depth beneath at the Main Building Site. Also, given the significant sources of contamination (three underground storage tanks and service bays with floor drains), and the high soil concentrations found at the Main Building Site, the groundwater at the Main Building Site should be evaluated.

- The purpose of the proposed sampling work is to determine if the Main Building Site and Storage Building Site are co-mingled via unknown soil contamination and/or a groundwater plume. Additionally, if groundwater is not impacted at the Main Building Site, that site could qualify for a No Further Action determination.

- The proposed sampling work consists of installing three monitoring wells and six direct-push borings in the area between the Main Building Site and the Storage Building Site. (See **Figure 2).** As presented in the *Data Gaps Investigation Work Plan*, locations and chemicals of concern appear to be adequate to determine if soil and/or groundwater contamination are present in this area. Also in particular, the plan would be expected to determine if a release to groundwater occurred at the Main Building Site and migrated to the west into the Storage Building Site.

- If there are detections in groundwater, then quarterly sampling will need to be done to understand the concentrations in time throughout the year. A minimum of four consecutive quarters of groundwater results demonstrating concentrations below MTCA Method A cleanup levels will then be required before the Main Building Site can be issued a No Further Action determination.

- If there are detections above Method A, then the releases from the former Main Building underground storage tanks and other Site activities may have impacted the Storage Building Site to the west. The groundwater contamination could be considered as a co-mingled plume with that Site and consequently, these two separate sites might need to be combined into one. The data collected during the Data Gaps Investigation will inform and guide the next steps in the cleanup process.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70A.305.040(4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70A.305.080 and WAC 173-340-545.

3. State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70A.305.170960.

Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

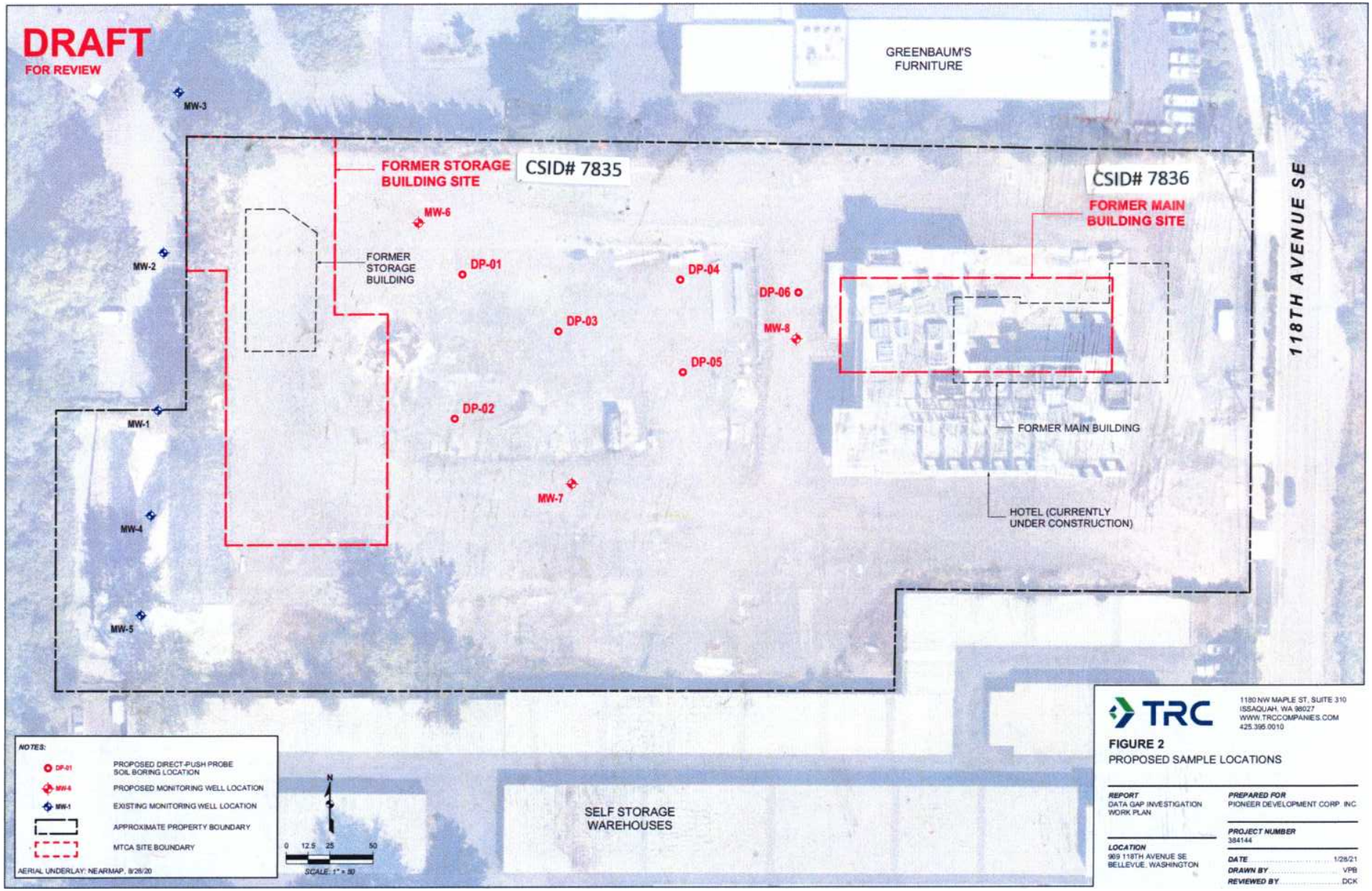
For more information about the VCP and the cleanup process, please visit our website. If you have any questions about this opinion, please contact me by phone at (206) 594-0118 or by email at roger.nye@ecy.wa.gov.

Sincerely,

Roger K. Nye
Toxics Cleanup Program, NWRO

Enclosure (1): Figure 2 from *Data Gaps Investigation Work Plan*

cc: Douglas Kunkel, TRC Environmental Corporation (dkunkel@trccompanies.com)
Sonia Fernandez, Ecology (sonia.fernandez@ecy.wa.gov)



TRC
1180 NW MAPLE ST, SUITE 310
ISSAQUAH, WA 98027
WWW.TRCCOMPANIES.COM
425.395.0010

FIGURE 2
PROPOSED SAMPLE LOCATIONS

REPORT DATA GAP INVESTIGATION WORK PLAN	**PREPARED FOR** PIONEER DEVELOPMENT CORP. INC.
LOCATION 969 118TH AVENUE SE BELLEVUE, WASHINGTON	**PROJECT NUMBER** 384144
	DATE 1/28/21
	DRAWN BY VPB
	REVIEWED BY DCK

Attachment C
Bore Logs

BORING ID: TSB-1

SITE ADDRESS: **969 118th Avenue, Bellevue, Washington**	CLIENT: **SRM Development**
DRILLING CONTRACTOR: **Holocene Drilling Inc.**	PROJECT #: **471241**
DRILLING EQUIPMENT: **7822DT Drill Rig**	DATE: **7/18/2022**
DRILLING METHOD: **Direct Push Technology (DPT)**	GROUND SURFACE ELEV. FT AMSL: **Not Measured** / DECOMMISSIONING MATERIAL: **Bentonite**
LOGGED BY: **J. Windsor**	TOTAL DEPTH: **15 feet** / BOREHOLE SIZE: **2 inch**

Depth (feet)	USCS	Description (USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other)	Interval & % Recovery	PID (ppm)	Sample	Sheen	Notes
0	SW-SM	WELL-GRADED SAND WITH SILT AND GRAVEL; dark olive gray; damp; loose; mostly medium to coarse grained sand, minor silt, minor gravel		0	TSB-1:0		
2			40	0			
3		Same as above, moist		0.1			No odor, no stain
5		Organics present		0	TSB-1:5		
6	GW	WELL-GRADED GRAVEL WITH SAND; light gray; dry; loose; mostly angular gravel, minor coarse sand		0.1			
7	SM	SILT; brown; medium stiff; low plasticity; mostly non plastic fines	75				
8	GW	WELL-GRADED GRAVEL WITH SAND; light olive brown; loose; mostly medium gravel, minor coarse sand		0			
9				0.3	TSB-1:9		No odor, bluish gray staining
10	SP	POORLY-GRADED SAND WITH GRAVEL; wet; grayish brown; loose; mostly coarse sand, minor medium sand.			TSB-1:GW		
12			100				
14	SP	POORLY-GRADED SAND; grayish brown; wet; medium dense; mostly medium sand					
15		End of Borehole			TSB-1:15		

NOTES: DTW = 10.8' below ground surface, temporary well screened 4 to 14'

BORING ID: TSB-2

SITE ADDRESS: **969 118th Avenue, Bellevue, Washington**	CLIENT: **SRM Development**
DRILLING CONTRACTOR: **Holocene Drilling Inc.**	PROJECT #: **471241**
DRILLING EQUIPMENT: **7822DT Drill Rig**	DATE: **7/18/2022**
DRILLING METHOD: **Direct Push Technology (DPT)**	GROUND SURFACE ELEV. FT AMSL: **Not Measured** / DECOMMISSIONING MATERIAL: **Bentonite**
LOGGED BY: **J. Windsor**	TOTAL DEPTH: **15 feet** / BOREHOLE SIZE: **2 inch**

Depth (feet)	USCS	Description (USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other)	Interval & % Recovery	PID (ppm)	Sample	Sheen	Notes
0	GW	WELL-GRADED GRAVEL WITH SAND; grayish brown; damp; loose; mostly gravel, some medium to coarse sand; no odor or staining; organics at 2.5' bgs		0.1	TSB-2:0		
1				0.4			
2			75	0.7	TSB-2:2		
3	SW	WELL-GRADED SAND WITH GRAVEL; brown; moist; loose; mostly coarse sand, minor gravel; no odor or staining		0.6			
4							
5				0.6	TSB-2:5		
6		Lens of coarse, angular gravel 3" thick at 6' bgs		0.5			
7	SM	SILTY SAND; dark reddish brown; moist; medium dense; mostly fine sand, minor silt; no odor or staining	60	0.6			
8				0.6			
9							
10 ▼	SM	SILTY SAND WITH GRAVEL; olive gray; moist; loose; mostly medium sand, trace silt, trace gravel		0.5	TSB-2:GW		
11				0.6			
12			60	0.4			
13	GW	WELL-GRADED GRAVEL WITH SILT AND SAND; grayish brown; wet; mostly gravel, trace sand; no odor or staining		0.2	TSB-2:13		
14							
15		End of Borehole					
16							
17							
18							
19							
20							
21							
22							

NOTES: DTW = 10.2' below ground surface, well screened 7.5 to 12.5' bgs

BORING ID: TSB-3

SITE ADDRESS **969 118th Avenue, Bellevue, Washington**	CLIENT: **SRM Development**
DRILLING CONTRACTOR: **Holocene Drilling Inc.**	PROJECT #: **471241**
DRILLING EQUIPMENT: **7822DT Drill Rig**	DATE: **7/18/2022**
DRILLING METHOD: **Direct Push Technology (DPT)**	GROUND SURFACE ELEV. FT AMSL: **Not Measured**
LOGGED BY: **J. Windsor**	TOTAL DEPTH: **20 feet**

DECOMMISSIONING MATERIAL: **Bentonite**

BOREHOLE SIZE: **2 inch**

Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	PID (ppm)	Sample	Sheen	Notes
0	SP	POORLY-GRADED SAND WITH GRAVEL; grayish brown; dry; loose; mostly fine sand; some gravel; no odor or staining	50	0.8			
1				0.7			
2				0.9	TSB-3:2	No	
3				0.9			
4		Gravel size increases to 2" diameter Becomes damp					
5			50	0.7			
6				0.7			
7				0.8	TSB-3:7	No	Iron oxide staining present
8							
9		Becomes moist to wet					
▼10	GP	POORLY-GRADED GRAVEL WITH SAND; brown; wet; loose; mostly gravel, minor sand, trace silt; no odor or staining	60	0.7	TSB-3:GW		
11				0.9			
12				0.8	TSB-3:12	No	
13	SP	POORLY-GRADED SAND; light olive brown; wet; loose; mostly medium sand, trace silt; no odor or staining		0.6			Bluish gray staining
14							
15		Gravel content increases		1			
16		Gravel content decreases, color change to dark gray	100	0.7			
17	SM	SILTY SAND; dark gray; wet; loose; mostly medium sand, minor silt		0.8			
18		Interbedded silty layers 2" thick from 18 to 20' bgs		0.8			
19		Color change to bluish dark gray, silt content decreases		0.6			
20		End of Borehole		0.7	TSB-3:20	No	
21							
22							

NOTES: DTW = 10' below ground surface, well screened 9.5' to 14.5' bgs

BORING ID: TSB-4

SITE ADDRESS: **969 118th Avenue, Bellevue, Washington**	CLIENT: **SRM Development**
DRILLING CONTRACTOR: **Holocene Drilling Inc.**	PROJECT #: **471241**
DRILLING EQUIPMENT: **7822DT Drill Rig**	DATE: **7/18/2022**
DRILLING METHOD: **Direct Push Technology (DPT)**	GROUND SURFACE ELEV. FT AMSL: **Not Measured** / DECOMMISSIONING MATERIAL: **Bentonite**
LOGGED BY: **J. Windsor**	TOTAL DEPTH: **14 feet** / BOREHOLE SIZE: **2 inch**

Depth (feet)	USCS	Description (USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other)	Interval & % Recovery	PID (ppm)	Sample	Sheen	Notes
0–1	SP-SM	POORLY-GRADED SAND WITH SILT AND GRAVEL; grayish brown; loose; mostly medium sand, minor gravel, trace silt; no odor or staining		0.4	TSB-4:0	No	
1–3	GW	WELL-GRADED GRAVEL WITH SAND; grayish brown; loose; mostly gravel; some medium sand; no odor or staining	30	0.3 0.4			
5–10	SM	SILTY SAND; light olive brown; moist; stiff; mostly medium sand, some silt, no odor or staining	60	0.8 0.8 0.8 1.1	TSB-4:5	No	Iron oxide staining Begin using different brand plastic bag for field screening at 6' bgs
10–14	GP	POORLY-GRADED GRAVEL WITH SAND; dark gray; moist; mostly angular gravel; some medium sand; trace silt	80	1.1 1.4 1.2 1.3	TSB-4:10 TSB-4:GW	No	
14		End of Borehole		1.3	TSB-4:14	No	

NOTES: DTW = 12.5' bgs, screened 9 to 14' bgs, pushed down to 15'

BORING ID: TSB-5

SITE ADDRESS: **969 118th Avenue, Bellevue, Washington**	CLIENT: **SRM Development**
DRILLING CONTRACTOR: **Holocene Drilling Inc.**	PROJECT #: **471241**
DRILLING EQUIPMENT: **7822DT Drill Rig**	DATE: **7/18/2022**
DRILLING METHOD: **Direct Push Technology (DPT)**	GROUND SURFACE ELEV. FT AMSL: **Not Measured** / DECOMMISSIONING MATERIAL: **Bentonite**
LOGGED BY: **J. Windsor**	TOTAL DEPTH: **15 feet** / BOREHOLE SIZE: **2 inch**

Depth (feet)	USCS	Description (USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other)	Interval & % Recovery	PID (ppm)	Sample	Sheen	Notes
0–1	SP	POORLY-GRADED SAND WITH GRAVEL; grayish brown; damp; loose to medium dense; mostly medium to coarse sand, some gravel		0.8			No odor
1–2	SP			1.2			
2–3	SP	Light gray discoloration, staining at 2' bgs 2" thick lens of angular gravel at 2.5' bgs	60	1.3	TSB-5:3	No	
3–4	SP			1.4			
4–5	SP						
5–6	SP	POORLY-GRADED SAND; grayish brown; moist; loose; mostly meidum sand, trace silt					Sample liner melted in sample tube; low recovery
6–7	SP			0.4			
7–8	SP		25	0.9			
8–9	SP			1.1	TSB-5:9	No	Drillers pushed sampler without piston for ease, likely extra sluff in top of sample
9–10	SP	Organics present					
10–11	SP	Sluff					
11–12	SP						
12–13	GP-GM	POORLY-GRADED GRAVEL WITH SILT AND SAND; grayish brown; loose; mostly gravel, some sand, some silt	100	1	TSB-5:GW		
13–14	SP-SM			1.1			
14–15	SP-SM	POORLY-GRADED SAND WITH SILT AND GRAVEL; grayish brown; wet; loose; mostly medium sand; some silt, some gravel		1			
15		End of Borehole		1	TSB-5:15	No	

NOTES: DTW = 12.4' below ground surface, well screened 10 to 15' bgs

BORING ID: TSB-6

SITE ADDRESS: **969 118th Avenue, Bellevue, Washington**	CLIENT: **SRM Development**
DRILLING CONTRACTOR: **Holocene Drilling Inc.**	PROJECT #: **471241**
DRILLING EQUIPMENT: **7822DT Drill Rig**	DATE: **7/18/2022**
DRILLING METHOD: **Direct Push Technology (DPT)**	GROUND SURFACE ELEV. FT AMSL: **Not Measured** / DECOMMISSIONING MATERIAL: **Bentonite**
LOGGED BY: **J. Windsor**	TOTAL DEPTH: **14 feet** / BOREHOLE SIZE: **2 inch**

Depth (feet)	USCS	Description (USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other)	Interval & % Recovery	PID (ppm)	Sample	Sheen	Notes
0	ML	SANDY SILT WITH GRAVEL; light gray; dry; loose; nonplastic; mostly silt; some sand, few gravel, staining present	60	0.1			Iron oxide staining
1				0.4			
2				0.7	TSB-6:2		
3				0.7			
4							
5	SP-SM	POORLY-GRADED SAND WITH SILT AND GRAVEL; light olive brown; damp; loose; mostly medium sand, some gravel, minor silt	100	0.4			
6				0.6			
7				0.4			
8				0.7			
9				0.9	TSB-6:9		
10				0.4			
11	GW-GM	WELL-GRADED GRAVEL WITH SILT AND SAND; light gray; damp; loose; mostly gravel; some sand, trace silt	100	0.4			
12				0.3			
13	SP-SM	POORLY-GRADED SAND WITH SILT; light olive brown; moist to wet; medium dense; mostly fine sand, some silt		0.4			
14				0.3			
15	GW-GM	Same as 11 - 13'		0.8	TSB-6:GW		
16	SP	POORLY-GRADED SAND; light olive brown; moist; medium dense; mostly medium sand, trace silt	100	1.1	TSB-6:16		
17	SP-SM	Same as 13 to 14.5', wet		1			
18				0.7			
19				0.7			
20		End of Borehole		0.7	TSB-6:20		
21							
22							

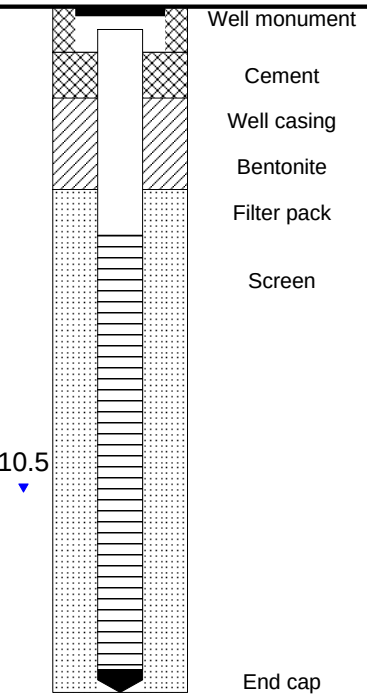
NOTES: DTW = 16.9' below ground surface, well screened from 14 to 19' bgs

BORING ID: TSB-07/MW-6

SITE ADDRESS **969 118th Ave SE, Bellevue, WA**	CLIENT: **SRM Development**	CASING MATERIAL AND SIZE: **2" Sch 40 PVC**
DRILLING CONTRACTOR: **Holocene Drilling Inc.**	PROJECT #: **471241**	SCREEN SIZE: **.010 in slotted PVC**
DRILLING EQUIPMENT: **CME-75**	DATE: **8/22/2022**	SCREEN INTERVAL: **5 - 15 ft**
DRILLING METHOD: **Hollow Stem Auger (HSA)**	GROUND SURFACE ELEV. FT AMSL: **NM**	FILTER PACK: **Silica Sand 10/20**
LOGGED BY: **J. Windsor** / BOREHOLE SIZE: **8 in**	TOTAL DEPTH: **16.5 ft**	FILTER PACK INTERVAL: **4 - 15 ft**

Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)
0–5	SW-SM	WELL-GRADED SAND WITH SILT AND GRAVEL; grayish brown; dry to damp; loose; mostly fine to medium sand, some silt, some angular to subangular gravel			TSB-07/MW-6 :5	0.3
5–6			40	26, 15, 18		
10–11	SP-SM	POORLY-GRADED SAND WITH SILT AND GRAVEL; dark gray to bluish gray; dense; moist to wet at 10.5 ft; mostly medium sand, minor silt, minor gravel	40	10, 50/3"	TSB-07/MW-6 :10	0
15–16	SP / GW-GM	POORLY-GRADED SAND; grayish brown; wet; loose to medium dense; mostly medium grained to coarse grained sand	100	12, 28, 38	TSB-07/MW-6 :15	0
16–18		WELL-GRADED GRAVEL WITH SILT AND SAND; brown; wet; loose; mostly angular to subangular gravel; minor sand, minor silt				
18		End of Borehole				

Well Construction



NOTES: Groundwater observed at 10.5 ft, well ID = BPK 192

BORING ID: TSB-08/MW-7

SITE ADDRESS **969 118th Ave SE, Bellevue, WA**	CLIENT: **SRM Development**	CASING MATERIAL AND SIZE: **2" Sch 40 PVC**
DRILLING CONTRACTOR: **Holocene Drilling Inc.**	PROJECT #: **471241**	SCREEN SIZE: **.010 in slotted PVC**
DRILLING EQUIPMENT: **CME-75**	DATE: **8/22/2022**	SCREEN INTERVAL: **5 - 15 ft**
DRILLING METHOD: **Hollow Stem Auger (HSA)**	GROUND SURFACE ELEV. FT AMSL: **NM**	FILTER PACK: **Silica Sand 10/20**
LOGGED BY: **J. Windsor** / BOREHOLE SIZE: **8 in**	TOTAL DEPTH: **16.5 ft**	FILTER PACK INTERVAL: **4 - 15 ft**

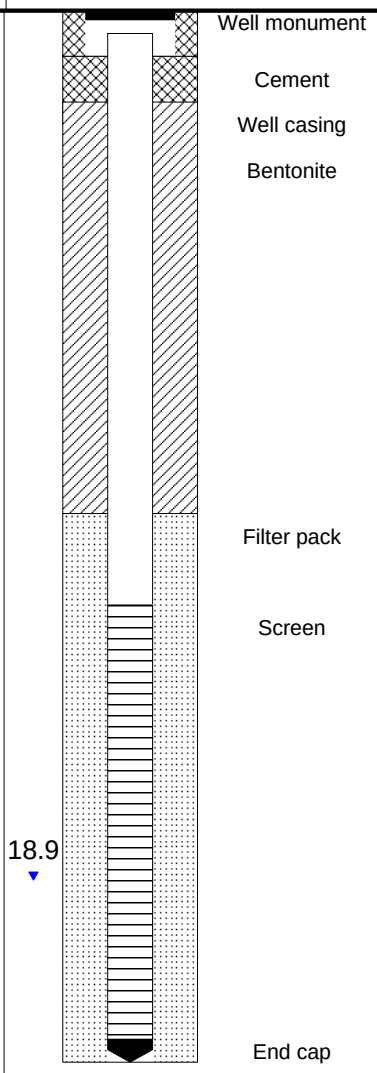
Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Construction
0–5	SP-SM	POORLY-GRADED SAND WITH SILT AND GRAVEL; brown; dry to damp; loose; mostly fine to medium grained sand, minor silt, minor subangular to rounded gravel, some silt			TSB-08/MW-7 :5	0.1	Well monument; Cement; Well casing; Bentonite; Filter pack
5–10			50	10, 14, 18			Screen
10–15	SM	SILTY SAND WITH GRAVEL; brown to dark brown; wet; loose; mostly fine to coarse sand, some angular to rounded gravel, minor silt	30	5, 12, 10	TSB-08/MW-7 :10	0	10.5 ▼
15–16	SP-SM	POORLY-GRADED SAND WITH SILT AND GRAVEL; dark bluish gray to dark gray; wet; loose to medium dense; mostly medium grained sand, minor gravel, few silt	100	10, 13, 22	TSB-08/MW-7 :15	0	End cap
16–17	SP-SM	POORLY-GRADED SAND WITH SILT; dark bluish gray to dark gray; wet; medium dense; mostly medium sand, few silt					
17		End of Borehole					

NOTES: Groundwater observed at 10.5 ft, well ID = BPK 193

BORING ID: TSB-09/MW-8

SITE ADDRESS **969 118th Ave SE, Bellevue, WA**	CLIENT: **SRM Development**	CASING MATERIAL AND SIZE: **2" Sch 40 PVC**
DRILLING CONTRACTOR: **Holocene Drilling Inc.**	PROJECT #: **471241**	SCREEN SIZE: **.010 in slotted PVC**
DRILLING EQUIPMENT: **CME-75**	DATE: **8/22/2022**	SCREEN INTERVAL: **13 - 23 ft**
DRILLING METHOD: **Hollow Stem Auger (HSA)**	GROUND SURFACE ELEV. FT AMSL: **NM**	FILTER PACK: **Silica Sand 10/20**
LOGGED BY: **J. Windsor** / BOREHOLE SIZE: **8 in**	TOTAL DEPTH: **24.5 ft**	FILTER PACK INTERVAL: **11 - 23 ft**

Depth (feet)	USCS	Description (USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other)	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)
0–10	SW-SM	WELL-GRADED SAND WITH SILT AND GRAVEL; grayish brown to brown; damp; medium dense; mostly fine to coarse sand, minor gravel, trace silt; minor iron oxide staining throughout	25	9, 30, 29	TSB-09/MW-8 :5	0
10–15	SM	SILTY SAND; dark reddish brown to dark brown; moist; medium dense; mostly fine to medium grained sand, some silt, trace organics present	20	5, 4, 4	TSB-09/MW-8 :10	0
15–16	SM		10	50/6"	TSB-09/MW-8 :15	0.6
18.9 ▼						
20–22	SP-SM	POORLY-GRADED SAND WITH SILT; brown to light olive brown; wet; medium dense; mostly fine to medium grained sand, minor silt	25	15, 28, 38	TSB-09/MW-8 :20	0.3
23–24	SW-SM / SP-SM	WELL-GRADED SAND WITH SILT AND GRAVEL; brown to light olive brown; wet; dense to very dense; mostly medium to coarse grained sand, few silt, few gravel	100	30, 45, 50/5"	TSB-09/MW-8 :23	0.1
25–27		POORLY-GRADED SAND WITH SILT; brown to light olive brown; wet; dense to very dense; mostly fine to medium coarse sand, trace silt; grain size fines downwards				
		End of Borehole				



NOTES: Groundwater observed at 18.9 ft, well ID = BPK 194

Attachment D
Wellhead Survey Data

September 7, 2022

Re: Monitoring Well Survey – PACE No. 22531

Client:	TRC Companies, INC
Project Name:	TRC-Bellevue (471241)
Site Address:	969 118th ave SE
City, and State:	Bellevue, WA

*Horizontal Datum:	NAD 83/2011 Washington SPC North (4601)
*Vertical Datum:	NAVD 88 Based on City of Bellevue benchmark #713

**** Benchmark: Punch in brass disk in concrete monument in case on CL of 118th ave SE in front of address 969 118th Ave SE**
Elevation = 52.07'

Well Name	Northing	Easting	Top of Casing Elevation	Lid Elevation
MW-1	221856.24	1306865.33	28.60	28.7
MW-2	221939.15	1306870.85	27.01	27.3
MW-3	222019.56	1306877.01	26.53	26.7
MW-4R	221812.00	1306913.99	31.03	31.5
MW-5R	221722.16	1306911.86	27.43	28.0
MW-6	221944.62	1306984.80	31.73	32.1
MW-7	221793.38	1307080.57	31.47	31.7
MW-8	221880.93	1307224.83	39.67	40.4

PACE Engineers, Inc.
11255 Kirkland Way, Suite 300
Kirkland, Washington 98033-3417
p: 425.827.2014 | f: 425.827.5043
www.paceengrs.com

Attachment E
Laboratory Analytical Results

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 27, 2022

Jerry Boyd, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: SRM Bellevue 471241 186033, F&BI 207300

Dear Mr Boyd:

Included are the results from the testing of material submitted on July 19, 2022 from the SRM Bellevue 471241 186033, F&BI 207300 project. There are 12 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: Cynthia Moon
TRC0727R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 19, 2022 by Friedman & Bruya, Inc. from the TRC Environmental SRM Bellevue 471241 186033, F&BI 207300 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	TRC Environmental
207300-01	TSB-3:7
207300-02	TSB-3:12
207300-03	TSB-3:20
207300-04	TSB-4:0
207300-05	TSB-4:5
207300-06	TSB-4:10
207300-07	TSB-4:14
207300-08	TSB-5:3
207300-09	TSB-5:9
207300-10	TSB-5:15
207300-11	TSB-1:0
207300-12	TSB-1:5
207300-13	TSB-1:9
207300-14	TSB-1:15
207300-15	TSB-2:0
207300-16	TSB-2:2
207300-17	TSB-2:5
207300-18	TSB-2:8
207300-19	TSB-2:13
207300-20	TSB-3:2
207300-21	TSB-6:2
207300-22	TSB-6:9
207300-23	TSB-6:16
207300-24	TSB-6:20
207300-25	TSB-1:GW
207300-26	TSB-2:GW
207300-27	TSB-3:GW
207300-28	TSB-4:GW
207300-29	TSB-5:GW
207300-30	TSB-6:GW

All quality control requirements were acceptable.

Date of Report: 07/27/22
Date Received: 07/19/22
Project: SRM Bellevue 471241 186033, F&BI 207300
Date Extracted: 07/21/22
Date Analyzed: 07/22/22

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

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

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
TSB-1:9 207300-13	<0.02	<0.02	<0.02	<0.06	<5	95
TSB-1:15 207300-14	<0.02	<0.02	<0.02	<0.06	<5	96
TSB-2:8 207300-18	<0.02	<0.02	<0.02	<0.06	<5	97
TSB-2:13 207300-19	<0.02	<0.02	<0.02	<0.06	<5	97
Method Blank 02-1703 MB	<0.02	<0.02	<0.02	<0.06	<5	65

Date of Report: 07/27/22
Date Received: 07/19/22
Project: SRM Bellevue 471241 186033, F&BI 207300
Date Extracted: 07/22/22
Date Analyzed: 07/25/22

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 52-124)
TSB-1:GW 207300-25	<1	<1	<1	<3	<100	66
TSB-2:GW 207300-26	<1	<1	<1	<3	<100	66
Method Blank 02-1704 MB	<1	<1	<1	<3	<100	67

Date of Report: 07/27/22
Date Received: 07/19/22
Project: SRM Bellevue 471241 186033, F&BI 207300
Date Extracted: 07/21/22
Date Analyzed: 07/21/22

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)
TSB-3:7 207300-01	<50	<250	100
TSB-3:12 207300-02	<50	<250	95
TSB-4:5 207300-05	<50	<250	93
TSB-4:10 207300-06	<50	<250	91
TSB-5:9 207300-09	<50	<250	94
TSB-5:15 207300-10	<50	<250	96
TSB-6:2 207300-21	<50	<250	102
TSB-6:9 207300-22	<50	<250	93
TSB-6:16 207300-23	<50	<250	95
Method Blank 02-1821 MB	<50	<250	92

Date of Report: 07/27/22
Date Received: 07/19/22
Project: SRM Bellevue 471241 186033, F&BI 207300
Date Extracted: 07/21/22
Date Analyzed: 07/21/22

RESULTS FROM THE ANALYSIS OF SOIL 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 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 56-165)
TSB-3:7 207300-01	<50	<250	103
TSB-3:12 207300-02	<50	<250	96
TSB-4:5 207300-05	<50	<250	107
TSB-4:10 207300-06	<50	<250	106
TSB-5:9 207300-09	<50	<250	109
TSB-5:15 207300-10	<50	<250	96
TSB-6:2 207300-21	<50	<250	94
TSB-6:9 207300-22	<50	<250	95
TSB-6:16 207300-23	<50	<250	108
Method Blank 02-1821 MB	<50	<250	109

Date of Report: 07/27/22
Date Received: 07/19/22
Project: SRM Bellevue 471241 186033, F&BI 207300
Date Extracted: 07/21/22
Date Analyzed: 07/21/22

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)
TSB-3:GW 207300-27	170 x	<250	128
TSB-4:GW 207300-28	59 x	<250	126
TSB-5:GW 207300-29	130 x	<250	104
TSB-6:GW 207300-30	300 x	330 x	125
Method Blank 02-1817 MB	<50	<250	110

Date of Report: 07/27/22
Date Received: 07/19/22
Project: SRM Bellevue 471241 186033, F&BI 207300

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 207321-01 (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	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	86	66-121
Toluene	mg/kg (ppm)	0.5	88	72-128
Ethylbenzene	mg/kg (ppm)	0.5	88	69-132
Xylenes	mg/kg (ppm)	1.5	87	69-131
Gasoline	mg/kg (ppm)	20	95	61-153

Date of Report: 07/27/22
Date Received: 07/19/22
Project: SRM Bellevue 471241 186033, F&BI 207300

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 207285-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	90	65-118
Toluene	ug/L (ppb)	50	92	72-122
Ethylbenzene	ug/L (ppb)	50	94	73-126
Xylenes	ug/L (ppb)	150	94	74-118
Gasoline	ug/L (ppb)	1,000	81	69-134

Date of Report: 07/27/22
Date Received: 07/19/22
Project: SRM Bellevue 471241 186033, F&BI 207300

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

Laboratory Code: 207344-01 (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	118	116	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	114	74-139

Date of Report: 07/27/22
Date Received: 07/19/22
Project: SRM Bellevue 471241 186033, F&BI 207300

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

Laboratory Code: 207344-01 (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 Extended	mg/kg (ppm)	5,000	<50	112	124	63-146	10

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	116	79-144

Date of Report: 07/27/22
Date Received: 07/19/22
Project: SRM Bellevue 471241 186033, F&BI 207300

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED 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 Extended	ug/L (ppb)	2,500	100	104	63-142	4

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.

SAMPLE CHAIN OF CUSTODY

7/19/22

A02/VSB3/1 VW3/E03 Page # 4 of 4

207300

Report to: Jerry Boyd

Company: TRC

Address: 1160 NW Maple St., Suite 310

City, State, ZIP: Issaquah, WA 98027

Phone: 425-395-0010 Email: jboyd@trccompanies.com

SAMPLERS (*signature*): MT JW

PROJECT NAME: SRM Bellevue 471241

PO #: 186033

REMARKS: ~~Hold all samples.~~ ~~PM will confirm by 7/19~~

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
																	X per JB 7/20/22 ME
TSB-3:7	01	7/18/22	1132	Soil	1	X											Please run TPH-Dx and TPH-Dx with SGC.
TSB-3:12	02		1137		1	X											
TSB-3:20	03		1140		1												
TSB-4:0	04		1305		1												
TSB-4:5	05		1306		1	X											
TSB-4:10	06		1310		1	X											
TSB-4:14	07		1315		1												
TSB-5:3	08		1522		1												
TSB-5:9	09		1530		1	X											
TSB-5:15	10		1535		1	X											

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Jill Windsor	Jill Windsor	TRC	7/19/22	0915
Received by: W. Madden	W. Madden	F+BI	7/19/22	1204
Relinquished by:				
Received by:		~~Samples received at~~ 3 °C		

Friedman & Bruya, Inc.
Ph. (206) 285-8282

SAMPLE CHAIN OF CUSTODY

7/19/22 A02/VSB3/VA03/E03

Page # 2 of 4

207300 Report To Jerry Boyd

Company TRC

Address 1180 NW Maple St., Suite 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email jboyd@trccompanies.com

SAMPLERS (*signature*) MT GW

PROJECT NAME SDM Bellevue 471241

PO # 186033

REMARKS ~~Hold all samples.~~ PM will confirm by 7/19

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
						ANALYSES REQUESTED											
TSB-1:0	11 A-D	7/18/22	0855	soil	4												
TSB-1:5	12		0900		4												
TSB-1:9	13		0903		4		x	x									
TSB-1:15	14		0910		4		x	x									
TSB-2:0	15		0930		4												
TSB-2:2	16		1000		4												
TSB-2:5	17		1030		4												
TSB-2:8	18		1020		4		x	x									
TSB-2:13	19		1028		4		x	x									
TSB-3:2	20		1130		1												

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Jill Windsor	Jill Windsor	TRC	7/19/22	0915
Received by: W. Madden	W. Madden	FTBI	7/19/22	1209
Relinquished by:				
Received by:		Samples received at 3°C		

Friedman & Bruya, Inc.
Ph. (206) 285-8282

SAMPLE CHAIN OF CUSTODY

7/19/22 102/US 83/WA/E03 3

Page # 3 of 4

207300

Report To Jerry Boyd

Company TRC

Address 1180 NW Maple St., Suite 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email jboyd@trcompanies.com

SAMPLERS (*signature*) MT SW

PROJECT NAME SRM Bellevue 471241

PO # 186033

REMARKS Hold all samples PM will confirm by 7/19

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
						ANALYSES REQUESTED											
TSB-6:2	21	7/18/2022	1646	Soil	1	X											Please run TPH-Dx and TPH-Dx with SGC.
TSB-6:9	22	↓	1650	↓	1	X											
TSB-6:16	23		1654		1	X											
TSB-6:20	24	↓	1656	↓	1												

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Jill Windsor	Jill Windsor	TRC	7/19/22	0915
Received by: W. Madden	W. Madden	F+BI	7/19/22	1204
Relinquished by:				
Received by:		Samples received at 3°C		

Friedman & Bruya, Inc.
Ph. (206) 285-8282

SAMPLE CHAIN OF CUSTODY

7/19/22 A02/VSB3/VW3/B03

Page # 4 of 4

207300 Reports To: Jerry Boyd

Company: TRC

Address: 1180 NW Maple St, Suite 310

City, State, ZIP: Issaquah, WA, 98027

Phone: 425-395-0010 Email: jboyd2moon@trcompanies.com

SAMPLERS (*signature*): MT

PROJECT NAME: SRM Bellevue 471241

PO #: 186033

REMARKS: Hold all samples. Confirm w/ PM by 7/19.

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
TSB-1:GW	25 A-F	7/18/22	0835	water	6		X	X									
TSB-2:GW	26		0950		6		X	X									
TSB-3:GW	27		1120		1	X											
TSB-3:GW	28		1320		1	X											
TSB-5:GW	29		1505		1	X											Labeled SB-5 GW
TSB-6:GW	30		1630		1	X											

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Jill Windsor	Jill Windsor	TRC	7/19/22	0915
Received by: W. Madden	W. Madden	F+BI	7/19/22	1204
Relinquished by:				
Received by:		Samples received at 3°C		

Friedman & Bruya, Inc.
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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Vineta Mills, M.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
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fbi@isomedia.com
www.friedmanandbruya.com

August 30, 2022

Joe Sherrod, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: SRM Development-471241 186033, F&BI 208324

Dear Mr Sherrod:

Included are the results from the testing of material submitted on August 22, 2022 from the SRM Development-471241 186033, F&BI 208324 project. There are 9 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: Cynthia Moon
TRC0830R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 22, 2022 by Friedman & Bruya, Inc. from the TRC Environmental SRM Development-471241 186033, F&BI 208324 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	TRC Environmental
208324-01	TSB-07/MW-6:5
208324-02	TSB-07/MW-6:10
208324-03	TSB-07/MW-6:15
208324-04	TSB-08/MW-7:5
208324-05	TSB-08/MW-7:10
208324-06	TSB-08/MW-7:15
208324-07	TSB-09/MW-8:5
208324-08	TSB-09/MW-8:10
208324-09	TSB-09/MW-8:15
208324-10	TSB-09/MW-8:20
208324-11	TSB-09/MW-8:23

Then NWTPH-Gx/8021B sample TSB-09/MW-8:15 was prepared from a 4 ounce jar. The data were qualified accordingly.

All other quality control requirements were acceptable.

Date of Report: 08/30/22
Date Received: 08/22/22
Project: SRM Development-471241 186033, F&BI 208324
Date Extracted: 08/25/22
Date Analyzed: 08/25/22

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

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

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
TSB-08/MW-7:5 208324-04	<5	103
TSB-08/MW-7:10 208324-05	<5	103
TSB-09/MW-8:5 208324-07	<5	106
TSB-09/MW-8:15 pc 208324-09	<5	105
Method Blank 02-1748 MB	<5	99

Date of Report: 08/30/22
Date Received: 08/22/22
Project: SRM Development-471241 186033, F&BI 208324
Date Extracted: 08/25/22
Date Analyzed: 08/25/22

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

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

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
TSB-07/MW-6:5 208324-01	<0.02	<0.02	<0.02	<0.06	<5	101
TSB-07/MW-6:10 208324-02	<0.02	<0.02	<0.02	<0.06	<5	100
Method Blank 02-1748 MB	<0.02	<0.02	<0.02	<0.06	<5	98

Date of Report: 08/30/22
Date Received: 08/22/22
Project: SRM Development-471241 186033, F&BI 208324
Date Extracted: 08/25/22
Date Analyzed: 08/25/22

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)
TSB-07/MW-6:5 208324-01	<50	<250	94
TSB-07/MW-6:10 208324-02	<50	<250	93
TSB-08/MW-7:5 208324-04	<50	<250	95
TSB-08/MW-7:10 208324-05	<50	<250	94
TSB-09/MW-8:5 208324-07	<50	<250	96
TSB-09/MW-8:15 208324-09	<50	<250	96
Method Blank 02-2029 MB2	<50	<250	93

Date of Report: 08/30/22
Date Received: 08/22/22
Project: SRM Development-471241 186033, F&BI 208324
Date Extracted: 08/25/22
Date Analyzed: 08/26/22

RESULTS FROM THE ANALYSIS OF SOIL 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 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)
TSB-07/MW-6:5 208324-01	<50	<250	100
TSB-07/MW-6:10 208324-02	<50	<250	104
TSB-08/MW-7:5 208324-04	<50	<250	104
TSB-08/MW-7:10 208324-05	<50	<250	123
TSB-09/MW-8:5 208324-07	<50	<250	121
TSB-09/MW-8:15 208324-09	<50	<250	115
Method Blank 02-2029 MB2	<50	<250	111

Date of Report: 08/30/22
Date Received: 08/22/22
Project: SRM Development-471241 186033, F&BI 208324

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 208324-01 (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	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	93	69-120
Toluene	mg/kg (ppm)	0.5	89	70-117
Ethylbenzene	mg/kg (ppm)	0.5	90	65-123
Xylenes	mg/kg (ppm)	1.5	92	66-120
Gasoline	mg/kg (ppm)	20	95	71-131

Date of Report: 08/30/22
Date Received: 08/22/22
Project: SRM Development-471241 186033, F&BI 208324

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

Laboratory Code: 208360-01 (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	112	122	73-135	9

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	114	74-139

Date of Report: 08/30/22
Date Received: 08/22/22
Project: SRM Development-471241 186033, F&BI 208324

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

Laboratory Code: 208360-01 (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 Extended	mg/kg (ppm)	5,000	<50	140 vo	134	73-135	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	132	74-139

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.

208324

SAMPLE CHAIN OF CUSTODY

8/22/22

C02/VSA2

Page # 1 of 2

Report To Joe Sherrod

Company TRC

Address 1180 NW Maple St #350

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0610 Email JSherrod@trcompanies.com JBoyd@ "

cc: cmoon@ "

SAMPLERS (*signature*) JW & JJ

PROJECT NAME: SRM Development - 471241

PO #: 186033

REMARKS ~~Hold all~~ samples confirm w/ PAH

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	NWTPH-Dx w/ silica gel cleanup	Notes
TSB-07/MW-6:5	01A-E	08/22/22	0850	Soil	4	X	X	X					X	JS X 8/23/2022
TSB-07/MW-6:10	02		0900		4	X	X	X					X	~~*HOLD ALL SAMPLES*~~
TSB-07/MW-6:15	03		0915		4									
TSB-08/MW-7:5	04		1020		4	X	X						X	
TSB-08/MW-7:10	05		1028		4	X	X						X	
TSB-08/MW-7:15	06		1032		4									
TSB-09/MW-8:5	07		1225		4	X	X						X	
TSB-09/MW-8:10	08		1235		4									
TSB-09/MW-8:15	09		1245		1	X	X						X	
TSB-09/MW-8:20	10A-E	↓	1300	↓	4									

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Joel Jacobsen	TRC	8-22-22	15:12
Received by: W. Madden	W. Madden	F+BI	8/22/22	15:12
Relinquished by:				
Received by:		Samples received at 0 °C		

Friedman & Bruya, Inc.
Ph. (206) 285-8282

SAMPLE CHAIN OF CUSTODY

208324 8/22/22 CO2/VSA2 Page # 2 of 2

Report To Joe Sherrod

Company TRC

Address 1180 NW Maple St, #310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email JSherrod@trcompanies.com JBoyd@ 11
CC: CMoon@ 11

SAMPLERS (*signature*) JW & JJ

PROJECT NAME: SRM Development 4712411

PO #: 186033

REMARKS: ~~Hold all samples~~ confirm w/ PM

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082					Notes
TSB-09/MW-8:23	11 A-E	08/22/22	1340	Soil	4												~~* HOLD ALL SAMPLES *~~

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Joel Jacobsen	Joel Jacobsen	TRC	8-22-22	14:13
Received by: W. Madden	W. Madden	F+BI	8/22/22	1513
Relinquished by:				
Received by:		~~Samples received~~ at 0 °C		

Friedman & Bruya, Inc.
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

September 13, 2022

Joe Sherrod, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: SRM Development 417241 186033, F&BI 209041

Dear Mr Sherrod:

Included are the results from the testing of material submitted on September 2, 2022 from the SRM Development 417241 186033, F&BI 209041 project. There are 29 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: Cynthia Moon, Jerry Boyd
TRC0913R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 2, 2022 by Friedman & Bruya, Inc. from the TRC Environmental SRM Development 417241 186033, F&BI 209041 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	TRC Environmental
209041 -01	MW-6:GW
209041 -02	MW-7:GW
209041 -03	MW-8:GW
209041 -04	MW-4R:GW
209041 -05	MW-5R:GW
209041 -06	MW-1:GW
209041 -07	MW-2:GW
209041 -08	DUP-1

The 8260D calibration standard failed the acceptance criteria for methylene chloride. The data were flagged accordingly.

All quality control requirements were acceptable.

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041
Date Extracted: 09/09/22
Date Analyzed: 09/09/22

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 51-134)
MW-8:GW 209041-03	<100	90
MW-4R:GW 209041-04	<100	87
MW-5R:GW 209041-05	<100	87
MW-1:GW 209041-06	<100	84
MW-2:GW 209041-07	<100	89
Method Blank 02-2074 MB	<100	93

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041
Date Extracted: 09/09/22
Date Analyzed: 09/09/22

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 52-124)
MW-6:GW 209041-01	<1	<1	<1	<3	<100	88
DUP-1 209041-08	<1	<1	<1	<3	<100	88
Method Blank 02-2074 MB	<1	<1	<1	<3	<100	89

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041
Date Extracted: 09/07/22
Date Analyzed: 09/09/22

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-6:GW 209041-01	<50	<250	122
MW-7:GW 209041-02	<50	<250	96
MW-8:GW 209041-03	<50	<250	118
MW-4R:GW 209041-04	<50	<250	112
MW-5R:GW 209041-05	<50	<250	102
MW-1:GW 209041-06	<50	<250	121
MW-2:GW 209041-07	<50	<250	94
DUP-1 209041-08	<50	<250	119
Method Blank 02-2122 MB	<50	<250	140

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041
Date Extracted: 09/07/22
Date Analyzed: 09/07/22

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 47-140)
MW-6:GW 209041-01	150 x	<250	108
MW-7:GW 209041-02	<50	<250	97
MW-8:GW 209041-03	200 x	<250	115
MW-4R:GW 209041-04	<50	<250	117
MW-5R:GW 209041-05	170 x	<250	105
MW-1:GW 209041-06	360 x	<250	103
MW-2:GW 209041-07	270 x	<250	94
DUP-1 209041-08	120 x	<250	119
Method Blank 02-2122 MB	<50	<250	123

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-6:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	209041-01
Date Analyzed:	09/12/22	Data File:	209041-01.073
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	1.94

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-7:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	209041-02
Date Analyzed:	09/12/22	Data File:	209041-02.062
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	1.30
Barium	25.7
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-8:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	209041-03
Date Analyzed:	09/12/22	Data File:	209041-03.065
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	3.93
Barium	35.7
Cadmium	<1
Chromium	1.07
Lead	<1
Mercury	<1
Selenium	1.24
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-4R:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	209041-04
Date Analyzed:	09/12/22	Data File:	209041-04.066
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	1.18

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-5R:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	209041-05
Date Analyzed:	09/12/22	Data File:	209041-05.067
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	12.0

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-1:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	209041-06
Date Analyzed:	09/12/22	Data File:	209041-06.068
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	9.02

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-2:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	209041-07
Date Analyzed:	09/12/22	Data File:	209041-07.069
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	11.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	DUP-1	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	209041-08
Date Analyzed:	09/12/22	Data File:	209041-08.072
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	9.81

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	TRC Environmental
Date Received:	NA	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	I2-630 mb
Date Analyzed:	09/12/22	Data File:	I2-630 mb.060
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-7:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/06/22	Lab ID:	209041-02
Date Analyzed:	09/07/22	Data File:	090715.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	78	126
Toluene-d8	98	84	115
4-Bromofluorobenzene	98	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5 ca	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-8:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/06/22	Lab ID:	209041-03
Date Analyzed:	09/07/22	Data File:	090716.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	78	126
Toluene-d8	97	84	115
4-Bromofluorobenzene	97	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5 ca	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-4R:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/06/22	Lab ID:	209041-04
Date Analyzed:	09/06/22	Data File:	090619.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	78	126
Toluene-d8	101	84	115
4-Bromofluorobenzene	103	72	130

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-5R:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/06/22	Lab ID:	209041-05
Date Analyzed:	09/06/22	Data File:	090620.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	94	78	126
Toluene-d8	100	84	115
4-Bromofluorobenzene	99	72	130

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-1:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/06/22	Lab ID:	209041-06
Date Analyzed:	09/06/22	Data File:	090621.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	91	78	126
Toluene-d8	93	84	115
4-Bromofluorobenzene	99	72	130

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-2:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/06/22	Lab ID:	209041-07
Date Analyzed:	09/06/22	Data File:	090618.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	78	126
Toluene-d8	96	84	115
4-Bromofluorobenzene	98	72	130

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	186033, F&BI 209041
Date Extracted:	09/06/22	Lab ID:	02-1969 mb
Date Analyzed:	09/06/22	Data File:	090607.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	93	78	126
Toluene-d8	101	84	115
4-Bromofluorobenzene	99	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041
Date Extracted: 09/08/22
Date Analyzed: 09/08/22

RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR 1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED
Results Reported as µg/L (ppb)

Sample ID Laboratory ID	EDB
MW-7:GW 209041-02	<0.01
MW-8:GW 209041-03	<0.01
Method Blank 02-2130	<0.01

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 209042-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	115	65-118
Toluene	ug/L (ppb)	50	91	72-122
Ethylbenzene	ug/L (ppb)	50	95	73-126
Xylenes	ug/L (ppb)	150	93	74-118
Gasoline	ug/L (ppb)	1,000	101	69-134

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED 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 Extended	ug/L (ppb)	2,500	92	96	63-142	4

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED 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 Extended	ug/L (ppb)	2,500	108	112	61-133	4

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 209041-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	1.30	89	89	75-125	0
Barium	ug/L (ppb)	50	25.7	95	95	75-125	0
Cadmium	ug/L (ppb)	5	<1	98	97	75-125	1
Chromium	ug/L (ppb)	20	<1	95	96	75-125	1
Lead	ug/L (ppb)	10	<1	87	87	75-125	0
Mercury	ug/L (ppb)	5	<1	93	95	75-125	2
Selenium	ug/L (ppb)	5	<1	84	94	75-125	11
Silver	ug/L (ppb)	5	<1	91	90	75-125	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	89	80-120
Barium	ug/L (ppb)	50	95	80-120
Cadmium	ug/L (ppb)	5	97	80-120
Chromium	ug/L (ppb)	20	96	80-120
Lead	ug/L (ppb)	10	97	80-120
Mercury	ug/L (ppb)	5	101	80-120
Selenium	ug/L (ppb)	5	98	80-120
Silver	ug/L (ppb)	5	98	80-120

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	10	109	107	46-206	2
Chloromethane	ug/L (ppb)	10	100	101	70-142	1
Vinyl chloride	ug/L (ppb)	10	107	106	70-130	1
Bromomethane	ug/L (ppb)	10	106	114	56-197	7
Chloroethane	ug/L (ppb)	10	114	111	70-130	3
Trichlorofluoromethane	ug/L (ppb)	10	104	101	70-130	3
Acetone	ug/L (ppb)	50	99	100	10-140	1
1,1-Dichloroethene	ug/L (ppb)	10	103	100	70-130	3
Hexane	ug/L (ppb)	10	88	87	54-136	1
Methylene chloride	ug/L (ppb)	10	77	77	43-134	0
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	102	99	70-130	3
trans-1,2-Dichloroethene	ug/L (ppb)	10	110	106	70-130	4
1,1-Dichloroethane	ug/L (ppb)	10	99	100	70-130	1
2,2-Dichloropropane	ug/L (ppb)	10	117	112	70-130	4
cis-1,2-Dichloroethene	ug/L (ppb)	10	108	107	70-130	1
Chloroform	ug/L (ppb)	10	97	95	70-130	2
2-Butanone (MEK)	ug/L (ppb)	50	106	102	17-154	4
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	99	96	70-130	3
1,1,1-Trichloroethane	ug/L (ppb)	10	102	99	70-130	3
1,1-Dichloropropene	ug/L (ppb)	10	97	97	70-130	0
Carbon tetrachloride	ug/L (ppb)	10	103	103	70-130	0
Benzene	ug/L (ppb)	10	103	99	70-130	4
Trichloroethene	ug/L (ppb)	10	104	100	70-130	4
1,2-Dichloropropane	ug/L (ppb)	10	100	95	70-130	5
Bromodichloromethane	ug/L (ppb)	10	104	97	70-130	7
Dibromomethane	ug/L (ppb)	10	104	98	70-130	6
4-Methyl-2-pentanone	ug/L (ppb)	50	112	101	68-130	10
cis-1,3-Dichloropropene	ug/L (ppb)	10	106	95	69-131	11
Toluene	ug/L (ppb)	10	119	112	70-130	6
trans-1,3-Dichloropropene	ug/L (ppb)	10	109	100	70-130	9
1,1,2-Trichloroethane	ug/L (ppb)	10	111	104	70-130	7
2-Hexanone	ug/L (ppb)	50	113	111	45-138	2
1,3-Dichloropropane	ug/L (ppb)	10	105	101	70-130	4
Tetrachloroethene	ug/L (ppb)	10	111	107	70-130	4
Dibromochloromethane	ug/L (ppb)	10	111	107	60-148	4
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	114	106	70-130	7
Chlorobenzene	ug/L (ppb)	10	109	103	70-130	6
Ethylbenzene	ug/L (ppb)	10	112	107	70-130	5
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	107	110	70-130	3
m,p-Xylene	ug/L (ppb)	20	112	107	70-130	5
o-Xylene	ug/L (ppb)	10	110	107	70-130	3
Styrene	ug/L (ppb)	10	104	100	70-130	4
Isopropylbenzene	ug/L (ppb)	10	107	107	70-130	0
Bromoform	ug/L (ppb)	10	115	114	69-138	1
n-Propylbenzene	ug/L (ppb)	10	111	107	70-130	4
Bromobenzene	ug/L (ppb)	10	111	108	70-130	3
1,3,5-Trimethylbenzene	ug/L (ppb)	10	108	106	70-130	2
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	111	111	70-130	0
1,2,3-Trichloropropane	ug/L (ppb)	10	109	111	70-130	2
2-Chlorotoluene	ug/L (ppb)	10	107	106	70-130	1
4-Chlorotoluene	ug/L (ppb)	10	109	109	70-130	0
tert-Butylbenzene	ug/L (ppb)	10	108	110	70-130	2
1,2,4-Trimethylbenzene	ug/L (ppb)	10	106	107	70-130	1
sec-Butylbenzene	ug/L (ppb)	10	109	109	70-130	0
p-Isopropyltoluene	ug/L (ppb)	10	109	109	70-130	0
1,3-Dichlorobenzene	ug/L (ppb)	10	107	109	70-130	2
1,4-Dichlorobenzene	ug/L (ppb)	10	107	106	70-130	1
1,2-Dichlorobenzene	ug/L (ppb)	10	105	108	70-130	3
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	115	121	70-130	5
1,2,4-Trichlorobenzene	ug/L (ppb)	10	101	105	70-130	4
Hexachlorobutadiene	ug/L (ppb)	10	101	108	70-130	7
Naphthalene	ug/L (ppb)	10	101	105	70-130	4
1,2,3-Trichlorobenzene	ug/L (ppb)	10	101	106	70-130	5

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR 1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 10)
1,2-Dibromoethane	ug/L (ppb)	0.10	99	100	70-130	1

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.

SAMPLE CHAIN OF CUSTODY

209041

09-02-22

Page # 1 of 1 | E03 | A13 | W4

Report To Joe Sherrod

Company TRC

Address 1180 NW Maple St, #310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email JSherrod@trcompanies.com
JBoyd@
cc: cmoon@

SAMPLERS (*signature*) JW and JJ

PROJECT NAME: SRM Development 471241

PO # 186033

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	NWTPH-Dx w/ SGC	VOCs + MTBE by 8260C	1,2-Dibromoethane (EDB) by 8011B	RCRA 8 Metals by 200.8, 6020A, 1638E	BTEX by 8260	Arsenic by 6020	Notes
MW-6:GW	01A-D	09/02/22	0937	H_2O	4	X	X	X					X					X	SGC = Silica gel cleanup
MW-7:GW	02A-L		1040		11	X							X	X	X	X			
MW-8:GW	03		1122		11	X	X						X	X	X	X			
MW-4R:GW	04A-H		1205		8	X	X						X				X	X	
MW-5R:GW	05		1431		8	X	X						X				X	X	
MW-1:GW	06		1437		8	X	X						X				X	X	
MW-2:GW	07		1539		8	X	X						X				X	X	
DUP-1	08A-D				4	X	X	X					X					X	

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Joel Jacobsen	TRC	09/02/22	17:32
Received by:	Joe Mohammed	FBI	09/02/22	17:32
Relinquished by:	Samples received at 6 °C			
Received by:				

Friedman & Bruya, Inc.
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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Vineta Mills, M.S.
Eric Young, B.S.

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Seattle, WA 98119-2029
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September 13, 2022

Joe Sherrod, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: SRM Development 417241 186033, F&BI 209041

Dear Mr Sherrod:

Included are the results from the testing of material submitted on September 2, 2022 from the SRM Development 417241 186033, F&BI 209041 project. There are 29 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: Cynthia Moon, Jerry Boyd
TRC0913R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 2, 2022 by Friedman & Bruya, Inc. from the TRC Environmental SRM Development 417241 186033, F&BI 209041 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	TRC Environmental
209041 -01	MW-6:GW
209041 -02	MW-7:GW
209041 -03	MW-8:GW
209041 -04	MW-4R:GW
209041 -05	MW-5R:GW
209041 -06	MW-1:GW
209041 -07	MW-2:GW
209041 -08	DUP-1

The 8260D calibration standard failed the acceptance criteria for methylene chloride. The data were flagged accordingly.

All quality control requirements were acceptable.

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041
Date Extracted: 09/09/22
Date Analyzed: 09/09/22

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 51-134)
MW-8:GW 209041-03	<100	90
MW-4R:GW 209041-04	<100	87
MW-5R:GW 209041-05	<100	87
MW-1:GW 209041-06	<100	84
MW-2:GW 209041-07	<100	89
Method Blank 02-2074 MB	<100	93

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041
Date Extracted: 09/09/22
Date Analyzed: 09/09/22

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 52-124)
MW-6:GW 209041-01	<1	<1	<1	<3	<100	88
DUP-1 209041-08	<1	<1	<1	<3	<100	88
Method Blank 02-2074 MB	<1	<1	<1	<3	<100	89

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041
Date Extracted: 09/07/22
Date Analyzed: 09/09/22

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-6:GW 209041-01	<50	<250	122
MW-7:GW 209041-02	<50	<250	96
MW-8:GW 209041-03	<50	<250	118
MW-4R:GW 209041-04	<50	<250	112
MW-5R:GW 209041-05	<50	<250	102
MW-1:GW 209041-06	<50	<250	121
MW-2:GW 209041-07	<50	<250	94
DUP-1 209041-08	<50	<250	119
Method Blank 02-2122 MB	<50	<250	140

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041
Date Extracted: 09/07/22
Date Analyzed: 09/07/22

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 47-140)
MW-6:GW 209041-01	150 x	<250	108
MW-7:GW 209041-02	<50	<250	97
MW-8:GW 209041-03	200 x	<250	115
MW-4R:GW 209041-04	<50	<250	117
MW-5R:GW 209041-05	170 x	<250	105
MW-1:GW 209041-06	360 x	<250	103
MW-2:GW 209041-07	270 x	<250	94
DUP-1 209041-08	120 x	<250	119
Method Blank 02-2122 MB	<50	<250	123

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-6:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	209041-01
Date Analyzed:	09/12/22	Data File:	209041-01.073
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	1.94

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-7:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	209041-02
Date Analyzed:	09/12/22	Data File:	209041-02.062
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	1.30
Barium	25.7
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-8:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	209041-03
Date Analyzed:	09/12/22	Data File:	209041-03.065
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	3.93
Barium	35.7
Cadmium	<1
Chromium	1.07
Lead	<1
Mercury	<1
Selenium	1.24
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-4R:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	209041-04
Date Analyzed:	09/12/22	Data File:	209041-04.066
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	1.18

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-5R:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	209041-05
Date Analyzed:	09/12/22	Data File:	209041-05.067
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	12.0

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-1:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	209041-06
Date Analyzed:	09/12/22	Data File:	209041-06.068
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	9.02

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-2:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	209041-07
Date Analyzed:	09/12/22	Data File:	209041-07.069
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	11.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	DUP-1	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	209041-08
Date Analyzed:	09/12/22	Data File:	209041-08.072
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	9.81

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	TRC Environmental
Date Received:	NA	Project:	186033, F&BI 209041
Date Extracted:	09/12/22	Lab ID:	I2-630 mb
Date Analyzed:	09/12/22	Data File:	I2-630 mb.060
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	WE

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-7:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/06/22	Lab ID:	209041-02
Date Analyzed:	09/07/22	Data File:	090715.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	78	126
Toluene-d8	98	84	115
4-Bromofluorobenzene	98	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5 ca	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-8:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/06/22	Lab ID:	209041-03
Date Analyzed:	09/07/22	Data File:	090716.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	78	126
Toluene-d8	97	84	115
4-Bromofluorobenzene	97	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5 ca	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-4R:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/06/22	Lab ID:	209041-04
Date Analyzed:	09/06/22	Data File:	090619.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	78	126
Toluene-d8	101	84	115
4-Bromofluorobenzene	103	72	130

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-5R:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/06/22	Lab ID:	209041-05
Date Analyzed:	09/06/22	Data File:	090620.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	94	78	126
Toluene-d8	100	84	115
4-Bromofluorobenzene	99	72	130

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-1:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/06/22	Lab ID:	209041-06
Date Analyzed:	09/06/22	Data File:	090621.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	91	78	126
Toluene-d8	93	84	115
4-Bromofluorobenzene	99	72	130

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-2:GW	Client:	TRC Environmental
Date Received:	09/02/22	Project:	186033, F&BI 209041
Date Extracted:	09/06/22	Lab ID:	209041-07
Date Analyzed:	09/06/22	Data File:	090618.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	78	126
Toluene-d8	96	84	115
4-Bromofluorobenzene	98	72	130

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	186033, F&BI 209041
Date Extracted:	09/06/22	Lab ID:	02-1969 mb
Date Analyzed:	09/06/22	Data File:	090607.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	RF

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	93	78	126
Toluene-d8	101	84	115
4-Bromofluorobenzene	99	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041
Date Extracted: 09/08/22
Date Analyzed: 09/08/22

RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR 1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED
Results Reported as µg/L (ppb)

Sample ID Laboratory ID	EDB
MW-7:GW 209041-02	<0.01
MW-8:GW 209041-03	<0.01
Method Blank 02-2130	<0.01

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 209042-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	115	65-118
Toluene	ug/L (ppb)	50	91	72-122
Ethylbenzene	ug/L (ppb)	50	95	73-126
Xylenes	ug/L (ppb)	150	93	74-118
Gasoline	ug/L (ppb)	1,000	101	69-134

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED 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 Extended	ug/L (ppb)	2,500	92	96	63-142	4

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED 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 Extended	ug/L (ppb)	2,500	108	112	61-133	4

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 209041-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	1.30	89	89	75-125	0
Barium	ug/L (ppb)	50	25.7	95	95	75-125	0
Cadmium	ug/L (ppb)	5	<1	98	97	75-125	1
Chromium	ug/L (ppb)	20	<1	95	96	75-125	1
Lead	ug/L (ppb)	10	<1	87	87	75-125	0
Mercury	ug/L (ppb)	5	<1	93	95	75-125	2
Selenium	ug/L (ppb)	5	<1	84	94	75-125	11
Silver	ug/L (ppb)	5	<1	91	90	75-125	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	89	80-120
Barium	ug/L (ppb)	50	95	80-120
Cadmium	ug/L (ppb)	5	97	80-120
Chromium	ug/L (ppb)	20	96	80-120
Lead	ug/L (ppb)	10	97	80-120
Mercury	ug/L (ppb)	5	101	80-120
Selenium	ug/L (ppb)	5	98	80-120
Silver	ug/L (ppb)	5	98	80-120

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	10	109	107	46-206	2
Chloromethane	ug/L (ppb)	10	100	101	70-142	1
Vinyl chloride	ug/L (ppb)	10	107	106	70-130	1
Bromomethane	ug/L (ppb)	10	106	114	56-197	7
Chloroethane	ug/L (ppb)	10	114	111	70-130	3
Trichlorofluoromethane	ug/L (ppb)	10	104	101	70-130	3
Acetone	ug/L (ppb)	50	99	100	10-140	1
1,1-Dichloroethene	ug/L (ppb)	10	103	100	70-130	3
Hexane	ug/L (ppb)	10	88	87	54-136	1
Methylene chloride	ug/L (ppb)	10	77	77	43-134	0
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	102	99	70-130	3
trans-1,2-Dichloroethene	ug/L (ppb)	10	110	106	70-130	4
1,1-Dichloroethane	ug/L (ppb)	10	99	100	70-130	1
2,2-Dichloropropane	ug/L (ppb)	10	117	112	70-130	4
cis-1,2-Dichloroethene	ug/L (ppb)	10	108	107	70-130	1
Chloroform	ug/L (ppb)	10	97	95	70-130	2
2-Butanone (MEK)	ug/L (ppb)	50	106	102	17-154	4
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	99	96	70-130	3
1,1,1-Trichloroethane	ug/L (ppb)	10	102	99	70-130	3
1,1-Dichloropropene	ug/L (ppb)	10	97	97	70-130	0
Carbon tetrachloride	ug/L (ppb)	10	103	103	70-130	0
Benzene	ug/L (ppb)	10	103	99	70-130	4
Trichloroethene	ug/L (ppb)	10	104	100	70-130	4
1,2-Dichloropropane	ug/L (ppb)	10	100	95	70-130	5
Bromodichloromethane	ug/L (ppb)	10	104	97	70-130	7
Dibromomethane	ug/L (ppb)	10	104	98	70-130	6
4-Methyl-2-pentanone	ug/L (ppb)	50	112	101	68-130	10
cis-1,3-Dichloropropene	ug/L (ppb)	10	106	95	69-131	11
Toluene	ug/L (ppb)	10	119	112	70-130	6
trans-1,3-Dichloropropene	ug/L (ppb)	10	109	100	70-130	9
1,1,2-Trichloroethane	ug/L (ppb)	10	111	104	70-130	7
2-Hexanone	ug/L (ppb)	50	113	111	45-138	2
1,3-Dichloropropane	ug/L (ppb)	10	105	101	70-130	4
Tetrachloroethene	ug/L (ppb)	10	111	107	70-130	4
Dibromochloromethane	ug/L (ppb)	10	111	107	60-148	4
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	114	106	70-130	7
Chlorobenzene	ug/L (ppb)	10	109	103	70-130	6
Ethylbenzene	ug/L (ppb)	10	112	107	70-130	5
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	107	110	70-130	3
m,p-Xylene	ug/L (ppb)	20	112	107	70-130	5
o-Xylene	ug/L (ppb)	10	110	107	70-130	3
Styrene	ug/L (ppb)	10	104	100	70-130	4
Isopropylbenzene	ug/L (ppb)	10	107	107	70-130	0
Bromoform	ug/L (ppb)	10	115	114	69-138	1
n-Propylbenzene	ug/L (ppb)	10	111	107	70-130	4
Bromobenzene	ug/L (ppb)	10	111	108	70-130	3
1,3,5-Trimethylbenzene	ug/L (ppb)	10	108	106	70-130	2
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	111	111	70-130	0
1,2,3-Trichloropropane	ug/L (ppb)	10	109	111	70-130	2
2-Chlorotoluene	ug/L (ppb)	10	107	106	70-130	1
4-Chlorotoluene	ug/L (ppb)	10	109	109	70-130	0
tert-Butylbenzene	ug/L (ppb)	10	108	110	70-130	2
1,2,4-Trimethylbenzene	ug/L (ppb)	10	106	107	70-130	1
sec-Butylbenzene	ug/L (ppb)	10	109	109	70-130	0
p-Isopropyltoluene	ug/L (ppb)	10	109	109	70-130	0
1,3-Dichlorobenzene	ug/L (ppb)	10	107	109	70-130	2
1,4-Dichlorobenzene	ug/L (ppb)	10	107	106	70-130	1
1,2-Dichlorobenzene	ug/L (ppb)	10	105	108	70-130	3
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	115	121	70-130	5
1,2,4-Trichlorobenzene	ug/L (ppb)	10	101	105	70-130	4
Hexachlorobutadiene	ug/L (ppb)	10	101	108	70-130	7
Naphthalene	ug/L (ppb)	10	101	105	70-130	4
1,2,3-Trichlorobenzene	ug/L (ppb)	10	101	106	70-130	5

Date of Report: 09/13/22
Date Received: 09/02/22
Project: SRM Development 417241 186033, F&BI 209041

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR 1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 10)
1,2-Dibromoethane	ug/L (ppb)	0.10	99	100	70-130	1

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.

SAMPLE CHAIN OF CUSTODY

209041

09-02-22

Page # 1 of 1 | E03 | A13 | W4

Report To Joe Sherrod

Company TRC

Address 1180 NW Maple St, #310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email JSherrod@trcompanies.com
JBoyd@
cc: cmoon@

SAMPLERS (*signature*) JW and JJ

PROJECT NAME: SRM Development 471241

PO # 186033

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	NWTPH-Dx w/ SGC	VOCs + MTBE by 8260C	1,2-Dibromoethane (EDB) by 8011B	RCRA 8 Metals by 200.8, 6020A, 1638E	BTEX by 8260	Arsenic by 6020	Notes
MW-6:GW	01A-D	09/02/22	0937	H_2O	4	X	X	X					X					X	SGC = Silica gel cleanup
MW-7:GW	02A-L		1040		11	X							X	X	X	X			
MW-8:GW	03		1122		11	X	X						X	X	X	X			
MW-4R:GW	04A-H		1205		8	X	X						X				X	X	
MW-5R:GW	05		1431		8	X	X						X				X	X	
MW-1:GW	06		1437		8	X	X						X				X	X	
MW-2:GW	07		1539		8	X	X						X				X	X	
DUP-1	08A-D				4	X	X	X					X					X	

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Joel Jacobsen	TRC	09/02/22	17:32
Received by:	Joe Mohammed	FBI	09/02/22	17:32
Relinquished by:	Samples received at 6 °C			
Received by:				

Friedman & Bruya, Inc.
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Avenue South
Seattle, WA 98108
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fbi@isomedia.com
www.friedmanandbruya.com

December 28, 2022

Jerry Boyd, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: SRM Bellevue 471241.0001 193460, F&BI 212266

Dear Mr Boyd:

Included are the results from the testing of material submitted on December 16, 2022 from the SRM Bellevue 471241.0001 193460, F&BI 212266 project. There are 31 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: Cynthia Moon, Joe Sherrod
TRC1228R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on December 16, 2022 by Friedman & Bruya, Inc. from the TRC Environmental SRM Bellevue 471241.0001 193460, F&BI 212266 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	TRC Environmental
212266-01	MW-7
212266-02	MW-8
212266-03	MW-4R
212266-04	MW-5R
212266-05	MW-1
212266-06	MW-6
212266-07	MW-2
212266-08	DUP-1

All quality control requirements were acceptable.

Date of Report: 12/28/22
Date Received: 12/16/22
Project: SRM Bellevue 471241.0001 193460, F&BI 212266
Date Extracted: 12/21/22
Date Analyzed: 12/21/22

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
MW-7 212266-01	<100	124
MW-8 212266-02	<100	107
MW-4R 212266-03	<100	115
MW-5R 212266-04	<100	117
MW-1 212266-05	<100	112
MW-6 212266-06	<100	109
MW-2 212266-07	<100	111
DUP-1 212266-08	<100	117
Method Blank 02-2938 MB	<100	119

Date of Report: 12/28/22
Date Received: 12/16/22
Project: SRM Bellevue 471241.0001 193460, F&BI 212266
Date Extracted: 12/19/22
Date Analyzed: 12/20/22

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-7 212266-01 1/0.4	<50	<250	108
MW-8 212266-02 1/0.4	<50	<250	108
MW-4R 212266-03 1/0.4	<50	<250	121
MW-5R 212266-04 1/0.4	<50	<250	105
MW-1 212266-05 1/0.4	<50	<250	117
MW-6 212266-06 1/0.4	<50	<250	114
MW-2 212266-07 1/0.4	<50	<250	117
DUP-1 212266-08 1/0.4	<50	<250	117
Method Blank 02-3021 MB	<50	<250	121

Date of Report: 12/28/22
Date Received: 12/16/22
Project: SRM Bellevue 471241.0001 193460, F&BI 212266
Date Extracted: 12/19/22
Date Analyzed: 12/20/22

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-7 212266-01 1/0.4	97 x	<260	146
MW-8 212266-02 1/0.4	220 x	<250	135
MW-4R 212266-03 1/0.4	55 x	<250	148
MW-5R 212266-04 1/0.4	130 x	<250	133
MW-1 212266-05 1/0.4	310 x	<250	143
MW-6 212266-06 1/0.4	74 x	<250	150
MW-2 212266-07 1/0.4	440 x	<250	149
DUP-1 212266-08 1/0.4	77 x	<260	150
Method Blank 02-3021 MB	<50	<250	141

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-7	Client:	TRC Environmental
Date Received:	12/16/22	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/19/22	Lab ID:	212266-01
Date Analyzed:	12/19/22	Data File:	212266-01.110
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Barium	33.1
Cadmium	<1
Chromium	1.24
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-8	Client:	TRC Environmental
Date Received:	12/16/22	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/19/22	Lab ID:	212266-02
Date Analyzed:	12/19/22	Data File:	212266-02.111
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	8.17
Barium	69.7
Cadmium	<1
Chromium	1.30
Lead	<1
Mercury	<1
Selenium	2.05
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-4R	Client:	TRC Environmental
Date Received:	12/16/22	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/19/22	Lab ID:	212266-03
Date Analyzed:	12/19/22	Data File:	212266-03.112
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.06

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-5R	Client:	TRC Environmental
Date Received:	12/16/22	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/19/22	Lab ID:	212266-04
Date Analyzed:	12/19/22	Data File:	212266-04.113
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	3.32

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-1	Client:	TRC Environmental
Date Received:	12/16/22	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/19/22	Lab ID:	212266-05
Date Analyzed:	12/19/22	Data File:	212266-05.114
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	10.4

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-6	Client:	TRC Environmental
Date Received:	12/16/22	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/19/22	Lab ID:	212266-06
Date Analyzed:	12/19/22	Data File:	212266-06.117
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.81

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-2	Client:	TRC Environmental
Date Received:	12/16/22	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/19/22	Lab ID:	212266-07
Date Analyzed:	12/19/22	Data File:	212266-07.118
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	10.7

Analysis For Total Metals By EPA Method 6020B

Client ID:	DUP-1	Client:	TRC Environmental
Date Received:	12/16/22	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/19/22	Lab ID:	212266-08
Date Analyzed:	12/19/22	Data File:	212266-08.119
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.73

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	TRC Environmental
Date Received:	NA	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/19/22	Lab ID:	I2-910 mb
Date Analyzed:	12/19/22	Data File:	I2-910 mb.037
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-7	Client:	TRC Environmental
Date Received:	12/16/22	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/22/22	Lab ID:	212266-01
Date Analyzed:	12/22/22	Data File:	122217.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	78	126
Toluene-d8	96	84	115
4-Bromofluorobenzene	102	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-8	Client:	TRC Environmental
Date Received:	12/16/22	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/22/22	Lab ID:	212266-02
Date Analyzed:	12/22/22	Data File:	122218.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	78	126
Toluene-d8	97	84	115
4-Bromofluorobenzene	97	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-4R	Client:	TRC Environmental
Date Received:	12/16/22	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/22/22	Lab ID:	212266-03
Date Analyzed:	12/22/22	Data File:	122219.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	78	126
Toluene-d8	99	84	115
4-Bromofluorobenzene	98	72	130

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-5R	Client:	TRC Environmental
Date Received:	12/16/22	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/22/22	Lab ID:	212266-04
Date Analyzed:	12/22/22	Data File:	122220.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	78	126
Toluene-d8	100	84	115
4-Bromofluorobenzene	105	72	130

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-1	Client:	TRC Environmental
Date Received:	12/16/22	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/22/22	Lab ID:	212266-05
Date Analyzed:	12/22/22	Data File:	122221.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	78	126
Toluene-d8	100	84	115
4-Bromofluorobenzene	102	72	130

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-6	Client:	TRC Environmental
Date Received:	12/16/22	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/22/22	Lab ID:	212266-06
Date Analyzed:	12/22/22	Data File:	122222.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	93	78	126
Toluene-d8	92	84	115
4-Bromofluorobenzene	105	72	130

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-2	Client:	TRC Environmental
Date Received:	12/16/22	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/22/22	Lab ID:	212266-07
Date Analyzed:	12/22/22	Data File:	122223.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	78	126
Toluene-d8	97	84	115
4-Bromofluorobenzene	99	72	130

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	DUP-1	Client:	TRC Environmental
Date Received:	12/16/22	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/22/22	Lab ID:	212266-08
Date Analyzed:	12/22/22	Data File:	122224.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	78	126
Toluene-d8	96	84	115
4-Bromofluorobenzene	96	72	130

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	SRM Bellevue 471241.0001
Date Extracted:	12/20/22	Lab ID:	02-2976 mb
Date Analyzed:	12/20/22	Data File:	122007.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	LM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	94	78	126
Toluene-d8	100	84	115
4-Bromofluorobenzene	102	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Date of Report: 12/28/22
Date Received: 12/16/22
Project: SRM Bellevue 471241.0001 193460, F&BI 212266
Date Extracted: 12/21/22
Date Analyzed: 12/21/22

RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR 1,2-DIBROMOETHANE BY EPA METHOD 8011 MODIFIED
Results Reported as µg/L (ppb)

Sample ID Laboratory ID	EDB
MW-7 212266-01	<0.01
MW-8 212266-02	<0.01
Method Blank 02-2786 MB	<0.01

Date of Report: 12/28/22
Date Received: 12/16/22
Project: SRM Bellevue 471241.0001 193460, F&BI 212266

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 212287-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	110	70-130

Date of Report: 12/28/22
Date Received: 12/16/22
Project: SRM Bellevue 471241.0001 193460, F&BI 212266

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED 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 Extended	ug/L (ppb)	1,000	84	85	70-130	1

Date of Report: 12/28/22
Date Received: 12/16/22
Project: SRM Bellevue 471241.0001 193460, F&BI 212266

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED 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 Extended	ug/L (ppb)	1,000	109	108	70-130	1

Date of Report: 12/28/22
Date Received: 12/16/22
Project: SRM Bellevue 471241.0001 193460, F&BI 212266

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 212279-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	<1	100	99	75-125	1
Barium	ug/L (ppb)	50	33.8	107	105	75-125	2
Cadmium	ug/L (ppb)	5	<1	101	101	75-125	0
Chromium	ug/L (ppb)	20	<1	109	102	75-125	7
Lead	ug/L (ppb)	10	2.24	90	89	75-125	1
Mercury	ug/L (ppb)	5	<1	105	97	75-125	8
Selenium	ug/L (ppb)	5	<1	107	109	75-125	2
Silver	ug/L (ppb)	5	<1	91	91	75-125	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	93	80-120
Barium	ug/L (ppb)	50	97	80-120
Cadmium	ug/L (ppb)	5	95	80-120
Chromium	ug/L (ppb)	20	100	80-120
Lead	ug/L (ppb)	10	97	80-120
Mercury	ug/L (ppb)	5	92	80-120
Selenium	ug/L (ppb)	5	100	80-120
Silver	ug/L (ppb)	5	96	80-120

Date of Report: 12/28/22
Date Received: 12/16/22
Project: SRM Bellevue 471241.0001 193460, F&BI 212266

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 212284-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	10	<10	108	50-150
Chloromethane	ug/L (ppb)	10	<10	99	50-150
Vinyl chloride	ug/L (ppb)	10	<0.2	103	50-150
Bromomethane	ug/L (ppb)	10	<1	116	50-150
Chloroethane	ug/L (ppb)	10	<1	109	50-150
Trichlorofluoromethane	ug/L (ppb)	10	<1	96	50-150
Acetone	ug/L (ppb)	50	<10	77	50-150
1,1-Dichloroethene	ug/L (ppb)	10	<1	107	50-150
Hexane	ug/L (ppb)	10	<1	105	50-150
Methylene chloride	ug/L (ppb)	10	<5	92	50-150
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	<1	102	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	103	50-150
1,1-Dichloroethane	ug/L (ppb)	10	<1	104	50-150
2,2-Dichloropropane	ug/L (ppb)	10	<1	112	50-150
cis-1,2-Dichloroethene	ug/L (ppb)	10	<1	104	50-150
Chloroform	ug/L (ppb)	10	<1	99	50-150
2-Butanone (MEK)	ug/L (ppb)	50	<10	99	50-150
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	<1	100	50-150
1,1,1-Trichloroethane	ug/L (ppb)	10	<1	102	50-150
1,1-Dichloropropene	ug/L (ppb)	10	<1	100	50-150
Carbon tetrachloride	ug/L (ppb)	10	<1	108	50-150
Benzene	ug/L (ppb)	10	<0.35	103	50-150
Trichloroethene	ug/L (ppb)	10	<1	96	50-150
1,2-Dichloropropane	ug/L (ppb)	10	<1	99	50-150
Bromodichloromethane	ug/L (ppb)	10	<1	101	50-150
Dibromomethane	ug/L (ppb)	10	<1	105	50-150
4-Methyl-2-pentanone	ug/L (ppb)	50	<10	100	50-150
cis-1,3-Dichloropropene	ug/L (ppb)	10	<1	99	50-150
Toluene	ug/L (ppb)	10	<1	100	50-150
trans-1,3-Dichloropropene	ug/L (ppb)	10	<1	102	50-150
1,1,2-Trichloroethane	ug/L (ppb)	10	<1	102	50-150
2-Hexanone	ug/L (ppb)	50	<10	97	50-150
1,3-Dichloropropane	ug/L (ppb)	10	<1	105	50-150
Tetrachloroethene	ug/L (ppb)	10	2.1	95	50-150
Dibromochloromethane	ug/L (ppb)	10	<1	106	50-150
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	<1	102	50-150
Chlorobenzene	ug/L (ppb)	10	<1	100	50-150
Ethylbenzene	ug/L (ppb)	10	<1	102	50-150
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	<1	104	50-150
m,p-Xylene	ug/L (ppb)	20	<2	101	50-150
o-Xylene	ug/L (ppb)	10	<1	104	50-150
Styrene	ug/L (ppb)	10	<1	96	50-150
Isopropylbenzene	ug/L (ppb)	10	<1	97	50-150
Bromoform	ug/L (ppb)	10	<1	106	50-150
n-Propylbenzene	ug/L (ppb)	10	<1	107	50-150
Bromobenzene	ug/L (ppb)	10	<1	109	50-150
1,3,5-Trimethylbenzene	ug/L (ppb)	10	<1	105	50-150
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	<1	121	50-150
1,2,3-Trichloropropane	ug/L (ppb)	10	<1	107	50-150
2-Chlorotoluene	ug/L (ppb)	10	<1	108	50-150
4-Chlorotoluene	ug/L (ppb)	10	<1	104	50-150
tert-Butylbenzene	ug/L (ppb)	10	<1	110	50-150
1,2,4-Trimethylbenzene	ug/L (ppb)	10	<1	109	50-150
sec-Butylbenzene	ug/L (ppb)	10	<1	108	50-150
p-Isopropyltoluene	ug/L (ppb)	10	<1	108	50-150
1,3-Dichlorobenzene	ug/L (ppb)	10	<1	105	50-150
1,4-Dichlorobenzene	ug/L (ppb)	10	<1	100	50-150
1,2-Dichlorobenzene	ug/L (ppb)	10	<1	104	50-150
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	<10	110	50-150
1,2,4-Trichlorobenzene	ug/L (ppb)	10	<1	96	50-150
Hexachlorobutadiene	ug/L (ppb)	10	<1	102	50-150
Naphthalene	ug/L (ppb)	10	<1	67	50-150
1,2,3-Trichlorobenzene	ug/L (ppb)	10	<1	94	50-150

Date of Report: 12/28/22
Date Received: 12/16/22
Project: SRM Bellevue 471241.0001 193460, F&BI 212266

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	10	108	106	46-206	2
Chloromethane	ug/L (ppb)	10	98	96	70-142	2
Vinyl chloride	ug/L (ppb)	10	102	102	70-130	0
Bromomethane	ug/L (ppb)	10	121	120	56-197	1
Chloroethane	ug/L (ppb)	10	110	109	70-130	1
Trichlorofluoromethane	ug/L (ppb)	10	101	96	70-130	5
Acetone	ug/L (ppb)	50	77	81	10-140	5
1,1-Dichloroethene	ug/L (ppb)	10	108	107	70-130	1
Hexane	ug/L (ppb)	10	106	105	54-136	1
Methylene chloride	ug/L (ppb)	10	96	96	43-134	0
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	103	101	70-130	2
trans-1,2-Dichloroethene	ug/L (ppb)	10	104	102	70-130	2
1,1-Dichloroethane	ug/L (ppb)	10	106	104	70-130	2
2,2-Dichloropropane	ug/L (ppb)	10	101	105	70-130	4
cis-1,2-Dichloroethene	ug/L (ppb)	10	106	105	70-130	1
Chloroform	ug/L (ppb)	10	104	100	70-130	4
2-Butanone (MEK)	ug/L (ppb)	50	103	98	17-154	5
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	101	99	70-130	2
1,1,1-Trichloroethane	ug/L (ppb)	10	104	102	70-130	2
1,1-Dichloropropene	ug/L (ppb)	10	105	101	70-130	4
Carbon tetrachloride	ug/L (ppb)	10	112	110	70-130	2
Benzene	ug/L (ppb)	10	105	104	70-130	1
Trichloroethene	ug/L (ppb)	10	98	96	70-130	2
1,2-Dichloropropane	ug/L (ppb)	10	102	100	70-130	2
Bromodichloromethane	ug/L (ppb)	10	102	103	70-130	1
Dibromomethane	ug/L (ppb)	10	104	99	70-130	5
4-Methyl-2-pentanone	ug/L (ppb)	50	103	98	68-130	5
cis-1,3-Dichloropropene	ug/L (ppb)	10	95	96	69-131	1
Toluene	ug/L (ppb)	10	101	101	70-130	0
trans-1,3-Dichloropropene	ug/L (ppb)	10	108	107	70-130	1
1,1,2-Trichloroethane	ug/L (ppb)	10	102	103	70-130	1
2-Hexanone	ug/L (ppb)	50	103	93	45-138	10
1,3-Dichloropropane	ug/L (ppb)	10	104	102	70-130	2
Tetrachloroethene	ug/L (ppb)	10	100	100	70-130	0
Dibromochloromethane	ug/L (ppb)	10	104	105	60-148	1
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	102	102	70-130	0
Chlorobenzene	ug/L (ppb)	10	102	103	70-130	1
Ethylbenzene	ug/L (ppb)	10	101	102	70-130	1
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	105	108	70-130	3
m,p-Xylene	ug/L (ppb)	20	102	101	70-130	1
o-Xylene	ug/L (ppb)	10	104	104	70-130	0
Styrene	ug/L (ppb)	10	100	97	70-130	3
Isopropylbenzene	ug/L (ppb)	10	99	95	70-130	4
Bromoform	ug/L (ppb)	10	105	103	69-138	2
n-Propylbenzene	ug/L (ppb)	10	103	100	70-130	3
Bromobenzene	ug/L (ppb)	10	103	103	70-130	0
1,3,5-Trimethylbenzene	ug/L (ppb)	10	103	100	70-130	3
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	116	112	70-130	4
1,2,3-Trichloropropane	ug/L (ppb)	10	100	101	70-130	1
2-Chlorotoluene	ug/L (ppb)	10	103	99	70-130	4
4-Chlorotoluene	ug/L (ppb)	10	100	99	70-130	1
tert-Butylbenzene	ug/L (ppb)	10	105	101	70-130	4
1,2,4-Trimethylbenzene	ug/L (ppb)	10	104	99	70-130	5
sec-Butylbenzene	ug/L (ppb)	10	103	100	70-130	3
p-Isopropyltoluene	ug/L (ppb)	10	104	102	70-130	2
1,3-Dichlorobenzene	ug/L (ppb)	10	102	100	70-130	2
1,4-Dichlorobenzene	ug/L (ppb)	10	100	96	70-130	4
1,2-Dichlorobenzene	ug/L (ppb)	10	105	100	70-130	5
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	99	100	70-130	1
1,2,4-Trichlorobenzene	ug/L (ppb)	10	106	100	70-130	6
Hexachlorobutadiene	ug/L (ppb)	10	104	99	70-130	5
Naphthalene	ug/L (ppb)	10	89	85	70-130	5
1,2,3-Trichlorobenzene	ug/L (ppb)	10	98	93	70-130	5

Date of Report: 12/28/22
Date Received: 12/16/22
Project: SRM Bellevue 471241.0001 193460, F&BI 212266

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR 1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 10)
1,2-Dibromoethane	ug/L (ppb)	0.10	119	120	70-130	1

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.

212266

SAMPLE CHAIN OF CUSTODY

12/16/22 I3/N4/VW6 1 of 1

Report To Jerry Boyd, Joe Sherrod

Company TRC

Address 1180 NW Maple St, Suite 310

City, State, ZIP Issaquah, WA 98027

Phone (425) 395-0010 Email JBoyd@trccompanies.com JSherrod@trccompanies.com CMoon@trccompanies.com

SAMPLERS (*signature*) GW NTH

PROJECT NAME: SRM Bellevue 471241.0001

PO #: 193460

REMARKS: Project specific RLs? - Yes / No

INVOICE TO

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 8260	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	VOCs and MTBE by 8260C	1,2-dibromoethane (EDB) by 8260C	RCRA 8 by 200.8/6020A, 7470A	DRO w/ SGC*	DRO/ORO w/ SGC*	Arsenic by 6020	Notes
MW-7	01 A-H	12/15/22	1140	H_2O	8	X	X						X	X	X	X			
MW-8	02		1148		8	X	X						X	X	X	X			
MW-4R	03 A-F		1300		6	X	X	X									X	X	
MW-5R	04		1500		6	X	X	X									X	X	
MW-1	05 A-H		1508		8	X	X	X									X	X	
MW-6	06		1315		8	X	X	X									X	X	
MW-2	07		1625		8	X	X	X									X	X	* SGC = silica gel cleanup
DUP-1	08		-		8	X	X	X									X	X	

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: NTH	NATE DORFNER	TRC	12/16/22	0630
Received by:	Michael Erdahl	F.I.Bruya	12/16/22	0630
Relinquished by:				
Received by:		Samples received at 4°C		

Friedman & Bruya, Inc.
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Avenue South
Seattle, WA 98108
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www.friedmanandbruya.com

March 24, 2023

Joe Sherrod, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: SRM Development Bellevue-471241 193460, F&BI 303256

Dear Mr Sherrod:

Included are the results from the testing of material submitted on March 16, 2023 from the SRM Development Bellevue-471241 193460, F&BI 303256 project. There are 31 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: Cynthia Moon
TRC0324R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 16, 2023 by Friedman & Bruya, Inc. from the TRC Environmental SRM Development Bellevue-471241 193460, F&BI 303256 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	TRC Environmental
303256-01	MW-8
303256-02	MW-7
303256-03	MW-4R
303256-04	MW-6
303256-05	MW-5R
303256-06	MW-1
303256-07	MW-2
303256-08	DUP-01

All quality control requirements were acceptable.

Date of Report: 03/24/23
Date Received: 03/16/23
Project: SRM Development Bellevue-471241 193460, F&BI 303256
Date Extracted: 03/17/23
Date Analyzed: 03/17/23

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
MW-8 303256-01	<100	104
MW-7 303256-02	<100	108
MW-4R 303256-03	<100	100
MW-6 303256-04	<100	104
MW-5R 303256-05	<100	98
MW-1 303256-06	<100	94
MW-2 303256-07	<100	100
DUP-01 303256-08	<100	101
Method Blank 03-581 MB	<100	99

Date of Report: 03/24/23
Date Received: 03/16/23
Project: SRM Development Bellevue-471241 193460, F&BI 303256
Date Extracted: 03/17/23
Date Analyzed: 03/21/23

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 50-150)
MW-8 303256-01	<50	<250	90
MW-7 303256-02	<50	<250	94
MW-4R 303256-03	<50	<250	90
MW-6 303256-04	<50	<250	93
MW-5R 303256-05	<50	<250	88
MW-1 303256-06	<50	<250	88
MW-2 303256-07	<50	<250	90
DUP-01 303256-08	<50	<260	85
Method Blank 03-630 MB	<50	<250	84

Date of Report: 03/24/23
Date Received: 03/16/23
Project: SRM Development Bellevue-471241 193460, F&BI 303256
Date Extracted: 03/17/23
Date Analyzed: 03/17/23

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 50-150)
MW-8 303256-01	230 x	<250	86
MW-7 303256-02	55 x	<250	88
MW-4R 303256-03	<50	<250	94
MW-6 303256-04	110 x	<250	88
MW-5R 303256-05	220 x	<250	89
MW-1 303256-06	350 x	<250	89
MW-2 303256-07	360 x	<250	89
DUP-01 303256-08	<50	<250	90
Method Blank 03-630 MB	<50	<250	92

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-8	Client:	TRC Environmental
Date Received:	03/16/23	Project:	SRM Development Bellevue-471241
Date Extracted:	03/16/23	Lab ID:	303256-01
Date Analyzed:	03/16/23	Data File:	303256-01.130
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	7.18
Barium	59.6
Cadmium	<1
Chromium	1.07
Lead	<1
Mercury	<1
Selenium	1.07
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-7	Client:	TRC Environmental
Date Received:	03/16/23	Project:	SRM Development Bellevue-471241
Date Extracted:	03/16/23	Lab ID:	303256-02
Date Analyzed:	03/16/23	Data File:	303256-02.131
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Barium	20.1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-4R	Client:	TRC Environmental
Date Received:	03/16/23	Project:	SRM Development Bellevue-471241
Date Extracted:	03/16/23	Lab ID:	303256-03
Date Analyzed:	03/16/23	Data File:	303256-03.132
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-6	Client:	TRC Environmental
Date Received:	03/16/23	Project:	SRM Development Bellevue-471241
Date Extracted:	03/16/23	Lab ID:	303256-04
Date Analyzed:	03/16/23	Data File:	303256-04.133
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.51

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-5R	Client:	TRC Environmental
Date Received:	03/16/23	Project:	SRM Development Bellevue-471241
Date Extracted:	03/16/23	Lab ID:	303256-05
Date Analyzed:	03/16/23	Data File:	303256-05.134
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.61

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-1	Client:	TRC Environmental
Date Received:	03/16/23	Project:	SRM Development Bellevue-471241
Date Extracted:	03/16/23	Lab ID:	303256-06
Date Analyzed:	03/16/23	Data File:	303256-06.143
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	9.55

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-2	Client:	TRC Environmental
Date Received:	03/16/23	Project:	SRM Development Bellevue-471241
Date Extracted:	03/16/23	Lab ID:	303256-07
Date Analyzed:	03/16/23	Data File:	303256-07.144
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	7.77

Analysis For Total Metals By EPA Method 6020B

Client ID:	DUP-01	Client:	TRC Environmental
Date Received:	03/16/23	Project:	SRM Development Bellevue-471241
Date Extracted:	03/16/23	Lab ID:	303256-08
Date Analyzed:	03/16/23	Data File:	303256-08.145
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	TRC Environmental
Date Received:	NA	Project:	SRM Development Bellevue-471241
Date Extracted:	03/16/23	Lab ID:	I3-200 mb2
Date Analyzed:	03/16/23	Data File:	I3-200 mb2.121
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-8	Client:	TRC Environmental
Date Received:	03/16/23	Project:	SRM Development Bellevue-471241
Date Extracted:	03/20/23	Lab ID:	303256-01
Date Analyzed:	03/21/23	Data File:	032140.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	88	71	132
Toluene-d8	93	68	139
4-Bromofluorobenzene	102	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-7	Client:	TRC Environmental
Date Received:	03/16/23	Project:	SRM Development Bellevue-471241
Date Extracted:	03/20/23	Lab ID:	303256-02
Date Analyzed:	03/21/23	Data File:	032141.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	92	71	132
Toluene-d8	93	68	139
4-Bromofluorobenzene	98	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-4R	Client:	TRC Environmental
Date Received:	03/16/23	Project:	SRM Development Bellevue-471241
Date Extracted:	03/20/23	Lab ID:	303256-03
Date Analyzed:	03/21/23	Data File:	032142.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	93	71	132
Toluene-d8	91	68	139
4-Bromofluorobenzene	103	62	136

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-6	Client:	TRC Environmental
Date Received:	03/16/23	Project:	SRM Development Bellevue-471241
Date Extracted:	03/20/23	Lab ID:	303256-04
Date Analyzed:	03/21/23	Data File:	032143.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	71	132
Toluene-d8	92	68	139
4-Bromofluorobenzene	106	62	136

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-5R	Client:	TRC Environmental
Date Received:	03/16/23	Project:	SRM Development Bellevue-471241
Date Extracted:	03/20/23	Lab ID:	303256-05
Date Analyzed:	03/21/23	Data File:	032144.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	71	132
Toluene-d8	99	68	139
4-Bromofluorobenzene	101	62	136

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-1	Client:	TRC Environmental
Date Received:	03/16/23	Project:	SRM Development Bellevue-471241
Date Extracted:	03/20/23	Lab ID:	303256-06
Date Analyzed:	03/21/23	Data File:	032145.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	86	71	132
Toluene-d8	89	68	139
4-Bromofluorobenzene	101	62	136

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-2	Client:	TRC Environmental
Date Received:	03/16/23	Project:	SRM Development Bellevue-471241
Date Extracted:	03/20/23	Lab ID:	303256-07
Date Analyzed:	03/21/23	Data File:	032146.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	71	132
Toluene-d8	101	68	139
4-Bromofluorobenzene	100	62	136

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	DUP-01	Client:	TRC Environmental
Date Received:	03/16/23	Project:	SRM Development Bellevue-471241
Date Extracted:	03/20/23	Lab ID:	303256-08
Date Analyzed:	03/21/23	Data File:	032147.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	94	71	132
Toluene-d8	93	68	139
4-Bromofluorobenzene	106	62	136

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	SRM Development Bellevue-471241
Date Extracted:	03/20/23	Lab ID:	03-0623 mb
Date Analyzed:	03/20/23	Data File:	032007.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	lm

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	71	132
Toluene-d8	100	68	139
4-Bromofluorobenzene	101	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Date of Report: 03/24/23
Date Received: 03/16/23
Project: SRM Development Bellevue-471241 193460, F&BI 303256
Date Extracted: 03/22/23
Date Analyzed: 03/22/23

RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR 1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED
Results Reported as µg/L (ppb)

Sample ID Laboratory ID	EDB
MW-8 303256-01	<0.01
MW-7 303256-02	<0.01
Method Blank 03-650	<0.01

Date of Report: 03/24/23
Date Received: 03/16/23
Project: SRM Development Bellevue-471241 193460, F&BI 303256

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 303222-01 Matrix Spike

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Gasoline	ug/L (ppb)	1,000	<100	98	104	50-150	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	96	70-130

Date of Report: 03/24/23
Date Received: 03/16/23
Project: SRM Development Bellevue-471241 193460, F&BI 303256

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED 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 Extended	ug/L (ppb)	2,500	108	116	70-130	7

Date of Report: 03/24/23
Date Received: 03/16/23
Project: SRM Development Bellevue-471241 193460, F&BI 303256

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED 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 Extended	ug/L (ppb)	2,500	100	112	70-130	11

Date of Report: 03/24/23
Date Received: 03/16/23
Project: SRM Development Bellevue-471241 193460, F&BI 303256

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 303225-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	2.40	87	92	75-125	6
Barium	ug/L (ppb)	50	15.8	113	114	75-125	1
Cadmium	ug/L (ppb)	5	<1	94	96	75-125	2
Chromium	ug/L (ppb)	20	1.07	89	95	75-125	7
Lead	ug/L (ppb)	10	<1	81	83	75-125	2
Mercury	ug/L (ppb)	5	<1	83	84	75-125	1
Selenium	ug/L (ppb)	5	<1	83	84	75-125	1
Silver	ug/L (ppb)	5	<1	89	91	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	91	80-120
Barium	ug/L (ppb)	50	94	80-120
Cadmium	ug/L (ppb)	5	92	80-120
Chromium	ug/L (ppb)	20	93	80-120
Lead	ug/L (ppb)	10	95	80-120
Mercury	ug/L (ppb)	5	93	80-120
Selenium	ug/L (ppb)	5	84	80-120
Silver	ug/L (ppb)	5	90	80-120

Date of Report: 03/24/23
Date Received: 03/16/23
Project: SRM Development Bellevue-471241 193460, F&BI 303256

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 303265-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	10	<1	87	50-150
Chloromethane	ug/L (ppb)	10	<10	87	50-150
Vinyl chloride	ug/L (ppb)	10	0.021	103	16-176
Bromomethane	ug/L (ppb)	10	<5	106	10-193
Chloroethane	ug/L (ppb)	10	<1	115	50-150
Trichlorofluoromethane	ug/L (ppb)	10	<1	103	50-150
Acetone	ug/L (ppb)	50	<50	88	15-179
1,1-Dichloroethene	ug/L (ppb)	10	<1	101	50-150
Hexane	ug/L (ppb)	10	<5	96	49-161
Methylene chloride	ug/L (ppb)	10	<5	100	40-143
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	<1	104	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	100	50-150
1,1-Dichloroethane	ug/L (ppb)	10	<1	103	50-150
2,2-Dichloropropane	ug/L (ppb)	10	<1	88	10-335
cis-1,2-Dichloroethene	ug/L (ppb)	10	13	117 b	50-150
Chloroform	ug/L (ppb)	10	<1	104	50-150
2-Butanone (MEK)	ug/L (ppb)	50	<20	109	34-168
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	<0.2	106	50-150
1,1,1-Trichloroethane	ug/L (ppb)	10	<1	103	50-150
1,1-Dichloropropene	ug/L (ppb)	10	<1	96	50-150
Carbon tetrachloride	ug/L (ppb)	10	<0.5	101	50-150
Benzene	ug/L (ppb)	10	<0.35	100	50-150
Trichloroethene	ug/L (ppb)	10	16	118 b	43-133
1,2-Dichloropropane	ug/L (ppb)	10	<1	105	50-150
Bromodichloromethane	ug/L (ppb)	10	<0.5	107	50-150
Dibromomethane	ug/L (ppb)	10	<1	103	50-150
4-Methyl-2-pentanone	ug/L (ppb)	50	<10	116	50-150
cis-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	100	48-145
Toluene	ug/L (ppb)	10	<1	110	50-150
trans-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	100	37-152
1,1,2-Trichloroethane	ug/L (ppb)	10	<0.5	111	50-150
2-Hexanone	ug/L (ppb)	50	<10	108	50-150
1,3-Dichloropropane	ug/L (ppb)	10	<1	98	50-150
Tetrachloroethene	ug/L (ppb)	10	460	-23	50-150
Dibromochloromethane	ug/L (ppb)	10	<0.5	101	33-164
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	<1	101	50-150
Chlorobenzene	ug/L (ppb)	10	<1	104	50-150
Ethylbenzene	ug/L (ppb)	10	<1	108	50-150
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	<1	105	50-150
m,p-Xylene	ug/L (ppb)	20	<2	109	50-150
o-Xylene	ug/L (ppb)	10	<1	103	50-150
Styrene	ug/L (ppb)	10	<1	108	50-150
Isopropylbenzene	ug/L (ppb)	10	<1	109	50-150
Bromoform	ug/L (ppb)	10	<5	104	23-161
n-Propylbenzene	ug/L (ppb)	10	<1	102	50-150
Bromobenzene	ug/L (ppb)	10	<1	103	50-150
1,3,5-Trimethylbenzene	ug/L (ppb)	10	<1	103	50-150
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	<0.2	109	10-235
1,2,3-Trichloropropane	ug/L (ppb)	10	6.8	98 b	33-151
2-Chlorotoluene	ug/L (ppb)	10	<1	102	50-150
4-Chlorotoluene	ug/L (ppb)	10	<1	103	50-150
tert-Butylbenzene	ug/L (ppb)	10	<1	104	50-150
1,2,4-Trimethylbenzene	ug/L (ppb)	10	<1	104	50-150
sec-Butylbenzene	ug/L (ppb)	10	<1	104	46-139
p-Isopropyltoluene	ug/L (ppb)	10	<1	104	46-140
1,3-Dichlorobenzene	ug/L (ppb)	10	<1	102	50-150
1,4-Dichlorobenzene	ug/L (ppb)	10	<1	103	50-150
1,2-Dichlorobenzene	ug/L (ppb)	10	<1	102	50-150
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	<10	93	50-150
1,2,4-Trichlorobenzene	ug/L (ppb)	10	<1	96	50-150
Hexachlorobutadiene	ug/L (ppb)	10	<0.5	93	42-150
Naphthalene	ug/L (ppb)	10	<1	99	50-150
1,2,3-Trichlorobenzene	ug/L (ppb)	10	<1	98	44-155

Date of Report: 03/24/23
Date Received: 03/16/23
Project: SRM Development Bellevue-471241 193460, F&BI 303256

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	10	114	115	70-130	1
Chloromethane	ug/L (ppb)	10	99	99	70-130	0
Vinyl chloride	ug/L (ppb)	10	114	116	70-130	2
Bromomethane	ug/L (ppb)	10	145	134	28-182	8
Chloroethane	ug/L (ppb)	10	122	126	70-130	3
Trichlorofluoromethane	ug/L (ppb)	10	112	115	70-130	3
Acetone	ug/L (ppb)	50	90	95	42-155	5
1,1-Dichloroethene	ug/L (ppb)	10	109	112	70-130	3
Hexane	ug/L (ppb)	10	109	113	50-161	4
Methylene chloride	ug/L (ppb)	10	103	103	29-192	0
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	110	112	70-130	2
trans-1,2-Dichloroethene	ug/L (ppb)	10	107	109	70-130	2
1,1-Dichloroethane	ug/L (ppb)	10	109	111	70-130	2
2,2-Dichloropropane	ug/L (ppb)	10	106	110	70-130	4
cis-1,2-Dichloroethene	ug/L (ppb)	10	108	111	70-130	3
Chloroform	ug/L (ppb)	10	106	111	70-130	5
2-Butanone (MEK)	ug/L (ppb)	50	109	114	50-157	4
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	109	110	70-130	1
1,1,1-Trichloroethane	ug/L (ppb)	10	108	111	70-130	3
1,1-Dichloropropene	ug/L (ppb)	10	101	105	70-130	4
Carbon tetrachloride	ug/L (ppb)	10	111	114	70-130	3
Benzene	ug/L (ppb)	10	102	105	70-130	3
Trichloroethene	ug/L (ppb)	10	101	105	70-130	4
1,2-Dichloropropane	ug/L (ppb)	10	108	107	70-130	1
Bromodichloromethane	ug/L (ppb)	10	105	112	70-130	6
Dibromomethane	ug/L (ppb)	10	103	110	70-130	7
4-Methyl-2-pentanone	ug/L (ppb)	50	114	118	70-130	3
cis-1,3-Dichloropropene	ug/L (ppb)	10	107	103	70-130	4
Toluene	ug/L (ppb)	10	108	107	70-130	1
trans-1,3-Dichloropropene	ug/L (ppb)	10	104	102	70-130	2
1,1,2-Trichloroethane	ug/L (ppb)	10	106	106	70-130	0
2-Hexanone	ug/L (ppb)	50	111	114	69-130	3
1,3-Dichloropropane	ug/L (ppb)	10	107	106	70-130	1
Tetrachloroethene	ug/L (ppb)	10	109	108	70-130	1
Dibromochloromethane	ug/L (ppb)	10	107	106	63-142	1
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	105	105	70-130	0
Chlorobenzene	ug/L (ppb)	10	106	106	70-130	0
Ethylbenzene	ug/L (ppb)	10	109	108	70-130	1
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	109	107	70-130	2
m,p-Xylene	ug/L (ppb)	20	109	108	70-130	1
o-Xylene	ug/L (ppb)	10	102	101	70-130	1
Styrene	ug/L (ppb)	10	103	102	70-130	1
Isopropylbenzene	ug/L (ppb)	10	107	105	70-130	2
Bromoform	ug/L (ppb)	10	105	103	50-157	2
n-Propylbenzene	ug/L (ppb)	10	108	106	70-130	2
Bromobenzene	ug/L (ppb)	10	109	106	70-130	3
1,3,5-Trimethylbenzene	ug/L (ppb)	10	107	108	52-150	1
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	115	118	70-130	3
1,2,3-Trichloropropane	ug/L (ppb)	10	103	105	70-130	2
2-Chlorotoluene	ug/L (ppb)	10	109	105	70-130	4
4-Chlorotoluene	ug/L (ppb)	10	108	105	70-130	3
tert-Butylbenzene	ug/L (ppb)	10	108	105	70-130	3
1,2,4-Trimethylbenzene	ug/L (ppb)	10	109	106	70-130	3
sec-Butylbenzene	ug/L (ppb)	10	109	108	70-130	1
p-Isopropyltoluene	ug/L (ppb)	10	108	108	70-130	0
1,3-Dichlorobenzene	ug/L (ppb)	10	106	105	70-130	1
1,4-Dichlorobenzene	ug/L (ppb)	10	108	106	70-130	2
1,2-Dichlorobenzene	ug/L (ppb)	10	106	103	70-130	3
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	115	106	70-130	8
1,2,4-Trichlorobenzene	ug/L (ppb)	10	99	99	70-130	0
Hexachlorobutadiene	ug/L (ppb)	10	102	103	70-130	1
Naphthalene	ug/L (ppb)	10	101	100	70-130	1
1,2,3-Trichlorobenzene	ug/L (ppb)	10	98	97	69-143	1

Date of Report: 03/24/23
Date Received: 03/16/23
Project: SRM Development Bellevue-471241 193460, F&BI 303256

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR 1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 10)
1,2-Dibromoethane	ug/L (ppb)	0.10	102	103	70-130	1

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, biased high; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 standard reporting limit. 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

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.

303256

SAMPLE CHAIN OF CUSTODY 03/16/23

I4/L3/VW3

Page # 1 of 1

Report To Joe Sherrod

Company TRC

Address 1180 NW Maple St, Ste 310

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email JSherrod@TRCcompanies.com

SAMPLERS (*signature*) Austin York

PROJECT NAME: SRM Development Bellevue - 471241

PO # 193460

REMARKS: Total Metals per JW 3/16/23 ME

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	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8260 ~~8021~~	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Arsenic EPA 6020	RCRA-8 EPA 6020B (6010C)	NWTPH-Dx with SGC	MTBE EPA 8260C	EDB EPA 8011B	Notes
MW-9	01 A-H	3-15-23	1015	water	8	X	X			X				X	X	X	X	
MW-7	02		1008		9	X	X			X				X	X	X	X	
MW-4R	03		1112		8	X	X	X					X		X			
MW-6	04		1149		8	X	X	X					X		X			
MW-5R	05 A-G		1245		7	X	X	X					X		X			
MW-1	06 A-H		1249		8	X	X	X					X		X			
MW-2	07		1351		8	X	X	X					X		X			
DUP-01	08	3-15-23	—	water	8	X	X	X					X		X			
									Samples received at 4 °C									

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Jill Windsor	TRC	03-16-23	1530
Received by:	Michael Erdahl	FB Inc	3/16/23	0635
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
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Vineta Mills, M.S.
Eric Young, B.S.

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fbi@isomedia.com
www.friedmanandbruya.com

July 5, 2023

Joe Sherrod, Project Manager
TRC Environmental
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: SRM Development 471241 202503, F&BI 306372

Dear Mr Sherrod:

Included are the results from the testing of material submitted on June 23, 2023 from the SRM Development 471241 202503, F&BI 306372 project. There are 31 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: Cynthia Moon
TRC0705R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 23, 2023 by Friedman & Bruya, Inc. from the TRC Environmental SRM Development 471241 202503, F&BI 306372 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	TRC Environmental
306372-01	MW-7
306372-02	MW-8
306372-03	MW-4R
306372-04	MW-6
306372-05	MW-5R
306372-06	MW-1
306372-07	MW-2
306372-08	DUP-01

The 8260D calibration standard exceeded the acceptance criteria for several analytes. The compounds were not detected, therefore this did not represent an out of control condition.

All quality control requirements were acceptable.

Date of Report: 07/05/23
Date Received: 06/23/23
Project: SRM Development 471241 202503, F&BI 306372
Date Extracted: 06/26/23
Date Analyzed: 06/26/23

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
MW-7 306372-01	<100	114
MW-8 306372-02	<100	110
MW-4R 306372-03	<100	122
MW-6 306372-04	<100	116
MW-5R 306372-05	<100	119
MW-1 306372-06	<100	108
MW-2 306372-07	<100	111
DUP-01 306372-08	<100	114
Method Blank 03-1400 MB	<100	111

Date of Report: 07/05/23
Date Received: 06/23/23
Project: SRM Development 471241 202503, F&BI 306372
Date Extracted: 06/23/23
Date Analyzed: 06/27/23 and 06/30/23

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 50-150)
MW-7 306372-01	<50	<250	113
MW-8 306372-02	<50	<250	113
MW-4R 306372-03	<50	<250	113
MW-6 306372-04	<50	<250	119
MW-5R 306372-05	<50	<250	121
MW-1 306372-06	<50	<250	122
MW-2 306372-07	<50	<250	109
DUP-01 306372-08	<50	<250	108
Method Blank 03-1505 MB	<50	<250	122

Date of Report: 07/05/23
Date Received: 06/23/23
Project: SRM Development 471241 202503, F&BI 306372
Date Extracted: 06/23/23
Date Analyzed: 06/23/23

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 50-150)
MW-7 306372-01	<50	<250	120
MW-8 306372-02	190 x	<250	119
MW-4R 306372-03	61 x	<250	115
MW-6 306372-04	100 x	<250	112
MW-5R 306372-05	540 x	430 x	119
MW-1 306372-06	250 x	<250	113
MW-2 306372-07	200 x	<250	116
DUP-01 306372-08	56 x	<250	114
Method Blank 03-1505 MB	<50	<250	118

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-7	Client:	TRC Environmental
Date Received:	06/23/23	Project:	SRM Development 471241 202503
Date Extracted:	06/23/23	Lab ID:	306372-01
Date Analyzed:	06/23/23	Data File:	306372-01.108
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Barium	28.8
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-8	Client:	TRC Environmental
Date Received:	06/23/23	Project:	SRM Development 471241 202503
Date Extracted:	06/23/23	Lab ID:	306372-02
Date Analyzed:	06/23/23	Data File:	306372-02.109
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	4.96
Barium	46.8
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	1.07
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-4R	Client:	TRC Environmental
Date Received:	06/23/23	Project:	SRM Development 471241 202503
Date Extracted:	06/23/23	Lab ID:	306372-03
Date Analyzed:	06/23/23	Data File:	306372-03.110
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.13

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-6	Client:	TRC Environmental
Date Received:	06/23/23	Project:	SRM Development 471241 202503
Date Extracted:	06/23/23	Lab ID:	306372-04
Date Analyzed:	06/23/23	Data File:	306372-04.118
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-5R	Client:	TRC Environmental
Date Received:	06/23/23	Project:	SRM Development 471241 202503
Date Extracted:	06/23/23	Lab ID:	306372-05
Date Analyzed:	06/23/23	Data File:	306372-05.119
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	6.07

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-1	Client:	TRC Environmental
Date Received:	06/23/23	Project:	SRM Development 471241 202503
Date Extracted:	06/23/23	Lab ID:	306372-06
Date Analyzed:	06/23/23	Data File:	306372-06.120
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	11.9

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW-2	Client:	TRC Environmental
Date Received:	06/23/23	Project:	SRM Development 471241 202503
Date Extracted:	06/23/23	Lab ID:	306372-07
Date Analyzed:	06/23/23	Data File:	306372-07.121
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	10.9

Analysis For Total Metals By EPA Method 6020B

Client ID:	DUP-01	Client:	TRC Environmental
Date Received:	06/23/23	Project:	SRM Development 471241 202503
Date Extracted:	06/23/23	Lab ID:	306372-08
Date Analyzed:	06/23/23	Data File:	306372-08.122
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.03

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	TRC Environmental
Date Received:	NA	Project:	SRM Development 471241 202503
Date Extracted:	06/23/23	Lab ID:	I3-506 mb2
Date Analyzed:	06/23/23	Data File:	I3-506 mb2.106
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-7	Client:	TRC Environmental
Date Received:	06/23/23	Project:	SRM Development 471241 202503
Date Extracted:	06/26/23	Lab ID:	306372-01
Date Analyzed:	06/26/23	Data File:	062617.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	71	132
Toluene-d8	100	68	139
4-Bromofluorobenzene	98	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5 k	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50 k	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20 k	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-8	Client:	TRC Environmental
Date Received:	06/23/23	Project:	SRM Development 471241 202503
Date Extracted:	06/26/23	Lab ID:	306372-02
Date Analyzed:	06/26/23	Data File:	062614.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	91	71	132
Toluene-d8	99	68	139
4-Bromofluorobenzene	100	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5 k	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50 k	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20 k	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-4R	Client:	TRC Environmental
Date Received:	06/23/23	Project:	SRM Development 471241 202503
Date Extracted:	06/26/23	Lab ID:	306372-03
Date Analyzed:	06/26/23	Data File:	062618.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	71	132
Toluene-d8	90	68	139
4-Bromofluorobenzene	102	62	136

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-6	Client:	TRC Environmental
Date Received:	06/23/23	Project:	SRM Development 471241 202503
Date Extracted:	06/26/23	Lab ID:	306372-04
Date Analyzed:	06/26/23	Data File:	062619.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	71	132
Toluene-d8	101	68	139
4-Bromofluorobenzene	104	62	136

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-5R	Client:	TRC Environmental
Date Received:	06/23/23	Project:	SRM Development 471241 202503
Date Extracted:	06/26/23	Lab ID:	306372-05
Date Analyzed:	06/26/23	Data File:	062620.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	87	71	132
Toluene-d8	92	68	139
4-Bromofluorobenzene	98	62	136

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-1	Client:	TRC Environmental
Date Received:	06/23/23	Project:	SRM Development 471241 202503
Date Extracted:	06/26/23	Lab ID:	306372-06
Date Analyzed:	06/26/23	Data File:	062621.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	71	132
Toluene-d8	100	68	139
4-Bromofluorobenzene	101	62	136

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-2	Client:	TRC Environmental
Date Received:	06/23/23	Project:	SRM Development 471241 202503
Date Extracted:	06/26/23	Lab ID:	306372-07
Date Analyzed:	06/26/23	Data File:	062622a.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	92	71	132
Toluene-d8	99	68	139
4-Bromofluorobenzene	101	62	136

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	DUP-01	Client:	TRC Environmental
Date Received:	06/23/23	Project:	SRM Development 471241 202503
Date Extracted:	06/26/23	Lab ID:	306372-08
Date Analyzed:	06/26/23	Data File:	062623.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	84	71	132
Toluene-d8	88	68	139
4-Bromofluorobenzene	101	62	136

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	Method Blank	Client:	TRC Environmental
Date Received:	Not Applicable	Project:	SRM Development 471241 202503
Date Extracted:	06/26/23	Lab ID:	03-1464 mb
Date Analyzed:	06/26/23	Data File:	062608.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	89	71	132
Toluene-d8	86	68	139
4-Bromofluorobenzene	101	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5 k	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50 k	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20 k	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Date of Report: 07/05/23
Date Received: 06/23/23
Project: SRM Development 471241 202503, F&BI 306372
Date Extracted: 06/26/23
Date Analyzed: 06/26/23

RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR 1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED
Results Reported as µg/L (ppb)

Sample ID Laboratory ID	EDB
MW-7 306372-01	<0.01
MW-8 306372-02	<0.01
Method Blank	<0.01

Date of Report: 07/05/23
Date Received: 06/23/23
Project: SRM Development 471241 202503, F&BI 306372

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 306372-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	99	70-130

Date of Report: 07/05/23
Date Received: 06/23/23
Project: SRM Development 471241 202503, F&BI 306372

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED 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 Extended	ug/L (ppb)	2,500	108	100	72-139	8

Date of Report: 07/05/23
Date Received: 06/23/23
Project: SRM Development 471241 202503, F&BI 306372

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED 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 Extended	ug/L (ppb)	2,500	104	96	72-139	8

Date of Report: 07/05/23
Date Received: 06/23/23
Project: SRM Development 471241 202503, F&BI 306372

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 306365-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	1.14	98	100	75-125	2
Barium	ug/L (ppb)	50	6.66	103	106	75-125	3
Cadmium	ug/L (ppb)	5	<1	97	99	75-125	2
Chromium	ug/L (ppb)	20	<1	92	95	75-125	3
Lead	ug/L (ppb)	10	<1	86	88	75-125	2
Mercury	ug/L (ppb)	5	<1	88	91	75-125	3
Selenium	ug/L (ppb)	5	<1	104	106	75-125	2
Silver	ug/L (ppb)	5	<1	93	95	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	99	80-120
Barium	ug/L (ppb)	50	102	80-120
Cadmium	ug/L (ppb)	5	98	80-120
Chromium	ug/L (ppb)	20	93	80-120
Lead	ug/L (ppb)	10	92	80-120
Mercury	ug/L (ppb)	5	94	80-120
Selenium	ug/L (ppb)	5	106	80-120
Silver	ug/L (ppb)	5	97	80-120

Date of Report: 07/05/23
Date Received: 06/23/23
Project: SRM Development 471241 202503, F&BI 306372

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 306372-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	10	<1	66	27-164
Chloromethane	ug/L (ppb)	10	<10	47	34-141
Vinyl chloride	ug/L (ppb)	10	<0.02	61	16-176
Bromomethane	ug/L (ppb)	10	<5	78	10-193
Chloroethane	ug/L (ppb)	10	<1	84	50-150
Trichlorofluoromethane	ug/L (ppb)	10	<1	87	50-150
Acetone	ug/L (ppb)	50	<50	60	15-179
1,1-Dichloroethene	ug/L (ppb)	10	<1	86	50-150
Hexane	ug/L (ppb)	10	<5	107	49-161
Methylene chloride	ug/L (ppb)	10	<5	85	40-143
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	<1	78	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	92	50-150
1,1-Dichloroethane	ug/L (ppb)	10	<1	93	50-150
2,2-Dichloropropane	ug/L (ppb)	10	<1	109	62-152
cis-1,2-Dichloroethene	ug/L (ppb)	10	<1	97	50-150
Chloroform	ug/L (ppb)	10	<1	109	50-150
2-Butanone (MEK)	ug/L (ppb)	50	<20	92	34-168
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	<0.2	111	50-150
1,1,1-Trichloroethane	ug/L (ppb)	10	<1	104	50-150
1,1-Dichloropropene	ug/L (ppb)	10	<1	102	50-150
Carbon tetrachloride	ug/L (ppb)	10	<0.5	109	50-150
Benzene	ug/L (ppb)	10	<0.35	94	50-150
Trichloroethene	ug/L (ppb)	10	<0.5	105	43-133
1,2-Dichloropropane	ug/L (ppb)	10	<1	107	50-150
Bromodichloromethane	ug/L (ppb)	10	<0.5	120	50-150
Dibromomethane	ug/L (ppb)	10	<1	115	50-150
4-Methyl-2-pentanone	ug/L (ppb)	50	<10	118	50-150
cis-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	118	48-145
Toluene	ug/L (ppb)	10	<1	109	50-150
trans-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	115	37-152
1,1,2-Trichloroethane	ug/L (ppb)	10	<0.5	117	50-150
2-Hexanone	ug/L (ppb)	50	<10	108	50-150
1,3-Dichloropropane	ug/L (ppb)	10	<1	112	50-150
Tetrachloroethene	ug/L (ppb)	10	<1	118	50-150
Dibromochloromethane	ug/L (ppb)	10	<0.5	125	33-164
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	<1	119	50-150
Chlorobenzene	ug/L (ppb)	10	<1	119	50-150
Ethylbenzene	ug/L (ppb)	10	<1	117	50-150
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	<1	124	50-150
m,p-Xylene	ug/L (ppb)	20	<2	118	50-150
o-Xylene	ug/L (ppb)	10	<1	116	50-150
Styrene	ug/L (ppb)	10	<1	121	50-150
Isopropylbenzene	ug/L (ppb)	10	<1	122	50-150
Bromoform	ug/L (ppb)	10	<5	114	23-161
n-Propylbenzene	ug/L (ppb)	10	<1	117	50-150
Bromobenzene	ug/L (ppb)	10	<1	116	50-150
1,3,5-Trimethylbenzene	ug/L (ppb)	10	<1	122	50-150
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	<0.2	123	57-162
1,2,3-Trichloropropane	ug/L (ppb)	10	<1	111	33-151
2-Chlorotoluene	ug/L (ppb)	10	<1	119	50-150
4-Chlorotoluene	ug/L (ppb)	10	<1	120	50-150
tert-Butylbenzene	ug/L (ppb)	10	<1	119	50-150
1,2,4-Trimethylbenzene	ug/L (ppb)	10	<1	119	50-150
sec-Butylbenzene	ug/L (ppb)	10	<1	120	46-139
p-Isopropyltoluene	ug/L (ppb)	10	<1	120	46-140
1,3-Dichlorobenzene	ug/L (ppb)	10	<1	117	50-150
1,4-Dichlorobenzene	ug/L (ppb)	10	<1	119	50-150
1,2-Dichlorobenzene	ug/L (ppb)	10	<1	114	50-150
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	<10	109	50-150
1,2,4-Trichlorobenzene	ug/L (ppb)	10	<1	116	50-150
Hexachlorobutadiene	ug/L (ppb)	10	<0.5	117	42-150
Naphthalene	ug/L (ppb)	10	<1	111	50-150
1,2,3-Trichlorobenzene	ug/L (ppb)	10	<1	113	44-155

Date of Report: 07/05/23
Date Received: 06/23/23
Project: SRM Development 471241 202503, F&BI 306372

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	10	107	106	49-149	1
Chloromethane	ug/L (ppb)	10	96	95	34-143	1
Vinyl chloride	ug/L (ppb)	10	96	99	43-149	3
Bromomethane	ug/L (ppb)	10	134	134	28-182	0
Chloroethane	ug/L (ppb)	10	127	126	59-157	1
Trichlorofluoromethane	ug/L (ppb)	10	109	106	59-141	3
Acetone	ug/L (ppb)	50	75	74	20-139	1
1,1-Dichloroethene	ug/L (ppb)	10	108	107	67-138	1
Hexane	ug/L (ppb)	10	97	100	50-161	3
Methylene chloride	ug/L (ppb)	10	100	103	29-192	3
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	104	104	70-130	0
trans-1,2-Dichloroethene	ug/L (ppb)	10	103	104	70-130	1
1,1-Dichloroethane	ug/L (ppb)	10	103	104	70-130	1
2,2-Dichloropropane	ug/L (ppb)	10	115	115	71-148	0
cis-1,2-Dichloroethene	ug/L (ppb)	10	108	109	70-130	1
Chloroform	ug/L (ppb)	10	107	106	70-130	1
2-Butanone (MEK)	ug/L (ppb)	50	92	91	50-157	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	113	113	70-130	0
1,1,1-Trichloroethane	ug/L (ppb)	10	108	109	70-130	1
1,1-Dichloropropene	ug/L (ppb)	10	106	107	70-130	1
Carbon tetrachloride	ug/L (ppb)	10	114	114	70-130	0
Benzene	ug/L (ppb)	10	100	101	70-130	1
Trichloroethene	ug/L (ppb)	10	101	102	70-130	1
1,2-Dichloropropane	ug/L (ppb)	10	95	97	70-130	2
Bromodichloromethane	ug/L (ppb)	10	109	107	70-130	2
Dibromomethane	ug/L (ppb)	10	106	104	70-130	2
4-Methyl-2-pentanone	ug/L (ppb)	50	98	98	70-130	0
cis-1,3-Dichloropropene	ug/L (ppb)	10	107	106	70-130	1
Toluene	ug/L (ppb)	10	100	98	70-130	2
trans-1,3-Dichloropropene	ug/L (ppb)	10	102	98	70-130	4
1,1,2-Trichloroethane	ug/L (ppb)	10	98	95	70-130	3
2-Hexanone	ug/L (ppb)	50	87	86	66-132	1
1,3-Dichloropropane	ug/L (ppb)	10	100	98	70-130	2
Tetrachloroethene	ug/L (ppb)	10	106	104	70-130	2
Dibromochloromethane	ug/L (ppb)	10	109	107	63-142	2
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	102	100	70-130	2
Chlorobenzene	ug/L (ppb)	10	100	98	70-130	2
Ethylbenzene	ug/L (ppb)	10	99	97	70-130	2
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	107	105	70-130	2
m,p-Xylene	ug/L (ppb)	20	99	98	70-130	1
o-Xylene	ug/L (ppb)	10	99	96	70-130	3
Styrene	ug/L (ppb)	10	100	100	70-130	0
Isopropylbenzene	ug/L (ppb)	10	103	100	70-130	3
Bromoform	ug/L (ppb)	10	106	102	50-157	4
n-Propylbenzene	ug/L (ppb)	10	96	96	70-130	0
Bromobenzene	ug/L (ppb)	10	102	100	70-130	2
1,3,5-Trimethylbenzene	ug/L (ppb)	10	100	99	52-150	1
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	104	105	75-140	1
1,2,3-Trichloropropane	ug/L (ppb)	10	97	95	40-153	2
2-Chlorotoluene	ug/L (ppb)	10	97	99	70-130	2
4-Chlorotoluene	ug/L (ppb)	10	97	97	70-130	0
tert-Butylbenzene	ug/L (ppb)	10	101	100	70-130	1
1,2,4-Trimethylbenzene	ug/L (ppb)	10	98	96	70-130	2
sec-Butylbenzene	ug/L (ppb)	10	98	98	70-130	0
p-Isopropyltoluene	ug/L (ppb)	10	98	99	70-130	1
1,3-Dichlorobenzene	ug/L (ppb)	10	100	98	70-130	2
1,4-Dichlorobenzene	ug/L (ppb)	10	101	100	70-130	1
1,2-Dichlorobenzene	ug/L (ppb)	10	98	101	70-130	3
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	93	94	70-130	1
1,2,4-Trichlorobenzene	ug/L (ppb)	10	95	96	70-130	1
Hexachlorobutadiene	ug/L (ppb)	10	95	102	70-130	7
Naphthalene	ug/L (ppb)	10	94	95	61-133	1
1,2,3-Trichlorobenzene	ug/L (ppb)	10	93	91	69-143	2

Date of Report: 07/05/23
Date Received: 06/23/23
Project: SRM Development 471241 202503, F&BI 306372

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR 1,2-DIBROMOETHANE (EDB) BY EPA METHOD 8011 MODIFIED

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 10)
1,2-Dibromoethane	ug/L (ppb)	0.10	111	113	70-130	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, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 standard reporting limit. 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.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

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.

306372

SAMPLE CHAIN OF CUSTODY

06/23/23

UW5/L3/I3

Page # 1 of

Report To Joe Shemod

Company TRC

Address 1180 NW Maple Street suite 310

City, State, ZIP Issaquah WA 98027

Phone 425-395-0010 Email jshemod cmoon@trccompanies.com

SAMPLERS (signature)

PROJECT NAME: SRM Development 471241

PO #: 202503

REMARKS

Project specific RLs? - Yes / No

INVOICE TO

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	ANALYSES REQUESTED: NWTPH-Dx *	NWTPH-Gx	BTEX EPA 8260 (8021)	NWTPH-HCID	VOCs EPA 8260C **	PAHs EPA 8270	PCBs EPA 8082	1,2 EDB by EPA 8011B	RCRA 8 Metals	Arsenic EPA 6020		Notes
MW-7	01 A-H	6-21-2023	1050	water	8	X	X			X			X	X			*w/ + w/o SGC
MW-8	02		1105		8	X	X			X			X	X			**: + MTBE by EPA 8260C
MW-4R	03 A-F		1152		6	X	X	X							X		
MW-6	04 A-H		1215		8	X	X	X							X		
MW-5R	05 A-F		1410		6	X	X	X							X		
MW-1	06 A-H		1430		8	X	X	X							X		
MW-2	07 A-H		1510		8	X	X	X							X		
DUP-01	08 A-F	6-21-2023		water	6	X	X	X							X		

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Jill Windsor	Jill Windsor	TRC	06-22-23	1415
Received by:	Michael Erdahl	F&B	6/23/23	0645
Relinquished by:				
Received by:		Samples received at 4 °C		

Friedman & Bruya, Inc.
Ph. (206) 285-8282