

January 20, 2021

Jim Fish  
Alaska Department of Environmental Conservation  
610 University Avenue  
Fairbanks, AK 99709

**Subject: Final 314 Wendell Avenue Soil Vapor Extraction System Decommissioning Report**

Dear Mr. Fish:

This report is submitted by Ahtna Engineering Services, LLC (Ahtna) to describe the soil vapor extraction (SVE) unit decommissioning work performed at the 314 Wendell Avenue site in Fairbanks, Alaska during July 2020. This work was performed under Term Contract #18-3007-18, NTP #180000954, Amendment #2.

## **INTRODUCTION**

This report describes decommissioning of the dormant SVE system at 314 Wendell Avenue, Fairbanks, Alaska. In 2002, chlorinated solvents were detected in groundwater under 314 Wendell Avenue (Attachment 1, Figure 1). Groundwater was found to contain tetrachloroethene (PCE) and its breakdown products above ADEC cleanup levels on the property and downgradient as it approached the Chena River. Soil borings identified a source area generally around and beneath the southern quarter of the onsite building. A combined sub-slab depressurization (SSD)/SVE system was installed and began operation in 2011 to mitigate vapor intrusion in the building and remove contaminant mass from the vadose zone source area. The 314 Wendell Avenue building was vacated about 2013; therefore, the SSD system operation was suspended. The SVE system was operated under contract to the State of Alaska from April 1<sup>st</sup> through September 30<sup>th</sup> of every year until 2020, when a new owner purchased the property. As part of the Prospective Purchaser's Agreement with the new property owner, ADEC agreed to decommission the SVE system by removing its wells, conveyance piping, and blowers.

## **WORK PERFORMED**

Utility locates were performed at the site prior to any subsurface work. No buried utilities were nearby.

The Ahtna field team, consisting of an operator and a field scientist, mobilized to the site on July 8, 2020 to decommission the SVE system. A site plan is included in Attachment 1, Figure 2. Field notes are included in Attachment 2. A photographic log is included in Attachment 3.

Decommissioning activities included the removal of:

- SVE wells,
- SSD and SVE conveyance piping,
- Exterior soil gas points,
- SSD and SVE blowers, and
- One monitoring well.

### **SVE System Decommissioning**

Flow meters and the SVE blower were removed from the SVE enclosure, decontaminated, and moved to the SVE enclosure formerly associated with the Gaffney West site, now located at the Peger Road Alaska Department of Transportation and Public Facilities (ADOT&PF) facility in Fairbanks. Conveyance piping was disconnected from the enclosure, and the connection fittings were decontaminated.

A mini-excavator was used to remove the conveyance piping connecting SVE wells SVE-2 through SVE-6 to the blower in the enclosure (Figure 2). Care was taken to avoid shredding the foam insulation surrounding the piping. Piping, including the foam insulation surrounding it, and the insulating foam board lying underneath the piping were all placed in super sacks for disposal as hazardous waste in a Resource Conservation and Recovery Act (RCRA) Subtitle C landfill, because the condition of the foam insulation made decontamination impractical.

All six SVE wells were decommissioned by removing the covers and wells, backfilling with native soil, and topping with D-1 gravel, including SVE-1 that was installed as a pilot test and was not connected to the SVE blower. Concrete did not surround the SVE wells.

### **SSD Blower and Conveyance Piping Decommissioning**

Ahtna removed the SSD blower from the SVE enclosure, decontaminated it, and moved it to the Gaffney West site SVE enclosure. The SSD conveyance piping in the onsite building made renovations to the building impractical. After speaking with the new property owner and ADEC project manager, Ahtna removed and decontaminated the SSD conveyance piping in accordance with procedures described in this letter, and stored it in the building for re-use in future SSD system reconstruction. Ahtna left the SSD wells in place and capped them for future use.

### **Soil Gas Point Decommissioning**

The Ahtna field team removed soil gas points SG-2, SG-3, SG-7, SG-8, and SG-24. The excavator or hand shovels were used to remove the covers, skirts, and surrounding concrete. The tubing was then removed by hand. Holes were backfilled with gravel.

### **Monitoring Well Decommissioning**

Monitoring well PP-5 was decommissioned in accordance with the ADEC Monitoring Well Guidance (2013). The metal stick up cover was removed. The field team excavated approximately 1.5 feet deep around the well and attached a cord with a marline hitch to the casing. The casing

was pulled up about four to five feet by the excavator until the casing broke off three feet below grade. The remaining casing was filled with bentonite and hydrated. Ahtna decontaminated the removed well casing as described below.

## **Health and Safety**

All site workers were Hazardous Waste Operations and Emergency Response (HAZWOPER)-certified, respirator fit-tested, and wore appropriate personal protective equipment (PPE). Field screening of workers' airspace was performed with a photoionization detector (PID) with a 10.6 electron volt (eV) lamp, calibrated with 100 parts per million (ppm) isobutylene. The 8-hr Occupational Safety and Health Administration (OSHA) time-weighted average (TWA) is 100 ppm, corresponding to a PID threshold of 57 ppm (with a 0.57 correction factor for PCE). Workers were prepared to don respirators or wait until vapors subside should any PID readings reach 10% of this value, or 5.7 ppm. No PID readings greater than 0.00 ppm were observed.

## **Decontamination**

The field team decontaminated or properly disposed of all waste materials, such as conveyance piping, well casings, blowers, SVE manifolds, rotameters, and foamboard, that could have come into contact with contaminated media. Decontamination was performed using the water washing and spraying removal technology in accordance with 40 CFR 268.45, Table 1. Water mixed with Alconox® detergent was sprayed on debris. The debris was then scrubbed with an abrasive brush and rinsed with potable water. Foamboard and sprayed foam insulation are weak and porous materials, so they could not withstand the abrasive decontamination method. They were also the most likely materials to be in contact with contaminants. Therefore, foamboard and sprayed foam insulation was containerized and shipped to a permitted hazardous waste landfill facility rather than being decontaminated. The SVE conveyance piping could not be easily separated from the spray foam, so it was containerized and shipped with the foam.

## **Waste Management**

Any waste that was in contact with PCE or its degradation products from the 314 Wendell Avenue site is considered F-listed until PCE or degradation products are removed by appropriate technology. The site is considered a small quantity generator with identification number AKR000203042. F-listed waste generated included decontamination rinsate, SVE conveyance piping, soil gas tubing, and insulation. One 55-gallon drum of decontamination rinsate and four one-cubic yard super sacks of debris were generated. Waste was properly labeled as F002 listed waste with Hazardous Waste labels and placed in a secure Central Accumulation Area (CAA) on site. The CAA was located within a fence on the east side of the building.

Waste characterization samples were collected from the rinsate and debris to complete waste profiles. All toxicity characteristic leaching procedure (TCLP) volatile organic compound (VOC) results were non-detect. These wastes were still classified and disposed as F-listed to comply with the agreement with the Environmental Protection Agency (EPA) as noted in the work plan. The laboratory report is included in Attachment 4.

Ahtna documented weekly waste inspections until they were picked up for shipment by US Ecology on October 5, 2020. US Ecology was subcontracted to manifest, transport, and dispose of all decontamination water and debris. Waste was transported to US Ecology's Subtitle C RCRA landfill in Grand View, Idaho. The waste manifest is included in Attachment 5.

Decontaminated debris was taken to the Fairbanks North Star Borough (FNSB) Landfill or recycled. Debris taken to the FNSB Landfill included SVE well casings and soil gas covers that had concrete attached. Large pieces of waste metal, such as well covers, were recycled at C&R Pipe following decontamination. Weight tickets are provided in Attachment 5. Asphalt removed to access the SVE piping in front of the former cleaners was placed in the base of the trenches prior to backfilling. All soil excavated to remove SVE piping was placed back into their original locations when backfilling, in accordance with the EPA trenching policy.

### **Site Restoration**

Ground surface conditions were returned to pre-project conditions. The area was backfilled with D-1 gravel, graded, and compacted to its previous elevation. New asphalt was placed in the area in front of the 314 Wendell Avenue building where the old asphalt was disturbed to remove conveyance piping. Worry Free Alaska and Restoration, LLC was subcontracted to deliver, spread, and grade the D-1 gravel, and repair the asphalt.

### **CONCLUSION**

The actions documented in this report represent the completion of ADEC's legal requirements to decommission the SVE system in accordance with the Prospective Purchaser's Agreement signed by ADEC and the new owner.

Sincerely,

**Ahtna Engineering Services, LLC**

Joel Brann, PG  
Project Manager

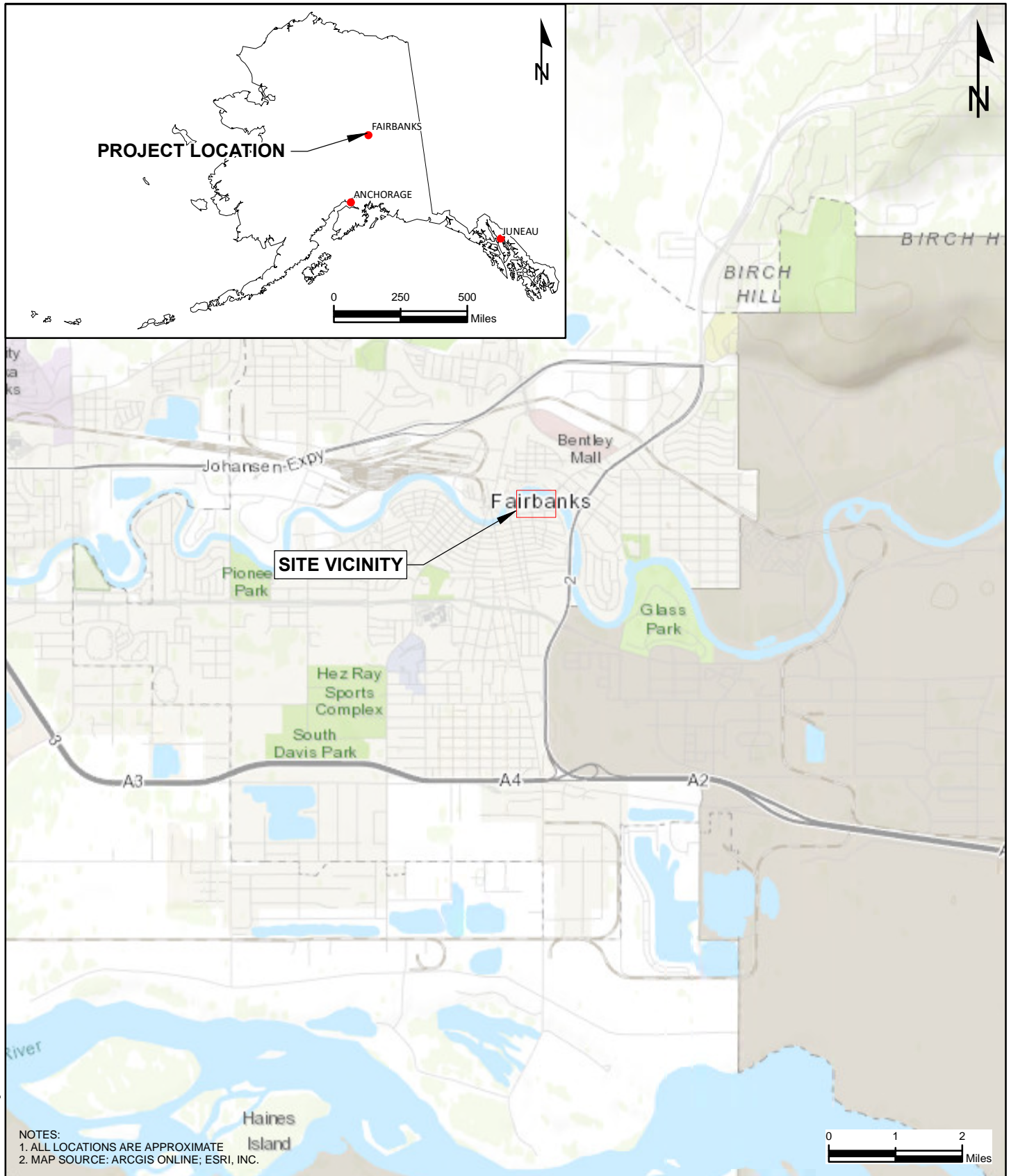
Attachments:

1. Figures
2. Field Notes
3. Photographic Log
4. Laboratory Report
5. Waste Manifest and Weight Tickets

## **ATTACHMENT 1**

Figures

(This Page Intentionally Left Blank)



Soil Vapor Extraction System Decommissioning Report  
314 Wendell Avenue, Fairbanks, Alaska

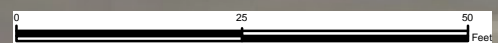
**Ahtna**  
Engineering Services, LLC

Project Number: 20301.002	Figure Number: <b>1</b>
Date: 9/21/2020	
Drafted By: J.B.	

## Project Location and Site Vicinity Map

(This Page Intentionally Left Blank)





Legend	
	Monitoring Well
	Vapor Monitoring Point
	SVE Well
	Conveyance Piping
<b>Acronyms:</b>	
SVE = Soil Vapor Extraction	

## Soil Vapor Extraction System Decommissioning Report 314 Wendell Avenue, Fairbanks, Alaska

### Site Plan and Decommissioned Components

*Ahtna*  
Engineering Services, LLC

Project Number:  
20301.002  
Date:  
12/23/2020  
Drafted By:  
J.B.

Figure Number:  
**2**

(This Page Intentionally Left Blank)

## **ATTACHMENT 2**

Field Notes

.

(This Page Intentionally Left Blank)

10/9/19

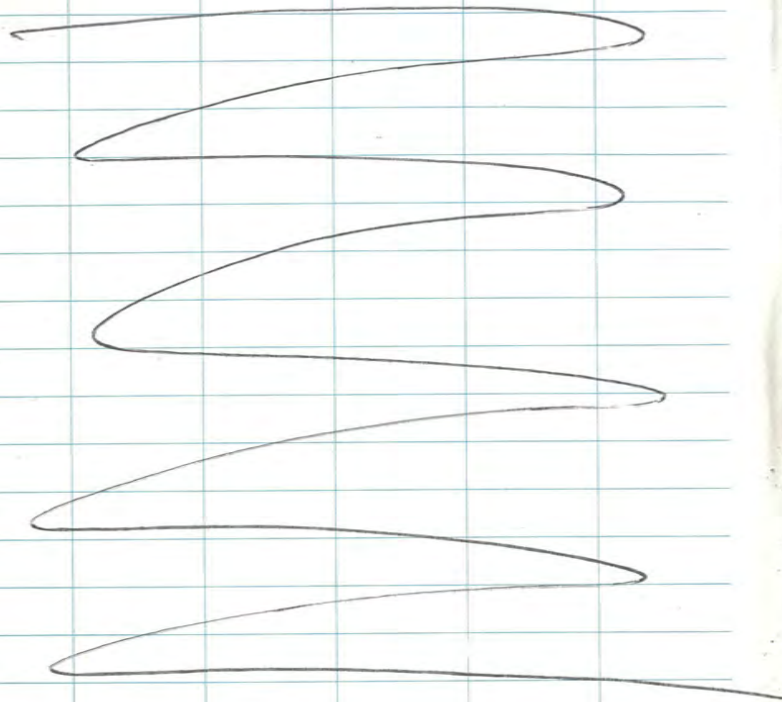
314 Wendell Ave  
+33°F rain

Wells

1330 Wells onsite to inspect for  
vagrancy activity,

- Window on W side of garage is broken out (missing)
- Front door was unlocked → locked it
- let J. Salinas (owner) know she will get it boarded up

1345 offsite



(11)

John J.

Gave 2 Menit batch of old Keys

McLamb  
Wells

+60°F, sun

314 Wendell Ave

7/6/20

1400 Wells + McLamb meet Rick  
Mensit → the new ADA ramp  
will not affect any monitoring  
points at 314 Wendell.

- OK the store materials needing to be decommissioned in "garage" behind SVE shed and OK to store waste in that area prior to pickup
- mark out buried SVE lines and locations to be removed
- Need: - 3 each, Maverick sacks + pallets
- 1 each, open top drum for decontamination
- brushes, rags, Alconox, nitriles, safety glasses, visqueen, pressure washer, squirt bottle
- digger
- saw to cut piping
- tools to remove blowers
- dig wrench
- haz waste labels

1600 offsite - grabbed grease gun + O+M manual out of shed. Take to office

John J. Salinas

office (11)  
Rite in the Rain



6 7/7/20 Wendell McComb  
1930 ACS Canceled for  
the 8th digime  
Stating No Conflict.



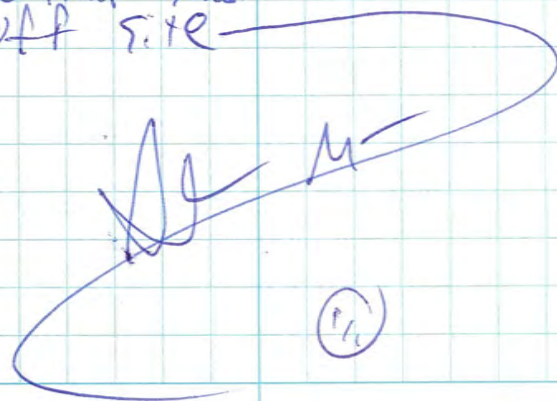
McComb  
Mack

Wendell 65 Partis  
Clouds

71820

- 1500 On Site to decon  
SVE system.
- Flow meters were removed and rinsed with alcohol and water.
  - Conveyance piping was opened and rinsed with alcohol and water.
  - Rinse water was gathered and contained in 55-gallon drum and labeled and stored on site.
- 1730 Motors have been removed from mounts and piping. Ready to be moved to Gaffney shed.

1815 off site



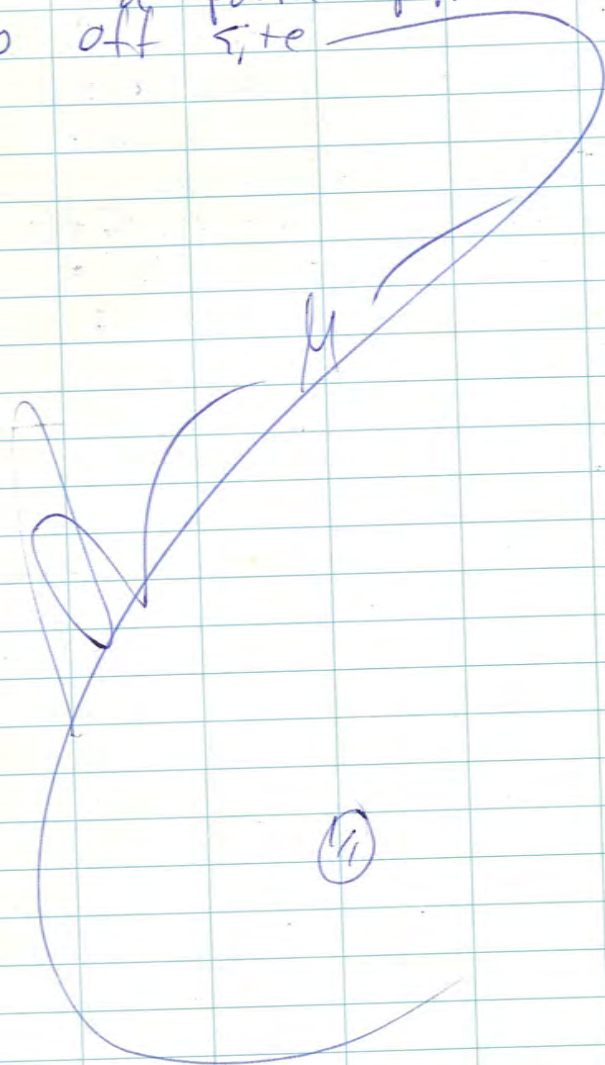
Rite in the Rain



8 719.20 ~~at~~ Wendell 55' overcast Moon

820 On site to remove biomass  
- Horizon Testing debris

850 off site Portia Potter



McComb  
Moon

Wendell

7/10/20

900 On site Tailgate meeting  
Cowl Screening at office

- Remove Stick up  
Monument from PP-5  
attempt to remove well, No  
Luck, will come back.

- Start trenching  
Pick up from office

- Keys, plastic sheet, Super sacks

900 Trenching Continued, PID  
Monitoring at and  
around trench. No readings  
Found over 0.00 ppm

950 pulled out and  
a PID reading at opening  
of well Cast left in  
ground read 0.00 ppm.  
Well Cast filled with  
bentonite to trench  
floor.

950 Pulled, PID readings  
0.00 ppm, Bentonite filled

1248 Pulled, PID reading  
0.00 ppm, Bentonite filled.

~~11~~ M  $\frac{1}{3}$  Rite in the Rain



10

7/10/20 Wendell Sunny Hot McCann Mack

1300 After Soil vapor wells removed and Tiger Flex and Foam insulation removed. Trench back filled. - Tigerflex and foam gathered in 1 yard Super Sacks. - PVC Wells and Man hole covers stored on porch in 3/4 Wendell East garage.

1500 Trenching from blower SUE shed started. Trench monitored with PID, waste stored properly.

- Opening in SUE shed closed up with Extra sheet of T-111. Screwed into place.

1700 with each side of asphalt exposed and SUE well in middle. - Continued -

Mc - (2/3)

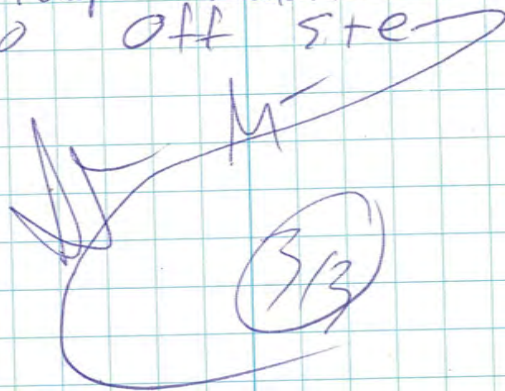
McCann Mack

Wendell Hot in Sunny 7/10/20

- Continued - The path of tigerflex was inferred. asphalt cut with cutter rented from Renton Zone, then pulled up with Mini Excavator.

1900 Trench completed, well removed, Tiger Flex ~~was~~ located South of Trench. Tigerflex and foam was partly removed, sidewalk started to collapse, undercutting the asphalt. Trench was filled in. Another attempt tomorrow.

192030 off site



Rite in the Rain



12 Fill 20 Wendell

Account  
Mach

700 On site CWD Screenshot  
Tailgate meeting

730 Re-dis trench at  
asphalt, wider to the  
South. Remove remaining  
Tigerflex and Foam

800 Trench open and  
widened to allow  
access to Tigerflex and  
Foam board, both removed

1020 Trench backfilled and  
Soil removed from Road/  
Sidewalk.

1200 SG-24 removed.

1448 SG-2 removed

1451 SG-3 removed

1900 SG-7 located under  
Sunk from inside the  
building. Could not remove  
at the time

1905 SG-8 removed.

1930 begin decoupling PVC  
and Metal parts from  
five wells.

1830 Off site

 M

Account  
Mach

Wendell

7-12-2013

800 On site to Finish  
Decou, Remove SSD Station  
inside Cleaners.

- Using Sawzall and  
Pattaband Indoor Pipe

★ Decou procedure

- Rinse item over 55-gal  
drum, spray with Alconox  
water mixture, scrub  
with brush until ~~every~~ <sup>the</sup>  
whole surface is covered  
in suds, Rinse with  
water again over  
55-gallon drum, wipe  
with rag.

1900 Off site



Return to the Rain



14 7/15/20 Wenden McCoub  
Hager

1500 McCoub and Hager on  
Site to remove SG-7  
and SUE-1, both  
were under debris  
Previously.

- SG-7 covered removed  
with Shovel. Tubing  
would not budge, so  
they were cut  
1.5 feet BGS, hole fringed  
in with loose surface  
gravel.

- SUE-1 Cover removed  
with Shovel. Well  
was dug out with  
Shovel deep enough to  
drill a hole in the  
pipe and insert Tebar.  
The Tebar was attached  
to a chain and  
a handman jack was  
used to pull. Well  
snapped 3' BGS at fitting.  
Removed Materials stored on porch  
with other materials.

1540 off site Ad-M- (1)

McCoub Wenden 7/16/20<sup>25</sup>

1145 Call Rich to open  
gate to side yard.  
- On Site to decom  
Cones from SUE-1  
and SG-7 and SUE-1  
well PVC.

1210 finish decom, load  
all PVC, well covers,  
and PP-5 stick up  
in truck for hauling  
or recycling.

1215 Horizon Services  
picks up Porta-John,  
they leave before I can  
grab Receipts.

1230 Dropped off PVC and  
Construction Debris at  
landfill. 0.12 tons  
Total weight.

1245 Dropped off Steel  
at CNR pipe 400lbs  
total weight.

1300 leave key to sliding door  
of 314 Wenden with Rich.

Ad-M- (1) *Rite in the Rain*



## Hatz Waste Check

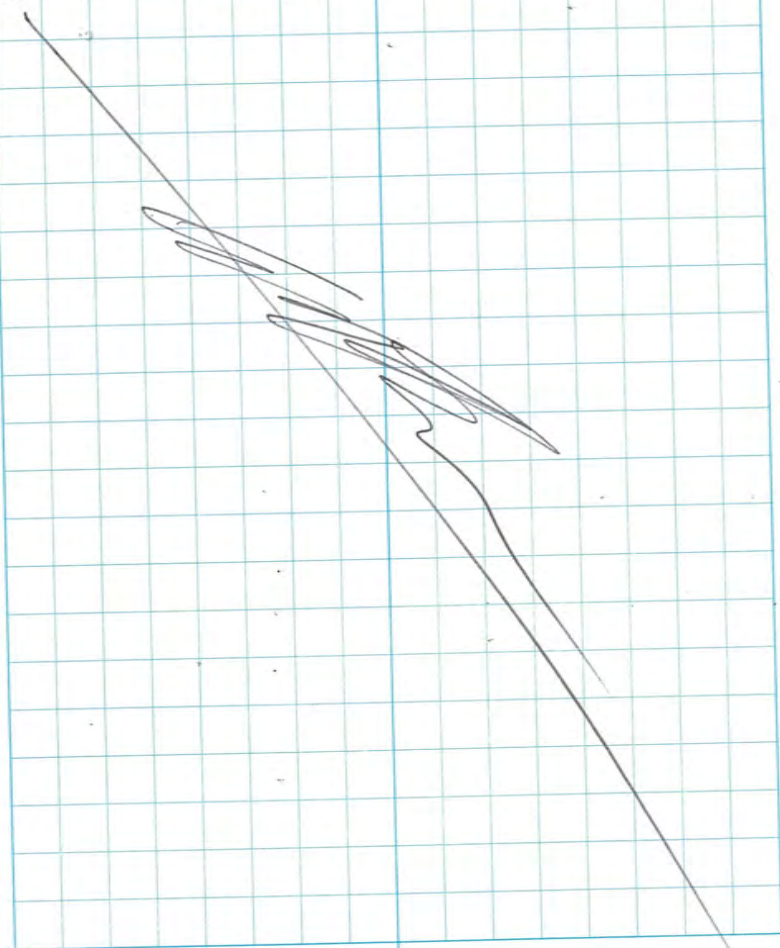
Date	Description	quantity	✓
7-16-20	3 Super Sacks Drum of IDW	3 4 1	✓ AM ✓ AM
7/24/20	Super Sack Drum IDW	3 4 1	✓ AM ✓ AM
7/31/20	Super Sack IDW Drum	3 4 1	✓ AM ✓ AM
8/7/20	Super Sack IDW Drum	3 4 1	✓ AM ✓ AM
8/11/20	Super Sack IDW Drum	4 1	✓ SB ✓ SB
8/21/20	Super Sack IDW Drum	4 1	✓ AM ✓ AM
8/28/20	Super Sacks IDW Drum	4 1	✓ AM ✓ AM
9/4/20	Super Sacks IDW Drum	4 1	✓ AM ✓ AM
9/11/20	Super Sacks IDW Drum	4 1	✓ AM ✓ AM
9/18/20	Super Sacks IDW Drum	4 1	✓ AM ✓ AM
9/25/20	Super Sacks IDW Drum	4 1	✓ AM ✓ AM

Brann

Wardell

8/11/20 17

- 0835 Arrive on site. Take photos of gravel and asphalt site restoration work performed by Worry Free yesterday.
- 0850 Off site.



Rite in the Rain



18 8/14/20 Wendell Ave. Macomb

1020 on site to grab  
Waste Characterization  
Samples from Supersacks  
and drum.

1030 Grabbed a variety of  
Samples of each material  
in each of the 4 Supersacks.  
Samples were collected  
in a gallon Ziploc  
and labeled with  
Sample name

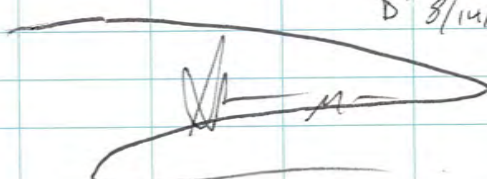
"20-WAS-110-WC"

D: 8/14/20 T: 1030

- Rich Stopped by and  
asked if Supersacks and  
drum could be moved  
out of site. Due to  
Security, they can not.

1040 Collected water sample from  
drum for VOC analysis in  
3 VOA's using New tubing.

1055 off site ↑ "20-WAS-111-WC"  
D: 8/14/20 T: 1040



(1/1)

10/6/20

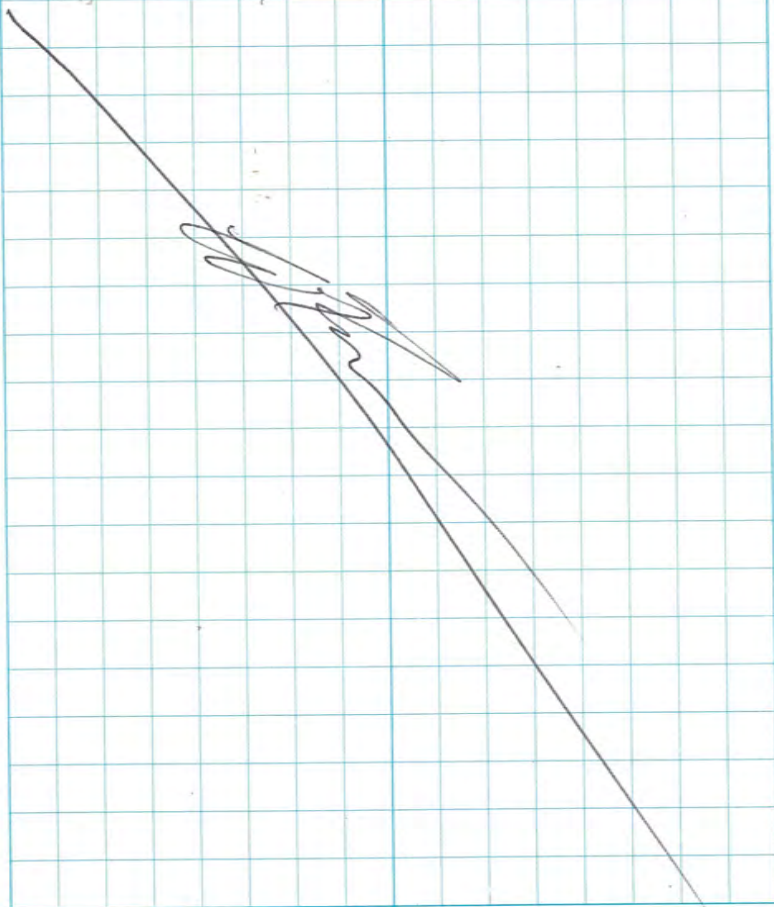
Wendell

Brown 19

1515 on site to supervise NRC picking  
up hazardous waste.

1525 All 4 Supersacks and 1 drum loaded  
onto their truck. Verifying they have  
signed manifest.

1530 off site



Rite in the Rain

## **ATTACHMENT 3**

### Photographic Log

(This Page Intentionally Left Blank)



Photograph 1: Decontaminating SVE shed components



Photograph 2: Decontaminating SVE shed components





---

Photograph 3: Disconnecting blower motor

---



---

Photograph 4: Decontaminating SVE shed components

---





Photograph 5: Decontaminating SVE shed components



Photograph 6: Decontaminating SVE shed components





Photograph 7: PP-5 removal with hitch



Photograph 8: Trenching from SVE-2 to SVE-3





Photograph 9: Trenching from SVE-2 to SVE-3



Photograph 10: PID check at SVE-3





Photograph 11: Trenching at SVE-3



Photograph 12: Trenching at SVE-4





Photograph 13: Removing SG-2



Photograph 14: SG-3 before removal





Photograph 15: SG-7 under trash.



Photograph 16: SG-8 removal





Photograph 17: SG-8 removal



Photograph 18: Decontaminating cover





Photograph 19: Decontaminating well



Photograph 20: Decontaminated debris





Photograph 21: Drum and supersacks stored on site



Photograph 22: Decontaminated debris removed to landfill and metal removed to C&R Pipe for recycling.



---

Photograph 23: Final site condition with new asphalt. View west.

---



---

Photograph 24: US Ecology removing hazardous waste from the site for delivery to RCRA landfill.

---

## **ATTACHMENT 4**

### Laboratory Report

(This Page Intentionally Left Blank)



## Laboratory Report of Analysis

To: Ahtna Engineering Svs  
110 W 38th Ave Suite 200A  
Anchorage, AK 99503  
(907)433-0720

Report Number: **1209577**

Client Project: **20301.002.01 314 Wenden Ave**

Dear Joel Brann,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Justin at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,  
SGS North America Inc.

Justin Nelson  
Project Manager  
Justin.Nelson@sgs.com

\_\_\_\_\_  
Date

## Case Narrative

SGS Client: **Ahtna Engineering Svs**  
SGS Project: **1209577**  
Project Name/Site: **20301.002.01 314 Wenden Ave**  
Project Contact: **Joel Brann**

Refer to sample receipt form for information on sample condition.

\*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 08/27/2020 4:57:51PM

## Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
B	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.

Note: Sample summaries which include a result for "Total Solids" have already been adjusted for moisture content. All DRO/RRO analyses are integrated per SOP.



### Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
20-WAS-110-WC	1209577001	08/14/2020	08/18/2020	Solid/Soil (Wet Weight)
20-WAS-111-WC	1209577002	08/14/2020	08/18/2020	Water (Surface, Eff., Ground)
<u>Method</u>	<u>Method Description</u>			
SW8260D TCLP	TCLP Volatile Organic Compounds 8260			
SW8260D	Volatile Organic Compounds (W) FULL			

Print Date: 08/27/2020 4:57:54PM



## Detectable Results Summary

Client Sample ID: **20-WAS-111-WC**

Lab Sample ID: 1209577002

**Volatile GC/MS**

Parameter

Chloroform

Result

0.745J

Units

ug/L

Print Date: 08/27/2020 4:57:55PM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518  
 t 907.562.2343 f 907.561.5301 www.us.sgs.com

Member of SGS Group



#### Results of 20-WAS-110-WC

Client Sample ID: **20-WAS-110-WC**  
Client Project ID: **20301.002.01 314 Wenden Ave**  
Lab Sample ID: 1209577001  
Lab Project ID: 1209577

Collection Date: 08/14/20 10:30  
Received Date: 08/18/20 09:04  
Matrix: Solid/Soil (Wet Weight)  
Solids (%):  
Location:

#### Results by TCLP Volatiles GC/MS

Parameter	Result Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1-Dichloroethene	0.0250 U	0.0500	0.0155	mg/L	50	(<0.7)	08/24/20 19:03
1,2-Dichloroethane	0.0125 U	0.0250	0.00750	mg/L	50	(<0.5)	08/24/20 19:03
1,4-Dichlorobenzene	0.0125 U	0.0250	0.00750	mg/L	50	(<7.5)	08/24/20 19:03
2-Butanone (MEK)	0.250 U	0.500	0.155	mg/L	50	(<200)	08/24/20 19:03
Benzene	0.0100 U	0.0200	0.00600	mg/L	50	(<0.5)	08/24/20 19:03
Carbon tetrachloride	0.0250 U	0.0500	0.0155	mg/L	50	(<0.5)	08/24/20 19:03
Chlorobenzene	0.0125 U	0.0250	0.00750	mg/L	50	(<100)	08/24/20 19:03
Chloroform	0.0250 U	0.0500	0.0155	mg/L	50	(<6)	08/24/20 19:03
Hexachlorobutadiene	0.0250 U	0.0500	0.0155	mg/L	50	(<0.5)	08/24/20 19:03
Tetrachloroethene	0.0250 U	0.0500	0.0155	mg/L	50	(<0.7)	08/24/20 19:03
Trichloroethene	0.0250 U	0.0500	0.0155	mg/L	50	(<0.5)	08/24/20 19:03
Vinyl chloride	0.0250 U	0.0500	0.0155	mg/L	50	(<0.2)	08/24/20 19:03

#### Surrogates

1,2-Dichloroethane-D4 (surr)	104	81-118	%	50	08/24/20 19:03
4-Bromofluorobenzene (surr)	109	85-114	%	50	08/24/20 19:03
Toluene-d8 (surr)	104	89-112	%	50	08/24/20 19:03

#### Batch Information

Analytical Batch: VMS20239  
Analytical Method: SW8260D TCLP  
Analyst: NRB  
Analytical Date/Time: 08/24/20 19:03  
Container ID: 1209577001-A

Prep Batch: VXX36200  
Prep Method: SW5030B  
Prep Date/Time: 08/24/20 15:00  
Prep Initial Wt./Vol.: 5 mL  
Prep Extract Vol: 5 mL

## Results of 20-WAS-111-WC

Client Sample ID: **20-WAS-111-WC**  
 Client Project ID: **20301.002.01 314 Wenden Ave**  
 Lab Sample ID: 1209577002  
 Lab Project ID: 1209577

Collection Date: 08/14/20 10:40  
 Received Date: 08/18/20 09:04  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Volatile GC/MS

Parameter	Result Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250 U	0.500	0.150	ug/L	1		08/21/20 18:28
1,1,1-Trichloroethane	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
1,1,2,2-Tetrachloroethane	0.250 U	0.500	0.150	ug/L	1		08/21/20 18:28
1,1,2-Trichloroethane	0.200 U	0.400	0.120	ug/L	1		08/21/20 18:28
1,1-Dichloroethane	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
1,1-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
1,1-Dichloropropene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
1,2,3-Trichlorobenzene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
1,2,3-Trichloropropane	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
1,2,4-Trichlorobenzene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
1,2,4-Trimethylbenzene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
1,2-Dibromo-3-chloropropane	5.00 U	10.0	3.10	ug/L	1		08/21/20 18:28
1,2-Dibromoethane	0.0375 U	0.0750	0.0180	ug/L	1		08/21/20 18:28
1,2-Dichlorobenzene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
1,2-Dichloroethane	0.250 U	0.500	0.150	ug/L	1		08/21/20 18:28
1,2-Dichloropropane	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
1,3,5-Trimethylbenzene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
1,3-Dichlorobenzene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
1,3-Dichloropropane	0.250 U	0.500	0.150	ug/L	1		08/21/20 18:28
1,4-Dichlorobenzene	0.250 U	0.500	0.150	ug/L	1		08/21/20 18:28
2,2-Dichloropropane	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
2-Butanone (MEK)	5.00 U	10.0	3.10	ug/L	1		08/21/20 18:28
2-Chlorotoluene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
2-Hexanone	5.00 U	10.0	3.10	ug/L	1		08/21/20 18:28
4-Chlorotoluene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
4-Isopropyltoluene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
4-Methyl-2-pentanone (MIBK)	5.00 U	10.0	3.10	ug/L	1		08/21/20 18:28
Benzene	0.200 U	0.400	0.120	ug/L	1		08/21/20 18:28
Bromobenzene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
Bromochloromethane	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
Bromodichloromethane	0.250 U	0.500	0.150	ug/L	1		08/21/20 18:28
Bromoform	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
Bromomethane	2.50 U	5.00	2.00	ug/L	1		08/21/20 18:28
Carbon disulfide	5.00 U	10.0	3.10	ug/L	1		08/21/20 18:28
Carbon tetrachloride	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
Chlorobenzene	0.250 U	0.500	0.150	ug/L	1		08/21/20 18:28
Chloroethane	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28

Print Date: 08/27/2020 4:57:56PM

J flagging is activated



## Results of 20-WAS-111-WC

Client Sample ID: **20-WAS-111-WC**  
 Client Project ID: **20301.002.01 314 Wenden Ave**  
 Lab Sample ID: 1209577002  
 Lab Project ID: 1209577

Collection Date: 08/14/20 10:40  
 Received Date: 08/18/20 09:04  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Volatile GC/MS

Parameter	Result Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.745 J	1.00	0.310	ug/L	1		08/21/20 18:28
Chloromethane	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
cis-1,2-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
cis-1,3-Dichloropropene	0.250 U	0.500	0.150	ug/L	1		08/21/20 18:28
Dibromochloromethane	0.250 U	0.500	0.150	ug/L	1		08/21/20 18:28
Dibromomethane	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
Dichlorodifluoromethane	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
Ethylbenzene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
Freon-113	5.00 U	10.0	3.10	ug/L	1		08/21/20 18:28
Hexachlorobutadiene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
Isopropylbenzene (Cumene)	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
Methylene chloride	5.00 U	10.0	3.10	ug/L	1		08/21/20 18:28
Methyl-t-butyl ether	5.00 U	10.0	3.10	ug/L	1		08/21/20 18:28
Naphthalene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
n-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
n-Propylbenzene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
o-Xylene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
P & M -Xylene	1.00 U	2.00	0.620	ug/L	1		08/21/20 18:28
sec-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
Styrene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
tert-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
Tetrachloroethene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
Toluene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
trans-1,2-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
trans-1,3-Dichloropropene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
Trichloroethene	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
Trichlorofluoromethane	0.500 U	1.00	0.310	ug/L	1		08/21/20 18:28
Vinyl acetate	5.00 U	10.0	3.10	ug/L	1		08/21/20 18:28
Vinyl chloride	0.0750 U	0.150	0.0500	ug/L	1		08/21/20 18:28
Xylenes (total)	1.50 U	3.00	1.00	ug/L	1		08/21/20 18:28
<b>Surrogates</b>							
1,2-Dichloroethane-D4 (surr)	102	81-118		%	1		08/21/20 18:28
4-Bromofluorobenzene (surr)	108	85-114		%	1		08/21/20 18:28
Toluene-d8 (surr)	102	89-112		%	1		08/21/20 18:28

Print Date: 08/27/2020 4:57:56PM

J flagging is activated

SGS North America Inc.

200 West Potter Drive Anchorage, AK 95518  
 t 907.562.2343 f 907.561.5301 www.us.sgs.com

Member of SGS Group



#### Results of **20-WAS-111-WC**

Client Sample ID: **20-WAS-111-WC**  
Client Project ID: **20301.002.01 314 Wenden Ave**  
Lab Sample ID: 1209577002  
Lab Project ID: 1209577

Collection Date: 08/14/20 10:40  
Received Date: 08/18/20 09:04  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

#### Results by **Volatile GC/MS**

##### Batch Information

Analytical Batch: VMS20224  
Analytical Method: SW8260D  
Analyst: NRB  
Analytical Date/Time: 08/21/20 18:28  
Container ID: 1209577002-A

Prep Batch: VXX36179  
Prep Method: SW5030B  
Prep Date/Time: 08/21/20 13:00  
Prep Initial Wt./Vol.: 5 mL  
Prep Extract Vol: 5 mL

Print Date: 08/27/2020 4:57:56PM

J flagging is activated

SGS North America Inc.

200 West Potter Drive Anchorage, AK 95518  
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Member of SGS Group

## Method Blank

Blank ID: MB for HBN 1810673 [VXX/36179]  
Blank Lab ID: 1576348

Matrix: Water (Surface, Eff., Ground)

QC for Samples:  
1209577002

## Results by SW8260D

Parameter	Results	LOQ/CL	DL	Units
1,1,1,2-Tetrachloroethane	0.250U	0.500	0.150	ug/L
1,1,1-Trichloroethane	0.500U	1.00	0.310	ug/L
1,1,2,2-Tetrachloroethane	0.250U	0.500	0.150	ug/L
1,1,2-Trichloroethane	0.200U	0.400	0.120	ug/L
1,1-Dichloroethane	0.500U	1.00	0.310	ug/L
1,1-Dichloroethene	0.500U	1.00	0.310	ug/L
1,1-Dichloropropene	0.500U	1.00	0.310	ug/L
1,2,3-Trichlorobenzene	0.500U	1.00	0.310	ug/L
1,2,3-Trichloropropane	0.500U	1.00	0.310	ug/L
1,2,4-Trichlorobenzene	0.500U	1.00	0.310	ug/L
1,2,4-Trimethylbenzene	0.500U	1.00	0.310	ug/L
1,2-Dibromo-3-chloropropane	5.00U	10.0	3.10	ug/L
1,2-Dibromoethane	0.0375U	0.0750	0.0180	ug/L
1,2-Dichlorobenzene	0.500U	1.00	0.310	ug/L
1,2-Dichloroethane	0.250U	0.500	0.150	ug/L
1,2-Dichloropropane	0.500U	1.00	0.310	ug/L
1,3,5-Trimethylbenzene	0.500U	1.00	0.310	ug/L
1,3-Dichlorobenzene	0.500U	1.00	0.310	ug/L
1,3-Dichloropropane	0.250U	0.500	0.150	ug/L
1,4-Dichlorobenzene	0.250U	0.500	0.150	ug/L
2,2-Dichloropropane	0.500U	1.00	0.310	ug/L
2-Butanone (MEK)	5.00U	10.0	3.10	ug/L
2-Chlorotoluene	0.500U	1.00	0.310	ug/L
2-Hexanone	5.00U	10.0	3.10	ug/L
4-Chlorotoluene	0.500U	1.00	0.310	ug/L
4-Isopropyltoluene	0.500U	1.00	0.310	ug/L
4-Methyl-2-pentanone (MIBK)	5.00U	10.0	3.10	ug/L
Benzene	0.200U	0.400	0.120	ug/L
Bromobenzene	0.500U	1.00	0.310	ug/L
Bromochloromethane	0.500U	1.00	0.310	ug/L
Bromodichloromethane	0.250U	0.500	0.150	ug/L
Bromoform	0.500U	1.00	0.310	ug/L
Bromomethane	2.50U	5.00	2.00	ug/L
Carbon disulfide	5.00U	10.0	3.10	ug/L
Carbon tetrachloride	0.500U	1.00	0.310	ug/L
Chlorobenzene	0.250U	0.500	0.150	ug/L
Chloroethane	0.500U	1.00	0.310	ug/L
Chloroform	0.500U	1.00	0.310	ug/L

Print Date: 08/27/2020 4:57:58PM

## Method Blank

Blank ID: MB for HBN 1810673 [VXX/36179]  
Blank Lab ID: 1576348

Matrix: Water (Surface, Eff., Ground)

QC for Samples:  
1209577002

## Results by SW8260D

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Chloromethane	0.500U	1.00	0.310	ug/L
cis-1,2-Dichloroethene	0.500U	1.00	0.310	ug/L
cis-1,3-Dichloropropene	0.250U	0.500	0.150	ug/L
Dibromochloromethane	0.250U	0.500	0.150	ug/L
Dibromomethane	0.500U	1.00	0.310	ug/L
Dichlorodifluoromethane	0.500U	1.00	0.310	ug/L
Ethylbenzene	0.500U	1.00	0.310	ug/L
Freon-113	5.00U	10.0	3.10	ug/L
Hexachlorobutadiene	0.500U	1.00	0.310	ug/L
Isopropylbenzene (Cumene)	0.500U	1.00	0.310	ug/L
Methylene chloride	5.00U	10.0	3.10	ug/L
Methyl-t-butyl ether	5.00U	10.0	3.10	ug/L
Naphthalene	0.500U	1.00	0.310	ug/L
n-Butylbenzene	0.500U	1.00	0.310	ug/L
n-Propylbenzene	0.500U	1.00	0.310	ug/L
o-Xylene	0.500U	1.00	0.310	ug/L
P & M -Xylene	1.00U	2.00	0.620	ug/L
sec-Butylbenzene	0.500U	1.00	0.310	ug/L
Styrene	0.500U	1.00	0.310	ug/L
tert-Butylbenzene	0.500U	1.00	0.310	ug/L
Tetrachloroethene	0.500U	1.00	0.310	ug/L
Toluene	0.500U	1.00	0.310	ug/L
trans-1,2-Dichloroethene	0.500U	1.00	0.310	ug/L
trans-1,3-Dichloropropene	0.500U	1.00	0.310	ug/L
Trichloroethene	0.500U	1.00	0.310	ug/L
Trichlorofluoromethane	0.500U	1.00	0.310	ug/L
Vinyl acetate	5.00U	10.0	3.10	ug/L
Vinyl chloride	0.0750U	0.150	0.0500	ug/L
Xylenes (total)	1.50U	3.00	1.00	ug/L
<b>Surrogates</b>				
1,2-Dichloroethane-D4 (surr)	102	81-118		%
4-Bromofluorobenzene (surr)	108	85-114		%
Toluene-d8 (surr)	103	89-112		%

Print Date: 08/27/2020 4:57:58PM



#### Method Blank

Blank ID: MB for HBN 1810673 [VXX/36179]  
Blank Lab ID: 1576348

Matrix: Water (Surface, Eff., Ground)

QC for Samples:  
1209577002

#### Results by SW8260D

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
------------------	----------------	---------------	-----------	--------------

#### Batch Information

Analytical Batch: VMS20224  
Analytical Method: SW8260D  
Instrument: Agilent 7890-75MS  
Analyst: NRB  
Analytical Date/Time: 8/21/2020 5:00:00PM

Prep Batch: VXX36179  
Prep Method: SW5030B  
Prep Date/Time: 8/21/2020 1:00:00PM  
Prep Initial Wt./Vol.: 5 mL  
Prep Extract Vol: 5 mL

Print Date: 08/27/2020 4:57:58PM

SGS North America Inc.

200 West Potter Drive Anchorage, AK 95518  
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Member of SGS Group



## Blank Spike Summary

Blank Spike ID: LCS for HBN 1209577 [VXX36179]  
Blank Spike Lab ID: 1576349  
Date Analyzed: 08/21/2020 14:33

Spike Duplicate ID: LCSD for HBN 1209577 [VXX36179]  
Spike Duplicate Lab ID: 1576350  
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1209577002

## Results by SW8260D

Parameter	Blank Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
1,1,1,2-Tetrachloroethane	30	30.4	101	30	31.2	104	( 78-124 )	2.50	(< 20 )
1,1,1-Trichloroethane	30	29.4	98	30	29.5	98	( 74-131 )	0.31	(< 20 )
1,1,2,2-Tetrachloroethane	30	31.3	104	30	32.0	107	( 71-121 )	2.10	(< 20 )
1,1,2-Trichloroethane	30	31.5	105	30	31.9	106	( 80-119 )	1.30	(< 20 )
1,1-Dichloroethane	30	29.6	99	30	30.1	100	( 77-125 )	1.40	(< 20 )
1,1-Dichloroethene	30	33.3	111	30	33.3	111	( 71-131 )	0.05	(< 20 )
1,1-Dichloropropene	30	30.7	102	30	30.8	103	( 79-125 )	0.10	(< 20 )
1,2,3-Trichlorobenzene	30	28.9	96	30	30.0	100	( 69-129 )	3.90	(< 20 )
1,2,3-Trichloropropane	30	30.2	101	30	30.9	103	( 73-122 )	2.10	(< 20 )
1,2,4-Trichlorobenzene	30	29.2	97	30	30.5	102	( 69-130 )	4.40	(< 20 )
1,2,4-Trimethylbenzene	30	31.9	106	30	32.8	109	( 79-124 )	2.50	(< 20 )
1,2-Dibromo-3-chloropropane	30	30.3	101	30	30.0	100	( 62-128 )	0.83	(< 20 )
1,2-Dibromoethane	30	30.0	100	30	30.9	103	( 77-121 )	2.90	(< 20 )
1,2-Dichlorobenzene	30	30.3	101	30	30.8	103	( 80-119 )	1.80	(< 20 )
1,2-Dichloroethane	30	28.6	95	30	29.3	98	( 73-128 )	2.40	(< 20 )
1,2-Dichloropropane	30	30.5	102	30	30.9	103	( 78-122 )	1.40	(< 20 )
1,3,5-Trimethylbenzene	30	31.5	105	30	32.3	108	( 75-124 )	2.60	(< 20 )
1,3-Dichlorobenzene	30	31.1	104	30	31.7	106	( 80-119 )	1.90	(< 20 )
1,3-Dichloropropane	30	30.8	103	30	31.6	105	( 80-119 )	2.50	(< 20 )
1,4-Dichlorobenzene	30	30.6	102	30	31.2	104	( 79-118 )	2.00	(< 20 )
2,2-Dichloropropane	30	30.7	102	30	30.9	103	( 60-139 )	0.69	(< 20 )
2-Butanone (MEK)	90	103	114	90	97.1	108	( 56-143 )	5.90	(< 20 )
2-Chlorotoluene	30	31.3	104	30	32.2	107	( 79-122 )	2.60	(< 20 )
2-Hexanone	90	94.6	105	90	93.8	104	( 57-139 )	0.79	(< 20 )
4-Chlorotoluene	30	31.8	106	30	32.8	109	( 78-122 )	3.00	(< 20 )
4-Isopropyltoluene	30	30.4	101	30	32.2	107	( 77-127 )	5.80	(< 20 )
4-Methyl-2-pentanone (MIBK)	90	93.1	103	90	92.8	103	( 67-130 )	0.29	(< 20 )
Benzene	30	30.0	100	30	30.4	101	( 79-120 )	1.10	(< 20 )
Bromobenzene	30	29.6	99	30	30.4	101	( 80-120 )	2.70	(< 20 )
Bromochloromethane	30	28.7	96	30	29.6	99	( 78-123 )	3.10	(< 20 )
Bromodichloromethane	30	29.6	99	30	30.2	101	( 79-125 )	2.10	(< 20 )
Bromoform	30	29.7	99	30	30.3	101	( 66-130 )	2.00	(< 20 )
Bromomethane	30	31.1	104	30	32.0	107	( 53-141 )	2.70	(< 20 )
Carbon disulfide	45	50.4	112	45	49.7	110	( 64-133 )	1.40	(< 20 )

Print Date: 08/27/2020 4:58:00PM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1209577 [VXX36179]  
 Blank Spike Lab ID: 1576349  
 Date Analyzed: 08/21/2020 14:33

Spike Duplicate ID: LCSD for HBN 1209577  
 [VXX36179]  
 Spike Duplicate Lab ID: 1576350  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1209577002

## Results by SW8260D

Parameter	Blank Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Carbon tetrachloride	30	29.2	97	30	29.3	98	( 72-136 )	0.39	(< 20 )
Chlorobenzene	30	29.1	97	30	29.6	99	( 82-118 )	1.80	(< 20 )
Chloroethane	30	34.9	116	30	35.2	117	( 60-138 )	0.83	(< 20 )
Chloroform	30	29.1	97	30	29.6	99	( 79-124 )	1.80	(< 20 )
Chloromethane	30	30.1	100	30	30.4	101	( 50-139 )	1.10	(< 20 )
cis-1,2-Dichloroethene	30	29.4	98	30	30.0	100	( 78-123 )	2.20	(< 20 )
cis-1,3-Dichloropropene	30	30.7	102	30	31.3	104	( 75-124 )	1.90	(< 20 )
Dibromochloromethane	30	29.5	98	30	30.3	101	( 74-126 )	2.80	(< 20 )
Dibromomethane	30	29.4	98	30	30.0	100	( 79-123 )	2.00	(< 20 )
Dichlorodifluoromethane	30	32.4	108	30	32.7	109	( 32-152 )	0.80	(< 20 )
Ethylbenzene	30	32.0	107	30	32.2	107	( 79-121 )	0.76	(< 20 )
Freon-113	45	50.9	113	45	50.9	113	( 70-136 )	0.10	(< 20 )
Hexachlorobutadiene	30	26.9	90	30	27.9	93	( 66-134 )	3.70	(< 20 )
Isopropylbenzene (Cumene)	30	31.9	106	30	32.5	108	( 72-131 )	2.00	(< 20 )
Methylene chloride	30	31.0	103	30	31.3	104	( 74-124 )	0.99	(< 20 )
Methyl-t-butyl ether	45	46.6	104	45	47.4	105	( 71-124 )	1.80	(< 20 )
Naphthalene	30	30.7	102	30	31.2	104	( 61-128 )	1.70	(< 20 )
n-Butylbenzene	30	30.3	101	30	32.3	108	( 75-128 )	6.40	(< 20 )
n-Propylbenzene	30	33.4	111	30	34.0	113	( 76-126 )	1.80	(< 20 )
o-Xylene	30	32.3	108	30	32.9	110	( 78-122 )	1.90	(< 20 )
P & M -Xylene	60	63.4	106	60	64.1	107	( 80-121 )	1.20	(< 20 )
sec-Butylbenzene	30	32.0	107	30	34.0	113	( 77-126 )	6.20	(< 20 )
Styrene	30	31.7	106	30	32.4	108	( 78-123 )	2.10	(< 20 )
tert-Butylbenzene	30	31.3	104	30	32.2	107	( 78-124 )	2.60	(< 20 )
Tetrachloroethene	30	29.0	97	30	29.0	97	( 74-129 )	0.12	(< 20 )
Toluene	30	29.6	99	30	30.1	100	( 80-121 )	1.70	(< 20 )
trans-1,2-Dichloroethene	30	30.3	101	30	30.3	101	( 75-124 )	0.06	(< 20 )
trans-1,3-Dichloropropene	30	32.4	108	30	32.9	110	( 73-127 )	1.60	(< 20 )
Trichloroethene	30	29.5	98	30	29.9	100	( 79-123 )	1.30	(< 20 )
Trichlorofluoromethane	30	33.8	113	30	33.2	111	( 65-141 )	1.60	(< 20 )
Vinyl acetate	30	31.9	106	30	32.5	108	( 54-146 )	1.70	(< 20 )
Vinyl chloride	30	32.0	107	30	32.1	107	( 58-137 )	0.27	(< 20 )
Xylenes (total)	90	95.7	106	90	97.1	108	( 79-121 )	1.40	(< 20 )

Print Date: 08/27/2020 4:58:00PM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1209577 [VXX36179]  
 Blank Spike Lab ID: 1576349  
 Date Analyzed: 08/21/2020 14:33

Spike Duplicate ID: LCSD for HBN 1209577 [VXX36179]  
 Spike Duplicate Lab ID: 1576350  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1209577002

## Results by SW8260D

Parameter	Blank Spike (%)			Spike Duplicate (%)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
<b>Surrogates</b>									
1,2-Dichloroethane-D4 (surr)	30	97.2	97	30	97.5	98	( 81-118 )	0.32	
4-Bromofluorobenzene (surr)	30	101	101	30	101	101	( 85-114 )	0.19	
Toluene-d8 (surr)	30	100	100	30	101	101	( 89-112 )	0.73	

## Batch Information

Analytical Batch: VMS20224  
 Analytical Method: SW8260D  
 Instrument: Agilent 7890-75MS  
 Analyst: NRB

Prep Batch: VXX36179  
 Prep Method: SW5030B  
 Prep Date/Time: 08/21/2020 13:00  
 Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL  
 Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL

Print Date: 08/27/2020 4:58:00PM

## Method Blank

Blank ID: MB for HBN 1810786 [VXX/36200]  
Blank Lab ID: 1576932

Matrix: Water (Surface, Eff., Ground)

QC for Samples:  
1209577001

## Results by SW8260D TCLP

Parameter	Results	LOQ/CL	DL	Units
1,1-Dichloroethene	0.000500U	0.00100	0.000310	mg/L
1,2-Dichloroethane	0.000250U	0.000500	0.000150	mg/L
1,4-Dichlorobenzene	0.000250U	0.000500	0.000150	mg/L
2-Butanone (MEK)	0.00500U	0.0100	0.00310	mg/L
Benzene	0.000200U	0.000400	0.000120	mg/L
Carbon tetrachloride	0.000500U	0.00100	0.000310	mg/L
Chlorobenzene	0.000250U	0.000500	0.000150	mg/L
Chloroform	0.000500U	0.00100	0.000310	mg/L
Hexachlorobutadiene	0.000500U	0.00100	0.000310	mg/L
Tetrachloroethene	0.000500U	0.00100	0.000310	mg/L
Trichloroethene	0.000500U	0.00100	0.000310	mg/L
Vinyl chloride	0.0000750U	0.000150	0.0000500	mg/L

## Surrogates

1,2-Dichloroethane-D4 (surr)	102	81-118	%
4-Bromofluorobenzene (surr)	112	85-114	%
Toluene-d8 (surr)	103	89-112	%

## Batch Information

Analytical Batch: VMS20239  
Analytical Method: SW8260D TCLP  
Instrument: Agilent 7890-75MS  
Analyst: NRB  
Analytical Date/Time: 8/24/2020 3:47:00PM

Prep Batch: VXX36200  
Prep Method: SW5030B  
Prep Date/Time: 8/24/2020 3:00:00PM  
Prep Initial Wt./Vol.: 5 mL  
Prep Extract Vol: 5 mL



## Leaching Blank

Blank ID: LB for HBN 1810561 [TCLP/10778]  
Blank Lab ID: 1575874

Matrix: Water (Surface, Eff., Ground)

QC for Samples:  
1209577001

## Results by SW8260D TCLP

Parameter	Results	LOQ/CL	DL	Units
1,1-Dichloroethene	0.0250U	0.0500	0.0155	mg/L
1,2-Dichloroethane	0.0125U	0.0250	0.00750	mg/L
1,4-Dichlorobenzene	0.0125U	0.0250	0.00750	mg/L
2-Butanone (MEK)	0.250U	0.500	0.155	mg/L
Benzene	0.0100U	0.0200	0.00600	mg/L
Carbon tetrachloride	0.0250U	0.0500	0.0155	mg/L
Chlorobenzene	0.0125U	0.0250	0.00750	mg/L
Chloroform	0.0250U	0.0500	0.0155	mg/L
Hexachlorobutadiene	0.0250U	0.0500	0.0155	mg/L
Tetrachloroethene	0.0250U	0.0500	0.0155	mg/L
Trichloroethene	0.0250U	0.0500	0.0155	mg/L
Vinyl chloride	0.0250U	0.0500	0.0155	mg/L

### Surrogates

1,2-Dichloroethane-D4 (surr)	101	81-118	%
4-Bromofluorobenzene (surr)	107	85-114	%
Toluene-d8 (surr)	104	89-112	%

## Batch Information

Analytical Batch: VMS20239  
Analytical Method: SW8260D TCLP  
Instrument: Agilent 7890-75MS  
Analyst: NRB  
Analytical Date/Time: 8/24/2020 6:19:00PM

Prep Batch: VXX36200  
Prep Method: SW5030B  
Prep Date/Time: 8/24/2020 3:00:00PM  
Prep Initial Wt./Vol.: 5 mL  
Prep Extract Vol: 5 mL



### Leaching Blank

Blank ID: LB for HBN 1810631 [TCLP/10781]  
Blank Lab ID: 1576188

Matrix: Water (Surface, Eff., Ground)

QC for Samples:  
1209577001

### Results by SW8260D TCLP

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
1,1-Dichloroethene	0.0250U	0.0500	0.0155	mg/L
1,2-Dichloroethane	0.0125U	0.0250	0.00750	mg/L
1,4-Dichlorobenzene	0.0125U	0.0250	0.00750	mg/L
2-Butanone (MEK)	0.250U	0.500	0.155	mg/L
Benzene	0.0100U	0.0200	0.00600	mg/L
Carbon tetrachloride	0.0250U	0.0500	0.0155	mg/L
Chlorobenzene	0.0125U	0.0250	0.00750	mg/L
Chloroform	0.0250U	0.0500	0.0155	mg/L
Hexachlorobutadiene	0.0250U	0.0500	0.0155	mg/L
Tetrachloroethene	0.0250U	0.0500	0.0155	mg/L
Trichloroethene	0.0250U	0.0500	0.0155	mg/L
Vinyl chloride	0.0250U	0.0500	0.0155	mg/L

### Surrogates

1,2-Dichloroethane-D4 (surr)	103	81-118	%
4-Bromofluorobenzene (surr)	107	85-114	%
Toluene-d8 (surr)	103	89-112	%

### Batch Information

Analytical Batch: VMS20239  
Analytical Method: SW8260D TCLP  
Instrument: Agilent 7890-75MS  
Analyst: NRB  
Analytical Date/Time: 8/24/2020 6:48:00PM

Prep Batch: VXX36200  
Prep Method: SW5030B  
Prep Date/Time: 8/24/2020 3:00:00PM  
Prep Initial Wt./Vol.: 5 mL  
Prep Extract Vol: 5 mL

Print Date: 08/27/2020 4:58:02PM



### Blank Spike Summary

Blank Spike ID: LCS for HBN 1209577 [VXX36200]  
Blank Spike Lab ID: 1576933  
Date Analyzed: 08/24/2020 16:21

Spike Duplicate ID: LCSD for HBN 1209577  
[VXX36200]  
Spike Duplicate Lab ID: 1576934  
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1209577001

### Results by SW8260D TCLP

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
1,1-Dichloroethene	0.0300	0.0352	117	0.0300	0.0338	113	( 71-131 )	4.20	(< 20 )
1,2-Dichloroethane	0.0300	0.0288	96	0.0300	0.0292	98	( 73-128 )	1.70	(< 20 )
1,4-Dichlorobenzene	0.0300	0.0310	103	0.0300	0.0312	104	( 79-118 )	0.66	(< 20 )
2-Butanone (MEK)	0.0900	0.0933	104	0.0900	0.0928	103	( 56-143 )	0.57	(< 20 )
Benzene	0.0300	0.0308	103	0.0300	0.0305	102	( 79-120 )	0.88	(< 20 )
Carbon tetrachloride	0.0300	0.0296	99	0.0300	0.0288	96	( 72-136 )	2.60	(< 20 )
Chlorobenzene	0.0300	0.0296	99	0.0300	0.0296	99	( 82-118 )	0.01	(< 20 )
Chloroform	0.0300	0.0299	100	0.0300	0.0297	99	( 79-124 )	0.80	(< 20 )
Hexachlorobutadiene	0.0300	0.0267	89	0.0300	0.0270	90	( 66-134 )	1.10	(< 20 )
Tetrachloroethene	0.0300	0.0296	99	0.0300	0.0289	96	( 74-129 )	2.30	(< 20 )
Trichloroethene	0.0300	0.0303	101	0.0300	0.0296	99	( 79-123 )	2.20	(< 20 )
Vinyl chloride	0.0300	0.0338	113	0.0300	0.0308	103	( 58-137 )	9.20	(< 20 )
<b>Surrogates</b>									
1,2-Dichloroethane-D4 (surr)	0.0300	97.5	98	0.0300	97.5	98	( 81-118 )	0.02	
4-Bromofluorobenzene (surr)	0.0300	103	103	0.0300	103	103	( 85-114 )	0.31	
Toluene-d8 (surr)	0.0300	99.9	100	0.0300	100	100	( 89-112 )	0.16	

### Batch Information

Analytical Batch: VMS20239  
Analytical Method: SW8260D TCLP  
Instrument: Agilent 7890-75MS  
Analyst: NRB

Prep Batch: VXX36200  
Prep Method: SW5030B  
Prep Date/Time: 08/24/2020 15:00  
Spike Init Wt./Vol.: 0.0300 mg/L Extract Vol: 5 mL  
Dupe Init Wt./Vol.: 0.0300 mg/L Extract Vol: 5 mL

Print Date: 08/27/2020 4:58:05PM





## Characterization of TCLP Samples for LIMS Login

Date Characterized: 8/18/20

Analyst: PP

Sample Container ID:	Matrix	%	Is sufficient volume/mass available?	Notes:
LA	Xylene miscible (Top layer * = matrix 3 **)	—	Yes / No	<p>If multiple jars were received, were they consistent? Yes / No / NA</p> <p>If biphasic, was there <u>only</u> one layer with sufficient sample? Yes / No / NA</p> <p>Sample description/other observations: <u>Irregular</u></p> <p>**Are samples Glycol or Solvent in appearance or odor? If yes schedule TCLP Metals matrix 6 acode.</p>
	Water miscible (Middle layer = matrix 6)	—		
	Solid (Bottom layer = matrix 7 or 2 if % solids required)	100		
	Xylene miscible (Top layer * = matrix 3 **)		Yes / No	<p>If multiple jars were received, were they consistent? Yes / No / NA</p> <p>If biphasic, was there <u>only</u> one layer with sufficient sample? Yes / No / NA</p> <p>Sample description/other observations:</p> <p>**Are samples Glycol or Solvent in appearance or odor? If yes schedule TCLP Metals matrix 6 acode.</p>
	Water miscible (Middle layer = matrix 6)			
	Solid (Bottom layer = matrix 7 or 2 if % solids required)			
	Xylene miscible (Top layer * = matrix 3 **)		Yes / No	<p>If multiple jars were received, were they consistent? Yes / No / NA</p> <p>If biphasic, was there <u>only</u> one layer with sufficient sample? Yes / No / NA</p> <p>Sample description/other observations:</p> <p>**Are samples Glycol or Solvent in appearance or odor? If yes schedule TCLP Metals matrix 6 acode.</p>
	Water miscible (Middle layer = matrix 6)			
	Solid (Bottom layer = matrix 7 or 2 if % solids required)			
	Xylene miscible (Top layer * = matrix 3 **)		Yes / No	<p>If multiple jars were received, were they consistent? Yes / No / NA</p> <p>If biphasic, was there <u>only</u> one layer with sufficient sample? Yes / No / NA</p> <p>Sample description/other observations:</p> <p>**Are samples Glycol or Solvent in appearance or odor? If yes schedule TCLP Metals matrix 6 acode.</p>
	Water miscible (Middle layer = matrix 6)			
	Solid (Bottom layer = matrix 7 or 2 if % solids required)			
	Xylene miscible (Top layer * = matrix 3 **)		Yes / No	<p>If multiple jars were received, were they consistent? Yes / No / NA</p> <p>If biphasic, was there <u>only</u> one layer with sufficient sample? Yes / No / NA</p> <p>Sample description/other observations:</p> <p>**Are samples Glycol or Solvent in appearance or odor? If yes schedule TCLP Metals matrix 6 acode.</p>
	Water miscible (Middle layer = matrix 6)			
	Solid (Bottom layer = matrix 7 or 2 if % solids required)			

Remember: \* = Chlorinated oils will be heavier than water and present as the bottom later.  
\*\* = Oils must be filterable to be logged in as matrix 3. Nonfilterable oils must be logged in as matrix 7.  
\*\*\* = Refer to F078 'Characterization of TCLP Samples for LIMS' to determine if there's sufficient volume/mass.



## e-Sample Receipt Form

SGS Workorder #:

1209577

1209577

Review Criteria		Condition (Yes, No, N/A)	Exceptions Noted below	
<b>Chain of Custody / Temperature Requirements</b>			N/A	Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	Yes	1F, 1B		
COC accompanied samples?	Yes			
DOD: Were samples received in COC corresponding coolers?	N/A			
N/A **Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required				
Temperature blank compliant* (i.e., 0-6 °C after CF)?	No	Cooler ID: 1	@ Ambient	°C Therm. ID: N/A
If samples received without a temperature blank, the "cooler temperature" will be documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.		Cooler ID:	@	°C Therm. ID:
		Cooler ID:	@	°C Therm. ID:
		Cooler ID:	@	°C Therm. ID:
		Cooler ID:	@	°C Therm. ID:
*If >6°C, were samples collected <8 hours ago?		No	Chilling not required	
If <0°C, were sample containers ice free?		N/A		
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.				
<b>Holding Time / Documentation / Sample Condition Requirements</b>		Note: Refer to form F-083 "Sample Guide" for specific holding times.		
Were samples received within holding time?	Yes			
Do samples match COC** (i.e., sample IDs, dates/times collected)?	Yes			
**Note: If times differ <1hr, record details & login per COC.				
***Note: If sample information on containers differs from COC, SGS will default to COC information				
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals)	Yes			
Were proper containers (type/mass/volume/preservative***) used?		Yes	N/A ***Exemption permitted for metals (e.g. 200.8/6020A).	
<b>Volatile / LL-Hg Requirements</b>				
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	No	No trip blanks received. Proceed without trip blanks.		
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?	Yes			
Were all soil VOAs field extracted with MeOH+BFB?	N/A			
Note to Client: Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.				
Additional notes (if applicable):				



## e-Sample Receipt Form FBK

SGS Workorder #:

1209577

1209577

Review Criteria		Condition (Yes, No, N/A)	Exceptions Noted below	
<b>Chain of Custody / Temperature Requirements</b>			<b>Yes</b>	Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location		N/A		
COC accompanied samples?		Yes		
DOD: Were samples received in COC corresponding coolers?		N/A		
<b>Yes</b> **Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required				
Temperature blank compliant* (i.e., 0-6 °C after CF)?			Cooler ID:	@ °C Therm. ID:
If samples received without a temperature blank, the "cooler temperature" will be documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.			Cooler ID:	@ °C Therm. ID:
			Cooler ID:	@ °C Therm. ID:
			Cooler ID:	@ °C Therm. ID:
			Cooler ID:	@ °C Therm. ID:
*If >6°C, were samples collected <8 hours ago?		Yes		
If <0°C, were sample containers ice free?				
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.				
<b>Holding Time / Documentation / Sample Condition Requirements</b>		Note: Refer to form F-083 "Sample Guide" for specific holding times.		
Do samples <b>match COC</b> ** (i.e., sample IDs, dates/times collected)?		N/C		
**Note: If times differ <1hr, record details & login per COC.				
***Note: If sample information on containers differs from COC, SGS will default to COC information				
Were samples in good condition (no leaks/cracks/breakage)?		Yes		
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals))		Yes		
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?		N/A	Trip blank not required by client.	
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?		N/C		
Were all soil VOAs field extracted with MeOH+BFB?		N/A		
For Rush/Short Hold Time, was RUSH/Short HT email sent?		N/A		
<b>Note to Client:</b> Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.				
Additional notes (if applicable):				
<b>SGS Profile #</b>			0	





## Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>
1209577001-A	No Preservative Required	OK			
1209577002-A	HCL to pH < 2	OK			
1209577002-B	HCL to pH < 2	OK			
1209577002-C	HCL to pH < 2	OK			

### Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.

BU - The container was received with headspace greater than 6mm.

DM - The container was received damaged.

FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

QN - Insufficient sample quantity provided.

## **ATTACHMENT 5**

Waste Manifest and Weight Tickets

(This Page Intentionally Left Blank)

20111003711

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number AKR000203042	2. Page 1 of 3	3. Emergency Response Phone 800-899-4672	4. Manifest Tracking Number 008741246 FLE			
5. Generator's Name and Mailing Address ADEC INVESTIGATION - WENDELL AVENUE SITE 314 WENDELL AVENUE, LOT 4 FAIRBANKS, AK 99701 Generator's Phone: (907) 451-2117				Generator's Site Address (if different than mailing address) ADEC INVESTIGATION - WENDELL AVENUE SITE 314 WENDELL AVENUE, LOT 4 FAIRBANKS, AK 99701				
6. Transporter 1 Company Name NRC ALASKA LLC				U.S. EPA ID Number AKR000004184				
7. Transporter 2 Company Name WEAVER BROTHERS				U.S. EPA ID Number AKD002848372				
8. Designated Facility Name and Site Address US ECOLOGY IDAHO, INC. 20400 LEMLEY RD GRAND VIEW, ID 83624 Facility's Phone: (208) 834-2275				U.S. EPA ID Number IDD073114854				
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ, UN3082, Waste Environmentally hazardous substances, liquid, n.o.s. (TETRACHLOROETHENE), 9, PGIII, RQ=100 ERG#171			1		DM	100	P F002
X	2. RQ, UN3077, Waste Environmentally hazardous substances, solid, n.o.s. (TETRACHLOROETHENE), 9, PGIII, RQ=100 ERG#171			4		BA	360	P F002
	3.							
	4.							
14. Special Handling Instructions and Additional Information D32479 1) USE52366 F002 IDW/DECON WATER 2) USE52366 F002 DEBRIS								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Officer's Printed/Typed Name Jane Fish, State of Alaska				Signature <i>[Signature]</i>		Month Day Year 10/1/20		
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____								
17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name Bret Lang Signature <i>[Signature]</i> Month Day Year 10/5/20 Transporter 2 Printed/Typed Name DANTE CUARESMA #372 Signature <i>[Signature]</i> Month Day Year 10/15/20								
18. Discrepancy 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: _____ U.S. EPA ID Number _____								
18b. Alternate Facility (or Generator) Facility's Phone: _____ U.S. EPA ID Number _____								
18c. Signature of Alternate Facility (or Generator) Month Day Year _____								
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. H132 2. H132 3. 4.								
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name Corian Schmitz Signature <i>[Signature]</i> Month Day Year 11/10/2020								



DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

## US Ecology, Inc. Land Disposal Restriction Form



GENERATOR : A.D.E.C. INVESTIGATION-WENDELL AVENUE SITE EPA I.D. NUMBER: AKR000203042

WASTE STREAM or PROFILE NUMBER: 52368-0 Manifest Doc. No. 08741246 File Line No. 2

WASTE IS A: ☐ Wastewater (<1% TSS and TOC) ☐ Non-wastewater ☒ DebrisNOTIFICATION FREQUENCY: ☐ ONE TIME ☒ REQUIRED WITH EACH SHIPMENT

Shipment EPA WASTE CODES (from 40 CFR 268.40) F002

UHC's (Underlying Hazardous Constituents 40 CFR 268.48)? ☐ Yes ☒ No

If yes, list:

Does a subcategory apply per 40 CFR 268.48 ? ☐ Yes ☒ No

If yes, list:

Constituents requiring treatment in F001-5, F039, debris, and alternate soils? ☐ Yes ☒ No

If yes, list:

☒ See Profile for analysis (if any).A. ☒ Restricted Waste Meets Treatment Standards (40 CFR 268.7(a) (3))

The restricted waste identified above meets the treatment standards in 40 CFR 268.40 or Alternative LDR treatment standards for contaminated soil 40 CFR 268.49 and can be landfill disposed without further treatment.

If applicable, under 268.49, this contaminated soil ☐ does or ☒ does not contain listed hazardous waste and ☐ does or ☒ does not exhibit a characteristic of hazardous waste and complies with the soil treatment standards as provided by 268.49 (c) or the universal treatment standards.

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

B. ☐ Restricted Waste Treated To Treatment Standards (40 CFR 268.7(b) (1) & 268.7 (b) (2))

The treatment residue, or extract of such residue, or the restricted waste identified above has been tested to assure that the treatment residues or extract meet all applicable treatment standards in 40 CFR 268.40 and/or performance standards in 40 CFR 268.45.

I certify under penalty of law that I personally have examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 40 CFR 268.40 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

C. ☐ Restricted Waste Soil Treated To Alternative Standards (40 CFR 268.7(b) (4))

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and believe that it has been maintained and operated properly so as to comply with treatment standards specified in 40 CFR 268.49 without impermissible dilution of the prohibited wastes. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

D. ☐ Restricted Waste Decharacterized But Requires Treatment For UHC (40 CFR 268.7(b)(4)(iv))

I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49 to remove the hazardous characteristic. This decharacterized waste contains Underlying Hazardous Constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

E. ☐ Restricted Waste Subject To Treatment (40 CFR 268.7(a) (2))

The restricted waste identified above must be treated to the applicable treatment standards in 40 CFR 268.40, or treated to comply with applicable prohibitions set forth in Part 268.32 or RCRA Section 3004(d) and 268.49 (c).

If applicable, under 268.49, this contaminated soil ☐ does or ☐ does not contain listed hazardous waste and ☐ does or ☐ does not exhibit a characteristic of hazardous wastewater and is subject to the soil treatment standards as provided by 268.49(c) or the universal treatment standards.

F. ☐ Hazardous Debris Subject To Treatment (40 CFR 268.45)

This hazardous debris identified above must be treated to the alternative treatment standards in 40 CFR 268.45.

I certify and warrant that the information that appears on this form, and appended documents, is true and correct. I have correctly indicated how my waste is to be managed in accordance with 40 CFR 268. My certification is based on personal examination of the information submitted, or is based on my inquiries of those individuals responsible for obtaining the information.

Authorized Signature

Title

ADRC Project Manager

Date

10/1/20

UHC and Subcategory list from 40 CFR Part 268.48 and 268.40 available upon request

C&R PIPE & STEEL  
(907) 456-8386  
INBOUND WEIGHT TICKET

Truck ID: RD35  
Description: WHITE TRUCK/AHTNA

Gross Weight: 8060 lb  
Tare Weight: 00 lb  
Net Weight: 8060 lb *7660* *400 LBS.*

16 Jul 2020 12:44:33

FNSB SOLID WASTE DIVISION  
455 SANDURI STREET  
FAIRBANKS, AK 99701

INBOUND CHARGE

001899 AHTNA ENGINEERING SERVICES, LL  
110 W. 38TH AVE., SUITE #200A  
ANCHORAGE AK 99503-5677

SITE	TICKET	GRID		WEIGHMASTER	
01	01003045	CELL 3		BARB	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
07/16/20	07/16/20	13:22	13:39	169	
REFERENCE		ORIGIN			
ADAM		FNSB - GENERAL			

Scale 1 Gross Wt. 8280 LB  
Scale 2 Tare Wt. 8040 LB  
Net Weight 240 LB

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
0.12	TON	CONSTRUCTION MATRL	120.000	14.40	0.00	14.40

LANDFILL HOURS: MONDAY THROUGH FRIDAY 8:00 AM TO 4:00 PM  
SATURDAY 9:00 AM TO 4:00 PM  
SUNDAY 12:00 NOON TO 4:00 PM

CHARGE CUSTOMERS...DO NOT PAY FROM THIS TICKET. THANK YOU.

NOTE 1: JOB:WENDELL AVENUJE



NET AMOUNT
14.40
TENDERED
CHANGE
CHECK NO.



(This Page Intentionally Left Blank)