FINAL CLOSURE REPORT

FOR

102 / 104 BURKHART STEET PROPERTY
SITKA ALASKA

BY

R&M ENGINEERING-KETCHIKAN, INC.
355 CARLANNA LAKE ROAD
KETCHIKAN, AK 99901

AUGUST 15, 2017

Site Investigation

An initial site inspection was performed by R&M Engineering in May of 2014. During this inspection visual observations noted numerous old fuel storage tanks (some with dark staining around them indicating spilled petroleum products), multiple old steel fuel storage barrels in varying states of decay, old chemical storage containers storing chemicals ranging from industrial degreasers to foam control agents for commercial fish processing, piles of old jerry jug fuel containers, pile of old tires, multiple broken down scrap vehicles ranging from cars to old excavators, a large pipe of scrap metal and construction debris with multiple old fuel storage vessels.

In general the visual inspection and soil sampling of the project site identified multiple areas of concern for high concentrations of hazardous materials spills.

After reviewing the initial soil sampling results a Site Characterization Work Plan was developed for the entire site and identified 6 individual cleanup areas where the levels of contamination were above the ADEC acceptable levels (see attached Cleanup Area Plan). Of these 6 areas 4 of them are located on the 104 Burkhart Street lot and the other two relatively smaller cleanup areas were located on the subject property 102 Burkhart.

Cleanup Activities

Surface Debris, Fuel Storage Barrels, Batteries, and Vehicle Removal

The initial cleanup activities for this project consisted of removing all of the miscellaneous debris from the entire site. All of the old batteries on site were picked up and delivered to the local Napa Store for recycling. All of the steel fuel drums were checked for contents and emptied and any items with remaining diesel fuel or gas were drained into a single mixed fuel and oil tank and burned in a waste fuel boiler. All the abandoned vehicles on site were drained of all oil and sent to the scrap metal yard with any other non-contaminated metal items. The remaining debris and contaminated metal items were delivered to the local waste transfer facility for disposal.

Contaminated Soil Removal

102 Burkhart Street Property

The work plan identified two cleanup Areas 5 and 6 on the subject property (102 Burkhart Street only). Cleanup of these two areas was conducted on April 30th – May 1st, 2015. In general the cleanup of this area consisted of first constructing a temporary containment area to store the contaminated material until shipping containers could be sent from Republic service to transport the contaminated material to their facility for disposal. Once the temporary containment area was completed excavation of the soils began. For this process the top 4"-6" were stripped from the surface and then PID sampling and visual inspections were made to determine if additional excavation was needed. Areas where the PID readings indicated high concentrations of hazardous materials were excavated deeper and additional PID meter readings were taken at the new depth. This process continued until the PID meter readings indicated that the concentrations of hazardous materials were non-detectable or below the ADEC limits. Once this was completed soil samples were taken for laboratory analysis in the areas where the PID meter reading indicated the highest concentrations and the excavated areas were then lined with an impermeable liner and backfilled with clean gravel until waiting for the laboratory results to get back. See Daily Inspection Report Dated May 1st, 2015 sample locations and depths. Upon reviewing the laboratory results (see SGS Report Dated May 26, 2015) it was noted that some additional excavation was needed.

On July 2nd, 2015 additional soil removal was performed on both cleanup Area 5 and 6 in order to remove the small pockets of remaining contaminated material for these sites. The cleanup procedures for the work performed on this day were consistent with the previous work. Again soil samples were taken and sent out for laboratory analysis (see SGS report dated 7-14-15).

The total estimated amount of material removed from cleanup Areas 5 and 6 is approximately 45 cubic yards. 40 cubic yards of this material was shipped to Republic Services in Washington State for disposal (see attached receipt). The remaining 5 cubic yards have been stockpiled in a containment cell on the 104 Burkhart Street property to be disposed of at a later date.

104 Burkhart Street Property

The work plan identified four cleanup Areas 1-4 on the subject property (104 Burkhart Street only). The cleanup of Areas 1&2 was conducted on May 9th – May 12th, 2015. In general the

cleanup of this area consisted of first constructing a temporary containment area to store the contaminated material until it could be disposed of at an ADEC approved facility. Once the temporary containment area was completed excavation of the soils began. The excavation of the contaminated material was started centered on the location where the original soil samples were taken for each of the cleanup these areas. Areas where the PID readings indicated high concentrations of hydrocarbons remaining in the soil were excavated deeper and additional PID meter readings were taken at the new depth. This process continued until the PID meter readings indicated that the concentrations of hazardous materials were non-detectable or below the ADEC limits or to a depth where groundwater was encountered. Once this was completed soil samples were taken for laboratory analysis in the areas where the PID meter reading indicated the highest concentrations. The laboratory analysis was returned and the confirmation samples showed levels below the ADEC cleanup levels except one localized location in clean up Area #1. Once confirmations samples confirmed that all soils with contaminated concentrations above the ADEC required cleanup levels had been removed, the excavation was filled with clean granular backfill. Additionally during this period cleanup began on Clean up Area #2 but was suspended due to poor weather conditions to ensure contaminated soils were not spread all over the site.

On May 13th, 2016 additional soil removal was performed on clean up Area #1 in the area where the previous soil sampling indicated the contamination levels were above ADEC limits and clean up Areas 2, 3&4 were excavated at that time. Again soil samples were taken and sent out for laboratory analysis (see SGS report dated 6-14-16). The laboratory test results showed all confirmation samples to be below the ADEC cleanup limits.

Finally ADEC requested that test holes 1-4 be sampled for PCB's, therefore on January 5th, 2017 a representative from R&M Engineering-Ketchikan, Inc, visited the site and collected soil samples from the bottom of each of the excavations of test holes 1-4. A review of test results for the PCB's form each of the test holes showed ND for all Polychlorinated Biphenyls.

Contaminated Soil Disposal

<u>102 Burkhart Street Property</u>

The total estimated amount of material removed from cleanup Areas 5 and 6 is approximately 45 cubic yards. 40 cubic yards of this material was shipped to Republic Services in Washington State for disposal (see attached receipt) . The remaining 5 cubic yards of have been stockpiled in a containment cell on the 104 Burkhart Street property to be disposed of on a later date.

<u>104 Burkhart Street Property</u>

The total estimated amount of material removed from cleanup Areas 1-4 is approximately 580 cubic yards. Approximately 60-70 cubic yards of this material was shipped to Republic Services in Washington State for disposal (see attached receipt) . The remaining 500+ cubic yards of contaminated soil was shipped to Bicknell Inc. in Juneau Alaska to be remediated.

Field Screening and Soil Sample Results

TCLP METALS TESTING 03/11/15 (102 &104 Burkhart Street)

Sample #	Cleanup Area	bottom or Sidewall	Depth (ft)	Measured Value (mg/L)	Comments
A-1-P	1	Bottom	3	Barium 0.235	All other ND
A-2-P	2	Bottom	3	Lead 0.162	All other ND
A-3-P	3	Bottom	3	Barium 0.241	All other ND
A-4-P	4	Bottom	3	Barium 0.183	All other ND
A-5-P	5	Bottom	3	Barium 0.238	All other ND
A-6-P	6	Bottom	3	Barium 0.183	All other ND

104 Burkhart Field Screening and Soil Sample Results

Soil Sample Results 3-12-2015 Sample Date (104 Burkhart Street)

Sample #	Cleanup Area	bottom or Sidewall	Depth FROM OG (ft)	TEST REQUESTED	Results
A-1-1C	1	Bottom	6	DRO/RRO	ND/ND
A-1-2C	1	Bottom	6	DRO/RRO	ND/ND
A-1-2D (2D)Duplicate	1	Bottom	6	DRO/RRO	ND/ND
A-1-3C	1	Sidewall	3	DRO/RRO	ND/ND
A-1-4C	1	Bottom	7	DRO/RRO	ND/ND
A-1-5C	1	Bottom	7	DRO/RRO	24.5/112
A-1-6C	1	Sidewall	3	DRO/RRO	ND/38
A-1-7C	1	Bottom	6	DRO/RRO/SVOC	ND/ND/ ND-ALL
A-1-8C	1	Bottom	6	DRO/RRO	ND/ND
A-1-9C	1	Bottom	6	DRO/RRO	ND/ND
A-1-10C	1	Bottom	6	DRO/RRO	104/211
A-1-11C	1	Sidewall	4	DRO/RRO	ND/ND
A-1-12C	1	Bottom	6	DRO/RRO/SVOC	29.8/25.3/ ND-MOST*1
A-1-12D (12c)Duplicate	1	Bottom	6	DRO/RRO	42.6/127
A-1-13C	1	Bottom	6	DRO/RRO	ND/ND
A-1-14C	1	Sidewall	3	DRO/RRO	562/2170
A-1-15C	1	Bottom	6	DRO/RRO	54.5/174

*1 bis(2-ethylhexyl)phthalate 0.668 – Below Method two cleanup level of 13 for migration to groundwater.

Note:

1) Mulitple field samples were taken during the soil removal process in order to determine the extent of the required soil removal. These field samples were not recorded other than the excavation cleanup Area 1 would be ended when the field sample results came back as non-detectible or below 125 mg/kg on the PID meter. Therefore significantly more laboratory samples were taken than normally required to ensure all of the contaminated soil was removed form cleanup Area 1.

2) Sample A-1-14C showed DRO levels Above the Method Two clean up level of 230 for groundwater migration therefore additional soil removal was performed in the area where this sample was taken on 5/14/2016

Field Screening Data 5/14/16

Sample #	Cleanup Area	bottom or Sidewall	Depth (ft)	Measured Value (mg/kg)	Comments
1	1	Bottom	2	354	Removed Additional material
2	1	Bottom	2	404	Removed Additional material
3	1	Bottom	3	101	
4	1	Bottom	3	147	Sample CA1-1
5	1	Bottom	3	83	
6	1	Sidewall	1.5	115	
7	1	Sidewall	1.5	63	
8	1	Sidewall	1	32	
9	1	Sidewall	1	59	
1	2	Bottom	2	43	
2	2	Bottom	2	33	
Sample #	Cleanup Area	bottom or Sidewall	Depth (ft)	Measured Value (mg/kg)	Comments
3	2	Bottom	2	87	
4	2	Bottom	1	587	Removed Soil form area
5	2	Sidewall	1	95	
6	2	Bottom	3	223	Removed Additional Soil
7	2	Bottom	3	97	
8	2	Sidewall	1.5	103	Sample CA2-1
9	2	Sidewall	1.5	87	
10	2	Bottom	3	43	
11	2	Bottom	3	68	
12	2	Sidewall	2	49	
13	2	Sidewall	2	62	
14	2	Bottom	3.5	57	Sample CA2-2

					After material was removed
1	3	Bottom	2	243	Removed additional Material
2	3	Bottom	3	73	Sample CA3-1
3	3	Bottom	3	52	
4	3	Sidewall	1.5	86	
5	3	Sidewall	1.5	63	
1	4	Bottom	4	137	Sample CA4-2
2	4	Bottom	4	96	
3	4	Sidewall	2	75	
4	4	Sidewall	2	102	Sample CA4-1

Soil Sample Results 5/14/16 Sample Date (104 Burkhart Street)

Sample ID	Cleanup Area	Sidewall or Bottom	Requested Test	Results (DRO/RRO)
CA1-1	1	Bottom	DRO/RRO/GRO	3.5/38.8/177
CA2-1	1	Sidewall	DRO/RRO/GRO	ND/ND/ND
CA2-2	2	Bottom	DRO/RRO/GRO	ND/ND/ND
CA2-2 DUPLICATE	2	Bottom	DRO/RRO/GRO	ND/ND/ND
CA3-1	3	Bottom	DRO/RRO/GRO	ND/ND/ND
CA4-1	4	Sidewall	DRO/RRO/GRO	ND/ND/ND
CA4-2	4	Bottom	DRO/RRO/GRO	ND/26.9/118

Note:

1. All samples were additionally tested for Semi-volatile Organics and Volatile Organics with none of the sample showing concentrations greater than their published Table B1 Method Two published limit for groundwater migration.

2. Per ADEC's request Test Holes 1-4 were additionally tested for PCB's. An R&M representative collected the samples on 1/5/17. SGS's Report Dated 1/13/17 shows Non-detected for all PCB's tested in each of the excavations.

102 Burkhart Field Screening and Soil Sample Results

Field Screening Data 5-1-15 (102 Burkhart Street)

Sample #	Cleanup Area	bottom or Sidewall	Depth (ft)	Measured Value (mg/kg)	Comments
1	5	Bottom	1	451	
2	5	Bottom	1	505	
3	5	Bottom	1	398	
4	5	Sidewall	1	405	
5	5	Sidewall	1	515	

6	5	Sidewall	1	426	
7	5	Bottom	2	240	
8	5	Bottom	2	326	Sample 5-2
9	5	Sidewall	1	152	Sample 5-4
10	5	Sidewall	1	110	Sample 5-3
11	5	Bottom	3	95	
12	5	Bottom	3	134	Sample 5-1
13	5	Sidewall	1	70	Sample 5-5
14	6	Bottom	.5	150	
15	6	Bottom	.5	205	Sample 6-1
16	6	Bottom	.5	140	
17	6	Bottom	.5	185	
18	6	Bottom	1	422	
19	6	Bottom	1	350	
20	6	Bottom	1	426	
21	6	Bottom	1	388	
22	6	Bottom	2	147	
23	6	Bottom	2	167	
24	6	Bottom	2	257	Sample 6-2
25	6	Bottom	2	216	
26	6	Bottom	.5	382	
27	6	Bottom	.5	368	
28	6	Bottom	.5	372	
29	6	Bottom	1	254	Sample 6-3
30	6	Bottom	1	230	
31	6	Bottom	1	241	
32	6	Bottom	.5	127	
Sample #	Cleanup Area	bottom or Sidewall	Depth (ft)	Measured Value (mg/kg)	Comments
33	6	Bottom	.5	85	
34	6	Bottom	.5	148	Sample 6-4
35	6	Bottom	.5	118	
36	6	Bottom	.5	524	
37	6	Bottom	.5	485	
38	6	Bottom	.5	504	
39	6	Bottom	1.5	128	
40	6	Bottom	1.5	110	
41	6	Bottom	1.5	147	Sample 6-5
42	6	Bottom	.5	243	Sample 6-6
43	6	Bottom	.5	196	
44	6	Bottom	.5	215	
45	6	Bottom	.5	534	
46	6	Bottom	.5	584	
47	6	Bottom	.5	520	

48	6	Bottom	2	442	
49	6	Bottom	2	469	
50	6	Bottom	2	415	
51	6	Bottom	3	158	Sample 6-7
52	6	Bottom	3	106	
53	6	Bottom	1	389	
54	6	Bottom	1	392	
55	6	Bottom	1	327	
56	6	Bottom	1.5	275	Sample 6-8
57	6	Bottom	1.5	243	

Soil Sample Results 5-1-15 Sample Date (102 Burkhart Street)

Sample ID	Cleanup area	Sidewall or Bottom	Depth from OG (ft)	Requested Test	Results (DRO/RRO)
5-1	5	Bottom	3	DRO/RRO	ND/ND
5-2	5	Bottom	2	DRO/RRO	342/1110
5-3	5	Sidewall	.5	DRO/RRO	ND/150
5-4	5	Sidewall	1	DRO/RRO	ND/263
5-5	5	Sidewall	1	DRO/RRO	27/99
6-1	6	Bottom	.5	DRO/RRO	ND/ND
6-2	6	Bottom	2	DRO/RRO	ND/ND
6-3	6	Bottom	1	DRO/RRO	304/1010
6-4	6	Bottom	.5	DRO/RRO	ND/ND
6-5	6	Bottom	1.5	DRO/RRO	ND/ND
6-6	6	Bottom	.5	DRO/RRO	109/365
6-7	6	Bottom	3	DRO/RRO	182/458
Sample ID	Cleanup area	Sidewall or Bottom	Depth from OG (ft)	Requested Test	Results (DRO/RRO)
6-8	6	Bottom	1.5	DRO/RRO	61/226
6-9	6	Sidewall	1	DRO/RRO	400/1190
6-10	6	Sidewall	1	DRO/RRO	ND/ND
6-12	6	Sidewall	1	DRO/RRO	31/101
6-12D	6	Sidewall	1	DRO/RRO	ND/44
6-13	6	Sidewall	1	DRO/RRO	186/679
6-14	6	Sidewall	1	DRO/RRO	67/261
6-15	6	Sidewall	1.5	DRO/RRO	ND/232

Note: Samples 5-2, 6-3, and 6-9 showed DRO levels higher than the 230 value published in ADEC's Method Two Cleanup Levels for groundwater migration in an area with over 40 inches of rain a year. Therefore additional soil was removed from the areas where these samples were taken on 7-2-15.

Soil Sample Results 7-2-15 Sample Date (102 Burkhart Street)

Sample ID	Cleanup Area	Sidewall or Bottom	Depth from OG (ft)	Requested Test	Results (DRO/RRO)
5-1	5	Bottom	3	GRO/DRO/RRO	ND/ND/ND
5-2	5	Sidewall	1.5	GRO/DRO/RRO	ND/ND/ND
6-1	6	Bottom	3	GRO/DRO/RRO	ND/ND/ND
6-2	6	Sidewall	1.5	GRO/DRO/RRO	ND/ND/ND

Note: All samples were additionally tested for PCB's, Semivolatile Organics, and Volatile Organics with no concentrations greater than ADEC's published Method Two Cleanup levels for ground water migration in areas with over 40 inches of rain a year.

Hazardous Materials Removal

On April 5th of this year a representative of R&M Engineering visited the site to test the contents of the existing fuel drums on site and do a preliminary inventory of the existing hazaredous waste items on site for removal.

The original investigation uncovered (9) 55 gallon drums of what appeared to be diesel fuel by the markings on the drums and a visual inspection of the contents being pumped out of the drums while sampling them.

In addition to the sampling the existing fuel drums R&M's representative also performed an initial inventory of the hazardous waste buckets on site. The initial inventory is listed below;

Waste Product Name	Product Manufacture	Type of Container	Contaner Size	# of Containers
Asphalt Petrol TY1	Imperial Coatings	Steel Bucket	5 gallon	30
Oil Based Paint	Various	Cans	1 gallon	25
Paint Thinner	Various	Various Contaners	10 gallon or less	6
Latex Paint	Various	Plastic and Steel buckets	5 gallon	5
450 Gym Finish Urethan	Hillyard	Steel Bucket	5 gallon	4
Gold Medalist wood seal Urethane Ester	Hillyard	Steel Bucket	5 gallon	3
EXIT-G (Solvent)	Pacific Chemical	Steel Bucket	5 gallon	3
Kleen-Up Solvent #437	Hillyard	Steel Bucket	5 gallon	3
SWEPP	Southwestern Petroleum	Steel Bucket	5 gallon	3

On May 3rd of this year R&M's representative met on site with a representative from Pegex's to remove and dispose of the hazardous materials listed above.

DOT Approved storage drums packed and ready to be shipped for disposal

Example of container labeling

After removing the first (35-40) five gallon buckets of hazardous materials for the site, it was noticed that some additional hazardous materials were behind the original materials and were unnoticed during the initial inventory, therefore these items were inventoried at this time and removed from the site for Disposal on May 26th, 2017 as follows:

Waste / Product Name	Product Manufacture	Container Type	Container Size	# of Containers
Aerosols	Various	Can	12 oz	20
Antifreeze	Zerex	Plastic	1 gallon	12
Antifreeze	Unknown	Plastic	1 gallon	10
Used Motor Oil	N/A	Plastic	5 gallon	10
Oil Based Paint	Various	Steel Bucket	5 gallon	5
Acrolon 218 HS Part A	Sherwin Williams	Steel Bucket	5 gallon	4
Muriatic Acid	True Value	Plastic	1 gallon	1
Aluminum Coating	Premium	Steel Bucket	5 gallon	1
Cleaning Solvent	Covbich-Williams Co	Steel Bucket	5 gallon	1
Exit-G Solvent	Pacific Chemicals	Steel Bucket	5 gallon	1
Flammable Debris and Oil	Unknown	Steel Drum	55 gallon	1

In addition to removing most of the hazardous materials from the site R&M's representative also contacted the City of Sitka Ports and Harbors department and made arrangements to have the contents of the (9) 55 gallon drums pumped out by the Sitka Ports and Harbors Department and shipped out to Emerald Service in Seattle with Sitka's standard shipping procedure. Upon getting confirmation that the contents within the existing drums was in fact diesel fuel Sitka Ports and Harbors pumped the fuel from the existing drums and sent it for processing to emerald services. See the test results and confirmation email.

Conclusion

Based on our observations of the site and review of the confirmation testing and manifest it is our opinion that all of the contaminated soils and hazardous materials have been removed from the site at this time.

Enclosures

A. Daily Inspection Reports
B. SGS Laboratory Analysis Reports
C. Receipts form Republic Services
D. Receipts from Bicknell Inc.
E. Hazardous Waste Manifests / Disposal Records
F. Fuel Drum Sampling Test Results and Removal Confirmation form Sitka Ports and Harbors.
G. Cleanup Area Plan

Submitted by:

Robert Badgett
R&M Engineering-Ketchikan, Inc.

5/25/17

APPENDIX A

R&M ENGINEERING-KETCHIKAN, INC.
ENGINEERS GEOLOGISTS SURVEYORS

355 CARLANNA LAKE ROAD, SUITE 200, KETCHIKAN, ALASKA 99901
PHONE (907) 225-7917 FAX (907) 225-3441 EMAIL RMMain@rmketchikan.com

Daily Field Report

Client: Patricia R. Bickar **Date:** May 1, 2015 Friday

Project: 102 & 104 Burkhart Street, Sitka Environmental Cleanup

Inspector(s): Guy Owens

Weather: Low 41°F, High 50°F, partly cloudy

Contractors personnel on-site: 1 hoe operator, 2 laborers
Equipment working on-site: 1 Excavator, 1 dump truck
R&M Equipment: Phocheck 1000 PID tester

Scope of days work: Obtain soil samples for PID analysis and sheen testing. Obtain confirmation samples from Area #5 & #6. Secure the excavations.

Narrative: On site at 06:30. Obtained 26 soil samples from locations within cleanup areas #5 & #6 and performed warm water headspace PID testing and warm water sheen testing to verify results from yesterday's continuous PID monitoring during soil removal activity. All results were negative or negligible for the PID and visually negative for warm water sheen. Confirmation samples (see following table) were obtained and packaged for shipment and a sample location map developed. Met with Kris Pearson (Coastal Excavation) and discussed disposition of the exposed excavations during the confirmation testing period and it was decided to line the excavations with 10mL impermeable membrane and backfill with clean 1.5" minus gravels. This would maintain the areas definition and allow for re-exposure, if necessary, for additional soils removal and reduce the potential of cross-contamination or risk of exposure.

Cleanup Area #5

Sample ID#	Sidewall or Bottom	Depth from OG	Test Required
5-1	Bottom	-3'	DRO/RRO; AK 102/103
5-2	Bottom	-2'	DRO/RRO; AK 102/103
5-3	Sidewall	-6"	DRO/RRO; AK 102/103
5-4	Sidewall	-1'	DRO/RRO; AK 102/103
5-5	Sidewall	-1'	DRO/RRO; AK 102/103

Cleanup Area #6

Sample ID#	Sidewall or Bottom	Depth from OG	Test Required
6-1	Bottom	-6"	DRO/RRO; AK 102/103
6-2	Bottom	-2'	DRO/RRO; AK 102/103
6-3	Bottom	-1'	DRO/RRO; AK 102/103
6-4	Bottom	-6"	DRO/RRO; AK 102/103
6-5	Bottom	-1.5'	DRO/RRO; AK 102/103
6-6	Bottom	-4"	DRO/RRO; AK 102/103
6-7	Bottom	-3'	DRO/RRO; AK 102/103
6-8	Bottom	-1.5'	DRO/RRO; AK 102/103
6-9	Sidewall	-1'	DRO/RRO; AK 102/103
6-10	Sidewall	-1'	DRO/RRO; AK 102/103
6-12	Sidewall	-1'	DRO/RRO; AK 102/103
6-12D	Sidewall	-1'	DRO/RRO; AK 102/103
6-13	Sidewall	-1'	DRO/RRO; AK 102/103
6-14	Sidewall	-1'	DRO/RRO; AK 102/103
6-15	Sidewall	-1.5'	DRO/RRO; AK 102/103

Estimated quantity of materials in secondary containment cell: 40 yards total; all removed from Cleanup Areas #5 & #6.

Material Testing Summary (see attached reports if any)
Inspector signature: Guy Owens

R&M ENGINEERING-KETCHIKAN, INC.
ENGINEERS GEOLOGISTS SURVEYORS

355 CARLANNA LAKE ROAD, SUITE 200, KETCHIKAN, ALASKA 99901
PHONE (907) 225-7917 FAX (907) 225-3441 EMAIL: RMMain@mketchikan.com

Daily Field Report

Client: Patricia R. Bickar

Date: April 30, 2015
Thursday

Project: 102 & 104 Burkhart Street, Sitka
Environmental Cleanup

Inspector(s): Guy Owens

Weather: Low 41°F, High 48°F, overcast am,
rain pm

Contractors personnel on-site: 1 hoe operator, 2 laborers
Equipment working on-site: 1 Excavator, 1 dump truck
R&M Equipment: Phocheck 1000 PID tester

Scope of days work: Construct a secondary containment cell. Excavating in front of shop; cleanup areas #5 and #6.

Narrative: Met on-site at 7:00am with Kris Pearson and Adam McLeod and discussed scope of today's work. Identified a location for a secondary containment cell and constructed it on Lot 104 adjacent to and at the east end of the existing containment. The cell was constructed 20' wide and 20' in length and left open at the west end to enable access with an 8 yd^3 dump truck. Initiated soils removal in area #6 by stripping off the top 4"-6" of visibly stained surface soil. PID continuous monitoring was done to identify areas within the stripped sections where readings indicated contamination still remained. In area #6 two distinct sections (see map) were stripped and within these sections three areas required additional subex based upon. It was noted that the soils consisted of a 2"-6" layer of crushed base type gravels overlying lenses and pockets of black soil varying in thickness from 1"-1'. It was also noted that PID readings were generally high only at the top interface of the black soil and tended to be low or negligible in the underlying soil. Underlying soils (fill) varied in type but consisted generally of either pit run or manufactured base type silty sandy gravels with a smattering of large stone to 1.5'. Three pockets of black soils, identified on the site map as A, B, C, indicated PID readings in the 500ppm-1095ppm range near the top interface and these areas were subex'd an additional 2'-3' with readings dropping to negligible in the underlying soils. At location C within Cleanup Area #6 the initial surface stripping exposed the highest concentration of VOC's which were noted olfactory and the PID readings were in the range of 800-1095ppm.
Area #5, the location of TP6, was stripped and the original test pit was re-exposed and slightly enlarged. PID readings in the bottom (-3' from OG) and of the sidewalls at this location were

negligible (<10ppm) and no staining was evident. All excavated soils were removed to the secondary containment cell.

Estimated quantity of materials in secondary containment cell: 40yards
Material Testing Summary (see attached reports if any)
Inspector signature: Guy Owens

Attachments/Photos (below if any)

	**Photograph No. 1** **Description:** Construction of a temporary containment cell at the northwest corner of Lot 104.
	**Photograph No. 2** **Description:** First of 5 loads placed in secondary containment.

	**Photograph No. 3** **Description:** View of area #6 stripping of surface stained soils.
	**Photograph No. 4** **Description:** Water collecting in area #6 post-cleanup showing no evidence of sheening.

	**Photograph No. 5** **Description:** View of Area #5. Original test pit exposed.
	**Photograph No. 6** **Description:** View of Area #6, Sec. #2

	**Photograph No. 7** **Description:** View of Area #6, Sec #1.
	**Photograph No. 8** **Description:** View of secondary containment cell constructed in the northeast corner of Lot 104.

Photograph No. 9

Description:
Another view of secondary containment cell.

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PHONE (907) 225-7917 FAX (907) 225-3441 EMAIL: RMMain@rmketchikan.com

Daily Field Report

Client: Patricia R. Bickar

Date: March 12, 2015
Thursday

Project: 102 & 104 Burkhart Street, Sitka
Environmental Cleanup

Inspector(s): Guy Owens

Weather: Low 18°F, High 41°F, snow.am,
rain pm

Contractors personnel on-site: 1 hoe operator, 1 driver
Equipment working on-site: 1 Excavator, 1 Loader, 1 dump truck
R&M Equipment: Phocheck 1000 PID tester

Scope of days work: Crew working on securing the soil containment cell damaged by high winds overnight.
Begin excavating in cleanup area #2 and then suspend operations due to inclement weather and risk of cross contamination.
R&M obtained representative soil samples from Cleanup Area #1 for confirmation testing for DRO/RRO and SVOC. Samples were sent to SGS Environmental Services in Anchorage, AK.

Narrative: Met on-site at 7:00am with contractor crew and discuss scope of todays work. Two excavations within area #2 were begun this morning. The first, at the location of test pit #7 was excavated to -7' which is just above groundwater elevation. This excavation was expanded to ≈ 20' x 10' to remove pockets of stained soils which were noted at -3 to -6 in the excavation walls. A second excavation was begun just east of this but was suspended due to weather.
Crew filling sandbags and placing on soil containment cover liner to stabilize against windy conditions. Crew also working to fence off the excavations in Areas #1 & 2. No additional investigative excavating to be done pending review of scope of work and results of confirmation sampling from area #1

Estimated quantity of materials in containment: 600 yards
Material Testing Summary (see attached reports if any)
Inspector signature: Guy Owens

Attachments/Photos (below if any)

	Photograph No. 1 **Description:**
	Photograph No. 2 **Description:**
	Photograph No. 3 **Description:**
	Photograph No. 4 **Description:**
	Photograph No. 5 **Description:**
	Photograph No. 6 **Description:**
	Photograph No. 7 **Description:**
	Photograph No. 8 **Description:**
	Photograph No. 9 **Description:**
	Photograph No. 10 **Description:**
	Photograph No. 11 **Description:**

R&M ENGINEERING-KETCHIKAN, INC.
ENGINEERS GEOLOGISTS SURVEYORS

355 CARLANNA LAKE ROAD, SUITE 200, KETCHIKAN, ALASKA 99901
PHONE (907) 225-7917 FAX (907) 225-3441 EMAIL RNMMain@rmketchikan.com

Daily Field Report

Client: Patricia R. Bickar

Date: March 11, 2015
Wednesday

Project: 102 & 104 Burkhart Street, Sitka
Environmental Cleanup

Inspector(s): Guy Owens

Weather: Low 18°F, High 41°F, snow.am,
rain pm

Contractors personnel on-site: 1 operator, 1 laborer
Equipment working on-site: 1 Excavator, 1 Loader
R&M Equipment: Phocheck 1000 PID tester

Scope of days work: Crew separating metal debris from concrete debris and loading in a dump truck for transfer to disposal. Observed and PID tested to ensure its' suitability for transfer off-site. The metal was removed to Sitkas recycle facility operated by Alaska Pacific and located at Sawmill Cove. The concrete was transferred to McGraws Granite Creek waste site for disposal. Begin excavating in cleanup area #2 and then suspend operations due to inclement weather and risk of cross contamination.
R&M obtained representative samples from each of the identified cleanup areas (1-6) for testing of metals (PCLP tests). Samples were sent to SGS Environmental Services.

Narrative: Met on-site at 7:00am with contractor crew and discuss scope of todays work. Continued investigation of the large amount of debris found yesterday with visual observation and PID testing while the crew sorted and loaded the materials for off-site transfer.
Then began excavating in cleanup area #2 targeting TP7. Work was suspended due to heavy rain. After discussion with Kris Pearson and Rob Badgett regarding soil containment and the lack of available space for stockpiling it was decided to get the transfer containers from Seattle in order to get the waste material generated to date off-site. The Seattle remediation facility has required that the materials be tested for PCLP metals. R&M obtained representative samples from each of the cleanup areas and shipped them to SGS Environmental Services.

Estimated quantity of materials in containment: 550 yards
Material Testing Summary (see attached reports if any)
Inspector signature: Guy Owens

Attachments/Photos (below if any)

	**Photograph No. 1** **Description: Loading waste concrete for off-site disposal.**
	**Photograph No. 2** **Description: Excavation in area #2. Showing dark-colored soil inclusions in the fill. PID tests of same yielded negative results.**
	Photograph No. 3 **Description:**
	Photograph No. 4 **Description:**

tr	**Photograph No. 5** **Description:**
	Photograph No. 6 **Description:**
	Photograph No. 7 **Description:**
	Photograph No. 8 **Description:**
	Photograph No. 9 **Description:**
	Photograph No. 10 **Description:**
	Photograph No. 11 **Description:**

R&M ENGINEERING-KETCHIKAN, INC.
ENGINEERS GEOLOGISTS SURVEYORS

355 CARLANNA LAKE ROAD, SUITE 200, KETCHIKAN, ALASKA 99901
PHONE (907) 225-7917 FAX (907) 225-3441 EMAIL RNMMain@rmketchikan.com

Daily Field Report

Client: Patricia R. Bickar **Date:** March 9, 2015

Project: 102 & 104 Burkhart Street, Sitka
Environmental Cleanup

Inspector(s): Guy Owens

Weather: Low 30°F, High 40°F, Partly Cloudy with light int. snow/rain.

Contractors personnel on-site: 1 operator, 2 laborers
Equipment working on-site: 1 Excavator, 1 Dump truck, 1 Loader
R&M Equipment: Photec 1000 PID tester

Scope of days work: Construct containment cell in NE corner of site. Move stockpiled contaminated soil from SE corner of site to the containment cell. Strip 1'-2' of original surface soils from under and around the stockpile location. Excavation of known contaminated soil in Cleanup Area #1 with transfer to containment cell. Cover cell for weather protection.

Narrative: Met on-site at 7:00am with Kris Pearson (Coastal Excavation) and crew and discussed scope of days work. Commenced construction of a soil containment cell along the inside of the chain-link fence at the northeast corner of the site. The bottom liner area was constructed 30' in width and 150' long. Berming was not done along the site side in order to allow for expansion of the cell as needed. The moisture content of the waste soils was low enough that no bleed-out is expected nor was any observed after placement. During its' construction I sampled the stockpile of scrapings which had been previously removed from the front (north side) of the building and had then been placed/integrated with existing stockpiles of debris and contaminated soils in Cleanup Area #1. Five representative samples were taken and tested with a PID meter using the poly bag headspace technique with results between 390ppm-975ppm. These test results in conjunction with visual observations indicated all the materials were contaminated or couldn't viably be separated and I directed their removal to the containment cell. In addition ≈ 1' of the original surface soils under and around the stockpiled material area was grubbed out and placed in the containment. Commenced excavating a 10'x 15'pit 5' in depth in the SE corner of Area #1. Performed PID testing of the soils which consisted of 2' of black semi-impermeable topsoil over 2' of brown highly permeable gravel fill over a gray D1 like soil. Testing indicated no volatiles in this area to 5' in depth and work was suspended to concentrate on containment cell closure for overnight weather protection to end the work shift. No confirmation sampling was done today.

Estimated quantity of materials in containment: 150 yds.
Material Testing Summary (see attached reports if any)

Inspector signature: Guy Owens

Attachments/Photos (below if any)

	**Photograph No. 1** **Description: View of scrapings stockpile in cleanup area #1**
	**Photograph No. 2** **Description: View of initial placement of waste on containment cell east end.**

	**Photograph No. 3** **Description: View of initial placement of waste on containment cell west end.**
	**Photograph No. 4** **Description: Site view of area in front of building looking towards the NW corner of site.**

	**Photograph No. 5** **<u>Description: Site view of area in front of building.</u>**
	**Photograph No. 6** **<u>Description: Site view along south property line looking east.</u>**

	**Photograph No. 7** **Description: Site view looking toward NE corner of site from the SE building corner.**
	**Photograph No. 8** **Description: View of containment cell along fenceline**

	**Photograph No. 9** **<u>Description: View of containment cell at east end.</u>**
	**Photograph No. 10** **<u>Description: Another view towards west end of cell</u>**

Photograph No. 11

Description: Constructing weather cover over containment cell.

SGS Ref.#	1170125003		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	01/13/2017 11:18
Project Name/#	Coastal Excavating- Patricia B	**Collected Date/Time**	01/05/2017 12:23
Client Sample ID	TH3	**Received Date/Time**	01/09/2017 8:07
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**
Location/Well ID	Lot 104		

Sample Remarks:

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Polychlorinated Biphenyls									
Aroclor-1016	ND	61.0	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1221	ND	244	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1232	ND	61.0	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1242	ND	61.0	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1248	ND	61.0	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1254	ND	61.0	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1260	ND	61.0	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Surrogates									
Decachlorobiphenyl (surr)	95		%	SW8082A	A	60-125	01/09/17	01/12/17	AEE
Solids									
Total Solids	81.1		%	SM21 2540G	A			01/09/17	ARS

SGS Ref.#	1170125004		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	01/13/2017 11:18
Project Name/#	Coastal Excavating- Patricia B	**Collected Date/Time**	01/05/2017 12:43
Client Sample ID	TH3-dup	**Received Date/Time**	01/09/2017 8:07
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**
Location/Well ID	Lot 104		

Sample Remarks:

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Polychlorinated Biphenyls									
Aroclor-1016	ND	60.5	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1221	ND	242	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1232	ND	60.5	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1242	ND	60.5	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1248	ND	60.5	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1254	ND	60.5	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1260	ND	60.5	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Surrogates									
Decachlorobiphenyl (surr)	99		%	SW8082A	A	60-125	01/09/17	01/12/17	AEE
Solids									
Total Solids	81.9		%	SM21 2540G	A			01/09/17	ARS

SGS Ref.#	1170125005		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	01/13/2017 11:18
Project Name/#	Coastal Excavating- Patricia B	**Collected Date/Time**	01/05/2017 11:49
Client Sample ID	TH4	**Received Date/Time**	01/09/2017 8:07
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**
Location/Well ID	Lot 104		

Sample Remarks:

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Polychlorinated Biphenyls									
Aroclor-1016	ND	55.5	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1221	ND	222	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1232	ND	55.5	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1242	ND	55.5	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1248	ND	55.5	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1254	ND	55.5	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Aroclor-1260	ND	55.5	ug/Kg	SW8082A	A		01/09/17	01/12/17	AEE
Surrogates									
Decachlorobiphenyl (surr)	102		%	SW8082A	A	60-125	01/09/17	01/12/17	AEE
Solids									
Total Solids	88.9		%	SM21 2540G	A			01/09/17	ARS

SGS

SGS North America Inc.
CHAIN OF CUSTODY RECORD

1170125

Locations Nationwide
Alaska Maryland
New Jersey New York
North Carolina Indiana
West Virgina Kentucky
www.us.sgs.com

Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.

Page 1 of 1

Section 1

CLIENT: R+M Engineers

CONTACT: Chaz Staunton PHONE NO:

PROJECT NAME: Patricia R Bickar 102 + 104 Burkhart St. PROJECT/ PWSID/ PERMIT#:

REPORTS TO: Robert Badgett E-MAIL:

INVOICE TO: R&M - Chaz S. QUOTE #: P.O. #: 142332

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Type C = COMP G = GRAB m = Multi Incremental Soils	Preservative: PCB's	REMARKS/ LOC ID
1A	TH 1	1/5/17	1403	Soil	1		✓	
2A	TH 2	1/5/17	1336	Soil	1		✓	
3A	TH 3	1/5/17	1223	Soil	1		✓	
4A	TH 3-dup	1/5/17	1243	Soil	1		✓	
5A	TH 4	1/5/17	1149	Soil	1		✓	
vlp 1/9/17								

Section 5

	Date	Time	
Relinquished By: (1)			Received By:
Relinquished By: (2)			Received By:
Relinquished By: (3)			Received By:
Relinquished By: (4)	1/9/17	08:07	Received For Laboratory By:

Section 4

DOD Project? Yes No

Cooler ID:

Data Deliverable Requirements:

Requested Turnaround Time and/or Special Instructions: Sampled by Coastal Excav. - Lot 104 - F. Roberts COC Filled out @ Lab added info per Chaz S (VLP)

Temp Blank °C: 1.9°C / D11 or Ambient [ ]

(See attached Sample Receipt Form)

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

(See attached Sample Receipt Form)

[ ] 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
[ ] 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

027 SIT 5389 7911 cooler 027-5389 7911

Shipper's Name and Address
R and M Engineering Inc
355 Carlanna Lake Road
Ketchikan, AK 99901
USA
Tel: 9072257917

Shipper's Account Number
27442063030
Customer's ID Number
15992

Not Negotiable
Air Waybill
Issued By
Alaska. AIR CARGO
P.O. BOX 68900 SEATTLE, WA 98168
800-225-2752 ALASKACARGO.COM

Consignee's Name and Address
SGS North America Inc
200 W Potter Drive
Anchorage, AK 99518
USA
Tel: 9075622343

Consignee's Account Number
27400215947

Also notify
N
Tel:

Issuing Carrier's Agent and City

Accounting Information
15992
R and M Engineering Inc
355 Carlanna Lake Road
Ketchikan, AK 99901
USA
1170125

Agent's IATA Code

Account No.

Airport of Departure (Addr. of First Carrier) and Requested Routing
Sitka
GoldStreak

To	By First Carrier	To / By	To / By	Currency		WT/VAL		Other		Declared Value For Carriage	Declared Value For Customs
ANC	Alaska Airlines			USD	PX	X		X		NVD	NCV

Airport of Destination	Flight/Date	Flight/Date	Amount of Insurance
Anchorage	AS 067/06		XXX

Handling Information
PERISHABLE CARGO (NON - FOOD)
NOA FOREST TAYLOR 562-2343

SCI

No of Pieces	Gross Weight	kg lb	Commodity Item No.	Chargeable Weight	Rate / Charge	Total	Nature and Quantity of Goods (Incl. Dimensions or Volume)
1	10.0	L		10.0		AS AGREED	SOIL SAMPLES Dims: 12 x 9 x11 x 1
1	10.0					AS AGREED	GSX PER Volume: 0.688

Prepaid	Weight Charge	Collect	Other Charges
AS AGREED			XBC 0.00

Valuation Charge

Tax

Total Other Charges Due Agent

Total Other Charges Due Carrier

Shipper certifies that the particulars on the face hereof are correct and that insofar as any part of the consignment contains dangerous goods, such part is properly described by name and is in proper condition for carriage by air according to the applicable Dangerous Goods Regulations. I consent to the inspection of this cargo.

For: R and M Engineering Inc

Signature of Shipper or his Agent

☐ THIS SHIPMENT DOES NOT CONTAIN DANGEROUS GOODS ☐ THIS SHIPMENT DOES CONTAIN DANGEROUS GOODS

Total Prepaid	Total Collect
AS AGREED	

06 Jan 2017 11:27 — Executed On (Date)
Sitka — at (Place)
Alaska Airlines — Signature of Issuing Carrier or its Agent

027-5389 7911

#370282

Alert Expeditors Inc.

Citywide Delivery • 440-3351
8421 Flamingo Drive • Anchorage, Alaska 99502

Date: 1917

From: L+M Eng

To: SOS

Collect ☐	Prepay ☐ Account ☐	Advance Charges ☐
Job #	PO#	

1 Carrier

5389 F711 — G5X

1170125

Shipped Signature

Received By:

Total Charge

SGS

e-SAMPLE RECEIPT FORM

1170125

Review Criteria	Y/N (yes/no)	Exceptions Noted below
		☐ exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location		ABSENT
COC accompanied samples?	N	COC filled out at the lab by VLP.
☐ **exemption permitted if chilled & collected <8hrs ago or chilling not required (i.e., waste, oil)		
Temperature blank compliant* (i.e., 0-6 °C after CF)?	Y	Cooler ID: 1 @ 1.9 °C Therm ID: D11
		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?		
If <0°C, were sample containers ice free?		
If samples received without a temperature blank, the "cooler temperature" will be documented in lieu of the temperature blank & "COOLER TEMP" will be noted to the right. In cases where neither a temp blank nor cooler temp can be obtained, note "ambient" or "chilled".		
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.		
		Note: Refer to form F-083 "Sample Guide" for hold times.
Were samples received within hold time?	Y	
Do samples match COC** (i.e.,sample IDs,dates/times collected)?	Y	
**Note: If times differ <1hr, record details & login per COC.		
Were analyses requested unambiguous?	Y	
		☐ ***Exemption permitted for metals (e.g.200.8/6020A).
Were proper containers (type/mass/volume/preservative***)used?	Y	
IF APPLICABLE		
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?		
Were all VOA vials free of headspace (i.e., bubbles ≤ 6mm)?		
Were all soil VOAs field extracted with MeOH+BFB?		

Note to Client: Any "no" answer above indicates non-compliance with standard procedures and may impact data quality.

Additional notes (if applicable):

Sample Containers and Preservatives

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1170125001-A	No Preservative Required	OK			
1170125002-A	No Preservative Required	OK			
1170125003-A	No Preservative Required	OK			
1170125004-A	No Preservative Required	OK			
1170125005-A	No Preservative Required	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.
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.

1/9/2017

Laboratory Analysis Report

Robert Badgett
R&M Engineering-Ketchikan, Inc.
355 Carlanna Lake Road
Ketchikan, AK 99901

Work Order:	1162454
	104 Burkhart St. Sitka
Client:	R&M Engineering-Ketchikan, Inc.
Report Date:	June 14, 2016

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) & UST-005 (CS) for ADEC and 2944.01 for DOD ELAP/ISO 17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020A, 7470A, 7471B, 8015C, 8021B, 8082A, 8260B, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). 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
D	The analyte concentration is the result of a dilution.
DF	Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
F	Indicates value that is greater than or equal to the DL
GT	Greater Than
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
JL	The analyte was positively identified, but the quantitation is a low estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
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
M	A matrix effect was present.
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
Q	QC parameter out of acceptance range.
R	Rejected
RPD	Relative Percent Difference
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.

SGS

SGS Ref.#	1162454001		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:00
Client Sample ID	CA1-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Sample Remarks:

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Fuels Department									
Gasoline Range Organics	3.52	2.91	mg/Kg	AK101	C		05/13/16	06/10/16	ST
Surrogates									
4-Bromofluorobenzene (surr)	87		%	AK101	C	50-150	05/13/16	06/10/16	ST
Semivolatile Organic Fuels Department									
Diesel Range Organics	38.8	22.7	mg/Kg	AK102	A		05/23/16	05/23/16	NLL
Residual Range Organics	177	22.7	mg/Kg	AK103	A		05/23/16	05/23/16	NLL
Surrogates									
5a Androstane (surr)	99.4		%	AK102	A	50-150	05/23/16	05/23/16	NLL
n-Triacontane-d62 (surr)	86		%	AK103	A	50-150	05/23/16	05/23/16	NLL
Volatile GC/MS									
1,1,1,2-Tetrachloroethane	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1,1-Trichloroethane	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1,2,2-Tetrachloroethane	ND	14.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1,2-Trichloroethane	ND	11.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1-Dichloroethane	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1-Dichloroethene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1-Dichloropropene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,3-Trichlorobenzene	ND	58.2	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,3-Trichloropropane	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,4-Trichlorobenzene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,4-Trimethylbenzene	ND	58.2	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dibromo-3-chloropropane	ND	116	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P

SGS

SGS Ref.#	1162454001		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:00
Client Sample ID	CA1-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile GC/MS									
1,2-Dibromoethane	ND	11.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dichlorobenzene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dichloroethane	ND	11.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dichloropropane	ND	11.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,3,5-Trimethylbenzene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,3-Dichlorobenzene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,3-Dichloropropane	ND	11.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,4-Dichlorobenzene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2,2-Dichloropropane	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2-Butanone (MEK)	ND	291	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2-Chlorotoluene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2-Hexanone	ND	291	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
4-Chlorotoluene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
4-Isopropyltoluene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
4-Methyl-2-pentanone (MIBK)	ND	291	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Benzene	ND	14.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromobenzene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromochloromethane	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromodichloromethane	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromoform	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromomethane	ND	233	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Carbon disulfide	ND	116	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Carbon tetrachloride	ND	14.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chlorobenzene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chloroethane	ND	233	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chloroform	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chloromethane	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
cis-1,2-Dichloroethene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
cis-1,3-Dichloropropene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Dibromochloromethane	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P

SGS

SGS Ref.#	1162454001		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:00
Client Sample ID	CA1-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile GC/MS									
Dibromomethane	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Dichlorodifluoromethane	ND	58.2	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Ethylbenzene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Freon-113	ND	116	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Hexachlorobutadiene	ND	58.2	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Isopropylbenzene (Cumene)	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Methylene chloride	ND	116	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Methyl-t-butyl ether	ND	116	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Naphthalene	ND	58.2	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
n-Butylbenzene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
n-Propylbenzene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
o-Xylene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
P & M -Xylene	ND	58.2	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
sec-Butylbenzene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Styrene	32.9	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
tert-Butylbenzene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Tetrachloroethene	ND	14.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Toluene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
trans-1,2-Dichloroethene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
trans-1,3-Dichloropropene	ND	29.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Trichloroethene	ND	14.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Trichlorofluoromethane	ND	58.2	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Vinyl acetate	ND	116	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Vinyl chloride	ND	11.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Xylenes (total)	ND	87.2	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Surrogates									
1,2-Dichloroethane-D4 (surr)	116		%	SW8260B	C	71-136	05/13/16	05/26/16	S.P
4-Bromofluorobenzene (surr)	98.3		%	SW8260B	C	55-151	05/13/16	05/26/16	S.P
Toluene-d8 (surr)	112		%	SW8260B	C	85-116	05/13/16	05/26/16	S.P

SGS Ref.#	1162454001		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:00
Client Sample ID	CA1-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
1,2,4-Trichlorobenzene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,2-Dichlorobenzene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,3-Dichlorobenzene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,4-Dichlorobenzene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1-Chloronaphthalene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1-Methylnaphthalene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4,5-Trichlorophenol	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4,6-Trichlorophenol	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dichlorophenol	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dimethylphenol	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dinitrophenol	ND	3.37	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dinitrotoluene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,6-Dichlorophenol	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,6-Dinitrotoluene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Chloronaphthalene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Chlorophenol	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methyl-4,6-dinitrophenol	ND	2.25	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methylnaphthalene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methylphenol (o-Cresol)	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Nitroaniline	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Nitrophenol	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3&4-Methylphenol (p&m-Cresol)	ND	1.12	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3,3-Dichlorobenzidine	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3-Nitroaniline	ND	0.562	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Bromophenyl-phenylether	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chloro-3-methylphenol	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chloroaniline	ND	0.562	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chlorophenyl-phenylether	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Nitroaniline	ND	3.37	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Nitrophenol	ND	1.12	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH

SGS

SGS Ref.#	1162454001		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:00
Client Sample ID	CA1-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
Acenaphthene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Acenaphthylene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Aniline	ND	2.25	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Anthracene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Azobenzene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo(a)Anthracene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[a]pyrene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[b]Fluoranthene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[g,h,i]perylene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[k]fluoranthene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzoic acid	ND	1.69	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzyl alcohol	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2chloro1methylethyl)Ether	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2-Chloroethoxy)methane	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2-Chloroethyl)ether	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
bis(2-Ethylhexyl)phthalate	0.438	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Butylbenzylphthalate	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Carbazole	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Chrysene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dibenzo[a,h]anthracene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dibenzofuran	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Diethylphthalate	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dimethylphthalate	0.292	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Di-n-butylphthalate	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
di-n-Octylphthalate	ND	0.562	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Fluoranthene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Fluorene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorobenzene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorobutadiene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorocyclopentadiene	ND	0.787	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH

SGS Ref.#	1162454001		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:00
Client Sample ID	CA1-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
Hexachloroethane	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Indeno[1,2,3-c,d] pyrene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Isophorone	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Naphthalene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Nitrobenzene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitrosodimethylamine	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitroso-di-n-propylamine	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitrosodiphenylamine	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Pentachlorophenol	ND	2.25	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Phenanthrene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Phenol	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Pyrene	ND	0.281	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Surrogates									
2,4,6-Tribromophenol (surr)	89.6		%	SW8270D	A	35-125	05/23/16	06/02/16	DSH
2-Fluorobiphenyl (surr)	75.9		%	SW8270D	A	44-115	05/23/16	06/02/16	DSH
2-Fluorophenol (surr)	64.4		%	SW8270D	A	35-115	05/23/16	06/02/16	DSH
Nitrobenzene-d5 (surr)	72.3		%	SW8270D	A	37-122	05/23/16	06/02/16	DSH
Phenol-d6 (surr)	69.6		%	SW8270D	A	33-122	05/23/16	06/02/16	DSH
Terphenyl-d14 (surr)	107		%	SW8270D	A	54-127	05/23/16	06/02/16	DSH
Solids									
Total Solids	87.0		%	SM21 2540G	A			05/20/16	RJA

SGS Ref.#	1162454002		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:15
Client Sample ID	CA2-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Sample Remarks:

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Fuels Department									
Gasoline Range Organics	ND	2.56	mg/Kg	AK101	C		05/13/16	06/10/16	ST
Surrogates									
4-Bromofluorobenzene (surr)	87.8		%	AK101	C	50-150	05/13/16	06/10/16	ST
Semivolatile Organic Fuels Department									
Diesel Range Organics	ND	21.9	mg/Kg	AK102	A		05/23/16	05/23/16	NLL
Residual Range Organics	ND	21.9	mg/Kg	AK103	A		05/23/16	05/23/16	NLL
Surrogates									
5a Androstane (surr)	87.3		%	AK102	A	50-150	05/23/16	05/23/16	NLL
n-Triacontane-d62 (surr)	90.8		%	AK103	A	50-150	05/23/16	05/23/16	NLL
Volatile GC/MS									
1,1,1,2-Tetrachloroethane	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1,1-Trichloroethane	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1,2,2-Tetrachloroethane	ND	12.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1,2-Trichloroethane	ND	10.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1-Dichloroethane	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1-Dichloroethene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1-Dichloropropene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,3-Trichlorobenzene	ND	51.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,3-Trichloropropane	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,4-Trichlorobenzene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,4-Trimethylbenzene	ND	51.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dibromo-3-chloropropane	ND	103	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P

SGS

SGS Ref.#	1162454002		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:15
Client Sample ID	CA2-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile GC/MS									
1,2-Dibromoethane	ND	10.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dichlorobenzene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dichloroethane	ND	10.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dichloropropane	ND	10.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,3,5-Trimethylbenzene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,3-Dichlorobenzene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,3-Dichloropropane	ND	10.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,4-Dichlorobenzene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2,2-Dichloropropane	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2-Butanone (MEK)	ND	256	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2-Chlorotoluene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2-Hexanone	ND	256	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
4-Chlorotoluene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
4-Isopropyltoluene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
4-Methyl-2-pentanone (MIBK)	ND	256	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Benzene	ND	12.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromobenzene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromochloromethane	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromodichloromethane	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromoform	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromomethane	ND	205	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Carbon disulfide	ND	103	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Carbon tetrachloride	ND	12.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chlorobenzene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chloroethane	ND	205	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chloroform	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chloromethane	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
cis-1,2-Dichloroethene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
cis-1,3-Dichloropropene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Dibromochloromethane	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P

SGS Ref.#	1162454002		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:15
Client Sample ID	CA2-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile GC/MS									
Dibromomethane	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Dichlorodifluoromethane	ND	51.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Ethylbenzene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Freon-113	ND	103	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Hexachlorobutadiene	ND	51.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Isopropylbenzene (Cumene)	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Methylene chloride	ND	103	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Methyl-t-butyl ether	ND	103	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Naphthalene	ND	51.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
n-Butylbenzene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
n-Propylbenzene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
o-Xylene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
P & M -Xylene	ND	51.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
sec-Butylbenzene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Styrene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
tert-Butylbenzene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Tetrachloroethene	ND	12.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Toluene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
trans-1,2-Dichloroethene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
trans-1,3-Dichloropropene	ND	25.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Trichloroethene	ND	12.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Trichlorofluoromethane	ND	51.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Vinyl acetate	ND	103	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Vinyl chloride	ND	10.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Xylenes (total)	ND	76.9	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Surrogates									
1,2-Dichloroethane-D4 (surr)	116		%	SW8260B	C	71-136	05/13/16	05/26/16	S.P
4-Bromofluorobenzene (surr)	107		%	SW8260B	C	55-151	05/13/16	05/26/16	S.P
Toluene-d8 (surr)	112		%	SW8260B	C	85-116	05/13/16	05/26/16	S.P

SGS

SGS Ref.#	1162454002		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:15
Client Sample ID	CA2-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
1,2,4-Trichlorobenzene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,2-Dichlorobenzene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,3-Dichlorobenzene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,4-Dichlorobenzene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1-Chloronaphthalene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1-Methylnaphthalene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4,5-Trichlorophenol	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4,6-Trichlorophenol	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dichlorophenol	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dimethylphenol	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dinitrophenol	ND	3.32	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dinitrotoluene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,6-Dichlorophenol	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,6-Dinitrotoluene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Chloronaphthalene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Chlorophenol	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methyl-4,6-dinitrophenol	ND	2.21	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methylnaphthalene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methylphenol (o-Cresol)	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Nitroaniline	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Nitrophenol	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3&4-Methylphenol (p&m-Cresol)	ND	1.11	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3,3-Dichlorobenzidine	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3-Nitroaniline	ND	0.553	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Bromophenyl-phenylether	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chloro-3-methylphenol	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chloroaniline	ND	0.553	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chlorophenyl-phenylether	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Nitroaniline	ND	3.32	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Nitrophenol	ND	1.11	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH

SGS

SGS Ref.#	1162454002		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:15
Client Sample ID	CA2-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
Acenaphthene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Acenaphthylene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Aniline	ND	2.21	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Anthracene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Azobenzene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo(a)Anthracene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[a]pyrene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[b]Fluoranthene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[g,h,i]perylene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[k]fluoranthene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzoic acid	ND	1.66	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzyl alcohol	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2chloro1methylethyl)Ether	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2-Chloroethoxy)methane	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2-Chloroethyl)ether	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
bis(2-Ethylhexyl)phthalate	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Butylbenzylphthalate	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Carbazole	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Chrysene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dibenzo[a,h]anthracene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dibenzofuran	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Diethylphthalate	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dimethylphthalate	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Di-n-butylphthalate	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
di-n-Octylphthalate	ND	0.553	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Fluoranthene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Fluorene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorobenzene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorobutadiene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorocyclopentadiene	ND	0.775	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH

SGS

SGS Ref.#	1162454002		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:15
Client Sample ID	CA2-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
Hexachloroethane	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Indeno[1,2,3-c,d] pyrene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Isophorone	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Naphthalene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Nitrobenzene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitrosodimethylamine	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitroso-di-n-propylamine	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitrosodiphenylamine	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Pentachlorophenol	ND	2.21	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Phenanthrene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Phenol	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Pyrene	ND	0.277	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Surrogates									
2,4,6-Tribromophenol (surr)	88.7		%	SW8270D	A	35-125	05/23/16	06/02/16	DSH
2-Fluorobiphenyl (surr)	79.1		%	SW8270D	A	44-115	05/23/16	06/02/16	DSH
2-Fluorophenol (surr)	71.1		%	SW8270D	A	35-115	05/23/16	06/02/16	DSH
Nitrobenzene-d5 (surr)	78.5		%	SW8270D	A	37-122	05/23/16	06/02/16	DSH
Phenol-d6 (surr)	76.3		%	SW8270D	A	33-122	05/23/16	06/02/16	DSH
Terphenyl-d14 (surr)	104		%	SW8270D	A	54-127	05/23/16	06/02/16	DSH
Solids									
Total Solids	90.2		%	SM21 2540G	A			05/20/16	RJA

SGS

SGS Ref.#	1162454003		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:30
Client Sample ID	CA2-2	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Sample Remarks:

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Fuels Department									
Gasoline Range Organics	ND	1.98	mg/Kg	AK101	C		05/13/16	06/10/16	ST
Surrogates									
4-Bromofluorobenzene (surr)	94.1		%	AK101	C	50-150	05/13/16	06/10/16	ST
Semivolatile Organic Fuels Department									
Diesel Range Organics	ND	21.9	mg/Kg	AK102	A		05/23/16	05/23/16	NLL
Residual Range Organics	ND	21.9	mg/Kg	AK103	A		05/23/16	05/23/16	NLL
Surrogates									
5a Androstane (surr)	90.7		%	AK102	A	50-150	05/23/16	05/23/16	NLL
n-Triacontane-d62 (surr)	91.4		%	AK103	A	50-150	05/23/16	05/23/16	NLL
Volatile GC/MS									
1,1,1,2-Tetrachloroethane	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1,1-Trichloroethane	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1,2,2-Tetrachloroethane	ND	9.88	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1,2-Trichloroethane	ND	7.91	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1-Dichloroethane	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1-Dichloroethene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1-Dichloropropene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,3-Trichlorobenzene	ND	39.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,3-Trichloropropane	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,4-Trichlorobenzene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,4-Trimethylbenzene	ND	39.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dibromo-3-chloropropane	ND	79.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P

SGS

SGS Ref.#	1162454003		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:30
Client Sample ID	CA2-2	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile GC/MS									
1,2-Dibromoethane	ND	7.91	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dichlorobenzene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dichloroethane	ND	7.91	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dichloropropane	ND	7.91	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,3,5-Trimethylbenzene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,3-Dichlorobenzene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,3-Dichloropropane	ND	7.91	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,4-Dichlorobenzene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2,2-Dichloropropane	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2-Butanone (MEK)	ND	198	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2-Chlorotoluene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2-Hexanone	ND	198	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
4-Chlorotoluene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
4-Isopropyltoluene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
4-Methyl-2-pentanone (MIBK)	ND	198	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Benzene	ND	9.88	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromobenzene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromochloromethane	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromodichloromethane	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromoform	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromomethane	ND	158	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Carbon disulfide	ND	79.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Carbon tetrachloride	ND	9.88	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chlorobenzene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chloroethane	ND	158	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chloroform	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chloromethane	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
cis-1,2-Dichloroethene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
cis-1,3-Dichloropropene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Dibromochloromethane	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P

SGS

SGS Ref.#	1162454003		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:30
Client Sample ID	CA2-2	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile GC/MS									
Dibromomethane	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Dichlorodifluoromethane	ND	39.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Ethylbenzene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Freon-113	ND	79.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Hexachlorobutadiene	ND	39.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Isopropylbenzene (Cumene)	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Methylene chloride	ND	79.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Methyl-t-butyl ether	ND	79.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Naphthalene	ND	39.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
n-Butylbenzene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
n-Propylbenzene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
o-Xylene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
P & M -Xylene	ND	39.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
sec-Butylbenzene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Styrene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
tert-Butylbenzene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Tetrachloroethene	ND	9.88	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Toluene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
trans-1,2-Dichloroethene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
trans-1,3-Dichloropropene	ND	19.8	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Trichloroethene	ND	9.88	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Trichlorofluoromethane	ND	39.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Vinyl acetate	ND	79.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Vinyl chloride	ND	7.91	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Xylenes (total)	ND	59.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Surrogates									
1,2-Dichloroethane-D4 (surr)	114		%	SW8260B	C	71-136	05/13/16	05/26/16	S.P
4-Bromofluorobenzene (surr)	108		%	SW8260B	C	55-151	05/13/16	05/26/16	S.P
Toluene-d8 (surr)	113		%	SW8260B	C	85-116	05/13/16	05/26/16	S.P

SGS

SGS Ref.#	1162454003		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:30
Client Sample ID	CA2-2	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
1,2,4-Trichlorobenzene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,2-Dichlorobenzene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,3-Dichlorobenzene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,4-Dichlorobenzene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1-Chloronaphthalene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1-Methylnaphthalene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4,5-Trichlorophenol	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4,6-Trichlorophenol	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dichlorophenol	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dimethylphenol	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dinitrophenol	ND	3.26	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dinitrotoluene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,6-Dichlorophenol	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,6-Dinitrotoluene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Chloronaphthalene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Chlorophenol	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methyl-4,6-dinitrophenol	ND	2.17	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methylnaphthalene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methylphenol (o-Cresol)	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Nitroaniline	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Nitrophenol	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3&4-Methylphenol (p&m-Cresol)	ND	1.09	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3,3-Dichlorobenzidine	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3-Nitroaniline	ND	0.543	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Bromophenyl-phenylether	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chloro-3-methylphenol	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chloroaniline	ND	0.543	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chlorophenyl-phenylether	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Nitroaniline	ND	3.26	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Nitrophenol	ND	1.09	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH

SGS

SGS Ref.#	1162454003		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:30
Client Sample ID	CA2-2	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
Acenaphthene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Acenaphthylene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Aniline	ND	2.17	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Anthracene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Azobenzene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo(a)Anthracene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[a]pyrene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[b]Fluoranthene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[g,h,i]perylene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[k]fluoranthene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzoic acid	ND	1.63	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzyl alcohol	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2chloro1methylethyl)Ether	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2-Chloroethoxy)methane	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2-Chloroethyl)ether	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
bis(2-Ethylhexyl)phthalate	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Butylbenzylphthalate	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Carbazole	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Chrysene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dibenzo[a,h]anthracene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dibenzofuran	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Diethylphthalate	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dimethylphthalate	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Di-n-butylphthalate	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
di-n-Octylphthalate	ND	0.543	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Fluoranthene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Fluorene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorobenzene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorobutadiene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorocyclopentadiene	ND	0.760	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH

SGS

SGS Ref.#	1162454003		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:30
Client Sample ID	CA2-2	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
Hexachloroethane	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Indeno[1,2,3-c,d] pyrene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Isophorone	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Naphthalene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Nitrobenzene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitrosodimethylamine	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitroso-di-n-propylamine	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitrosodiphenylamine	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Pentachlorophenol	ND	2.17	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Phenanthrene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Phenol	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Pyrene	ND	0.272	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Surrogates									
2,4,6-Tribromophenol (surr)	76.8		%	SW8270D	A	35-125	05/23/16	06/02/16	DSH
2-Fluorobiphenyl (surr)	66.8		%	SW8270D	A	44-115	05/23/16	06/02/16	DSH
2-Fluorophenol (surr)	60.9		%	SW8270D	A	35-115	05/23/16	06/02/16	DSH
Nitrobenzene-d5 (surr)	68.7		%	SW8270D	A	37-122	05/23/16	06/02/16	DSH
Phenol-d6 (surr)	65.8		%	SW8270D	A	33-122	05/23/16	06/02/16	DSH
Terphenyl-d14 (surr)	96.2		%	SW8270D	A	54-127	05/23/16	06/02/16	DSH
Solids									
Total Solids	90.7		%	SM21 2540G	A			05/20/16	RJA

SGS Ref.#	1162454004		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:45
Client Sample ID	CA2-2 DUPLICATE	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Sample Remarks:

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Fuels Department									
Gasoline Range Organics	ND	2.39	mg/Kg	AK101	C		05/13/16	06/10/16	ST
Surrogates									
4-Bromofluorobenzene (surr)	89.8		%	AK101	C	50-150	05/13/16	06/10/16	ST
Semivolatile Organic Fuels Department									
Diesel Range Organics	ND	21.8	mg/Kg	AK102	A		05/23/16	05/23/16	NLL
Residual Range Organics	ND	21.8	mg/Kg	AK103	A		05/23/16	05/23/16	NLL
Surrogates									
5a Androstane (surr)	99.7		%	AK102	A	50-150	05/23/16	05/23/16	NLL
n-Triacontane-d62 (surr)	101		%	AK103	A	50-150	05/23/16	05/23/16	NLL
Volatile GC/MS									
1,1,1,2-Tetrachloroethane	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,1,1-Trichloroethane	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,1,2,2-Tetrachloroethane	ND	12.0	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,1,2-Trichloroethane	ND	9.56	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,1-Dichloroethane	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,1-Dichloroethene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,1-Dichloropropene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,2,3-Trichlorobenzene	ND	47.8	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,2,3-Trichloropropane	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,2,4-Trichlorobenzene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,2,4-Trimethylbenzene	ND	47.8	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,2-Dibromo-3-chloropropane	ND	95.6	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P

SGS

SGS Ref.#	1162454004		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:45
Client Sample ID	CA2-2 DUPLICATE	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile GC/MS									
1,2-Dibromoethane	ND	9.56	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,2-Dichlorobenzene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,2-Dichloroethane	ND	9.56	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,2-Dichloropropane	ND	9.56	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,3,5-Trimethylbenzene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,3-Dichlorobenzene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,3-Dichloropropane	ND	9.56	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
1,4-Dichlorobenzene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
2,2-Dichloropropane	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
2-Butanone (MEK)	ND	239	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
2-Chlorotoluene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
2-Hexanone	ND	239	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
4-Chlorotoluene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
4-Isopropyltoluene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
4-Methyl-2-pentanone (MIBK)	ND	239	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Benzene	ND	12.0	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Bromobenzene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Bromochloromethane	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Bromodichloromethane	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Bromoform	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Bromomethane	ND	191	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Carbon disulfide	ND	95.6	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Carbon tetrachloride	ND	12.0	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Chlorobenzene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Chloroethane	ND	191	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Chloroform	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Chloromethane	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
cis-1,2-Dichloroethene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
cis-1,3-Dichloropropene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Dibromochloromethane	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P

SGS

SGS Ref.#	1162454004		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:45
Client Sample ID	CA2-2 DUPLICATE	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile GC/MS									
Dibromomethane	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Dichlorodifluoromethane	ND	47.8	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Ethylbenzene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Freon-113	ND	95.6	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Hexachlorobutadiene	ND	47.8	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Isopropylbenzene (Cumene)	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Methylene chloride	ND	95.6	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Methyl-t-butyl ether	ND	95.6	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Naphthalene	ND	47.8	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
n-Butylbenzene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
n-Propylbenzene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
o-Xylene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
P & M -Xylene	ND	47.8	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
sec-Butylbenzene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Styrene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
tert-Butylbenzene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Tetrachloroethene	ND	12.0	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Toluene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
trans-1,2-Dichloroethene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
trans-1,3-Dichloropropene	ND	23.9	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Trichloroethene	ND	12.0	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Trichlorofluoromethane	ND	47.8	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Vinyl acetate	ND	95.6	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Vinyl chloride	ND	9.56	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Xylenes (total)	ND	71.7	ug/Kg	SW8260B	C		05/13/16	05/27/16	S.P
Surrogates									
1,2-Dichloroethane-D4 (surr)	113		%	SW8260B	C	71-136	05/13/16	05/27/16	S.P
4-Bromofluorobenzene (surr)	105		%	SW8260B	C	55-151	05/13/16	05/27/16	S.P
Toluene-d8 (surr)	108		%	SW8260B	C	85-116	05/13/16	05/27/16	S.P

SGS

SGS Ref.#	1162454004		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:45
Client Sample ID	CA2-2 DUPLICATE	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
1,2,4-Trichlorobenzene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,2-Dichlorobenzene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,3-Dichlorobenzene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,4-Dichlorobenzene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1-Chloronaphthalene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1-Methylnaphthalene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4,5-Trichlorophenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4,6-Trichlorophenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dichlorophenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dimethylphenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dinitrophenol	ND	3.25	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dinitrotoluene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,6-Dichlorophenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,6-Dinitrotoluene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Chloronaphthalene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Chlorophenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methyl-4,6-dinitrophenol	ND	2.17	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methylnaphthalene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methylphenol (o-Cresol)	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Nitroaniline	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Nitrophenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3&4-Methylphenol (p&m-Cresol)	ND	1.08	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3,3-Dichlorobenzidine	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3-Nitroaniline	ND	0.542	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Bromophenyl-phenylether	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chloro-3-methylphenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chloroaniline	ND	0.542	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chlorophenyl-phenylether	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Nitroaniline	ND	3.25	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Nitrophenol	ND	1.08	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH

SGS

SGS Ref.#	1162454004		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:45
Client Sample ID	CA2-2 DUPLICATE	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
Acenaphthene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Acenaphthylene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Aniline	ND	2.17	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Anthracene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Azobenzene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo(a)Anthracene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[a]pyrene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[b]Fluoranthene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[g,h,i]perylene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[k]fluoranthene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzoic acid	ND	1.63	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzyl alcohol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2chloro1methylethyl)Ether	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2-Chloroethoxy)methane	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2-Chloroethyl)ether	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
bis(2-Ethylhexyl)phthalate	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Butylbenzylphthalate	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Carbazole	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Chrysene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dibenzo[a,h]anthracene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dibenzofuran	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Diethylphthalate	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dimethylphthalate	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Di-n-butylphthalate	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
di-n-Octylphthalate	ND	0.542	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Fluoranthene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Fluorene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorobenzene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorobutadiene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorocyclopentadiene	ND	0.759	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH

SGS

SGS Ref.#	1162454004		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 14:45
Client Sample ID	CA2-2 DUPLICATE	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
Hexachloroethane	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Indeno[1,2,3-c,d] pyrene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Isophorone	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Naphthalene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Nitrobenzene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitrosodimethylamine	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitroso-di-n-propylamine	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitrosodiphenylamine	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Pentachlorophenol	ND	2.17	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Phenanthrene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Phenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Pyrene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Surrogates									
2,4,6-Tribromophenol (surr)	74.2		%	SW8270D	A	35-125	05/23/16	06/02/16	DSH
2-Fluorobiphenyl (surr)	64.3		%	SW8270D	A	44-115	05/23/16	06/02/16	DSH
2-Fluorophenol (surr)	57.6		%	SW8270D	A	35-115	05/23/16	06/02/16	DSH
Nitrobenzene-d5 (surr)	63		%	SW8270D	A	37-122	05/23/16	06/02/16	DSH
Phenol-d6 (surr)	61.6		%	SW8270D	A	33-122	05/23/16	06/02/16	DSH
Terphenyl-d14 (surr)	108		%	SW8270D	A	54-127	05/23/16	06/02/16	DSH
Solids									
Total Solids	91.2		%	SM21 2540G	A			05/20/16	RJA

SGS Ref.#	1162454005		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 15:15
Client Sample ID	CA3-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Sample Remarks:

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Fuels Department									
Gasoline Range Organics	ND	2.07	mg/Kg	AK101	C		05/13/16	06/10/16	ST
Surrogates									
4-Bromofluorobenzene (surr)	78.2		%	AK101	C	50-150	05/13/16	06/10/16	ST
Semivolatile Organic Fuels Department									
Diesel Range Organics	ND	21.5	mg/Kg	AK102	A		05/23/16	05/23/16	NLL
Residual Range Organics	ND	21.5	mg/Kg	AK103	A		05/23/16	05/23/16	NLL
Surrogates									
5a Androstane (surr)	90.8		%	AK102	A	50-150	05/23/16	05/23/16	NLL
n-Triacontane-d62 (surr)	94		%	AK103	A	50-150	05/23/16	05/23/16	NLL
Volatile GC/MS									
1,1,1,2-Tetrachloroethane	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1,1-Trichloroethane	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1,2,2-Tetrachloroethane	ND	10.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1,2-Trichloroethane	ND	8.27	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1-Dichloroethane	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1-Dichloroethene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1-Dichloropropene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,3-Trichlorobenzene	ND	41.4	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,3-Trichloropropane	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,4-Trichlorobenzene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,4-Trimethylbenzene	ND	41.4	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dibromo-3-chloropropane	ND	82.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P

SGS

SGS Ref.#	1162454005		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 15:15
Client Sample ID	CA3-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile GC/MS									
1,2-Dibromoethane	ND	8.27	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dichlorobenzene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dichloroethane	ND	8.27	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dichloropropane	ND	8.27	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,3,5-Trimethylbenzene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,3-Dichlorobenzene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,3-Dichloropropane	ND	8.27	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,4-Dichlorobenzene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2,2-Dichloropropane	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2-Butanone (MEK)	ND	207	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2-Chlorotoluene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2-Hexanone	ND	207	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
4-Chlorotoluene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
4-Isopropyltoluene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
4-Methyl-2-pentanone (MIBK)	ND	207	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Benzene	ND	10.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromobenzene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromochloromethane	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromodichloromethane	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromoform	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromomethane	ND	165	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Carbon disulfide	ND	82.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Carbon tetrachloride	ND	10.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chlorobenzene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chloroethane	ND	165	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chloroform	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chloromethane	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
cis-1,2-Dichloroethene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
cis-1,3-Dichloropropene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Dibromochloromethane	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P

SGS

SGS Ref.#	1162454005		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 15:15
Client Sample ID	CA3-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile GC/MS									
Dibromomethane	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Dichlorodifluoromethane	ND	41.4	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Ethylbenzene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Freon-113	ND	82.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Hexachlorobutadiene	ND	41.4	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Isopropylbenzene (Cumene)	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Methylene chloride	ND	82.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Methyl-t-butyl ether	ND	82.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Naphthalene	ND	41.4	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
n-Butylbenzene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
n-Propylbenzene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
o-Xylene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
P & M -Xylene	ND	41.4	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
sec-Butylbenzene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Styrene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
tert-Butylbenzene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Tetrachloroethene	ND	10.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Toluene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
trans-1,2-Dichloroethene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
trans-1,3-Dichloropropene	ND	20.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Trichloroethene	ND	10.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Trichlorofluoromethane	ND	41.4	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Vinyl acetate	ND	82.7	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Vinyl chloride	ND	8.27	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Xylenes (total)	ND	62.0	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Surrogates									
1,2-Dichloroethane-D4 (surr)	113		%	SW8260B	C	71-136	05/13/16	05/26/16	S.P
4-Bromofluorobenzene (surr)	103		%	SW8260B	C	55-151	05/13/16	05/26/16	S.P
Toluene-d8 (surr)	112		%	SW8260B	C	85-116	05/13/16	05/26/16	S.P

SGS

SGS Ref.#	1162454005		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 15:15
Client Sample ID	CA3-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
1,2,4-Trichlorobenzene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,2-Dichlorobenzene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,3-Dichlorobenzene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,4-Dichlorobenzene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1-Chloronaphthalene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1-Methylnaphthalene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4,5-Trichlorophenol	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4,6-Trichlorophenol	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dichlorophenol	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dimethylphenol	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dinitrophenol	ND	3.24	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dinitrotoluene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,6-Dichlorophenol	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,6-Dinitrotoluene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Chloronaphthalene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Chlorophenol	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methyl-4,6-dinitrophenol	ND	2.16	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methylnaphthalene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methylphenol (o-Cresol)	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Nitroaniline	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Nitrophenol	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3&4-Methylphenol (p&m-Cresol)	ND	1.08	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3,3-Dichlorobenzidine	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3-Nitroaniline	ND	0.541	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Bromophenyl-phenylether	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chloro-3-methylphenol	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chloroaniline	ND	0.541	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chlorophenyl-phenylether	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Nitroaniline	ND	3.24	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Nitrophenol	ND	1.08	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH

SGS

SGS Ref.#	1162454005		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 15:15
Client Sample ID	CA3-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
Acenaphthene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Acenaphthylene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Aniline	ND	2.16	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Anthracene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Azobenzene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo(a)Anthracene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[a]pyrene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[b]Fluoranthene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[g,h,i]perylene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[k]fluoranthene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzoic acid	ND	1.62	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzyl alcohol	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2chloro1methylethyl)Ether	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2-Chloroethoxy)methane	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2-Chloroethyl)ether	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
bis(2-Ethylhexyl)phthalate	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Butylbenzylphthalate	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Carbazole	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Chrysene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dibenzo[a,h]anthracene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dibenzofuran	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Diethylphthalate	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dimethylphthalate	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Di-n-butylphthalate	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
di-n-Octylphthalate	ND	0.541	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Fluoranthene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Fluorene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorobenzene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorobutadiene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorocyclopentadiene	ND	0.757	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH

SGS Ref.#	1162454005		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 15:15
Client Sample ID	CA3-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
Hexachloroethane	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Indeno[1,2,3-c,d] pyrene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Isophorone	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Naphthalene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Nitrobenzene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitrosodimethylamine	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitroso-di-n-propylamine	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitrosodiphenylamine	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Pentachlorophenol	ND	2.16	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Phenanthrene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Phenol	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Pyrene	ND	0.270	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Surrogates									
2,4,6-Tribromophenol (surr)	80.6		%	SW8270D	A	35-125	05/23/16	06/02/16	DSH
2-Fluorobiphenyl (surr)	82.3		%	SW8270D	A	44-115	05/23/16	06/02/16	DSH
2-Fluorophenol (surr)	69.5		%	SW8270D	A	35-115	05/23/16	06/02/16	DSH
Nitrobenzene-d5 (surr)	76.3		%	SW8270D	A	37-122	05/23/16	06/02/16	DSH
Phenol-d6 (surr)	75.7		%	SW8270D	A	33-122	05/23/16	06/02/16	DSH
Terphenyl-d14 (surr)	100		%	SW8270D	A	54-127	05/23/16	06/02/16	DSH
Solids									
Total Solids	92.1		%	SM21 2540G	A			05/20/16	RJA

SGS

SGS Ref.#	1162454006		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 15:45
Client Sample ID	CA4-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Sample Remarks:

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile Fuels Department									
Gasoline Range Organics	ND	2.65	mg/Kg	AK101	C		05/13/16	06/10/16	ST
Surrogates									
4-Bromofluorobenzene (surr)	88.7		%	AK101	C	50-150	05/13/16	06/10/16	ST
Semivolatile Organic Fuels Department									
Diesel Range Organics	ND	22.1	mg/Kg	AK102	A		05/23/16	05/23/16	NLL
Residual Range Organics	ND	22.1	mg/Kg	AK103	A		05/23/16	05/23/16	NLL
Surrogates									
5a Androstane (surr)	86.6		%	AK102	A	50-150	05/23/16	05/23/16	NLL
n-Triacontane-d62 (surr)	88.7		%	AK103	A	50-150	05/23/16	05/23/16	NLL
Volatile GC/MS									
1,1,1,2-Tetrachloroethane	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1,1-Trichloroethane	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1,2,2-Tetrachloroethane	ND	13.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1,2-Trichloroethane	ND	10.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1-Dichloroethane	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1-Dichloroethene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,1-Dichloropropene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,3-Trichlorobenzene	ND	53.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,3-Trichloropropane	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,4-Trichlorobenzene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2,4-Trimethylbenzene	ND	53.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dibromo-3-chloropropane	ND	106	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P

SGS

SGS Ref.#	1162454006		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 15:45
Client Sample ID	CA4-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile GC/MS									
1,2-Dibromoethane	ND	10.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dichlorobenzene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dichloroethane	ND	10.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,2-Dichloropropane	ND	10.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,3,5-Trimethylbenzene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,3-Dichlorobenzene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,3-Dichloropropane	ND	10.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
1,4-Dichlorobenzene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2,2-Dichloropropane	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2-Butanone (MEK)	ND	265	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2-Chlorotoluene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
2-Hexanone	ND	265	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
4-Chlorotoluene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
4-Isopropyltoluene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
4-Methyl-2-pentanone (MIBK)	ND	265	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Benzene	ND	13.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromobenzene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromochloromethane	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromodichloromethane	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromoform	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Bromomethane	ND	212	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Carbon disulfide	ND	106	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Carbon tetrachloride	ND	13.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chlorobenzene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chloroethane	ND	212	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chloroform	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Chloromethane	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
cis-1,2-Dichloroethene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
cis-1,3-Dichloropropene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Dibromochloromethane	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P

SGS

SGS Ref.#	1162454006		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 15:45
Client Sample ID	CA4-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Volatile GC/MS									
Dibromomethane	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Dichlorodifluoromethane	ND	53.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Ethylbenzene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Freon-113	ND	106	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Hexachlorobutadiene	ND	53.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Isopropylbenzene (Cumene)	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Methylene chloride	ND	106	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Methyl-t-butyl ether	ND	106	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Naphthalene	ND	53.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
n-Butylbenzene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
n-Propylbenzene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
o-Xylene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
P & M -Xylene	ND	53.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
sec-Butylbenzene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Styrene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
tert-Butylbenzene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Tetrachloroethene	ND	13.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Toluene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
trans-1,2-Dichloroethene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
trans-1,3-Dichloropropene	ND	26.5	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Trichloroethene	ND	13.3	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Trichlorofluoromethane	ND	53.1	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Vinyl acetate	ND	106	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Vinyl chloride	ND	10.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Xylenes (total)	ND	79.6	ug/Kg	SW8260B	C		05/13/16	05/26/16	S.P
Surrogates									
1,2-Dichloroethane-D4 (surr)	114		%	SW8260B	C	71-136	05/13/16	05/26/16	S.P
4-Bromofluorobenzene (surr)	102		%	SW8260B	C	55-151	05/13/16	05/26/16	S.P
Toluene-d8 (surr)	96.9		%	SW8260B	C	85-116	05/13/16	05/26/16	S.P

SGS

SGS Ref.#	1162454006
Client Name	R&M Engineering-Ketchikan, Inc.
Project Name/#	104 Burkhart St. Sitka
Client Sample ID	CA4-1
Matrix	Soil/Solid (dry weight)

Printed Date/Time	06/14/2016 10:03
Collected Date/Time	05/13/2016 15:45
Received Date/Time	05/18/2016 8:00
Technical Director	Stephen C. Ede

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
1,2,4-Trichlorobenzene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,2-Dichlorobenzene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,3-Dichlorobenzene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1,4-Dichlorobenzene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1-Chloronaphthalene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
1-Methylnaphthalene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4,5-Trichlorophenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4,6-Trichlorophenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dichlorophenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dimethylphenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dinitrophenol	ND	3.26	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,4-Dinitrotoluene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,6-Dichlorophenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2,6-Dinitrotoluene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Chloronaphthalene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Chlorophenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methyl-4,6-dinitrophenol	ND	2.17	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methylnaphthalene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Methylphenol (o-Cresol)	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Nitroaniline	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
2-Nitrophenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3&4-Methylphenol (p&m-Cresol)	ND	1.09	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3,3-Dichlorobenzidine	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
3-Nitroaniline	ND	0.543	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Bromophenyl-phenylether	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chloro-3-methylphenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chloroaniline	ND	0.543	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Chlorophenyl-phenylether	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Nitroaniline	ND	3.26	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
4-Nitrophenol	ND	1.09	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH

SGS

SGS Ref.#	1162454006		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 15:45
Client Sample ID	CA4-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
Acenaphthene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Acenaphthylene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Aniline	ND	2.17	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Anthracene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Azobenzene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo(a)Anthracene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[a]pyrene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[b]Fluoranthene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[g,h,i]perylene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzo[k]fluoranthene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzoic acid	ND	1.63	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Benzyl alcohol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2chloro1methylethyl)Ether	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2-Chloroethoxy)methane	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Bis(2-Chloroethyl)ether	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
bis(2-Ethylhexyl)phthalate	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Butylbenzylphthalate	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Carbazole	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Chrysene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dibenzo[a,h]anthracene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dibenzofuran	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Diethylphthalate	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Dimethylphthalate	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Di-n-butylphthalate	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
di-n-Octylphthalate	ND	0.543	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Fluoranthene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Fluorene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorobenzene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorobutadiene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Hexachlorocyclopentadiene	ND	0.760	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH

SGS

SGS Ref.#	1162454006		
Client Name	R&M Engineering-Ketchikan, Inc.	**Printed Date/Time**	06/14/2016 10:03
Project Name/#	104 Burkhart St. Sitka	**Collected Date/Time**	05/13/2016 15:45
Client Sample ID	CA4-1	**Received Date/Time**	05/18/2016 8:00
Matrix	Soil/Solid (dry weight)	**Technical Director**	**Stephen C. Ede**

Parameter	Results	LOQ	Units	Method	Container ID	Allowable Limits	Prep Date	Analysis Date	Init
Semivolatile Organics GC/MS									
Hexachloroethane	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Indeno[1,2,3-c,d] pyrene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Isophorone	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Naphthalene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Nitrobenzene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitrosodimethylamine	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitroso-di-n-propylamine	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
N-Nitrosodiphenylamine	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Pentachlorophenol	ND	2.17	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Phenanthrene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Phenol	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Pyrene	ND	0.271	mg/Kg	SW8270D	A		05/23/16	06/02/16	DSH
Surrogates									
2,4,6-Tribromophenol (surr)	82.7		%	SW8270D	A	35-125	05/23/16	06/02/16	DSH
2-Fluorobiphenyl (surr)	76.1		%	SW8270D	A	44-115	05/23/16	06/02/16	DSH
2-Fluorophenol (surr)	65.7		%	SW8270D	A	35-115	05/23/16	06/02/16	DSH
Nitrobenzene-d5 (surr)	71.2		%	SW8270D	A	37-122	05/23/16	06/02/16	DSH
Phenol-d6 (surr)	73.1		%	SW8270D	A	33-122	05/23/16	06/02/16	DSH
Terphenyl-d14 (surr)	105		%	SW8270D	A	54-127	05/23/16	06/02/16	DSH
Solids									
Total Solids	90.4		%	SM21 2540G	A			05/20/16	RJA

SGS

Results of **4**

Client Sample ID: **4**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753004
Lab Project ID: 1172753

Collection Date: 05/25/17 07:30
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Benzo[k]fluoranthene	973	U	973	973	mg/Kg	1		06/15/17 00:22
Benzoic acid	1950	U	1950	1950	mg/Kg	1		06/15/17 00:22
Benzyl alcohol	973	U	973	973	mg/Kg	1		06/15/17 00:22
Bis(2chloro1methylethyl)Ether	973	U	973	973	mg/Kg	1		06/15/17 00:22
Bis(2-Chloroethoxy)methane	973	U	973	973	mg/Kg	1		06/15/17 00:22
Bis(2-Chloroethyl)ether	973	U	973	973	mg/Kg	1		06/15/17 00:22
bis(2-Ethylhexyl)phthalate	973	U	973	973	mg/Kg	1		06/15/17 00:22
Butylbenzylphthalate	973	U	973	973	mg/Kg	1		06/15/17 00:22
Chrysene	973	U	973	973	mg/Kg	1		06/15/17 00:22
Dibenzo[a,h]anthracene	973	U	973	973	mg/Kg	1		06/15/17 00:22
Dibenzofuran	973	U	973	973	mg/Kg	1		06/15/17 00:22
Diethylphthalate	973	U	973	973	mg/Kg	1		06/15/17 00:22
Dimethylphthalate	973	U	973	973	mg/Kg	1		06/15/17 00:22
Di-n-butylphthalate	973	U	973	973	mg/Kg	1		06/15/17 00:22
di-n-Octylphthalate	973	U	973	973	mg/Kg	1		06/15/17 00:22
Fluoranthene	973	U	973	973	mg/Kg	1		06/15/17 00:22
Fluorene	973	U	973	973	mg/Kg	1		06/15/17 00:22
Hexachlorobenzene	973	U	973	973	mg/Kg	1		06/15/17 00:22
Hexachlorobutadiene	973	U	973	973	mg/Kg	1		06/15/17 00:22
Hexachlorocyclopentadiene	973	U	973	973	mg/Kg	1		06/15/17 00:22
Hexachloroethane	973	U	973	973	mg/Kg	1		06/15/17 00:22
Indeno[1,2,3-c,d] pyrene	973	U	973	973	mg/Kg	1		06/15/17 00:22
Isophorone	973	U	973	973	mg/Kg	1		06/15/17 00:22
Naphthalene	973	U	973	973	mg/Kg	1		06/15/17 00:22
Nitrobenzene	973	U	973	973	mg/Kg	1		06/15/17 00:22
N-Nitrosodimethylamine	973	U	973	973	mg/Kg	1		06/15/17 00:22
N-Nitroso-di-n-propylamine	973	U	973	973	mg/Kg	1		06/15/17 00:22
N-Nitrosodiphenylamine	973	U	973	973	mg/Kg	1		06/15/17 00:22
Pentachlorophenol	1950	U	1950	1950	mg/Kg	1		06/15/17 00:22
Phenanthrene	973	U	973	973	mg/Kg	1		06/15/17 00:22
Phenol	973	U	973	973	mg/Kg	1		06/15/17 00:22
Pyrene	973	U	973	973	mg/Kg	1		06/15/17 00:22

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Results of 4

Client Sample ID: **4**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753004
Lab Project ID: 1172753

Collection Date: 05/25/17 07:30
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organics GC/MS**

Batch Information

Analytical Batch: XMS10127
Analytical Method: SW8270D
Analyst: DSH
Analytical Date/Time: 06/15/17 00:22
Container ID: 1172753004-A

Prep Batch: XXX37455
Prep Method: SW3580A
Prep Date/Time: 05/31/17 17:04
Prep Initial Wt./Vol.: 0.1028 g
Prep Extract Vol: 10 mL

Print Date: 06/29/2017 1:28:57PM

Results of 4

Client Sample ID: **4**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753004
Lab Project ID: 1172753

Collection Date: 05/25/17 07:30
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
1,1,1-Trichloroethane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
1,1,2,2-Tetrachloroethane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
1,1,2-Trichloroethane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
1,1-Dichloroethane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
1,1-Dichloroethene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
1,1-Dichloropropene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
1,2,3-Trichlorobenzene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
1,2,3-Trichloropropane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
1,2,4-Trichlorobenzene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
1,2,4-Trimethylbenzene	1570		23.8	7.42	mg/Kg	50		06/02/17 01:49
1,2-Dibromo-3-chloropropane	95.1	U	95.1	29.5	mg/Kg	50		06/02/17 01:49
1,2-Dibromoethane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
1,2-Dichlorobenzene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
1,2-Dichloroethane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
1,2-Dichloropropane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
1,3,5-Trimethylbenzene	409		23.8	7.42	mg/Kg	50		06/02/17 01:49
1,3-Dichlorobenzene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
1,3-Dichloropropane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
1,4-Dichlorobenzene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
2,2-Dichloropropane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
2-Butanone (MEK)	238	U	238	7.42	mg/Kg	50		06/02/17 01:49
2-Chlorotoluene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
2-Hexanone	238	U	238	74.2	mg/Kg	50		06/02/17 01:49
4-Chlorotoluene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
4-Isopropyltoluene	298		23.8	7.42	mg/Kg	50		06/02/17 01:49
4-Methyl-2-pentanone (MIBK)	238	U	238	74.2	mg/Kg	50		06/02/17 01:49
Benzene	59.4		12.4	3.71	mg/Kg	50		06/02/17 01:49
Bromobenzene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Bromochloromethane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Bromodichloromethane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Bromoform	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Bromomethane	190	U	190	59.0	mg/Kg	50		06/02/17 01:49
Carbon disulfide	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Carbon tetrachloride	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Chlorobenzene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Chloroethane	190	U	190	59.0	mg/Kg	50		06/02/17 01:49

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Results of 4

Client Sample ID: 4
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753004
Lab Project ID: 1172753

Collection Date: 05/25/17 07:30
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Chloromethane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
cis-1,2-Dichloroethene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
cis-1,3-Dichloropropene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Dibromochloromethane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Dibromomethane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Dichlorodifluoromethane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Ethylbenzene	292		23.8	7.42	mg/Kg	50		06/02/17 01:49
Freon-113	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Hexachlorobutadiene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Isopropylbenzene (Cumene)	107		23.8	7.42	mg/Kg	50		06/02/17 01:49
Methylene chloride	95.1	U	95.1	29.5	mg/Kg	50		06/02/17 01:49
Methyl-t-butyl ether	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Naphthalene	218		47.5	14.3	mg/Kg	50		06/02/17 01:49
n-Butylbenzene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
n-Propylbenzene	329		23.8	7.42	mg/Kg	50		06/02/17 01:49
o-Xylene	509		23.8	7.42	mg/Kg	50		06/02/17 01:49
P & M -Xylene	1030		47.5	14.3	mg/Kg	50		06/02/17 01:49
sec-Butylbenzene	150		23.8	7.42	mg/Kg	50		06/02/17 01:49
Styrene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
tert-Butylbenzene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Tetrachloroethene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Toluene	506		23.8	7.42	mg/Kg	50		06/02/17 01:49
trans-1,2-Dichloroethene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
trans-1,3-Dichloropropene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Trichloroethene	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Trichlorofluoromethane	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Vinyl acetate	95.1	U	95.1	29.5	mg/Kg	50		06/02/17 01:49
Vinyl chloride	23.8	U	23.8	7.42	mg/Kg	50		06/02/17 01:49
Xylenes (total)	1540		71.3	21.7	mg/Kg	50		06/02/17 01:49
Surrogates								
1,2-Dichloroethane-D4 (surr)	99.4		71-136		%	50		06/02/17 01:49
4-Bromofluorobenzene (surr)	113		55-151		%	50		06/02/17 01:49
Toluene-d8 (surr)	99.8		85-116		%	50		06/02/17 01:49

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Results of **4**

Client Sample ID: **4**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753004
Lab Project ID: 1172753

Collection Date: 05/25/17 07:30
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS16787
Analytical Method: SW8260C
Analyst: NRO
Analytical Date/Time: 06/02/17 01:49
Container ID: 1172753004-A

Prep Batch: VXX30590
Prep Method: SW5035 Mod
Prep Date/Time: 06/01/17 06:00
Prep Initial Wt./Vol.: 1.0517 g
Prep Extract Vol: 5 mL

Print Date: 06/29/2017 1:28:57PM

Results of **5**

Client Sample ID: **5**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753005
Lab Project ID: 1172753

Collection Date: 05/25/17 07:40
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Polychlorinated Biphenyls**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Aroclor-1016	1.96	U	1.96	0.609	mg/Kg	1		06/05/17 20:53
Aroclor-1221	1.96	U	1.96	0.609	mg/Kg	1		06/05/17 20:53
Aroclor-1232	1.96	U	1.96	0.609	mg/Kg	1		06/05/17 20:53
Aroclor-1242	1.96	U	1.96	0.609	mg/Kg	1		06/05/17 20:53
Aroclor-1248	1.96	U	1.96	0.609	mg/Kg	1		06/05/17 20:53
Aroclor-1254	1.96	U	1.96	0.609	mg/Kg	1		06/05/17 20:53
Aroclor-1260	1.96	U	1.96	0.609	mg/Kg	1		06/05/17 20:53
Surrogates								
Decachlorobiphenyl (surr)	93				%	1		06/05/17 20:53

Batch Information

Analytical Batch: XGC9736
Analytical Method: SW8082A
Analyst: BMZ
Analytical Date/Time: 06/05/17 20:53
Container ID: 1172753005-A

Prep Batch: XXX37449
Prep Method: SW3580A
Prep Date/Time: 05/31/17 10:44
Prep Initial Wt./Vol.: 0.5092 g
Prep Extract Vol: 10 mL

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Results of **5**

Client Sample ID: **5**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753005
Lab Project ID: 1172753

Collection Date: 05/25/17 07:40
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,2,4-Trichlorobenzene	987	U	987	987	mg/Kg	1		06/15/17 00:39
1,2-Dichlorobenzene	987	U	987	987	mg/Kg	1		06/15/17 00:39
1,3-Dichlorobenzene	987	U	987	987	mg/Kg	1		06/15/17 00:39
1,4-Dichlorobenzene	987	U	987	987	mg/Kg	1		06/15/17 00:39
1-Methylnaphthalene	987	U	987	987	mg/Kg	1		06/15/17 00:39
2,4,5-Trichlorophenol	987	U	987	987	mg/Kg	1		06/15/17 00:39
2,4,6-Trichlorophenol	987	U	987	987	mg/Kg	1		06/15/17 00:39
2,4-Dichlorophenol	987	U	987	987	mg/Kg	1		06/15/17 00:39
2,4-Dimethylphenol	987	U	987	987	mg/Kg	1		06/15/17 00:39
2,4-Dinitrophenol	4940	U	4940	4940	mg/Kg	1		06/15/17 00:39
2,4-Dinitrotoluene	987	U	987	987	mg/Kg	1		06/15/17 00:39
2,6-Dinitrotoluene	987	U	987	987	mg/Kg	1		06/15/17 00:39
2-Chloronaphthalene	987	U	987	987	mg/Kg	1		06/15/17 00:39
2-Chlorophenol	987	U	987	987	mg/Kg	1		06/15/17 00:39
2-Methyl-4,6-dinitrophenol	1970	U	1970	1970	mg/Kg	1		06/15/17 00:39
2-Methylnaphthalene	1140		987	987	mg/Kg	1		06/15/17 00:39
2-Methylphenol (o-Cresol)	987	U	987	987	mg/Kg	1		06/15/17 00:39
2-Nitroaniline	987	U	987	987	mg/Kg	1		06/15/17 00:39
2-Nitrophenol	987	U	987	987	mg/Kg	1		06/15/17 00:39
3&4-Methylphenol (p&m-Cresol)	987	U	987	987	mg/Kg	1		06/15/17 00:39
3,3-Dichlorobenzidine	987	U	987	987	mg/Kg	1		06/15/17 00:39
3-Nitroaniline	987	U	987	987	mg/Kg	1		06/15/17 00:39
4-Bromophenyl-phenylether	987	U	987	987	mg/Kg	1		06/15/17 00:39
4-Chloro-3-methylphenol	987	U	987	987	mg/Kg	1		06/15/17 00:39
4-Chloroaniline	987	U	987	987	mg/Kg	1		06/15/17 00:39
4-Chlorophenyl-phenylether	987	U	987	987	mg/Kg	1		06/15/17 00:39
4-Nitroaniline	987	U	987	987	mg/Kg	1		06/15/17 00:39
4-Nitrophenol	4940	U	4940	4940	mg/Kg	1		06/15/17 00:39
Acenaphthene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Acenaphthylene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Aniline	987	U	987	987	mg/Kg	1		06/15/17 00:39
Anthracene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Azobenzene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Benzo(a)Anthracene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Benzo[a]pyrene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Benzo[b]Fluoranthene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Benzo[g,h,i]perylene	987	U	987	987	mg/Kg	1		06/15/17 00:39

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Results of **5**

Client Sample ID: **5**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753005
Lab Project ID: 1172753

Collection Date: 05/25/17 07:40
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Benzo[k]fluoranthene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Benzoic acid	1970	U	1970	1970	mg/Kg	1		06/15/17 00:39
Benzyl alcohol	987	U	987	987	mg/Kg	1		06/15/17 00:39
Bis(2chloro1methylethyl)Ether	987	U	987	987	mg/Kg	1		06/15/17 00:39
Bis(2-Chloroethoxy)methane	987	U	987	987	mg/Kg	1		06/15/17 00:39
Bis(2-Chloroethyl)ether	987	U	987	987	mg/Kg	1		06/15/17 00:39
bis(2-Ethylhexyl)phthalate	987	U	987	987	mg/Kg	1		06/15/17 00:39
Butylbenzylphthalate	987	U	987	987	mg/Kg	1		06/15/17 00:39
Chrysene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Dibenzo[a,h]anthracene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Dibenzofuran	987	U	987	987	mg/Kg	1		06/15/17 00:39
Diethylphthalate	987	U	987	987	mg/Kg	1		06/15/17 00:39
Dimethylphthalate	987	U	987	987	mg/Kg	1		06/15/17 00:39
Di-n-butylphthalate	987	U	987	987	mg/Kg	1		06/15/17 00:39
di-n-Octylphthalate	987	U	987	987	mg/Kg	1		06/15/17 00:39
Fluoranthene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Fluorene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Hexachlorobenzene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Hexachlorobutadiene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Hexachlorocyclopentadiene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Hexachloroethane	987	U	987	987	mg/Kg	1		06/15/17 00:39
Indeno[1,2,3-c,d] pyrene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Isophorone	987	U	987	987	mg/Kg	1		06/15/17 00:39
Naphthalene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Nitrobenzene	987	U	987	987	mg/Kg	1		06/15/17 00:39
N-Nitrosodimethylamine	987	U	987	987	mg/Kg	1		06/15/17 00:39
N-Nitroso-di-n-propylamine	987	U	987	987	mg/Kg	1		06/15/17 00:39
N-Nitrosodiphenylamine	987	U	987	987	mg/Kg	1		06/15/17 00:39
Pentachlorophenol	1970	U	1970	1970	mg/Kg	1		06/15/17 00:39
Phenanthrene	987	U	987	987	mg/Kg	1		06/15/17 00:39
Phenol	987	U	987	987	mg/Kg	1		06/15/17 00:39
Pyrene	987	U	987	987	mg/Kg	1		06/15/17 00:39

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Results of **5**

Client Sample ID: **5**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753005
Lab Project ID: 1172753

Collection Date: 05/25/17 07:40
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organics GC/MS**

Batch Information

Analytical Batch: XMS10127
Analytical Method: SW8270D
Analyst: DSH
Analytical Date/Time: 06/15/17 00:39
Container ID: 1172753005-A

Prep Batch: XXX37455
Prep Method: SW3580A
Prep Date/Time: 05/31/17 17:04
Prep Initial Wt./Vol.: 0.1013 g
Prep Extract Vol: 10 mL

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Results of **5**

Client Sample ID: **5**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753005
Lab Project ID: 1172753

Collection Date: 05/25/17 07:40
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
1,1,1-Trichloroethane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
1,1,2,2-Tetrachloroethane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
1,1,2-Trichloroethane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
1,1-Dichloroethane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
1,1-Dichloroethene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
1,1-Dichloropropene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
1,2,3-Trichlorobenzene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
1,2,3-Trichloropropane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
1,2,4-Trichlorobenzene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
1,2,4-Trimethylbenzene	1550		24.9	7.77	mg/Kg	50		06/02/17 02:06
1,2-Dibromo-3-chloropropane	99.6	U	99.6	30.9	mg/Kg	50		06/02/17 02:06
1,2-Dibromoethane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
1,2-Dichlorobenzene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
1,2-Dichloroethane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
1,2-Dichloropropane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
1,3,5-Trimethylbenzene	399		24.9	7.77	mg/Kg	50		06/02/17 02:06
1,3-Dichlorobenzene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
1,3-Dichloropropane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
1,4-Dichlorobenzene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
2,2-Dichloropropane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
2-Butanone (MEK)	249	U	249	7.77	mg/Kg	50		06/02/17 02:06
2-Chlorotoluene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
2-Hexanone	249	U	249	77.7	mg/Kg	50		06/02/17 02:06
4-Chlorotoluene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
4-Isopropyltoluene	291		24.9	7.77	mg/Kg	50		06/02/17 02:06
4-Methyl-2-pentanone (MIBK)	249	U	249	77.7	mg/Kg	50		06/02/17 02:06
Benzene	61.0		12.9	3.88	mg/Kg	50		06/02/17 02:06
Bromobenzene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Bromochloromethane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Bromodichloromethane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Bromoform	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Bromomethane	199	U	199	61.8	mg/Kg	50		06/02/17 02:06
Carbon disulfide	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Carbon tetrachloride	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Chlorobenzene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Chloroethane	199	U	199	61.8	mg/Kg	50		06/02/17 02:06

Results of **5**

Client Sample ID: **5**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753005
Lab Project ID: 1172753

Collection Date: 05/25/17 07:40
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Chloromethane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
cis-1,2-Dichloroethene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
cis-1,3-Dichloropropene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Dibromochloromethane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Dibromomethane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Dichlorodifluoromethane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Ethylbenzene	293		24.9	7.77	mg/Kg	50		06/02/17 02:06
Freon-113	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Hexachlorobutadiene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Isopropylbenzene (Cumene)	104		24.9	7.77	mg/Kg	50		06/02/17 02:06
Methylene chloride	99.6	U	99.6	30.9	mg/Kg	50		06/02/17 02:06
Methyl-t-butyl ether	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Naphthalene	216		49.8	14.9	mg/Kg	50		06/02/17 02:06
n-Butylbenzene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
n-Propylbenzene	316		24.9	7.77	mg/Kg	50		06/02/17 02:06
o-Xylene	496		24.9	7.77	mg/Kg	50		06/02/17 02:06
P & M -Xylene	1010		49.8	14.9	mg/Kg	50		06/02/17 02:06
sec-Butylbenzene	149		24.9	7.77	mg/Kg	50		06/02/17 02:06
Styrene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
tert-Butylbenzene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Tetrachloroethene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Toluene	512		24.9	7.77	mg/Kg	50		06/02/17 02:06
trans-1,2-Dichloroethene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
trans-1,3-Dichloropropene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Trichloroethene	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Trichlorofluoromethane	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Vinyl acetate	99.6	U	99.6	30.9	mg/Kg	50		06/02/17 02:06
Vinyl chloride	24.9	U	24.9	7.77	mg/Kg	50		06/02/17 02:06
Xylenes (total)	1500		74.7	22.7	mg/Kg	50		06/02/17 02:06
Surrogates								
1,2-Dichloroethane-D4 (surr)	99.5		71-136		%	50		06/02/17 02:06
4-Bromofluorobenzene (surr)	128		55-151		%	50		06/02/17 02:06
Toluene-d8 (surr)	101		85-116		%	50		06/02/17 02:06

Results of **5**

Client Sample ID: **5**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753005
Lab Project ID: 1172753

Collection Date: 05/25/17 07:40
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS16787
Analytical Method: SW8260C
Analyst: NRO
Analytical Date/Time: 06/02/17 02:06
Container ID: 1172753005-A

Prep Batch: VXX30590
Prep Method: SW5035 Mod
Prep Date/Time: 06/01/17 06:00
Prep Initial Wt./Vol.: 1.004 g
Prep Extract Vol: 5 mL

Print Date: 06/29/2017 1:28:57PM

Results of **6**

Client Sample ID: **6**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753006
Lab Project ID: 1172753

Collection Date: 05/25/17 07:45
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Polychlorinated Biphenyls**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Aroclor-1016	2.00	U	2.00	0.619	mg/Kg	1		06/05/17 21:04
Aroclor-1221	2.00	U	2.00	0.619	mg/Kg	1		06/05/17 21:04
Aroclor-1232	2.00	U	2.00	0.619	mg/Kg	1		06/05/17 21:04
Aroclor-1242	2.00	U	2.00	0.619	mg/Kg	1		06/05/17 21:04
Aroclor-1248	2.00	U	2.00	0.619	mg/Kg	1		06/05/17 21:04
Aroclor-1254	2.00	U	2.00	0.619	mg/Kg	1		06/05/17 21:04
Aroclor-1260	2.00	U	2.00	0.619	mg/Kg	1		06/05/17 21:04
Surrogates								
Decachlorobiphenyl (surr)	94				%	1		06/05/17 21:04

Batch Information

Analytical Batch: XGC9736
Analytical Method: SW8082A
Analyst: BMZ
Analytical Date/Time: 06/05/17 21:04
Container ID: 1172753006-A

Prep Batch: XXX37449
Prep Method: SW3580A
Prep Date/Time: 05/31/17 10:44
Prep Initial Wt./Vol.: 0.5009 g
Prep Extract Vol: 10 mL

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Results of **6**

Client Sample ID: **6**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753006
Lab Project ID: 1172753

Collection Date: 05/25/17 07:45
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,2,4-Trichlorobenzene	995	U	995	995	mg/Kg	1		06/21/17 20:48
1,2-Dichlorobenzene	995	U	995	995	mg/Kg	1		06/21/17 20:48
1,3-Dichlorobenzene	995	U	995	995	mg/Kg	1		06/21/17 20:48
1,4-Dichlorobenzene	995	U	995	995	mg/Kg	1		06/21/17 20:48
1-Methylnaphthalene	995	U	995	995	mg/Kg	1		06/21/17 20:48
2,4,5-Trichlorophenol	995	U	995	995	mg/Kg	1		06/21/17 20:48
2,4,6-Trichlorophenol	995	U	995	995	mg/Kg	1		06/21/17 20:48
2,4-Dichlorophenol	995	U	995	995	mg/Kg	1		06/21/17 20:48
2,4-Dimethylphenol	995	U	995	995	mg/Kg	1		06/21/17 20:48
2,4-Dinitrophenol	4980	U	4980	4980	mg/Kg	1		06/21/17 20:48
2,4-Dinitrotoluene	995	U	995	995	mg/Kg	1		06/21/17 20:48
2,6-Dinitrotoluene	995	U	995	995	mg/Kg	1		06/21/17 20:48
2-Chloronaphthalene	995	U	995	995	mg/Kg	1		06/21/17 20:48
2-Chlorophenol	995	U	995	995	mg/Kg	1		06/21/17 20:48
2-Methyl-4,6-dinitrophenol	1990	U	1990	1990	mg/Kg	1		06/21/17 20:48
2-Methylnaphthalene	1060		995	995	mg/Kg	1		06/21/17 20:48
2-Methylphenol (o-Cresol)	995	U	995	995	mg/Kg	1		06/21/17 20:48
2-Nitroaniline	995	U	995	995	mg/Kg	1		06/21/17 20:48
2-Nitrophenol	995	U	995	995	mg/Kg	1		06/21/17 20:48
3&4-Methylphenol (p&m-Cresol)	995	U	995	995	mg/Kg	1		06/21/17 20:48
3,3-Dichlorobenzidine	995	U	995	995	mg/Kg	1		06/21/17 20:48
3-Nitroaniline	995	U	995	995	mg/Kg	1		06/21/17 20:48
4-Bromophenyl-phenylether	995	U	995	995	mg/Kg	1		06/21/17 20:48
4-Chloro-3-methylphenol	995	U	995	995	mg/Kg	1		06/21/17 20:48
4-Chloroaniline	995	U	995	995	mg/Kg	1		06/21/17 20:48
4-Chlorophenyl-phenylether	995	U	995	995	mg/Kg	1		06/21/17 20:48
4-Nitroaniline	995	U	995	995	mg/Kg	1		06/21/17 20:48
4-Nitrophenol	4980	U	4980	4980	mg/Kg	1		06/21/17 20:48
Acenaphthene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Acenaphthylene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Aniline	995	U	995	995	mg/Kg	1		06/21/17 20:48
Anthracene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Azobenzene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Benzo(a)Anthracene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Benzo[a]pyrene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Benzo[b]Fluoranthene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Benzo[g,h,i]perylene	995	U	995	995	mg/Kg	1		06/21/17 20:48

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Results of 6

Client Sample ID: **6**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753006
Lab Project ID: 1172753

Collection Date: 05/25/17 07:45
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Benzo[k]fluoranthene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Benzoic acid	1990	U	1990	1990	mg/Kg	1		06/21/17 20:48
Benzyl alcohol	995	U	995	995	mg/Kg	1		06/21/17 20:48
Bis(2chloro1methylethyl)Ether	995	U	995	995	mg/Kg	1		06/21/17 20:48
Bis(2-Chloroethoxy)methane	995	U	995	995	mg/Kg	1		06/21/17 20:48
Bis(2-Chloroethyl)ether	995	U	995	995	mg/Kg	1		06/21/17 20:48
bis(2-Ethylhexyl)phthalate	995	U	995	995	mg/Kg	1		06/21/17 20:48
Butylbenzylphthalate	995	U	995	995	mg/Kg	1		06/21/17 20:48
Chrysene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Dibenzo[a,h]anthracene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Dibenzofuran	995	U	995	995	mg/Kg	1		06/21/17 20:48
Diethylphthalate	995	U	995	995	mg/Kg	1		06/21/17 20:48
Dimethylphthalate	995	U	995	995	mg/Kg	1		06/21/17 20:48
Di-n-butylphthalate	995	U	995	995	mg/Kg	1		06/21/17 20:48
di-n-Octylphthalate	995	U	995	995	mg/Kg	1		06/21/17 20:48
Fluoranthene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Fluorene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Hexachlorobenzene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Hexachlorobutadiene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Hexachlorocyclopentadiene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Hexachloroethane	995	U	995	995	mg/Kg	1		06/21/17 20:48
Indeno[1,2,3-c,d] pyrene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Isophorone	995	U	995	995	mg/Kg	1		06/21/17 20:48
Naphthalene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Nitrobenzene	995	U	995	995	mg/Kg	1		06/21/17 20:48
N-Nitrosodimethylamine	995	U	995	995	mg/Kg	1		06/21/17 20:48
N-Nitroso-di-n-propylamine	995	U	995	995	mg/Kg	1		06/21/17 20:48
N-Nitrosodiphenylamine	995	U	995	995	mg/Kg	1		06/21/17 20:48
Pentachlorophenol	1990	U	1990	1990	mg/Kg	1		06/21/17 20:48
Phenanthrene	995	U	995	995	mg/Kg	1		06/21/17 20:48
Phenol	995	U	995	995	mg/Kg	1		06/21/17 20:48
Pyrene	995	U	995	995	mg/Kg	1		06/21/17 20:48

Results of **6**

Client Sample ID: **6**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753006
Lab Project ID: 1172753

Collection Date: 05/25/17 07:45
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organics GC/MS**

Batch Information

Analytical Batch: XMS10168
Analytical Method: SW8270D
Analyst: DSH
Analytical Date/Time: 06/21/17 20:48
Container ID: 1172753006-A

Prep Batch: XXX37641
Prep Method: SW3580A
Prep Date/Time: 06/20/17 09:24
Prep Initial Wt./Vol.: 0.1005 g
Prep Extract Vol: 10 mL

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Results of **6**

Client Sample ID: **6**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753006
Lab Project ID: 1172753

Collection Date: 05/25/17 07:45
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
1,1,1-Trichloroethane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
1,1,2,2-Tetrachloroethane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
1,1,2-Trichloroethane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
1,1-Dichloroethane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
1,1-Dichloroethene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
1,1-Dichloropropene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
1,2,3-Trichlorobenzene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
1,2,3-Trichloropropane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
1,2,4-Trichlorobenzene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
1,2,4-Trimethylbenzene	1790		24.6	7.67	mg/Kg	50		06/02/17 02:23
1,2-Dibromo-3-chloropropane	98.4	U	98.4	30.5	mg/Kg	50		06/02/17 02:23
1,2-Dibromoethane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
1,2-Dichlorobenzene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
1,2-Dichloroethane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
1,2-Dichloropropane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
1,3,5-Trimethylbenzene	465		24.6	7.67	mg/Kg	50		06/02/17 02:23
1,3-Dichlorobenzene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
1,3-Dichloropropane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
1,4-Dichlorobenzene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
2,2-Dichloropropane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
2-Butanone (MEK)	246	U	246	7.67	mg/Kg	50		06/02/17 02:23
2-Chlorotoluene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
2-Hexanone	246	U	246	76.7	mg/Kg	50		06/02/17 02:23
4-Chlorotoluene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
4-Isopropyltoluene	342		24.6	7.67	mg/Kg	50		06/02/17 02:23
4-Methyl-2-pentanone (MIBK)	246	U	246	76.7	mg/Kg	50		06/02/17 02:23
Benzene	82.9		12.8	3.84	mg/Kg	50		06/02/17 02:23
Bromobenzene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Bromochloromethane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Bromodichloromethane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Bromoform	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Bromomethane	197	U	197	61.0	mg/Kg	50		06/02/17 02:23
Carbon disulfide	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Carbon tetrachloride	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Chlorobenzene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Chloroethane	197	U	197	61.0	mg/Kg	50		06/02/17 02:23

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Results of **6**

Client Sample ID: **6**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753006
Lab Project ID: 1172753

Collection Date: 05/25/17 07:45
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Chloromethane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
cis-1,2-Dichloroethene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
cis-1,3-Dichloropropene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Dibromochloromethane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Dibromomethane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Dichlorodifluoromethane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Ethylbenzene	364		24.6	7.67	mg/Kg	50		06/02/17 02:23
Freon-113	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Hexachlorobutadiene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Isopropylbenzene (Cumene)	131		24.6	7.67	mg/Kg	50		06/02/17 02:23
Methylene chloride	98.4	U	98.4	30.5	mg/Kg	50		06/02/17 02:23
Methyl-t-butyl ether	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Naphthalene	221		49.2	14.8	mg/Kg	50		06/02/17 02:23
n-Butylbenzene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
n-Propylbenzene	386		24.6	7.67	mg/Kg	50		06/02/17 02:23
o-Xylene	604		24.6	7.67	mg/Kg	50		06/02/17 02:23
P & M -Xylene	1270		49.2	14.8	mg/Kg	50		06/02/17 02:23
sec-Butylbenzene	181		24.6	7.67	mg/Kg	50		06/02/17 02:23
Styrene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
tert-Butylbenzene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Tetrachloroethene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Toluene	667		24.6	7.67	mg/Kg	50		06/02/17 02:23
trans-1,2-Dichloroethene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
trans-1,3-Dichloropropene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Trichloroethene	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Trichlorofluoromethane	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Vinyl acetate	98.4	U	98.4	30.5	mg/Kg	50		06/02/17 02:23
Vinyl chloride	24.6	U	24.6	7.67	mg/Kg	50		06/02/17 02:23
Xylenes (total)	1870		73.8	22.4	mg/Kg	50		06/02/17 02:23
Surrogates								
1,2-Dichloroethane-D4 (surr)	99.8		71-136		%	50		06/02/17 02:23
4-Bromofluorobenzene (surr)	164	*	55-151		%	50		06/02/17 02:23
Toluene-d8 (surr)	99.7		85-116		%	50		06/02/17 02:23

Results of **6**

Client Sample ID: **6**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753006
Lab Project ID: 1172753

Collection Date: 05/25/17 07:45
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS16787
Analytical Method: SW8260C
Analyst: NRO
Analytical Date/Time: 06/02/17 02:23
Container ID: 1172753006-A

Prep Batch: VXX30590
Prep Method: SW5035 Mod
Prep Date/Time: 06/01/17 06:00
Prep Initial Wt./Vol.: 1.0167 g
Prep Extract Vol: 5 mL

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Results of **7**

Client Sample ID: **7**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753007
Lab Project ID: 1172753

Collection Date: 05/25/17 07:55
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Polychlorinated Biphenyls**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Aroclor-1016	1.96	U	1.96	0.608	mg/Kg	1		06/05/17 21:24
Aroclor-1221	1.96	U	1.96	0.608	mg/Kg	1		06/05/17 21:24
Aroclor-1232	1.96	U	1.96	0.608	mg/Kg	1		06/05/17 21:24
Aroclor-1242	1.96	U	1.96	0.608	mg/Kg	1		06/05/17 21:24
Aroclor-1248	1.96	U	1.96	0.608	mg/Kg	1		06/05/17 21:24
Aroclor-1254	1.96	U	1.96	0.608	mg/Kg	1		06/05/17 21:24
Aroclor-1260	1.96	U	1.96	0.608	mg/Kg	1		06/05/17 21:24
Surrogates								
Decachlorobiphenyl (surr)	94				%	1		06/05/17 21:24

Batch Information

Analytical Batch: XGC9736
Analytical Method: SW8082A
Analyst: BMZ
Analytical Date/Time: 06/05/17 21:24
Container ID: 1172753007-A

Prep Batch: XXX37449
Prep Method: SW3580A
Prep Date/Time: 05/31/17 10:44
Prep Initial Wt./Vol.: 0.5095 g
Prep Extract Vol: 10 mL

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Results of **7**

Client Sample ID: **7**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753007
Lab Project ID: 1172753

Collection Date: 05/25/17 07:55
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,2,4-Trichlorobenzene	928	U	928	928	mg/Kg	1		06/15/17 01:14
1,2-Dichlorobenzene	928	U	928	928	mg/Kg	1		06/15/17 01:14
1,3-Dichlorobenzene	928	U	928	928	mg/Kg	1		06/15/17 01:14
1,4-Dichlorobenzene	928	U	928	928	mg/Kg	1		06/15/17 01:14
1-Methylnaphthalene	928	U	928	928	mg/Kg	1		06/15/17 01:14
2,4,5-Trichlorophenol	928	U	928	928	mg/Kg	1		06/15/17 01:14
2,4,6-Trichlorophenol	928	U	928	928	mg/Kg	1		06/15/17 01:14
2,4-Dichlorophenol	928	U	928	928	mg/Kg	1		06/15/17 01:14
2,4-Dimethylphenol	928	U	928	928	mg/Kg	1		06/15/17 01:14
2,4-Dinitrophenol	4640	U	4640	4640	mg/Kg	1		06/15/17 01:14
2,4-Dinitrotoluene	928	U	928	928	mg/Kg	1		06/15/17 01:14
2,6-Dinitrotoluene	928	U	928	928	mg/Kg	1		06/15/17 01:14
2-Chloronaphthalene	928	U	928	928	mg/Kg	1		06/15/17 01:14
2-Chlorophenol	928	U	928	928	mg/Kg	1		06/15/17 01:14
2-Methyl-4,6-dinitrophenol	1860	U	1860	1860	mg/Kg	1		06/15/17 01:14
2-Methylnaphthalene	1200		928	928	mg/Kg	1		06/15/17 01:14
2-Methylphenol (o-Cresol)	928	U	928	928	mg/Kg	1		06/15/17 01:14
2-Nitroaniline	928	U	928	928	mg/Kg	1		06/15/17 01:14
2-Nitrophenol	928	U	928	928	mg/Kg	1		06/15/17 01:14
3&4-Methylphenol (p&m-Cresol)	928	U	928	928	mg/Kg	1		06/15/17 01:14
3,3-Dichlorobenzidine	928	U	928	928	mg/Kg	1		06/15/17 01:14
3-Nitroaniline	928	U	928	928	mg/Kg	1		06/15/17 01:14
4-Bromophenyl-phenylether	928	U	928	928	mg/Kg	1		06/15/17 01:14
4-Chloro-3-methylphenol	928	U	928	928	mg/Kg	1		06/15/17 01:14
4-Chloroaniline	928	U	928	928	mg/Kg	1		06/15/17 01:14
4-Chlorophenyl-phenylether	928	U	928	928	mg/Kg	1		06/15/17 01:14
4-Nitroaniline	928	U	928	928	mg/Kg	1		06/15/17 01:14
4-Nitrophenol	4640	U	4640	4640	mg/Kg	1		06/15/17 01:14
Acenaphthene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Acenaphthylene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Aniline	928	U	928	928	mg/Kg	1		06/15/17 01:14
Anthracene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Azobenzene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Benzo(a)Anthracene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Benzo[a]pyrene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Benzo[b]Fluoranthene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Benzo[g,h,i]perylene	928	U	928	928	mg/Kg	1		06/15/17 01:14

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Results of **7**

Client Sample ID: **7**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753007
Lab Project ID: 1172753

Collection Date: 05/25/17 07:55
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Benzo[k]fluoranthene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Benzoic acid	1860	U	1860	1860	mg/Kg	1		06/15/17 01:14
Benzyl alcohol	928	U	928	928	mg/Kg	1		06/15/17 01:14
Bis(2chloro1methylethyl)Ether	928	U	928	928	mg/Kg	1		06/15/17 01:14
Bis(2-Chloroethoxy)methane	928	U	928	928	mg/Kg	1		06/15/17 01:14
Bis(2-Chloroethyl)ether	928	U	928	928	mg/Kg	1		06/15/17 01:14
bis(2-Ethylhexyl)phthalate	928	U	928	928	mg/Kg	1		06/15/17 01:14
Butylbenzylphthalate	928	U	928	928	mg/Kg	1		06/15/17 01:14
Chrysene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Dibenzo[a,h]anthracene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Dibenzofuran	928	U	928	928	mg/Kg	1		06/15/17 01:14
Diethylphthalate	928	U	928	928	mg/Kg	1		06/15/17 01:14
Dimethylphthalate	928	U	928	928	mg/Kg	1		06/15/17 01:14
Di-n-butylphthalate	928	U	928	928	mg/Kg	1		06/15/17 01:14
di-n-Octylphthalate	928	U	928	928	mg/Kg	1		06/15/17 01:14
Fluoranthene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Fluorene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Hexachlorobenzene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Hexachlorobutadiene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Hexachlorocyclopentadiene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Hexachloroethane	928	U	928	928	mg/Kg	1		06/15/17 01:14
Indeno[1,2,3-c,d] pyrene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Isophorone	928	U	928	928	mg/Kg	1		06/15/17 01:14
Naphthalene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Nitrobenzene	928	U	928	928	mg/Kg	1		06/15/17 01:14
N-Nitrosodimethylamine	928	U	928	928	mg/Kg	1		06/15/17 01:14
N-Nitroso-di-n-propylamine	928	U	928	928	mg/Kg	1		06/15/17 01:14
N-Nitrosodiphenylamine	928	U	928	928	mg/Kg	1		06/15/17 01:14
Pentachlorophenol	1860	U	1860	1860	mg/Kg	1		06/15/17 01:14
Phenanthrene	928	U	928	928	mg/Kg	1		06/15/17 01:14
Phenol	928	U	928	928	mg/Kg	1		06/15/17 01:14
Pyrene	928	U	928	928	mg/Kg	1		06/15/17 01:14

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Results of 7

Client Sample ID: **7**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753007
Lab Project ID: 1172753

Collection Date: 05/25/17 07:55
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organics GC/MS**

Batch Information

Analytical Batch: XMS10127
Analytical Method: SW8270D
Analyst: DSH
Analytical Date/Time: 06/15/17 01:14
Container ID: 1172753007-A

Prep Batch: XXX37455
Prep Method: SW3580A
Prep Date/Time: 05/31/17 17 04
Prep Initial Wt./Vol.: 0.1078 g
Prep Extract Vol: 10 mL

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Results of 7

Client Sample ID: 7
Client Project ID: 104 Burkhart
Lab Sample ID: 1172753007
Lab Project ID: 1172753

Collection Date: 05/25/17 07:55
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by Volatile GC/MS

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
1,1,1-Trichloroethane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
1,1,2,2-Tetrachloroethane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
1,1,2-Trichloroethane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
1,1-Dichloroethane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
1,1-Dichloroethene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
1,1-Dichloropropene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
1,2,3-Trichlorobenzene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
1,2,3-Trichloropropane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
1,2,4-Trichlorobenzene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
1,2,4-Trimethylbenzene	1510		24.1	7.52	mg/Kg	50		06/02/17 02:35
1,2-Dibromo-3-chloropropane	96.4	U	96.4	29.9	mg/Kg	50		06/02/17 02:35
1,2-Dibromoethane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
1,2-Dichlorobenzene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
1,2-Dichloroethane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
1,2-Dichloropropane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
1,3,5-Trimethylbenzene	375		24.1	7.52	mg/Kg	50		06/02/17 02:35
1,3-Dichlorobenzene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
1,3-Dichloropropane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
1,4-Dichlorobenzene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
2,2-Dichloropropane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
2-Butanone (MEK)	241	U	241	7.52	mg/Kg	50		06/02/17 02:35
2-Chlorotoluene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
2-Hexanone	241	U	241	75.2	mg/Kg	50		06/02/17 02:35
4-Chlorotoluene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
4-Isopropyltoluene	69.9		24.1	7.52	mg/Kg	50		06/02/17 02:35
4-Methyl-2-pentanone (MIBK)	241	U	241	75.2	mg/Kg	50		06/02/17 02:35
Benzene	67.2		12.5	3.76	mg/Kg	50		06/02/17 02:35
Bromobenzene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Bromochloromethane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Bromodichloromethane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Bromoform	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Bromomethane	193	U	193	59.8	mg/Kg	50		06/02/17 02:35
Carbon disulfide	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Carbon tetrachloride	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Chlorobenzene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Chloroethane	193	U	193	59.8	mg/Kg	50		06/02/17 02:35

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Results of **7**

Client Sample ID: **7**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753007
Lab Project ID: 1172753

Collection Date: 05/25/17 07:55
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Chloromethane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
cis-1,2-Dichloroethene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
cis-1,3-Dichloropropene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Dibromochloromethane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Dibromomethane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Dichlorodifluoromethane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Ethylbenzene	273		24.1	7.52	mg/Kg	50		06/02/17 02:35
Freon-113	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Hexachlorobutadiene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Isopropylbenzene (Cumene)	96.9		24.1	7.52	mg/Kg	50		06/02/17 02:35
Methylene chloride	96.4	U	96.4	29.9	mg/Kg	50		06/02/17 02:35
Methyl-t-butyl ether	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Naphthalene	207		48.2	14.5	mg/Kg	50		06/02/17 02:35
n-Butylbenzene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
n-Propylbenzene	298		24.1	7.52	mg/Kg	50		06/02/17 02:35
o-Xylene	476		24.1	7.52	mg/Kg	50		06/02/17 02:35
P & M -Xylene	974		48.2	14.5	mg/Kg	50		06/02/17 02:35
sec-Butylbenzene	133		24.1	7.52	mg/Kg	50		06/02/17 02:35
Styrene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
tert-Butylbenzene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Tetrachloroethene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Toluene	505		24.1	7.52	mg/Kg	50		06/02/17 02:35
trans-1,2-Dichloroethene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
trans-1,3-Dichloropropene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Trichloroethene	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Trichlorofluoromethane	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Vinyl acetate	96.4	U	96.4	29.9	mg/Kg	50		06/02/17 02:35
Vinyl chloride	24.1	U	24.1	7.52	mg/Kg	50		06/02/17 02:35
Xylenes (total)	1450		72.3	22.0	mg/Kg	50		06/02/17 02:35
Surrogates								
1,2-Dichloroethane-D4 (surr)	109		71-136		%	50		06/02/17 02:35
4-Bromofluorobenzene (surr)	100		55-151		%	50		06/02/17 02:35
Toluene-d8 (surr)	98.8		85-116		%	50		06/02/17 02:35

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Results of **7**

Client Sample ID: **7**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753007
Lab Project ID: 1172753

Collection Date: 05/25/17 07:55
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS16794
Analytical Method: SW8260C
Analyst: NRB
Analytical Date/Time: 06/02/17 02:35
Container ID: 1172753007-A

Prep Batch: VXX30600
Prep Method: SW5035 Mod
Prep Date/Time: 05/30/17 17:42
Prep Initial Wt./Vol.: 1.0376 g
Prep Extract Vol: 5 mL

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Results of **8**

Client Sample ID: **8**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753008
Lab Project ID: 1172753

Collection Date: 05/25/17 08:05
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Polychlorinated Biphenyls**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Aroclor-1016	1.97	U	1.97	0.612	mg/Kg	1		06/05/17 21:35
Aroclor-1221	1.97	U	1.97	0.612	mg/Kg	1		06/05/17 21:35
Aroclor-1232	1.97	U	1.97	0.612	mg/Kg	1		06/05/17 21:35
Aroclor-1242	1.97	U	1.97	0.612	mg/Kg	1		06/05/17 21:35
Aroclor-1248	1.97	U	1.97	0.612	mg/Kg	1		06/05/17 21:35
Aroclor-1254	1.97	U	1.97	0.612	mg/Kg	1		06/05/17 21:35
Aroclor-1260	1.97	U	1.97	0.612	mg/Kg	1		06/05/17 21:35
Surrogates								
Decachlorobiphenyl (surr)	94				%	1		06/05/17 21:35

Batch Information

Analytical Batch: XGC9736
Analytical Method: SW8082A
Analyst: BMZ
Analytical Date/Time: 06/05/17 21:35
Container ID: 1172753008-A

Prep Batch: XXX37449
Prep Method: SW3580A
Prep Date/Time: 05/31/17 10:44
Prep Initial Wt./Vol.: 0.5067 g
Prep Extract Vol: 10 mL

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Results of **8**

Client Sample ID: **8**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753008
Lab Project ID: 1172753

Collection Date: 05/25/17 08:05
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,2,4-Trichlorobenzene	970	U	970	970	mg/Kg	1		06/15/17 01:31
1,2-Dichlorobenzene	970	U	970	970	mg/Kg	1		06/15/17 01:31
1,3-Dichlorobenzene	970	U	970	970	mg/Kg	1		06/15/17 01:31
1,4-Dichlorobenzene	970	U	970	970	mg/Kg	1		06/15/17 01:31
1-Methylnaphthalene	970	U	970	970	mg/Kg	1		06/15/17 01:31
2,4,5-Trichlorophenol	970	U	970	970	mg/Kg	1		06/15/17 01:31
2,4,6-Trichlorophenol	970	U	970	970	mg/Kg	1		06/15/17 01:31
2,4-Dichlorophenol	970	U	970	970	mg/Kg	1		06/15/17 01:31
2,4-Dimethylphenol	970	U	970	970	mg/Kg	1		06/15/17 01:31
2,4-Dinitrophenol	4850	U	4850	4850	mg/Kg	1		06/15/17 01:31
2,4-Dinitrotoluene	970	U	970	970	mg/Kg	1		06/15/17 01:31
2,6-Dinitrotoluene	970	U	970	970	mg/Kg	1		06/15/17 01:31
2-Chloronaphthalene	970	U	970	970	mg/Kg	1		06/15/17 01:31
2-Chlorophenol	970	U	970	970	mg/Kg	1		06/15/17 01:31
2-Methyl-4,6-dinitrophenol	1940	U	1940	1940	mg/Kg	1		06/15/17 01:31
2-Methylnaphthalene	1160		970	970	mg/Kg	1		06/15/17 01:31
2-Methylphenol (o-Cresol)	970	U	970	970	mg/Kg	1		06/15/17 01:31
2-Nitroaniline	970	U	970	970	mg/Kg	1		06/15/17 01:31
2-Nitrophenol	970	U	970	970	mg/Kg	1		06/15/17 01:31
3&4-Methylphenol (p&m-Cresol)	970	U	970	970	mg/Kg	1		06/15/17 01:31
3,3-Dichlorobenzidine	970	U	970	970	mg/Kg	1		06/15/17 01:31
3-Nitroaniline	970	U	970	970	mg/Kg	1		06/15/17 01:31
4-Bromophenyl-phenylether	970	U	970	970	mg/Kg	1		06/15/17 01:31
4-Chloro-3-methylphenol	970	U	970	970	mg/Kg	1		06/15/17 01:31
4-Chloroaniline	970	U	970	970	mg/Kg	1		06/15/17 01:31
4-Chlorophenyl-phenylether	970	U	970	970	mg/Kg	1		06/15/17 01:31
4-Nitroaniline	970	U	970	970	mg/Kg	1		06/15/17 01:31
4-Nitrophenol	4850	U	4850	4850	mg/Kg	1		06/15/17 01:31
Acenaphthene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Acenaphthylene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Aniline	970	U	970	970	mg/Kg	1		06/15/17 01:31
Anthracene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Azobenzene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Benzo(a)Anthracene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Benzo[a]pyrene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Benzo[b]Fluoranthene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Benzo[g,h,i]perylene	970	U	970	970	mg/Kg	1		06/15/17 01:31

Results of **8**

Client Sample ID: **8**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753008
Lab Project ID: 1172753

Collection Date: 05/25/17 08:05
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Benzo[k]fluoranthene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Benzoic acid	1940	U	1940	1940	mg/Kg	1		06/15/17 01:31
Benzyl alcohol	970	U	970	970	mg/Kg	1		06/15/17 01:31
Bis(2chloro1methylethyl)Ether	970	U	970	970	mg/Kg	1		06/15/17 01:31
Bis(2-Chloroethoxy)methane	970	U	970	970	mg/Kg	1		06/15/17 01:31
Bis(2-Chloroethyl)ether	970	U	970	970	mg/Kg	1		06/15/17 01:31
bis(2-Ethylhexyl)phthalate	970	U	970	970	mg/Kg	1		06/15/17 01:31
Butylbenzylphthalate	970	U	970	970	mg/Kg	1		06/15/17 01:31
Chrysene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Dibenzo[a,h]anthracene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Dibenzofuran	970	U	970	970	mg/Kg	1		06/15/17 01:31
Diethylphthalate	970	U	970	970	mg/Kg	1		06/15/17 01:31
Dimethylphthalate	970	U	970	970	mg/Kg	1		06/15/17 01:31
Di-n-butylphthalate	970	U	970	970	mg/Kg	1		06/15/17 01:31
di-n-Octylphthalate	970	U	970	970	mg/Kg	1		06/15/17 01:31
Fluoranthene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Fluorene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Hexachlorobenzene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Hexachlorobutadiene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Hexachlorocyclopentadiene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Hexachloroethane	970	U	970	970	mg/Kg	1		06/15/17 01:31
Indeno[1,2,3-c,d] pyrene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Isophorone	970	U	970	970	mg/Kg	1		06/15/17 01:31
Naphthalene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Nitrobenzene	970	U	970	970	mg/Kg	1		06/15/17 01:31
N-Nitrosodimethylamine	970	U	970	970	mg/Kg	1		06/15/17 01:31
N-Nitroso-di-n-propylamine	970	U	970	970	mg/Kg	1		06/15/17 01:31
N-Nitrosodiphenylamine	970	U	970	970	mg/Kg	1		06/15/17 01:31
Pentachlorophenol	1940	U	1940	1940	mg/Kg	1		06/15/17 01:31
Phenanthrene	970	U	970	970	mg/Kg	1		06/15/17 01:31
Phenol	970	U	970	970	mg/Kg	1		06/15/17 01:31
Pyrene	970	U	970	970	mg/Kg	1		06/15/17 01:31

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Results of **8**

Client Sample ID: **8**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753008
Lab Project ID: 1172753

Collection Date: 05/25/17 08:05
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organics GC/MS**

Batch Information

Analytical Batch: XMS10127
Analytical Method: SW8270D
Analyst: DSH
Analytical Date/Time: 06/15/17 01:31
Container ID: 1172753008-A

Prep Batch: XXX37455
Prep Method: SW3580A
Prep Date/Time: 05/31/17 17:04
Prep Initial Wt./Vol.: 0.1031 g
Prep Extract Vol: 10 mL

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Results of **8**

Client Sample ID: **8**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753008
Lab Project ID: 1172753

Collection Date: 05/25/17 08:05
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
1,1,1-Trichloroethane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
1,1,2,2-Tetrachloroethane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
1,1,2-Trichloroethane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
1,1-Dichloroethane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
1,1-Dichloroethene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
1,1-Dichloropropene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
1,2,3-Trichlorobenzene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
1,2,3-Trichloropropane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
1,2,4-Trichlorobenzene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
1,2,4-Trimethylbenzene	1890		24.8	7.74	mg/Kg	50		06/02/17 02:52
1,2-Dibromo-3-chloropropane	99.2	U	99.2	30.8	mg/Kg	50		06/02/17 02:52
1,2-Dibromoethane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
1,2-Dichlorobenzene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
1,2-Dichloroethane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
1,2-Dichloropropane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
1,3,5-Trimethylbenzene	488		24.8	7.74	mg/Kg	50		06/02/17 02:52
1,3-Dichlorobenzene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
1,3-Dichloropropane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
1,4-Dichlorobenzene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
2,2-Dichloropropane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
2-Butanone (MEK)	248	U	248	7.74	mg/Kg	50		06/02/17 02:52
2-Chlorotoluene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
2-Hexanone	248	U	248	77.4	mg/Kg	50		06/02/17 02:52
4-Chlorotoluene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
4-Isopropyltoluene	99.2		24.8	7.74	mg/Kg	50		06/02/17 02:52
4-Methyl-2-pentanone (MIBK)	248	U	248	77.4	mg/Kg	50		06/02/17 02:52
Benzene	68.5		12.9	3.87	mg/Kg	50		06/02/17 02:52
Bromobenzene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Bromochloromethane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Bromodichloromethane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Bromoform	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Bromomethane	198	U	198	61.5	mg/Kg	50		06/02/17 02:52
Carbon disulfide	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Carbon tetrachloride	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Chlorobenzene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Chloroethane	198	U	198	61.5	mg/Kg	50		06/02/17 02:52

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Results of **8**

Client Sample ID: **8**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753008
Lab Project ID: 1172753

Collection Date: 05/25/17 08:05
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Chloromethane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
cis-1,2-Dichloroethene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
cis-1,3-Dichloropropene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Dibromochloromethane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Dibromomethane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Dichlorodifluoromethane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Ethylbenzene	343		24.8	7.74	mg/Kg	50		06/02/17 02:52
Freon-113	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Hexachlorobutadiene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Isopropylbenzene (Cumene)	127		24.8	7.74	mg/Kg	50		06/02/17 02:52
Methylene chloride	99.2	U	99.2	30.8	mg/Kg	50		06/02/17 02:52
Methyl-t-butyl ether	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Naphthalene	243		49.6	14.9	mg/Kg	50		06/02/17 02:52
n-Butylbenzene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
n-Propylbenzene	402		24.8	7.74	mg/Kg	50		06/02/17 02:52
o-Xylene	565		24.8	7.74	mg/Kg	50		06/02/17 02:52
P & M -Xylene	1200		49.6	14.9	mg/Kg	50		06/02/17 02:52
sec-Butylbenzene	185		24.8	7.74	mg/Kg	50		06/02/17 02:52
Styrene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
tert-Butylbenzene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Tetrachloroethene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Toluene	560		24.8	7.74	mg/Kg	50		06/02/17 02:52
trans-1,2-Dichloroethene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
trans-1,3-Dichloropropene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Trichloroethene	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Trichlorofluoromethane	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Vinyl acetate	99.2	U	99.2	30.8	mg/Kg	50		06/02/17 02:52
Vinyl chloride	24.8	U	24.8	7.74	mg/Kg	50		06/02/17 02:52
Xylenes (total)	1770		74.4	22.6	mg/Kg	50		06/02/17 02:52
Surrogates								
1,2-Dichloroethane-D4 (surr)	110		71-136		%	50		06/02/17 02:52
4-Bromofluorobenzene (surr)	129		55-151		%	50		06/02/17 02:52
Toluene-d8 (surr)	98.8		85-116		%	50		06/02/17 02:52

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Results of **8**

Client Sample ID: **8**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753008
Lab Project ID: 1172753

Collection Date: 05/25/17 08:05
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS16794
Analytical Method: SW8260C
Analyst: NRB
Analytical Date/Time: 06/02/17 02:52
Container ID: 1172753008-A

Prep Batch: VXX30600
Prep Method: SW5035 Mod
Prep Date/Time: 05/30/17 17:42
Prep Initial Wt./Vol.: 1.0079 g
Prep Extract Vol.: 5 mL

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Results of **9**

Client Sample ID: **9**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753009
Lab Project ID: 1172753

Collection Date: 05/25/17 08:20
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Polychlorinated Biphenyls**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Aroclor-1016	1.99	U	1.99	0.618	mg/Kg	1		06/05/17 21:45
Aroclor-1221	1.99	U	1.99	0.618	mg/Kg	1		06/05/17 21:45
Aroclor-1232	1.99	U	1.99	0.618	mg/Kg	1		06/05/17 21:45
Aroclor-1242	1.99	U	1.99	0.618	mg/Kg	1		06/05/17 21:45
Aroclor-1248	1.99	U	1.99	0.618	mg/Kg	1		06/05/17 21:45
Aroclor-1254	1.99	U	1.99	0.618	mg/Kg	1		06/05/17 21:45
Aroclor-1260	1.99	U	1.99	0.618	mg/Kg	1		06/05/17 21:45
Surrogates								
Decachlorobiphenyl (surr)	93				%	1		06/05/17 21:45

Batch Information

Analytical Batch: XGC9736
Analytical Method: SW8082A
Analyst: BMZ
Analytical Date/Time: 06/05/17 21:45
Container ID: 1172753009-A

Prep Batch: XXX37449
Prep Method: SW3580A
Prep Date/Time: 05/31/17 10:44
Prep Initial Wt./Vol.: 0.502 g
Prep Extract Vol: 10 mL

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Results of **9**

Client Sample ID: **9**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753009
Lab Project ID: 1172753

Collection Date: 05/25/17 08:20
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,2,4-Trichlorobenzene	963	U	963	963	mg/Kg	1		06/15/17 01:49
1,2-Dichlorobenzene	963	U	963	963	mg/Kg	1		06/15/17 01:49
1,3-Dichlorobenzene	963	U	963	963	mg/Kg	1		06/15/17 01:49
1,4-Dichlorobenzene	963	U	963	963	mg/Kg	1		06/15/17 01:49
1-Methylnaphthalene	1370		963	963	mg/Kg	1		06/15/17 01:49
2,4,5-Trichlorophenol	963	U	963	963	mg/Kg	1		06/15/17 01:49
2,4,6-Trichlorophenol	963	U	963	963	mg/Kg	1		06/15/17 01:49
2,4-Dichlorophenol	963	U	963	963	mg/Kg	1		06/15/17 01:49
2,4-Dimethylphenol	963	U	963	963	mg/Kg	1		06/15/17 01:49
2,4-Dinitrophenol	4820	U	4820	4820	mg/Kg	1		06/15/17 01:49
2,4-Dinitrotoluene	963	U	963	963	mg/Kg	1		06/15/17 01:49
2,6-Dinitrotoluene	963	U	963	963	mg/Kg	1		06/15/17 01:49
2-Chloronaphthalene	963	U	963	963	mg/Kg	1		06/15/17 01:49
2-Chlorophenol	963	U	963	963	mg/Kg	1		06/15/17 01:49
2-Methyl-4,6-dinitrophenol	1930	U	1930	1930	mg/Kg	1		06/15/17 01:49
2-Methylnaphthalene	2250		963	963	mg/Kg	1		06/15/17 01:49
2-Methylphenol (o-Cresol)	963	U	963	963	mg/Kg	1		06/15/17 01:49
2-Nitroaniline	963	U	963	963	mg/Kg	1		06/15/17 01:49
2-Nitrophenol	963	U	963	963	mg/Kg	1		06/15/17 01:49
3&4-Methylphenol (p&m-Cresol)	963	U	963	963	mg/Kg	1		06/15/17 01:49
3,3-Dichlorobenzidine	963	U	963	963	mg/Kg	1		06/15/17 01:49
3-Nitroaniline	963	U	963	963	mg/Kg	1		06/15/17 01:49
4-Bromophenyl-phenylether	963	U	963	963	mg/Kg	1		06/15/17 01:49
4-Chloro-3-methylphenol	963	U	963	963	mg/Kg	1		06/15/17 01:49
4-Chloroaniline	963	U	963	963	mg/Kg	1		06/15/17 01:49
4-Chlorophenyl-phenylether	963	U	963	963	mg/Kg	1		06/15/17 01:49
4-Nitroaniline	963	U	963	963	mg/Kg	1		06/15/17 01:49
4-Nitrophenol	4820	U	4820	4820	mg/Kg	1		06/15/17 01:49
Acenaphthene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Acenaphthylene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Aniline	963	U	963	963	mg/Kg	1		06/15/17 01:49
Anthracene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Azobenzene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Benzo(a)Anthracene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Benzo[a]pyrene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Benzo[b]Fluoranthene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Benzo[g,h,i]perylene	963	U	963	963	mg/Kg	1		06/15/17 01:49

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Results of **9**

Client Sample ID: **9**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753009
Lab Project ID: 1172753

Collection Date: 05/25/17 08:20
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organics GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Benzo[k]fluoranthene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Benzoic acid	1930	U	1930	1930	mg/Kg	1		06/15/17 01:49
Benzyl alcohol	963	U	963	963	mg/Kg	1		06/15/17 01:49
Bis(2chloro1methylethyl)Ether	963	U	963	963	mg/Kg	1		06/15/17 01:49
Bis(2-Chloroethoxy)methane	963	U	963	963	mg/Kg	1		06/15/17 01:49
Bis(2-Chloroethyl)ether	963	U	963	963	mg/Kg	1		06/15/17 01:49
bis(2-Ethylhexyl)phthalate	963	U	963	963	mg/Kg	1		06/15/17 01:49
Butylbenzylphthalate	963	U	963	963	mg/Kg	1		06/15/17 01:49
Chrysene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Dibenzo[a,h]anthracene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Dibenzofuran	963	U	963	963	mg/Kg	1		06/15/17 01:49
Diethylphthalate	963	U	963	963	mg/Kg	1		06/15/17 01:49
Dimethylphthalate	963	U	963	963	mg/Kg	1		06/15/17 01:49
Di-n-butylphthalate	963	U	963	963	mg/Kg	1		06/15/17 01:49
di-n-Octylphthalate	963	U	963	963	mg/Kg	1		06/15/17 01:49
Fluoranthene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Fluorene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Hexachlorobenzene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Hexachlorobutadiene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Hexachlorocyclopentadiene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Hexachloroethane	963	U	963	963	mg/Kg	1		06/15/17 01:49
Indeno[1,2,3-c,d] pyrene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Isophorone	963	U	963	963	mg/Kg	1		06/15/17 01:49
Naphthalene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Nitrobenzene	963	U	963	963	mg/Kg	1		06/15/17 01:49
N-Nitrosodimethylamine	963	U	963	963	mg/Kg	1		06/15/17 01:49
N-Nitroso-di-n-propylamine	963	U	963	963	mg/Kg	1		06/15/17 01:49
N-Nitrosodiphenylamine	963	U	963	963	mg/Kg	1		06/15/17 01:49
Pentachlorophenol	1930	U	1930	1930	mg/Kg	1		06/15/17 01:49
Phenanthrene	963	U	963	963	mg/Kg	1		06/15/17 01:49
Phenol	963	U	963	963	mg/Kg	1		06/15/17 01:49
Pyrene	963	U	963	963	mg/Kg	1		06/15/17 01:49

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Results of **9**

Client Sample ID: **9**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753009
Lab Project ID: 1172753

Collection Date: 05/25/17 08:20
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organics GC/MS**

Batch Information

Analytical Batch: XMS10127
Analytical Method: SW8270D
Analyst: DSH
Analytical Date/Time: 06/15/17 01:49
Container ID: 1172753009-A

Prep Batch: XXX37455
Prep Method: SW3580A
Prep Date/Time: 05/31/17 17:04
Prep Initial Wt./Vol.: 0.1038 g
Prep Extract Vol: 10 mL

Print Date: 06/29/2017 1:28:57PM

Results of **9**

Client Sample ID: **9**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753009
Lab Project ID: 1172753

Collection Date: 05/25/17 08:20
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
1,1,1-Trichloroethane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
1,1,2,2-Tetrachloroethane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
1,1,2-Trichloroethane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
1,1-Dichloroethane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
1,1-Dichloroethene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
1,1-Dichloropropene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
1,2,3-Trichlorobenzene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
1,2,3-Trichloropropane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
1,2,4-Trichlorobenzene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
1,2,4-Trimethylbenzene	1890		24.4	7.62	mg/Kg	50		06/02/17 03:09
1,2-Dibromo-3-chloropropane	97.6	U	97.6	30.3	mg/Kg	50		06/02/17 03:09
1,2-Dibromoethane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
1,2-Dichlorobenzene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
1,2-Dichloroethane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
1,2-Dichloropropane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
1,3,5-Trimethylbenzene	501		24.4	7.62	mg/Kg	50		06/02/17 03:09
1,3-Dichlorobenzene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
1,3-Dichloropropane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
1,4-Dichlorobenzene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
2,2-Dichloropropane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
2-Butanone (MEK)	244	U	244	7.62	mg/Kg	50		06/02/17 03:09
2-Chlorotoluene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
2-Hexanone	244	U	244	76.2	mg/Kg	50		06/02/17 03:09
4-Chlorotoluene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
4-Isopropyltoluene	103		24.4	7.62	mg/Kg	50		06/02/17 03:09
4-Methyl-2-pentanone (MIBK)	244	U	244	76.2	mg/Kg	50		06/02/17 03:09
Benzene	70.8		12.7	3.81	mg/Kg	50		06/02/17 03:09
Bromobenzene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Bromochloromethane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Bromodichloromethane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Bromoform	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Bromomethane	195	U	195	60.5	mg/Kg	50		06/02/17 03:09
Carbon disulfide	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Carbon tetrachloride	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Chlorobenzene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Chloroethane	195	U	195	60.5	mg/Kg	50		06/02/17 03:09

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Results of **9**

Client Sample ID: **9**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753009
Lab Project ID: 1172753

Collection Date: 05/25/17 08:20
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Chloromethane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
cis-1,2-Dichloroethene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
cis-1,3-Dichloropropene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Dibromochloromethane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Dibromomethane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Dichlorodifluoromethane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Ethylbenzene	353		24.4	7.62	mg/Kg	50		06/02/17 03:09
Freon-113	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Hexachlorobutadiene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Isopropylbenzene (Cumene)	132		24.4	7.62	mg/Kg	50		06/02/17 03:09
Methylene chloride	97.6	U	97.6	30.3	mg/Kg	50		06/02/17 03:09
Methyl-t-butyl ether	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Naphthalene	241		48.8	14.6	mg/Kg	50		06/02/17 03:09
n-Butylbenzene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
n-Propylbenzene	403		24.4	7.62	mg/Kg	50		06/02/17 03:09
o-Xylene	591		24.4	7.62	mg/Kg	50		06/02/17 03:09
P & M -Xylene	1240		48.8	14.6	mg/Kg	50		06/02/17 03:09
sec-Butylbenzene	183		24.4	7.62	mg/Kg	50		06/02/17 03:09
Styrene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
tert-Butylbenzene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Tetrachloroethene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Toluene	585		24.4	7.62	mg/Kg	50		06/02/17 03:09
trans-1,2-Dichloroethene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
trans-1,3-Dichloropropene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Trichloroethene	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Trichlorofluoromethane	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Vinyl acetate	97.6	U	97.6	30.3	mg/Kg	50		06/02/17 03:09
Vinyl chloride	24.4	U	24.4	7.62	mg/Kg	50		06/02/17 03:09
Xylenes (total)	1830		73.2	22.3	mg/Kg	50		06/02/17 03:09
Surrogates								
1,2-Dichloroethane-D4 (surr)	109		71-136		%	50		06/02/17 03:09
4-Bromofluorobenzene (surr)	119		55-151		%	50		06/02/17 03:09
Toluene-d8 (surr)	98.7		85-116		%	50		06/02/17 03:09

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Results of **9**

Client Sample ID: **9**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1172753009
Lab Project ID: 1172753

Collection Date: 05/25/17 08:20
Received Date: 05/30/17 08:00
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS16794
Analytical Method: SW8260C
Analyst: NRB
Analytical Date/Time: 06/02/17 03:09
Container ID: 1172753009-A

Prep Batch: VXX30600
Prep Method: SW5035 Mod
Prep Date/Time: 05/30/17 17:42
Prep Initial Wt./Vol.: 1.0241 g
Prep Extract Vol: 5 mL

Method Blank

Blank ID: MB for HBN 1759957 [XXX/37449]
Blank Lab ID: 1387441

Matrix: Oil/Xylene Miscible Liquid

QC for Samples:
1172753001, 1172753002, 1172753003, 1172753004, 1172753005, 1172753006, 1172753007, 1172753008, 1172753009

Results by **SW8082A**

Parameter	Results	LOQ/CL	DL	Units
Aroclor-1016	0.985U	1.97	0.612	mg/Kg
Aroclor-1221	0.985U	1.97	0.612	mg/Kg
Aroclor-1232	0.985U	1.97	0.612	mg/Kg
Aroclor-1242	0.985U	1.97	0.612	mg/Kg
Aroclor-1248	0.985U	1.97	0.612	mg/Kg
Aroclor-1254	0.985U	1.97	0.612	mg/Kg
Aroclor-1260	0.985U	1.97	0.612	mg/Kg
Surrogates				
Decachlorobiphenyl (surr)	81			%

Batch Information

Analytical Batch: XGC9736
Analytical Method: SW8082A
Instrument: Agilent 7890B GC ECD SW F
Analyst: BMZ
Analytical Date/Time: 6/5/2017 7:11:00PM

Prep Batch: XXX37449
Prep Method: SW3580A
Prep Date/Time: 5/31/2017 10:44:52AM
Prep Initial Wt./Vol.: 0.5068 g
Prep Extract Vol: 10 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1172753 [XXX37449]
Blank Spike Lab ID: 1387442
Date Analyzed: 06/05/2017 19:21

Spike Duplicate ID: LCSD for HBN 1172753 [XXX37449]
Spike Duplicate Lab ID: 1387443
Matrix: Oil/Xylene Miscible Liquid

QC for Samples: 1172753001, 1172753002, 1172753003, 1172753004, 1172753005, 1172753006, 1172753007, 1172753008, 1172753009

Results by SW8082A

	Blank Spike (mg/Kg)				Spike Duplicate (mg/Kg)					
Parameter	Spike	Result	Rec (%)		Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Aroclor-1016	20	19.0	95		19.6	18.9	96	(47-134)	0.58	(< 30)
Aroclor-1260	20	16.6	83		19.6	16.1	82	(53-140)	2.84	(< 30)
Surrogates										
Decachlorobiphenyl (surr)	20	80	80	*	19.6	80	80		1.62	

Batch Information

Analytical Batch: XGC9736
Analytical Method: SW8082A
Instrument: Agilent 7890B GC ECD SW F
Analyst: BMZ

Prep Batch: XXX37449
Prep Method: SW3580A
Prep Date/Time: 05/31/2017 10:44
Spike Init Wt./Vol.: 20 mg/Kg Extract Vol: 10 mL
Dupe Init Wt./Vol.: 19.6 mg/Kg Extract Vol: 10 mL

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CHAIN OF CUSTODY RECC

1172753

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New Jersey — New York
North Carolina — Indiana
West Virginia — Kentucky
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Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.

Page 1 of 1

Section 1

CLIENT: REM Engineering-Ketchikan
CONTACT: Robert Badgett
PHONE NO: 907-225-7917
PROJECT NAME: 104 Burkhart
PROJECT/ PWSID/ PERMIT#:
REPORTS TO: Robert Badgett
E-MAIL: rbadgett@remketchikan.com
INVOICE TO: REM
QUOTE #:
P.O. #:

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Type C = COMP G = GRAB M = Multi Incremental Soils	Preservative: SVOC	VOC	ETPH							REMARKS/ LOC ID
(1)A	1	5/25/17	7:00	Liquid	1	G	X	X	X							Liquid from DW
(2)A	2	"	7:10		1	G	X	X	X							"
(3)A	3	"	7:20		1	G	X	X	X							"
(4)A	4	"	7:30		1	G	X	X	X							"
(5)A	5	"	7:40		1	G	X	X	X							"
(6)A	6	"	7:45		1	G	X	X	X							"
(7)A	7	"	7:55		1	G	X	X	X							"
(8)A	8	"	8:05		1	G	X	X	X							"
(9)A	9	"	8:20		1	G	X	X	X							"
				UPS 5/30/17												

Section 5

	Date	Time	
Relinquished By: (1)			Received By:
Relinquished By: (2)			Received By:
Relinquished By: (3)			Received By:
Relinquished By: (4)	5/30/17	0900	Received For Laboratory By:

Section 4

DOD Project? Yes No

Cooler ID:

Data Deliverable Requirements:

Requested Turnaround Time and/or Special Instructions:

Cooler temp: 5.5°C/T21

Temp Blank °C: No Temp Bk
or Ambient [ ]
(See attached Sample Receipt Form)

Chain of Custody Seal: (Circle)
INTACT BROKEN ABSENT
(See attached Sample Receipt Form)

Ak air

[ ] 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
[ ] 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

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SGS North America Inc.
200 W. Potter Drive, Anchorage, AK 99518
phone (907) 562-2343, fax (907) 561-5301

Characterization of TCLP Samples for LIMS Login

Date Characterized: 5/30/17 **Analyst:** ARC

Sample Container ID:	Matrix	%	Is sufficient volume/mass available?	Notes:
1A-9A ~~5A~~	Xylene miscible (Top layer * = matrix 3 **)	100%	(Yes) / No	If multiple jars were received, were they consistent? (Yes) / No / NA
	Water miscible (Middle layer = matrix 6)			If biphasic, was there only one layer with sufficient sample ***? Yes / No / (NA)
	Solid (Bottom layer = matrix 7 or 2 if % solids required)			Sample description/other observations: red liquid (diesel)
	Xylene miscible (Top layer * = matrix 3 **)		Yes / No	If multiple jars were received, were they consistent? Yes / No / NA
	Water miscible (Middle layer = matrix 6)			If biphasic, was there only one layer with sufficient sample ***? Yes / No / NA
	Solid (Bottom layer = matrix 7 or 2 if % solids required)			Sample description/other observations:
	Xylene miscible (Top layer * = matrix 3 **)		Yes / No	If multiple jars were received, were they consistent? Yes / No / NA
	Water miscible (Middle layer = matrix 6)			If biphasic, was there only one layer with sufficient sample ***? Yes / No / NA
	Solid (Bottom layer = matrix 7 or 2 if % solids required)			Sample description/other observations:
	Xylene miscible (Top layer * = matrix 3 **)		Yes / No	If multiple jars were received, were they consistent? Yes / No / NA
	Water miscible (Middle layer = matrix 6)			If biphasic, was there only one layer with sufficient sample ***? Yes / No / NA
	Solid (Bottom layer = matrix 7 or 2 if % solids required)			Sample description/other observations:
	Xylene miscible (Top layer * = matrix 3 **)		Yes / No	If multiple jars were received, were they consistent? Yes / No / NA
	Water miscible (Middle layer = matrix 6)			If biphasic, was there only one layer with sufficient sample ***? Yes / No / NA
	Solid (Bottom layer = matrix 7 or 2 if % solids required)			Sample description/other observations:

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 sufficent volume/mass.*

C

027 SIT 9723 5526 027-9723 5526

Shipper's Name and Address R and M Engineering Inc 355 Carlanna Lake Road Ketchikan, AK 99901 USA Tel: 9072257917	**Shipper's Account Number** 27442063030 **Customer's ID Number** 15992
Not Negotiable **Air Waybill** **Issued By** Alaska. AIR CARGO P.O. BOX 68900 SEATTLE, WA 98168 800-225-2752 ALASKACARGO.COM	
Consignee's Name and Address SGS North America Inc 200 W Potter Drive Anchorage, AK 99518 USA Tel: 9075622343	**Consignee's Account Number** 27400215947
Also notify 5/26 7:26pm no contact Tel:	
Issuing Carrier's Agent and City	**Accounting Information** 15992 R and M Engineering Inc 355 Carlanna Lake Road Ketchikan, AK 99901 USA
Agent's IATA Code / **Account No.**	
Airport of Departure (Addr. of First Carrier) and Requested Routing Sitka	GoldStreak

To	By First Carrier	To / By	To / By	Currency		WT/VAL		Other		Declared Value For Carriage	Declared Value For Customs
ANC	Alaska Airlines			USD	PX	X		X		NVD	NCV

Airport of Destination	Flight/Date	Flight/Date	Amount of Insurance
Anchorage	AS 7039/26		XXX

Handling Information

DANGEROUS GOODS IN EXCEPTED QUANTITIES DGD AND NOTOC NOT REQUIRED
NOA 907-562-2343

SCI

No of Pieces	Gross Weight	kg / lb	Commodity Item No.	Chargeable Weight	Rate / Charge	Total	Nature and Quantity of Goods (Incl. Dimensions or Volume)
1	10.0	L		10.0		AS AGREED	DG IN ACCEPTED QTY.
							1172753
							Dims: 14 x 9 x14 x 1
							GSX REQ
1	10.0					AS AGREED	Volume: 1.021

Prepaid	Weight Charge	Collect	Other Charges
AS AGREED			XBC 0.00
Valuation Charge			
Tax			
Total Other Charges Due Agent			Shipper certifies that the particulars on the face hereof are correct and that insofar as any part of the consignment contains dangerous goods, such part is properly described by name and is in proper condition for carriage by air according to the applicable Dangerous Goods Regulations. I consent to the inspection of this cargo.
Total Other Charges Due Carrier			For: R and M Engineering Inc Signature of Shipper or his Agent
			☐ THIS SHIPMENT DOES NOT CONTAIN DANGEROUS GOODS ☒ THIS SHIPMENT DOES CONTAIN DANGEROUS GOODS
Total Prepaid	Total Collect		
AS AGREED			26 May 2017 08:42 Sitka Alaska Airlines
			Executed On (Date) at (Place) Signature of Issuing Carrier or its Agent

Alert Expeditors Inc. #356241

Citywide Delivery • 440-3351
8421 Flamingo Drive • Anchorage, Alaska 99502

Date 5 30 17

From R & M Eng

To SGS

Collect ☐	Prepay ☐ Account ☐	Advance Charges ☐
Job #	PO#	

1 Cooler

GSX

9723 5526

1172753

Shipped Signature

Total Charge

Received By: Pam 0800

Sample Containers and Preservatives

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1172753001-A	No Preservative Required	OK			
1172753002-A	No Preservative Required	OK			
1172753003-A	No Preservative Required	OK			
1172753004-A	No Preservative Required	OK			
1172753005-A	No Preservative Required	OK			
1172753006-A	No Preservative Required	OK			
1172753007-A	No Preservative Required	OK			
1172753008-A	No Preservative Required	OK			
1172753009-A	No Preservative Required	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.
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.

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Laboratory Report of Analysis

To: R&M Engineering-Ketchikan, Inc.
355 Carlanna Lake Road
Ketchikan, AK 99901
(907)225-7917

Report Number: **1171664**

Client Project: **104 Burkhart**

Dear Robert Badgett,

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 Forest 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.

Forest Taylor Date
Project Manager
Forest.Taylor@sgs.com

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t 907.562.2343 f 907.561.5301 www.us.sgs.com

Case Narrative

SGS Client: **R&M Engineering-Ketchikan, Inc.**
SGS Project: **1171664**
Project Name/Site: **104 Burkhart**
Project Contact: **Robert Badgett**

Refer to sample receipt form for information on sample condition.

1 (1171664001) PS
AK102/103 - Surrogates are not added to oil samples.

2 (1171664002) PS
AK102/103 - Surrogates are not added to oil samples.

3 (1171664003) PS
AK102/103 - Surrogates are not added to oil samples.

4 (1171664004) PS
AK102/103 - Surrogates are not added to oil samples.

5 (1171664005) PS
AK102/103 - Surrogates are not added to oil samples.

6 (1171664006) PS
AK102/103 - Surrogates are not added to oil samples.

7 (1171664007) PS
AK102/103 - Surrogates are not added to oil samples.

8 (1171664008) PS
AK102/103 - Surrogates are not added to oil samples.

9 (1171664009) PS
AK102/103 - Surrogates are not added to oil samples.

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

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. 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) for which SGS North America Inc. is Provisionally Certified as of 2/8/2017 & UST-005 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020A, 7470A, 7471B, 8015C, 8021B, 8082A, 8260C, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). 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	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
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.

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Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
1	1171664001	04/05/2017	04/18/2017	Oil/Xylene Miscible Liquid
2	1171664002	04/05/2017	04/18/2017	Oil/Xylene Miscible Liquid
3	1171664003	04/05/2017	04/18/2017	Oil/Xylene Miscible Liquid
4	1171664004	04/05/2017	04/18/2017	Oil/Xylene Miscible Liquid
5	1171664005	04/05/2017	04/18/2017	Oil/Xylene Miscible Liquid
6	1171664006	04/05/2017	04/18/2017	Oil/Xylene Miscible Liquid
7	1171664007	04/05/2017	04/18/2017	Oil/Xylene Miscible Liquid
8	1171664008	04/05/2017	04/18/2017	Oil/Xylene Miscible Liquid
9	1171664009	04/05/2017	04/18/2017	Oil/Xylene Miscible Liquid

Method	Method Description
AK102	Diesel/Residual Range Organics
AK103	Diesel/Residual Range Organics

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Detectable Results Summary

Client Sample ID: **1**			
Lab Sample ID: 1171664001	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	960000	mg/Kg
Client Sample ID: **2**			
Lab Sample ID: 1171664002	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	982000	mg/Kg
Client Sample ID: **3**			
Lab Sample ID: 1171664003	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	942000	mg/Kg
Client Sample ID: **4**			
Lab Sample ID: 1171664004	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	278000	mg/Kg
	Residual Range Organics	1600000	mg/Kg
Client Sample ID: **5**			
Lab Sample ID: 1171664005	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	937000	mg/Kg
	Residual Range Organics	53000	mg/Kg
Client Sample ID: **6**			
Lab Sample ID: 1171664006	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	943000	mg/Kg
Client Sample ID: **7**			
Lab Sample ID: 1171664007	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	931000	mg/Kg
Client Sample ID: **8**			
Lab Sample ID: 1171664008	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	160000	mg/Kg
Client Sample ID: **9**			
Lab Sample ID: 1171664009	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	941000	mg/Kg

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Results of 1

Client Sample ID: **1**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1171664001
Lab Project ID: 1171664

Collection Date: 04/05/17 12:00
Received Date: 04/18/17 08:03
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	960000		56500	17700	mg/Kg	1		04/19/17 16:44
Surrogates								
5a Androstane (surr)	0	*	50-150		%	1		04/19/17 16:44

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK102
Analyst: FDR
Analytical Date/Time: 04/19/17 16:44
Container ID: 1171664001-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.1062 g
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	47100	U	47100	15100	mg/Kg	1		04/19/17 16:44
Surrogates								
n-Triacontane-d62 (surr)	0	*	50-150		%	1		04/19/17 16:44

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK103
Analyst: FDR
Analytical Date/Time: 04/19/17 16:44
Container ID: 1171664001-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.1062 g
Prep Extract Vol: 10 mL

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Results of 2

Client Sample ID: 2
Client Project ID: 104 Burkhart
Lab Sample ID: 1171664002
Lab Project ID: 1171664

Collection Date: 04/05/17 12:15
Received Date: 04/18/17 08:03
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by Semivolatile Organic Fuels

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	982000		58100	18200	mg/Kg	1		04/19/17 17:05
Surrogates								
5a Androstane (surr)	0	*	50-150		%	1		04/19/17 17:05

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK102
Analyst: FDR
Analytical Date/Time: 04/19/17 17:05
Container ID: 1171664002-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.1033 g
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	48400	U	48400	15500	mg/Kg	1		04/19/17 17:05
Surrogates								
n-Triacontane-d62 (surr)	0	*	50-150		%	1		04/19/17 17:05

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK103
Analyst: FDR
Analytical Date/Time: 04/19/17 17:05
Container ID: 1171664002-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.1033 g
Prep Extract Vol: 10 mL

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Results of 3

Client Sample ID: 3
Client Project ID: 104 Burkhart
Lab Sample ID: 1171664003
Lab Project ID: 1171664

Collection Date: 04/05/17 12:30
Received Date: 04/18/17 08:03
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by Semivolatile Organic Fuels

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	942000		57000	17900	mg/Kg	1		04/19/17 17:27
Surrogates								
5a Androstane (surr)	0	*	50-150		%	1		04/19/17 17:27

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK102
Analyst: FDR
Analytical Date/Time: 04/19/17 17:27
Container ID: 1171664003-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.1052 g
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	47500	U	47500	15200	mg/Kg	1		04/19/17 17:27
Surrogates								
n-Triacontane-d62 (surr)	0	*	50-150		%	1		04/19/17 17:27

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK103
Analyst: FDR
Analytical Date/Time: 04/19/17 17:27
Container ID: 1171664003-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.1052 g
Prep Extract Vol: 10 mL

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Results of **4**

Client Sample ID: **4**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1171664004
Lab Project ID: 1171664

Collection Date: 04/05/17 12:40
Received Date: 04/18/17 08:03
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	278000		55800	17500	mg/Kg	1		04/19/17 17:48
Surrogates								
5a Androstane (surr)	0	*	50-150		%	1		04/19/17 17:48

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK102
Analyst: FDR
Analytical Date/Time: 04/19/17 17:48
Container ID: 1171664004-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.1075 g
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	1600000		46500	14900	mg/Kg	1		04/19/17 17:48
Surrogates								
n-Triacontane-d62 (surr)	0	*	50-150		%	1		04/19/17 17:48

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK103
Analyst: FDR
Analytical Date/Time: 04/19/17 17:48
Container ID: 1171664004-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.1075 g
Prep Extract Vol: 10 mL

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Results of **5**

Client Sample ID: **5**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1171664005
Lab Project ID: 1171664

Collection Date: 04/05/17 12:55
Received Date: 04/18/17 08:03
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	937000		55100	17300	mg/Kg	1		04/19/17 18:10
Surrogates								
5a Androstane (surr)	0	*	50-150		%	1		04/19/17 18:10

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK102
Analyst: FDR
Analytical Date/Time: 04/19/17 18:10
Container ID: 1171664005-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.1089 g
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	53000		45900	14700	mg/Kg	1		04/19/17 18:10
Surrogates								
n-Triacontane-d62 (surr)	0	*	50-150		%	1		04/19/17 18:10

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK103
Analyst: FDR
Analytical Date/Time: 04/19/17 18:10
Container ID: 1171664005-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.1089 g
Prep Extract Vol: 10 mL

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Results of 6

Client Sample ID: 6
Client Project ID: **104 Burkhart**
Lab Sample ID: 1171664006
Lab Project ID: 1171664

Collection Date: 04/05/17 14:15
Received Date: 04/18/17 08:03
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	943000		57400	18000	mg/Kg	1		04/19/17 18:31
Surrogates								
5a Androstane (surr)	0	*	50-150		%	1		04/19/17 18:31

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK102
Analyst: FDR
Analytical Date/Time: 04/19/17 18:31
Container ID: 1171664006-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.1046 g
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	47800	U	47800	15300	mg/Kg	1		04/19/17 18:31
Surrogates								
n-Triacontane-d62 (surr)	0	*	50-150		%	1		04/19/17 18:31

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK103
Analyst: FDR
Analytical Date/Time: 04/19/17 18:31
Container ID: 1171664006-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.1046 g
Prep Extract Vol: 10 mL

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Results of **7**

Client Sample ID: **7**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1171664007
Lab Project ID: 1171664

Collection Date: 04/05/17 14:35
Received Date: 04/18/17 08:03
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	931000		58800	18500	mg/Kg	1		04/19/17 18:52
Surrogates								
5a Androstane (surr)	0	*	50-150		%	1		04/19/17 18:52

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK102
Analyst: FDR
Analytical Date/Time: 04/19/17 18:52
Container ID: 1171664007-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.102 g
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	49000	U	49000	15700	mg/Kg	1		04/19/17 18:52
Surrogates								
n-Triacontane-d62 (surr)	0	*	50-150		%	1		04/19/17 18:52

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK103
Analyst: FDR
Analytical Date/Time: 04/19/17 18:52
Container ID: 1171664007-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.102 g
Prep Extract Vol: 10 mL

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Results of 8

Client Sample ID: **8**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1171664008
Lab Project ID: 1171664

Collection Date: 04/05/17 14:50
Received Date: 04/18/17 08:03
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	160000		59200	18600	mg/Kg	1		04/19/17 19:14
Surrogates								
5a Androstane (surr)	0	*	50-150		%	1		04/19/17 19:14

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK102
Analyst: FDR
Analytical Date/Time: 04/19/17 19:14
Container ID: 1171664008-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.1013 g
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	49400	U	49400	15800	mg/Kg	1		04/19/17 19:14
Surrogates								
n-Triacontane-d62 (surr)	0	*	50-150		%	1		04/19/17 19:14

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK103
Analyst: FDR
Analytical Date/Time: 04/19/17 19:14
Container ID: 1171664008-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.1013 g
Prep Extract Vol: 10 mL

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Results of **9**

Client Sample ID: **9**
Client Project ID: **104 Burkhart**
Lab Sample ID: 1171664009
Lab Project ID: 1171664

Collection Date: 04/05/17 15:10
Received Date: 04/18/17 08:03
Matrix: Oil/Xylene Miscible Liquid
Solids (%):
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	941000		56700	17800	mg/Kg	1		04/19/17 19:35
Surrogates								
5a Androstane (surr)	0	*	50-150		%	1		04/19/17 19:35

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK102
Analyst: FDR
Analytical Date/Time: 04/19/17 19:35
Container ID: 1171664009-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.1058 g
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	47300	U	47300	15100	mg/Kg	1		04/19/17 19:35
Surrogates								
n-Triacontane-d62 (surr)	0	*	50-150		%	1		04/19/17 19:35

Batch Information

Analytical Batch: XFC13263
Analytical Method: AK103
Analyst: FDR
Analytical Date/Time: 04/19/17 19:35
Container ID: 1171664009-A

Prep Batch: XXX37190
Prep Method: SW3580A
Prep Date/Time: 04/19/17 10:30
Prep Initial Wt./Vol.: 0.1058 g
Prep Extract Vol: 10 mL

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

SGS North America Inc.
CHAIN OF CUSTODY RECORD

117 1004

Alaska, New Jersey, North Carolina, West Virgina, Maryland, New York, Indiana, Kentucky

www.us.sgs.com

Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.

Page 1 of 1

Section 1

CLIENT: REM Engineering - Ketchikan

CONTACT: Robert Badgett — PHONE #: 907-225-7917

PROJECT NAME: 104 Burkhart — Project/ PWSID/ PERMIT#:

REPORTS TO: Robert Badgett — E-MAIL: rbadgett@rmketchikan.com

INVOICE TO: R&M — QUOTE #: — P.O. #:

Section 3 — Preservative

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Pres: Type: Comp Grab MI (Multi-Incre-mental)	AK102 and AK103	REMARKS/ LOC ID
1A	1	4/5/17	12:00	soil liquid	1	G	X	
2A	2	4/5/17	12:15	soil liquid	1	G	X	
3A	3	4/5/17	12:30	"	1	G	X	
4A	4	4/5/17	12:40	"	1	G	X	
5A	5	4/5/17	12:55	"	1	G	X	
6A	6	4/5/17	14:15	"	1	G	X	
7A	7	4/5/17	14:35	"	1	G	X	
8A	8	4/5/17	14:50	"	1	G	X	
9A	9	4/5/17	15:10	"	1	G	X	
					1	G		

Section 5

	Date	Time	
Relinquished By: (1)			Received By:
Relinquished By: (2)			Received By:
Relinquished By: (3)			Received By:
Relinquished By: (4)	4/18/17	0803	Received For Laboratory By:

Section 4 — DOD Project? Yes No — Data Deliverable Requirements:

Cooler ID:

Requested Turnaround Time and/or Special Instructions:

Please Expidite (one week)

Temp Blank °C: 4.1 #D26 or Ambient [ ] (See attached Sample Receipt Form)

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT (See attached Sample Receipt Form)

[ ] 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
[ ] 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

http://www.sgs.com/terms-and-conditions

027 KTN 9723 5574 cooler 027-9723 5574

Shipper's Name and Address
R and M Engineering Inc
355 Carlanna Lake Road
Ketchikan, AK 99901
USA
Tel: 9072257917

Shipper's Account Number
27442063030

Customer's ID Number
15992

Not Negotiable
Air Waybill
Issued By
Alaska. AIR CARGO
P.O. BOX 68900 SEATTLE, WA 98168
800-225-2752 ALASKACARGO.COM

Consignee's Name and Address
SGS North America Inc
200 W Potter Drive
Anchorage, AK 99518
USA
Tel: 9075622343

Consignee's Account Number
27400215947

Also notify
Tel:

Issuing Carrier's Agent and City

Accounting Information
15992
R and M Engineering Inc
355 Carlanna Lake Road
Ketchikan, AK 99901
USA
GoldStreak

1171664

Agent's IATA Code

Account No.

Airport of Departure (Addr. of First Carrier) and Requested Routing
Ketchikan

To	By First Carrier	To / By		To / By		Currency		WT/VAL		Other		Declared Value For Carriage	Declared Value For Customs
ANC	Alaska Airlines					USD	PX	X		X		NVD	NCV

Airport of Destination	Flight/Date	Flight/Date	Amount of Insurance
Anchorage	AS 067/17		XXX

Handling Information
DANGEROUS GOODS IN EXCEPTED QUANTITIES DGD AND NOTOC NOT REQUIRED
NOA SGS 907-562-2343

SCI

No of Pieces	Gross Weight	kg lb	Commodity Item No.	Chargeable Weight	Rate / Charge	Total	Nature and Quantity of Goods (Incl. Dimensions or Volume)
1	32.0	L N		32.0		AS AGREED	UN1230 - METHANOL IN SOIL SAMPLES Dims: 24 x 13 x13 x 1 REQ GSX
1	32.0					AS AGREED	Volume: 2.347

Prepaid	Weight Charge	Collect
AS AGREED		

Valuation Charge

Tax

Other Charges
XBC 0.00

Total Other Charges Due Agent

Total Other Charges Due Carrier

Shipper certifies that the particulars on the face hereof are correct and that insofar as any part of the consignment contains dangerous goods, such part is properly described by name and is in proper condition for carriage by air according to the applicable Dangerous Goods Regulations. I consent to the inspection of this cargo.

For: R and M Engineering Inc

Signature of Shipper or his Agent

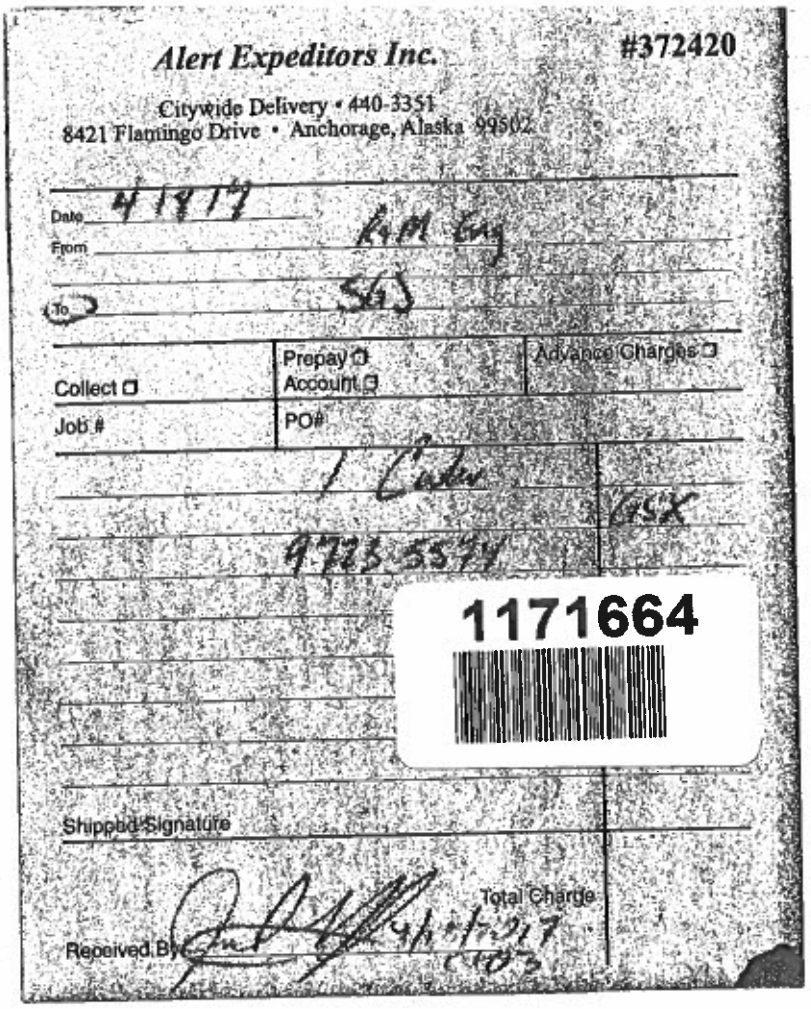
☐ THIS SHIPMENT DOES NOT CONTAIN DANGEROUS GOODS ☐ THIS SHIPMENT DOES CONTAIN DANGEROUS GOODS

Total Prepaid	Total Collect
AS AGREED	

17 Apr 2017 13:43 Ketchikan Alaska Airlines

Executed On (Date) at (Place) Signature of Issuing Carrier or its Agent

027-9723 5574



Alert Expeditors Inc. #372420

Citywide Delivery • 440-3351
8421 Flamingo Drive • Anchorage, Alaska 99502

Date 4/8/17

From KPM Eng

To SAS

Collect ☐ | Prepay ☐ Account ☐ | Advance Charges ☐

Job # | PO#

1 Cooler

GSX

9733574

1171664

Shipped Signature

Total Charge

Received By 4/8/17 1103

SGS

e-Sample Receipt Form

SGS Workorder #: 1171664

1 1 7 1 6 6 4

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
Chain of Custody / Temperature Requirements		Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	N/A	Absent
COC accompanied samples?	Yes	
Temperature blank compliant* (i.e., 0-6 °C after CF)?	Yes	**Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required
		Cooler ID: Ambient @ °C Therm. ID:
		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?		
If <0°C, were sample containers ice free?		
If samples received without a temperature blank, the "cooler temperature" will be documented in lieu of the temperature blank & "**COOLER TEMP**" will be noted to the right. In cases where neither a temp blank nor cooler temp can be obtained, note "ambient" or "chilled".		
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.		
Holding Time / Documentation / Sample Condition Requirements		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)? **Note: If times differ <1hr, record details & login per COC.	Yes	
Were analyses requested unambiguous? (i.e., method is specified for analyses with >1 option for analysis)	Yes	
		***Exemption permitted for metals (e.g.200.8/6020A).
Were proper containers (type/mass/volume/preservative***)used?	Yes	
Volatile / LL-Hg Requirements		
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	N/A	
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?		
Were all soil VOAs field extracted with MeOH+BFB?		

Note to Client: Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.

Additional notes (if applicable):

Sample Containers and Preservatives

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1171664001-A	No Preservative Required	OK			
1171664002-A	No Preservative Required	OK			
1171664003-A	No Preservative Required	OK			
1171664004-A	No Preservative Required	OK			
1171664005-A	No Preservative Required	OK			
1171664006-A	No Preservative Required	OK			
1171664007-A	No Preservative Required	OK			
1171664008-A	No Preservative Required	OK			
1171664009-A	No Preservative Required	OK			

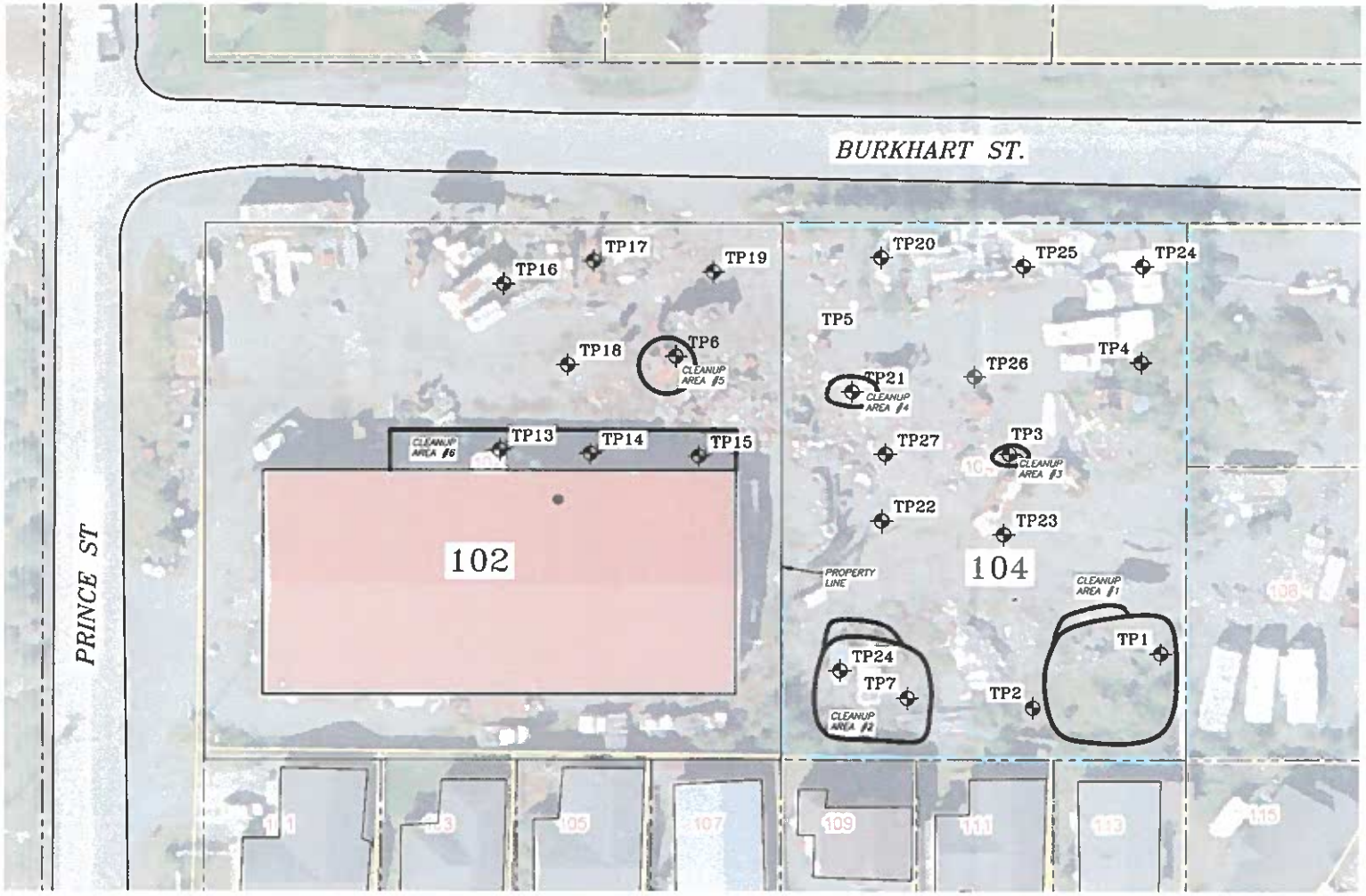
Container Condition Glossary

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.
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.

4/18/2017

APPENDIX G



Date	No.	Description	By
		REVISION	

Designed: | Approved:
Drawn: RKB | Date: JANUARY 2016
Checked: RKB | PROJECT #:

RAM ENGINEERING-KETCHIKAN, INC.
335 CARLANNA LAKE ROAD
KETCHIKAN, ALASKA 99901

Client: PATRICIA R. BICKAR
102&104 BURKHART STREET

Project: LOT 104 BURKHART ST
ENVIRONMENTAL CLEANUP

Sheet Description: TEST HOLE LOCATION
/ CLEANUP AREA MAP

Sheet No. EX1

Date	No.	Description REVISION	By

Designed:
Drawn: RKB
Checked: RKB
Approved:
Date: JANUARY 2016
PROJECT #:

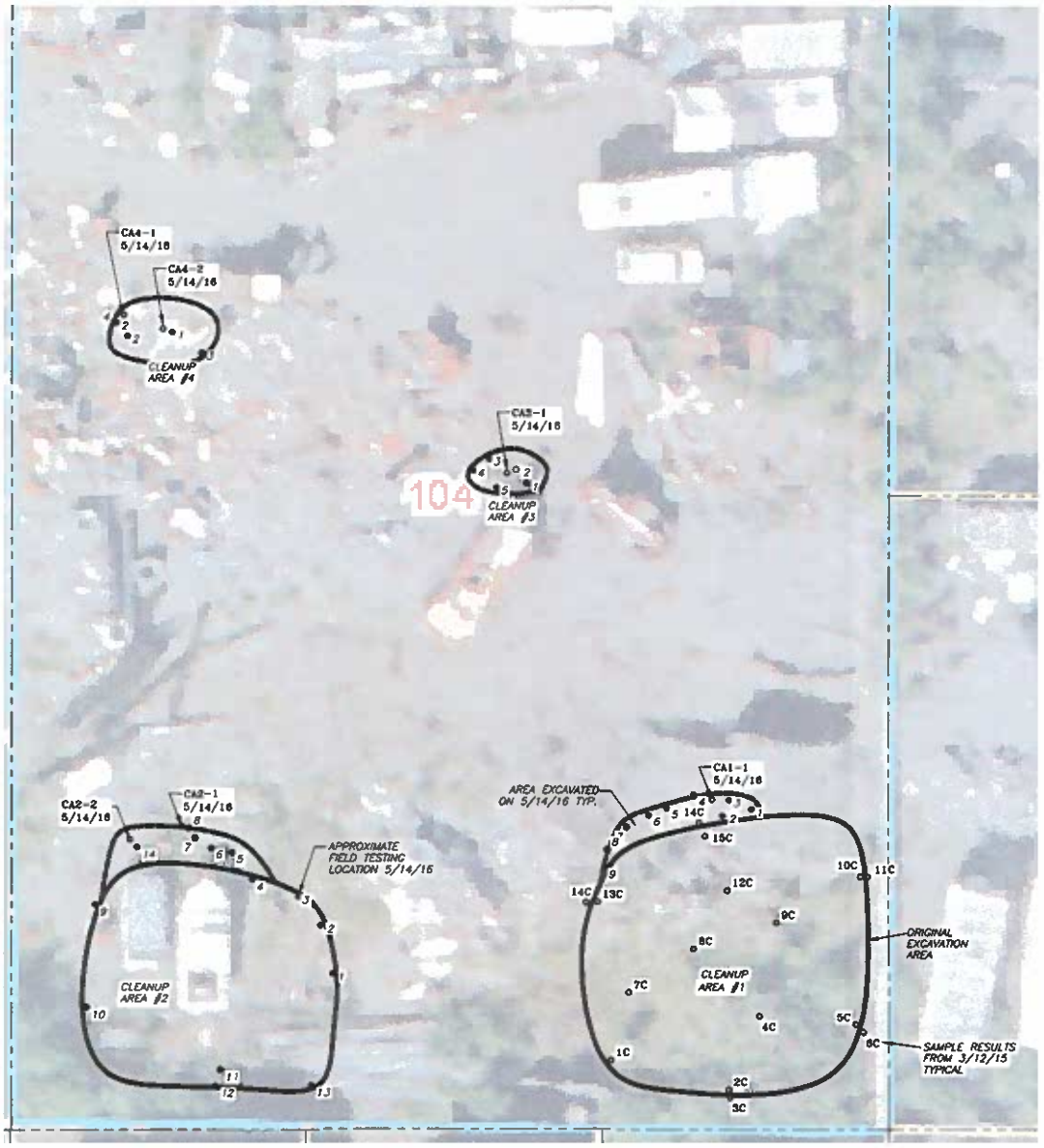
R&M ENGINEERING-KETCHIKAN, INC.
355 CARLANNA LAKE ROAD
KETCHIKAN, ALASKA 99901

Client: PATRICIA R. BICKAR
102&104 BURKHART STREET

Project: LOT 104 BURKHART ST
ENVIRONMENTAL CLEANUP

Sheet Description: LOT 102 TEST SAMPLE LOCATION MAP

Sheet No. EX2



Date	No.	Description REVISION	By

Designed:
Drawn: RKB
Checked: RKB
Approved:
Date: JANUARY 2016
PROJECT #:

RSM
RSM ENGINEERING-KETCHIKAN, INC.
355 CARLANNA LAKE ROAD
KETCHIKAN, ALASKA 99901

Client:
PATRICIA R. BICKAR
102&104 BURKHART STREET

Project:
LOT 104 BURKHART ST
ENVIRONMENTAL CLEANUP

Sheet Description: LOT 104 BLOWUP

Sheet No. EX3