

ENVIRONMENTAL ENGINEERING, HEALTH & SAFETY

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May 20, 2013

Markel Underwriting Managers, Inc. 310 Highway 35 South Red Bank, New Jersey 07701-5921

ADEC File # 100.38.217

ATTN: Pat Dunstan, RN, JD Senior Claims Examiner

RE: Summary of March 2013 Activities 578 Canoro Road, North Pole, Alaska

Ms. Dunstan:

NORTECH Environmental Engineering, Health & Safety (**NORTECH**) is pleased to provide the following 2013 field activities update to the ongoing release investigation at 578 Canoro Road in North Pole, Alaska (the Site). This letter report includes activity summaries and findings to date with recommendations originally discussed in the March 22, 2013 ADEC approved Work Plan and estimate letter to Markel Underwriting Managers, Inc. (Markel).

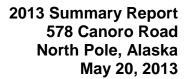
Groundwater/drinking water sampling was performed on March 30, 2013. Work included free product monitoring, collecting groundwater elevational data, collecting groundwater parameters, and collecting analytical samples from twelve groundwater wells and the resident's drinking water. Figures 1 and 2 show the Site location in North Pole, Alaska. Figure 3 shows the locations of the Site monitoring wells and drinking water well.

Table 1 summarizes free product observation and recovery efforts. Table 2 summarizes drinking water results since 2008. Table 3 summarizes groundwater laboratory results and field duplicate quality control results for the 2013 event. Table 4 is a summary of historical results, including this event. Copies of the 2013 laboratory report and Alaska Department of Environmental Conservation (ADEC) Laboratory Data Review Checklist are also attached.

Background

A more detailed history of Site activities can be found in previous reports, specifically the March 16, 2007 and March 24, 2008 Characterization Reports, and update letters dated June 25, 2010 and September 28, 2012. The release occurred in late November 2006, when approximately 470 gallons of heating oil was inadvertently delivered (under pressure) into the Site's drinking water well. Approximately 250 to 300 gallons of fuel was reportedly recovered. A large diameter recovery well was installed adjacent to the impacted well and all contaminated soil above the groundwater smear zone was removed during recovery well excavation. A temporary holding tank and replacement water system parts were installed to provide water for the house distribution system







after the system was cleaned, flushed and tested. Laboratory results indicated the system met ADEC drinking water standards.

NORTECH conducted initial Site characterization efforts between November 2006 and March 2007 including installing seven groundwater monitoring wells. Characterization indicated the hydraulic gradient was generally west across the Site, but the heating oil appeared to be moving east. A March 2008 aquifer characterization indicated petroleum migration was controlled by confining layers sloping upward towards the north and east. A well search identified six neighborhood wells located down-gradient. The wells were tested for drinking water standards with results indicating no wells were impacted by the release at 578 Canoro Road. No additional sampling was recommended.

The 2008 report indicated free product recovery efforts focus in the vicinity of monitoring well SW5. In June 2008, additional shallow monitoring wells were installed to complete the delineation of dissolved benzene contamination. The wells were installed east and south of the garage, including three new wells on adjacent property 580 Orion Drive. A new drinking water well was installed approximately 75 northeast of the Site's home in 2009. The drinking water well is screened at a depth of approximately 65 feet due to frozen silt below this depth. Subsequent periodic testing confirms this well is clean.

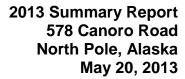
Markel approved a 2010 work plan to complete additional monitoring. In January 2011 analytical samples were collected from 12 monitoring wells: SW1 through SW9, DW1 and DW2. In March 2011, upgradient adjacent wells SW5 and FRW2 were re-sampled to ensure January 2011 results accurately reflected SW5 testing positive for contamination and FRW2 non-detect. During March re-sampling, a video inspection confirmed both wells are screened at the top of the water table, representing shallow groundwater at the same elevation only a few feet apart.

Markel approved a 2012 work plan and in March 2012 **NORTECH** collected analytical samples from 12 monitoring wells: SW1 through SW9, DW1 and DW2. As with the January 2011 sampling event, a sample was collected from product recovery well FRW2. The former drinking water well (DWW) and culvert recovery well (CRW1) were frozen during each sampling event and samples were not collected.

In September 2012, **NORTECH** completed a report that included data from the 2011 and 2012 sampling events. The results indicated a continual decline and/or stabilization in the dissolved phase contaminant concentrations across the Site. The drinking water system was also sampled with results showing the new Site drinking water well remains clean and usable. A trend analysis of the existing groundwater sampling data (2007 through 2012) showed a significant decline in contaminant concentrations across the Site.

The 2012 report detailed the ongoing discrepancy in contaminant concentrations between SW5 (one of the original shallow direct push wells) and FRW2 (a 4" deep well







installed for product recovery). These two wells are located a few feet apart and FRW2 was installed in 2008 to more efficiently collect the free product observed in SW5. FRW2 has not had free product or exceeded the ADEC cleanup level for any contaminant of concern (COC) since installation, while SW5 has exceeded the cleanup level for some contaminants over this same period. While SW5 has shown a steady decline in contaminant concentrations since 2008, the 2012 report detailed the rationale for using FRW2 data instead of SW5 data for site closure evaluation due to differences in well construction and installation.

Scope of Work and Objectives

The March 2013 work plan outlined the following activities:

- Complete a late winter 2013 groundwater sampling event of the existing Site monitoring wells and drinking water system
- Report on the March 2013 groundwater sampling events
- Evaluate the SW-5/FRW-2 results and site-wide water results in the context of Site closure.

The project was assigned to a different ADEC Site project manager (PM) in late 2012. He indicated via email he agreed with the 2012 recommendation to complete a sampling event in March 2013, but had not reviewed the file adequately to fully understand Site conditions. During a follow-up phone call, the PM indicated he would fully evaluate the Site conditions and consider the FRW2/SW5 issue in more detail. He would also evaluate the potential for closing the Site if existing trends were observed in the March 2013 results.

March 30, 2013 Field Activities

Free Product Measurements and Recovery

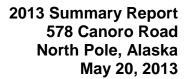
Each well was measured for depth to product and depth to water using an interface probe. No well contained appreciable free product including SW5. The historic free product data is summarized in Table 1 and discussed in results below.

Drinking Water Sampling

One primary and one duplicate were collected from the hose bib located in the utility room before the water softening and filter equipment. Samples were submitted to SGS Environmental Services (SGS) field office in Fairbanks, Alaska and analyzed at the SGS laboratory in Anchorage, Alaska. for volatile organic compounds (VOCs) analysis by EPA Method 524.2. Laboratory results are summarized in Table 2 and are discussed in results below.

Groundwater Sampling

Depth to water was measured in each well and used to evaluate the Site hydraulic gradient. The depth to water was also used to calculate total water volume in each well. Three to five well volumes of water from each well were purged using a Geotech peristaltic pump. During purging, water quality parameters were measured using a





Horiba Multi meter sensor by filling a flow-through cell connected to the pump outlet tubing. The meter sensor was placed in the filled cell and recorded conductivity, temperature, pH, dissolved oxygen, reduction/oxidation potential, and turbidity. These parameters were recorded in the field book as each well volume was purged to determine when groundwater conditions stabilized.

As with previous sampling events, analytical samples were collected using the peristaltic pump at a reduced flow rate to prevent entrainment of bubbles or other quality control concerns. Based on the number of samples, two field duplicates were collected for quality control purposes. Water samples were hand delivered to SGS for analyses of diesel range organics (DRO) by Method AK 102, and benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method SW8021B. The DRO analyses were inadvertently run as a combination with residual range organics (RRO), and BTEX was inadvertently run as a combination with gasoline range organics (GRO). Laboratory results are summarized in Table 3 and discussed below.

2013 Results With Discussion

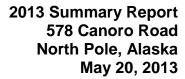
Free Product

No measurable product was observed in FRW2 since the June 2008 installation and no product was recovered from this well. Historically, free product was measured in SW5; however the quantity has steadily decreased with none observed from 2009 through 2013 as shown in Table 1. Specific free product monitoring field visits were discontinued in 2009/2010. Current observations confirm free product is not an issue at this Site.

Drinking Water Sampling

In the 2013 sampling event, toluene was detected in both the primary and field duplicate samples as shown in Table 2. The toluene concentration was slightly above the 2012 event but at greater than two orders of magnitude below the respective ADEC cleanup level. P & M xylenes were detected in primary sample TW1 (at 0.00063 milligram per liter), but not duplicate sample TW2. The reported P & M xylene concentration was just above the limit of quantitation (LOQ) and more than four orders of magnitude below the total xylenes cleanup level of 10 mg/L.

Toluene and xylenes have been detected in the same concentration range in some of the previous drinking water well samples. These compounds have been reported only at concentrations orders of magnitude below the respective cleanup levels in a few monitoring wells. The source of the toluene and xylenes in the drinking water well samples is not known and the concentrations are low so this is not considered a concern. The drinking water well has now been tested seven times since it was installed in 2008. No evidence of contamination related to the 2006 release has been observed. Sampling is no longer recommended as outlined below in the recommendation for Site closure.





Groundwater Elevations

Depth to groundwater was measured at each monitoring well and FRW2 during groundwater sampling events. Groundwater depths collected during 2013 when plotted showed elevation data was not consistent with previous years or consistent between wells. Plotted elevations were significantly different indicating that in addition to SW1 and SW2, other wells were potentially frost jacked, which changed casing elevations. Due to the unreliability of groundwater depths, the Site hydraulic gradient was not analyzed for the 2013 event.

Using 2012 groundwater elevations(Figure 4 in the 2012 report), the groundwater surface continue to show general sloping to the west or southwest. The total elevation difference across the Site in 2012 was less than 0.15 feet, resulting in a calculated hydraulic gradient of less than 0.001 feet/foot. The Site location and porosity of soil observed during aquifer characterization indicate groundwater elevation is dependent on the Chena River water level.

As the Site is within a meander, river level changes are not expected to result in transient groundwater gradient conditions because the river would rise on each side relatively equally. The potential impact of groundwater elevation changes and resulting flow direction is expected to be minimal. The potential for vertical mixing within the groundwater has not been evaluated, but is expected to be minimal.

2013 Groundwater Characterization

The analytical results for March 2013 are summarized in Table 3. A summary of the historical results for each well is presented in Table 4. The well locations and benzene concentrations are shown in Figure 4. Copies of the laboratory analytical report and the ADEC Laboratory Data Review Checklist are attached to this report.

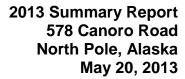
Contaminant Concentrations

In March 2013, benzene and DRO were observed above the ADEC cleanup levels in SW5, while toluene, ethylbenzene, and xylenes were observed below the cleanup levels. Benzene was not detected in any other well. DRO was also detected in DW2 at a concentration below the cleanup level. Ethylbenzene and xylenes were detected in SW6 and DWW at concentrations below the cleanup levels. No COCs were detected in the nine other monitoring wells, including FRW2, in this sampling event.

QA/QC Results and Discussion

Three field duplicate sample pairs were collected and submitted blind to the laboratory. The primary and duplicate sample pair results were used to calculate the relevant percent difference (RPD). The RPD results for each duplicate pair are shown at the bottom of the respective summary Table 2(drinking water) and Table 3 (groundwater). ADEC considers an acceptable RPD in a groundwater duplicate pair at 30% or less. If a compound was not detected in either sample, the RPD was not calculated. Non-detect results were reviewed to verify a comparable order of magnitude.







In 2013, both monitoring well duplicate pairs met RPD goals with each calculable RPD at less than 6%. Calculable RPDs for the 2013 drinking water pairs were 23% and 37%, meeting the RPD goal for total xylenes but not toluene. Although the toluene RPD was just above the ADEC 30% limit, both samples were greater than two orders of magnitude below the cleanup level.

NORTECH also reviewed the laboratory reports for other quality control issues using the ADEC Laboratory Data Review Checklist. A review of the reports did not identify any concerns that affect data usability as described in this report. The checklist is included as an attachment with the laboratory report.

Contaminant Trends

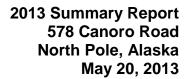
The historical data summary in Table 4 is organized by well and each well is discussed below. The wells are listed in alphanumeric order in Table 4 and grouped by area.

Source Area

The source area consists of the area on the east of the house between the release location and SW5 to the northwest. Wells tested in this area include the former drinking water well (DWW, the release location), CRW1 (a shallow product recovery well), DW2 and FRW2 (deep monitoring and product recovery wells), and SW5 and SW6 (shallow monitoring wells).

- CRW1: This well was installed in December 2006 to collect product expected to
 float vertically to the groundwater surface. Ice was observed in 2013 and no
 sample was collected. Historical data in Table 5 indicated no BTEX at this
 location. DRO was observed in 2007 and 2008 below ADEC cleanup limits.
 Product was never measured or recovered, indicating product did not float to the
 top of the groundwater in this location.
- DW2: The 2008 aquifer study indicated petroleum contaminants migrated through the screened depth of this deep well to the groundwater surface. Ethylbenzene and xylenes below ADEC cleanup levels have steadily decreased from the 2007 installation through 2012 and were not detected in 2013. Since 2009, benzene and toluene have not been detected at or above the LOQ. From 2008 through 2013, the DRO concentration has been around the LOQ, except in 2011, when DRO was above the cleanup level. The data set suggests the 2011 result was an anomaly.
- FRW2: The 4-inch, 35-foot deep product recovery well was installed in 2008 to recover product from multiple depths. Recoverable product was never measured. Historical contaminant concentrations have not exceeded ADEC cleanup levels. Since 2009, no COCs were detected at or above the LOQ. The 2011 field inspection confirmed FRW2 is screened from the bottom to above the water table, indicating results should be similar to SW5.
- **SW5**: This well was installed as the upgradient background well, but free product was observed and small amounts recovered until late 2008. Free product has







generally decreased between sampling events with none observed since 2008. Dissolved contaminant concentrations of toluene, ethylbenzene, and xylenes decreased steadily since August 2008 and continue below cleanup levels. Benzene and DRO have remained above ADEC cleanup levels, but benzene has continued on a steady downward trend since November 2008. DRO levels have fluctuated since 2008, but remain well below those observed during the initial sampling event. The 2013 result of 1.7 mg/L was just above the 1.5 mg/L cleanup level.

• **SW6**: SW6 was installed in 2008 to evaluate contaminant migration at the groundwater surface from the SW5 area. Benzene exceeded the ADEC cleanup level in late 2008 and 2009 but has been steadily decreasing and dropped below the cleanup level in 2011. No benzene was detected in 2013. Detected ethylbenzene and xylenes have fluctuated within a narrow range that is several orders of magnitude below the ADEC cleanup level.

Downgradient Area

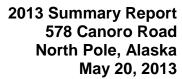
The groundwater elevation contours have generally been to the southwest or west during sampling events. Monitoring wells DW1, SW1, and SW9 are considered directly downgradient of the source area.

- DW1: This deep monitoring well was installed to identify contaminant migration at the release depth in the direction of the hydraulic gradient. BTEX concentrations have generally been low, if detected at all. Benzene is the only COC exceeding the ADEC cleanup level. Benzene was not detected in 2007, slightly above the cleanup level in 2008 and 2009, dropped below the cleanup level in 2011, and returned to non-detect in 2012 and 2013.
- **SW1**: This shallow well was installed to evaluate downgradient contaminant migration at the groundwater surface. Benzene was not detected initially and concentrations stayed in a narrow range near the ADEC cleanup level from July 2007 through 2009. The 2011 to 2013 events showed benzene and other BTEX decreasing below the cleanup level to non-detect.
- **SW9**: This shallow well was installed in 2008 and is 65 feet farther downgradient than SW1. DRO has not been detected. Ethylbenzene and xylene concentrations have been detected well below ADEC cleanup levels. Benzene exceeded the ADEC cleanup level slightly in 2008 and has steadily decreased to non-detect in 2013.

Perimeter Area

Wells SW2, SW3, SW4, SW7, and SW8 are perimeter wells and/or sentry wells around the contaminant plume edge. These wells are expected to have concentrations of COCs below the ADEC cleanup levels, if detected at all.

• **SW2**: This shallow monitoring well is west of source area wells SW5 and SW6 on the east side of the house. Benzene was not detected in 2007 then detected in 2008 and 2009 at concentrations below the ADEC cleanup level. Benzene has not been detected since. No other COCs were ever detected in SW2.





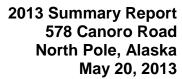
- SW3: This shallow monitoring well is northwest of the source area and cross-gradient based on groundwater elevations. Similar to SW2, benzene was not detected in 2007 then detected in 2008 and 2009 at concentrations below the ADEC cleanup level. Benzene has not been detected since 2009. No other COCs were ever detected in SW3.
- SW4: This shallow monitoring well is north of the source area. Based on groundwater elevation and the sloped stratigraphic layers that moved the release east, the SW4 location is generally upgradient. DRO has not been detected. BTEX compounds were generally not detected in 2007, were detected from 2008 to 2011, and not detected since 2012.
- SW7: This monitoring well was installed in 2008 to evaluate the southern edge
 of the plume adjacent to the house. Benzene was detected at an order of
 magnitude below the ADEC cleanup level in 2008. No COCs have been
 detected since 2009.
- **SW8**: This shallow well was installed in 2008 to evaluate the southern edge of the plume. Benzene, ethylbenzene, and xylenes were detected in 2008 below ADEC cleanup levels. Detected concentrations of individual compounds have steadily dropped since 2008 and no COCs were detected since 2012.

SW5 and FRW2 Evaluation

SW5 and FRW2 are located approximately five feet apart on the eastern side of the Site. As indicated above, SW5 was expected to be an upgradient well but free product was encountered during installation. Further characterization indicated this was due to aquifer characteristics that led the petroleum to migrate horizontally while floating to the surface from the release location. FRW2 was screened for approximately 30 feet to recover product from any contaminated depth in the SW5 area. However, free product was never observed in FRW2. Dissolved contaminant concentrations have never exceeded the ADEC cleanup levels in FRW2 and no contaminants have been detected since 2009.

The 2011 sampling event was the first event in which SW5 was the only well that exceeded ADEC cleanup levels. At this time, adjacent well FRW2 was non-detect for all contaminants. Combined with concentration differences from earlier sampling events, this data suggested samples from these wells may have been from different elevations in the aquifer. A video inspection indicated both wells are screened across the top of the water table. Results in both wells were confirmed by re-sampling in March 2011, as well as results from March 2012 and March 2013.

The September 2012 report provides a detailed analysis of the differences between these wells. This analysis indicated the FRW2 data is more likely representative of aquifer conditions than the SW5 data due to differences in well construction and installation. The 2012 report recommended decommissioning of SW5 and removing the SW5 data from the data set to evaluate the potential for Site closure. The 2013 data show contaminant concentrations in SW5 continuing to decrease while no COCs are





present above the detection limits in FRW2. While the SW5 data shows the well approaching the cleanup levels, the continued discrepancy between SW5 and FRW2 provides further support for discontinuing use of SW5 and using FRW2 for overall evaluation of the Site.

Overall Site Conditions

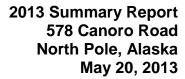
The seven sampling events following initial well installation were timed to encounter seasonal high water twice (July 2007 and August 2008) and seasonal low water five times (November 2008, October 2009, January 2011, March 2012, and March 2013). Transient and variable groundwater flow is most likely to occur during the summer when the Chena River elevation is impacted by precipitation, raising and lowering the groundwater elevation directly with the river stage. During the winter, the water elevation generally decreases as the surrounding aquifer slowly drains. This winter groundwater recession is most likely to produce groundwater results comparable year over year and COCs are typically highest in mid to late winter as groundwater flow slows.

Excluding the unreliable 2013 data, collected groundwater elevations support the expected seasonal variations. Groundwater elevations in October 2009 were at least 1.5 feet lower than previous events and January and March events since then have been similarly low. Groundwater elevation variability although not defined is expected at four or five feet with rapid changes due to the Chena River's proximity. The potential for vertical groundwater transport is considered limited due to thin lower permeability layers that controlled product migration following the initial release. While free product was able to penetrate these layers, the buoyant force of petroleum is expected to be much greater than the vertical diffusion necessary to move benzene downward in the aquifer. Benzene seen in deeper wells appears consistent with horizontal migration of contaminants in water from residual smear rather than vertical mixing from the surface.

The 2010 Work Plan was developed with the concept SW5 was representative of source area aquifer. SW5 is no longer believed to be representative of source area aquifer conditions. FRW2 data indicates free product and most dissolvable portions of petroleum were removed from the source area. This is consistent with the other source area and downgradient well data indicating benzene concentrations peaked in late 2007 or early 2008 with a steady decline in concentrations to non-detect at most locations in 2013. This is also consistent with the observed aquifer characteristics indicating a high volume of water is moving through the area, including the initial speed with which the petroleum moved to the SW5 location and the low percentage of fines observed in the aquifer during soil borings.

Using FRW2 as representative of east side Site conditions, existing data provides multiple lines of evidence that Site conditions have reached that necessary for closure. The hydraulic gradient is consistent in the general flow direction of the river. DW2 has not exceeded the DRO ADEC cleanup level since 2011. Other than this anomalous result, each detected COC showed a decreasing trend in each well. This data indicates







dissolution of lighter benzene within the residual smear area is reaching a limit. The rate of biological degradation appears to exceed the pace of physical transport mechanisms moving contaminants with groundwater.

While residual phase petroleum may be present in the soil matrix below the water table, data shows any remaining contamination poses little Site risk to human health or environment or in the surrounding area. The area primary potential receptors are Site drinking water wells and nearby properties as shown in Figure 2. These wells are generally screened at depths more than 40 feet below grade, below the fuel release depth and onsite deep monitoring wells. In 2008, three downgradient residential wells within the potential contamination path were tested and petroleum contamination was not identified. Contaminant concentrations have since dropped in every monitoring well. The potential for contamination to impact these wells is considered minimal.

Conclusions and Recommendations

The Site has been extensively characterized with most monitoring wells less than 75 feet apart. Many intermediate areas were assessed using GPR, soil borings, and electrical conductivity measurements. Additional monitoring wells approved in the 2010 work plan were not installed due to winter onset. The 2011, 2012 and 2013 groundwater monitoring results suggest the wells are not necessary and the Site has reached the criteria to evaluate the potential for closure. *NORTECH* has the following Site conclusions and recommendations:

Free Product Monitoring and Recovery

- The total amount of product recovered from SW5 has been less than 0.1 gallons with none recovered since August 2008
- Any product remaining appears to be residual and not recoverable
- Periodic free product monitoring remains unnecessary

On-Site Drinking Water Well Testing

- Drinking water results indicate released contaminants have not impacted the new drinking water well
- Annual drinking well testing is no longer necessary
- Future testing should be completed only if there is indication the well has become contaminated

Groundwater Elevations

- The Site gradient is clearly established
- Additional elevation monitoring and re-surveying casing elevations is not necessary





Groundwater Characterization

- Groundwater data from 2007 through 2013 show a significant decline in contaminant concentrations across the Site
- Perimeter and downgradient wells met the ADEC cleanup levels from 2011 through 2013
- Source area well DW2 has exceeded the ADEC cleanup level for DRO only once (2011) dating back to 2008
 - Detected BTEX concentrations have steadily decreased since the well was installed with none detected in 2013
 - The detection limit of DRO shows more variability than the reported concentrations
 - The 2012 and 2013 DRO results confirms the 2011 result was an anomaly and not representative of changing conditions at DW2
- East side well SW5 has exceeded the ADEC cleanup level for benzene and DRO since installation
 - Contaminant concentrations are generally decreasing
 - Contaminants have not been detected in the adjacent FRW2 since October 2009
 - FRW2 is believed to be more representative of location conditions than SW5 based on the following observations:
 - Both are screened and sampled at the water table surface
 - SW5 is a pre-packed microwell installed into free product
 - The SW5 sand pack screen is believed to have trapped petroleum resulting in continued contaminant concentration discrepancy between SW5 and FRW2
 - Decommissioning of SW5 is recommended
 - FRW2 should be used to evaluate potential closure of the Site
- Site conditions indicate the Site should be evaluated for decommissioning and closure

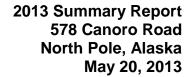
Contaminant Migration and Potential Receptor

- Three downgradient residential wells within the potential contamination path were tested in 2008
- Contaminant concentrations across the Site were highest during this time period
- Site concentrations have steadily dropped since 2009
- The potential to impact these wells is considered minimal
- No additional off-Site testing is recommended

<u>Project Management Recommendations</u>

 Submit this report to ADEC to document 2013 activities and recommendations for closure evaluation







- Teleconference/meet with Markel and ADEC to discuss Site conditions, historic trends, SW5/FRW2 divergence, and recommended closure
- Develop 2013 work plan to meet ADEC closure requirements

Please contact either of the undersigned at your earliest convenience if you have any questions about the data presented in the report or the Site in general.

Sincerely, **NORTECH**

Susan L. Vogt, CPESC, CISEC

Senior Professional

Peter Beardsley, PE

Principal, Environmental Engineer

Attachments:

Figure 1 Location Map
Figure 2 Vicinity Map

Figure 3 Site Location Map

Figure 4 Site Map

Table 1 Free Product Measurements and Recovery Data – 2008 through

2013

Table 2 March 2013 and Historical Drinking Water Results – Detected

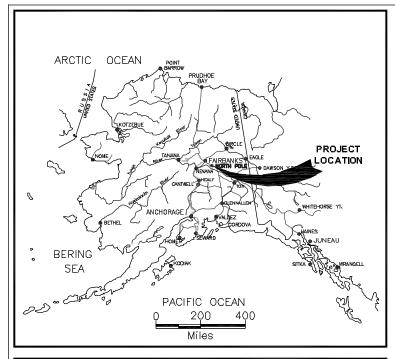
Analyses

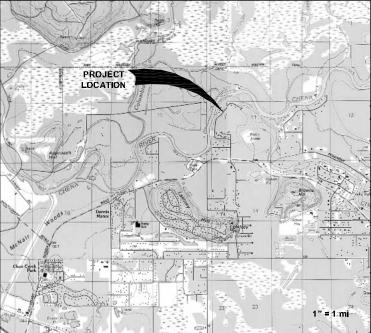
Table 3 Groundwater Results – March 30, 2013

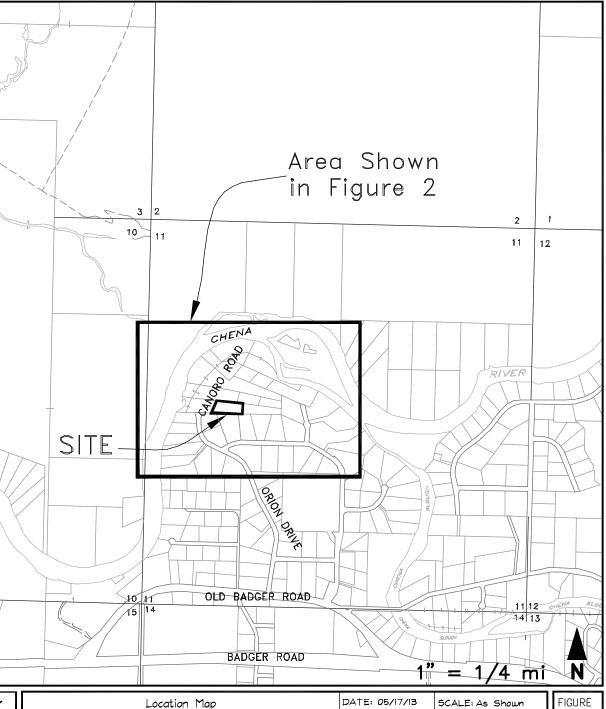
Table 4 Groundwater Results – Historical Summary

Laboratory Reports and Lab Quality Checklists

Figures







Nortech

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578 Canoro Road
North Pole, Alaska

 DATE: 05/17/13
 SCALE: As Shown

 DESIGN: PLB
 PROJECT: 06-1080

 DRAWN: PLB
 DWG: 061080h(01)

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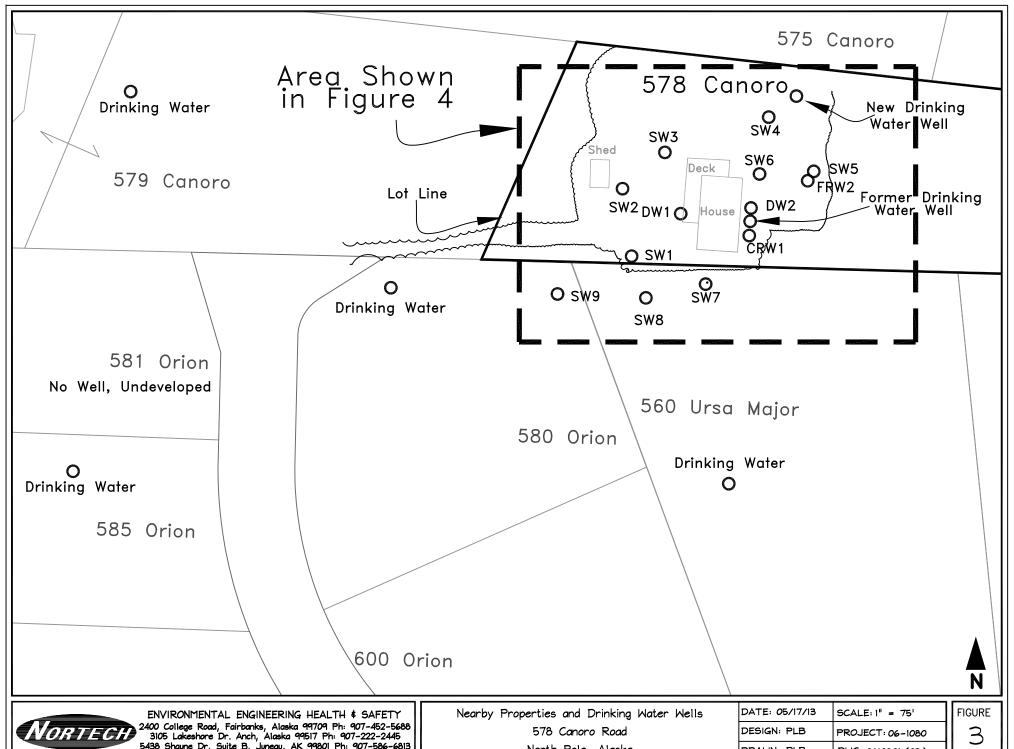


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Vicinity Map 578 Canoro Road North Pole, Alaska

DATE: <i>0</i> 5/17/13	SCALE: 1" = 3001
DESIGN: PLB	PROJECT: 06-1080
DRAWN: PLB	DWG: 061080h(02)

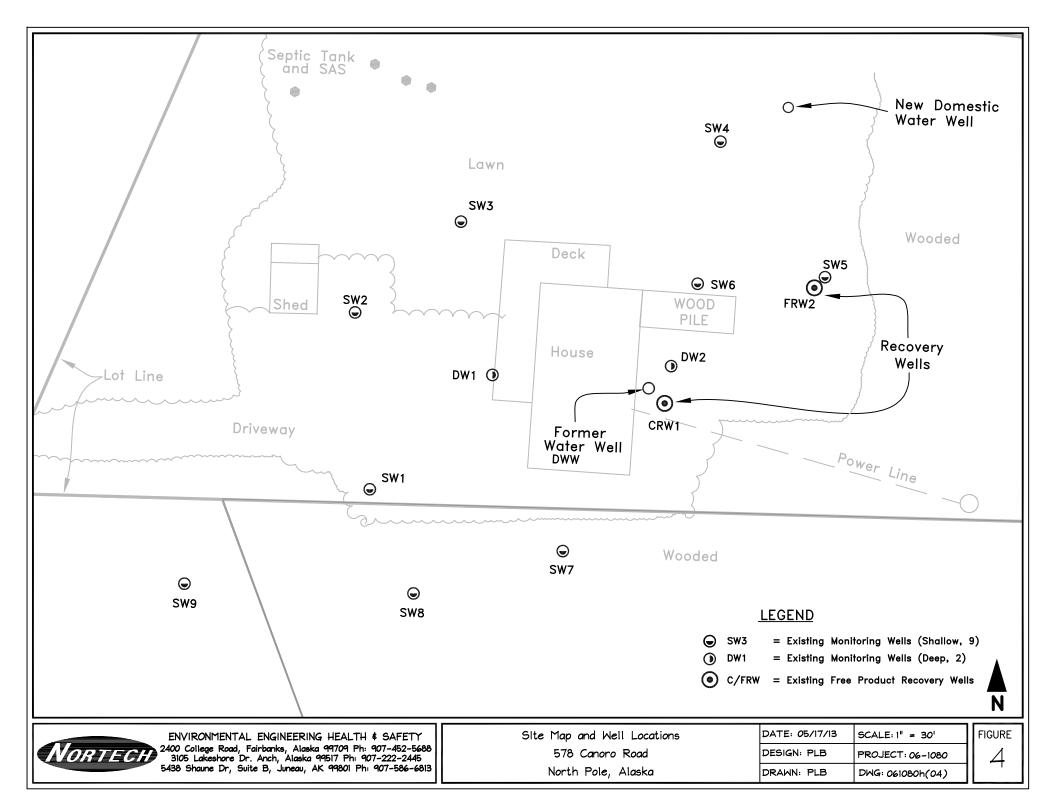
FIGURE



2400 College Road, Fairbanks, Alaska 99709 Ph: 907-452-5688 3105 Lakeshore Dr. Anch, Alaska 99517 Ph: 907-222-2445 5438 Shaune Dr, Suite B, Juneau, AK 99801 Ph: 907-586-6813

North Pole, Alaska

DATE: 05/17/13	SCALE: 1" = 75'		
DESIGN: PLB	PROJECT: 06-1080		
DRAWN: PLB	DWG: 061080h(03)		



Tables

Table 1
Free Product Measurements and Recovery Data - 2008 through 2013

Date	Well	Depth to Product	Depth to Water	Product Thickness	Product Volume	Recovered Product
	Units	feet	feet	feet	gallons	gallons
6/3/2008	SW5	13.49	14.28	0.790	0.018	0.018
6/25/2008	FRW2	-	13.60	sheen	NR	NR
6/25/2008	SW5	13.32	14.75	1.430	0.033	0.033
7/10/2008	FRW2	-	13.50	NP	NR	NR
7/10/2008	SW5	13.15	14.06	0.910	0.021	0.021
8/6/2008	FRW2	-	9.59	sheen	NR	NR
8/6/2008	SW5	9.30	9.82	0.520	0.012	0.012
8/16/2008	FRW2	-	10.99	sheen	NR	NR
8/16/2008	SW5	10.88	11.32	0.440	0.010	0.010
9/18/2008	FRW2	-	12.72	NP	NR	NR
9/18/2008	SW5	12.48	12.49	0.010	NR	NR
11/11/2008	FRW2	-	11.65	NP	NR	NR
11/11/2008	SW5	11.41	11.43	0.020	NR	NR
10/27/2009	FRW2	-	13.97	NP	NR	NR
10/27/2009	SW5	-	14.24	NP	NR	NR
1/27/2011	FRW2	1	12.21	NP	NR	NR
1/27/2011	SW5	ı	13.81	NP	NR	NR
3/25/2012	FRW2	-	13.90	NP	NR	NR
3/25/2012	SW5	-	13.18	NP	NR	NR
3/30/2013	FRW2	-	13.40	NP	NR	NR
3/30/2013	SW5	-	13.50	NP	NR	NR

Total Product Recovered: 0.094

Notes:

Depths are measured from the top of casing

NP No product NR No Recovery

Table 2
March 2013 and Historical Drinking Water Results - Detected Analytes

Sampling	Sample ID	Benzene	Toluene	Ethyl-	Total	Chloro-
Date	Sample 1D	Delizerie	inzerie Toluelle		Xylenes	methane
	Units	mg/L	mg/L	mg/L	mg/L	mg/L
	ADEC Limit	0.005	1.0	0.7	10	0.066
3/8/2008	BALL-DWW-1	0.0005U	0.0005U	0.0005U	0.001U	0.0005U
3/8/2008	BALL-DWW-2*	0.0005U	0.0005U	0.0005U	0.001U	0.0005U
4/8/2008	[BALL-]DW-01	0.000440J	0.00183J	0.000150J	0.000800J	0.0005U
4/8/2008	[BALL-]DW-02*	0.00063	0.00268	0.000210J	0.000940J	0.000220J
6/3/2008	BALL-DWW1	0.0005U	0.0005U	0.0005U	0.001U	0.0005U
6/3/2008	BALL-DWW2*	0.0005U	0.0005U	0.0005U	0.001U	0.0005U
9/18/2008	BALL-DWW1	0.0005U	0.0005U	0.0005U	0.001U	0.0005U
9/18/2008	BALL-DWW2*	0.0005U	0.0005U	0.0005U	0.001U	0.0005U
1/28/2011	IN1	0.0005U	0.00082	0.0005U	0.001U	0.0005U
1/28/2011	IN2*	0.0005U	0.00071	0.0005U	0.001U	0.0005U
3/23/2012	NDW1	0.0005U	0.00059	0.0005U	0.001U	NA
3/23/2012	NDW2*	0.0005U	0.00067	0.0005U	0.001U	NA
3/30/2013	TW1	0.0005U	0.00186	0.0005U	0.00063	0.0005U
3/30/2013	TW2*	0.0005U	0.00127	0.0005U	0.001U	0.0005U

Notes:

U Analyte not detected at the listed detection limit

Shade Analyte detected in concentration below the ADEC Cleanup level

X.XX U Analyte(s) not detected at specified limit of quantitation (LOQ)

X.XX J Measured concentration below LOQ, value estimated by laboratory

Blind duplicate sample

NA Not Analyzed

Duplicate Pair Quality Control Summaries - 2013 Samples

Sample ID	TW1	TW2	Average	Difference	RPD
Analyte	mg/L	mg/L	mg/L	mg/L	%
В	ND	ND	NA	NA	NA
Т	0.00186	0.00127	0.00157	0.00059	37.7%
E	ND	ND	NA	NA	NA
X	0.00063	0.0005	0.00057	0.00013	23.0%

Notes:

NA The calculation is not applicable.

RPD Relative percent difference as described in the lab data review checklist

ND Analyte not detected

Table 3
Groundwater Results - March 30, 2013

Sample ID	Benzene	Toluene	Ethyl- benzene	Total Xylenes	DRO
Units	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Limit	0.005	1.0	0.7	10	1.5
SW1	0.0005U	0.0010U	0.0010U	0.0020U	0.600U
SW2	0.0005U	0.0010U	0.0010U	0.0020U	0.600U
SW3	0.0005U	0.0010U	0.0010U	0.0020U	0.600U
SW4	0.0005U	0.0010U	0.0010U	0.0020U	0.667U
SW5	0.00917	0.0779	0.279	1.729	1.7
SW6	0.0005U	0.0010U	0.021	0.023	0.667U
SW7	0.0005U	0.0010U	0.0010U	0.0020U	0.600U
SW8	0.0005U	0.0010U	0.0010U	0.0020U	0.600U
SW9	0.0005U	0.0010U	0.0010U	0.0020U	0.600U
SW-19*	0.0005U	0.0010U	0.0010U	0.0020U	0.600U
DW1	0.0005U	0.0010U	0.0010U	0.0020U	0.706U
DW2	0.0005U	0.0010U	0.0010U	0.0020U	0.730
DWW	0.0005U	0.0010U	0.007	0.016	0.632U
DWW2*	0.0005U	0.0010U	0.007	0.015	0.652U
CRW1	Frozen no sa	ımple			
FRW2	0.0005U	0.0010U	0.0010U	0.002U	0.659U

Notes:

DRO; GRO Diesel range organics; Gasoline Range Organics

U Analyte not detected at the listed limit of quantitation (LOQ)

Shade Analyte detected in concentration below the ADEC Cleanup level
Analyte detected at concentration exceeding the ADEC Cleanup level

TB NA Trip blank not analyzed

* Duplicate of previous sample

2013 Quality Control Summary

Sample ID	SW9	SW19	RPD	DWW	DWW2	RPD
Analyte	mg/L	mg/L	%	mg/L	mg/L	%
В	ND	ND	NA	ND	ND	NA
Т	ND	ND	NA	ND	ND	NA
E	ND	ND	NA	0.007	0.007	1.6%
Х	ND	ND	NA	0.016	0.015	5.7%
DRO	ND	ND	NA	ND	ND	NA
GRO	ND	ND	NA	0.214	0.208	2.8%

Notes:

NA The calculation is not applicable.

ND Analyte not detected

RPD Relative percent difference as described in the lab data review checklist

Table 4
Groundwater Results - Historical Summary

Well ID	Date	Benzene	Toluene	Ethyl-	Total	DRO
Units		ma/l	mg/L	benzene mg/l	Xylenes	ma/l
ADEC Li		mg/L 0.005	111 9/ L	mg/L 0.7	mg/L 10	mg/L 1.5
DW1	Feb-07	0.0005U	0.00245	0.002U	0.00813	0.319U
	Jul-07	0.0005U	0.002U	0.002U	0.002U	0.324U
Dup Sample	Jul-07	0.0005U	0.002U	0.002U	0.002U	0.319U
2 ap Campio	Aug-08	0.00741	0.0020U	0.00794	0.0059	0.400U
	Nov-08	0.000798	0.0020U	0.00209	0.0040U	0.357U
	Oct-09	0.00589	0.0020U	0.0237	0.0160	0.769U
	Jan-11	0.00102	0.0020U	0.002U	0.00209	0.714U
	Mar-12	0.0005U	0.0020U	0.0010U	0.0030U	0.0006U
	Mar-13	0.0005U	0.0010U	0.0010U	0.0020U	0.706U
DW2	Feb-07	0.117	0.698	0.269	1.639	15.0
Field Duplicate	Feb-07	0.117	0.702	0.209	1.667	8.6
1 lold Duplicate	Jul-07	0.0452	0.416	0.209	1.253	19.3
	Aug-08	0.00273	0.002U	0.022	0.06656	0.766
Field Duplicate	Aug-08	0.00283	0.00282	0.0202	0.06256	0.71
·	Nov-08	0.0005U	0.00208	0.00752	0.01609	0.621
Field Duplicate	Nov-08	0.0005U	0.002U	0.00706	0.01548	0.637
	Oct-09	0.0005U	0.0020U	0.00518	0.0084	0.714U
Field Duplicate	Oct-09	0.0005U	0.0020U	0.00527	0.01081	0.784U
	Jan-11	0.0005U	0.0020U	0.00269	0.0079	2.24
	Mar-12	0.0005U	0.0010U	0.00147	0.00285	0.600U
	Mar-13	0.0005U	0.0010U	0.0010U	0.0020U	0.730
SW1	Feb-07	0.0005U	0.002U	0.002U	0.002U	0.326U
	Jul-07	0.00982	0.002U	0.00864	0.0550	0.333U
	Aug-08	0.00287	0.0020U	0.00895	0.00876	0.357U
Field Duplicate	Aug-08	0.00233	0.0020U	0.00736	0.00743	0.400U
	Nov-08	0.00938	0.0020U	0.0296	0.0258	0.357U
Field Duplicate	Nov-08	0.00866	0.002U	0.0283	0.0248	0.357U
	Oct-09	0.00397	0.0020U	0.0129	0.0121	0.714U
Field Duplicate	Oct-09	0.00504	0.002U	0.0194	0.0176	0.784U
	Jan-11	0.00164	0.0020U	0.00762	0.0040U	0.714U
	Mar-12	0.00081	0.0010U	0.0010U	0.0030U	0.600U
	Mar-13	0.0005U	0.0010U	0.0010U	0.0020U	0.600U
SW2	Feb-07	0.0005U	0.002U	0.002U	0.002U	0.333U
	Jul-07	0.0005U	0.002U	0.002U	0.002U	0.324U
	Aug-08	0.00137	0.0020U	0.0020U	0.0040U	0.357U
	Nov-08	0.00485	0.0020U	0.0020U	0.0040U	0.357U
	Oct-09	0.00115	0.0020U	0.0020U	0.0040U	0.714U
	Jan-11	0.0005U	0.0020U	0.0020U	0.0040U	0.714U
	Mar-12	0.0005U	0.0010U	0.0010U	0.0030U	0.600U
	Mar-13	0.0005U	0.0010U	0.0010U	0.0020U	0.600U

Table 4
Groundwater Results - Historical Summary

Well ID	Date	Benzene	Toluene	Ethyl-	Total	DRO
Units		mg/L	ma/l	benzene ma/l	Xylenes	ma/l
	ADEC Limit		<u>mg/L</u> 1	mg/L 0.7	mg/L 10	mg/L 1.5
SW3	Feb-07	0.005 0.0005U	0.002U	0.002U	0.002U	0.313U
000	Jul-07	0.0005U	0.002U	0.002U	0.002U	0.313U
	Aug-08	0.000648	0.0020U	0.0020U	0.0020 0.0040U	0.357U
	Nov-08	0.00327	0.0020U	0.0020U	0.0040U	0.357U
	Oct-09	0.00060	0.0020U	0.0020U	0.0040U	0.337U 0.714U
	Jan-11	0.0005U	0.0020U	0.0020U	0.0040U	0.714U
	Mar-12	0.0005U	0.0010U	0.0010U	0.0030U	0.600U
	Mar-13	0.0005U	0.0010U	0.0010U	0.0020U	0.600U
SW4	Feb-07	0.0005U	0.002U	0.002U	0.00238	0.326U
	Jul-07	0.0005U	0.002U	0.002U	0.002U	0.316U
	Aug-08	0.0005U	0.0020U	0.0020U	0.0040U	0.357U
	Nov-08	0.00350	0.0020U	0.00372	0.0040U	0.357U
	Oct-09	0.00142	0.0020U	0.00393	0.00339	0.769U
	Jan-11	0.00067	0.0020U	0.002U	0.00265	0.714U
	Mar-12	0.0005U	0.0010U	0.0010U	0.0030U	0.600U
	Mar-13	0.0005U	0.0010U	0.0010U	0.0020U	0.667U
SW5	Feb-07	0.466	1.670	0.767	4.400	2320
• • • • • • • • • • • • • • • • • • • •	Jul-07			e product dep		
	Aug-08	0.00955	0.673	0.310	1.876	5.70
	Nov-08	0.0846	0.587	0.308	1.865	2.08
	Oct-09	0.0776	0.497	0.319	1.836	1.75
	Jan-11	0.0429	0.443	0.319	1.884	21.3
	Mar-11	0.0218	0.304	0.279	1.569	9.84
	Mar-12	0.0297	0.259	0.291	1.816	2.19
Field Duplicate	Mar-12	0.0294	0.257	0.288	1.804	2.18
	Mar-13	0.00917	0.0779	0.279	1.729	1.7
SW6	Aug-08	0.000939	0.0020U	0.0020U	0.00581	0.400U
	Nov-08	0.0170	0.0020U	0.0273	0.0833	0.385U
	Oct-09	0.00609	0.0020U	0.0659	0.0500	0.714U
E. 11D I. (Jan-11	0.00477	0.0020U	0.0536	0.0596	0.714U
Field Duplicate	Jan-11	0.00484	0.0020U	0.054	0.0602	0.714U
	Mar-12 Mar-13	0.00109	0.0010U	0.0278	0.0265	0.600U
CMZ		0.0005U	0.0010U	0.021	0.023	0.667U
SW7	Aug-08	0.0005U	0.0020U	0.0020U	0.0040U	0.400U
	Nov-08 Oct-09	0.000734 0.0005U	0.0020U 0.0020U	0.0020U	0.0040U	0.357U 0.714U
	Jan-11	0.0005U	0.0020U	0.0020U 0.0020U	0.0040U 0.0040U	0.714U
	Mar-12	0.0005U	0.0020U	0.0020U 0.0010U	0.0040U	0.600U
Field Duplicate	Mar-12	0.0050U	0.0010U	0.0010U	0.0030U	0.600U
. ioia Dapiioato	Mar-13	0.0005U	0.0010U	0.0010U	0.0020U	0.600U

Table 4
Groundwater Results - Historical Summary

Well ID	Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	DRO
Units		mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Li	mit	0.005	1	0.7	10	1.5
SW8	Aug-08	0.0005U	0.0020U	0.0020U	0.0040U	0.400U
	Nov-08	0.00127	0.0020U	0.00897	0.00764	0.357U
	Oct-09	0.0005U	0.0020U	0.00655	0.005710	0.714U
	Jan-11	0.0005U	0.0020U	0.00322	0.0040U	0.714U
	Mar-12	0.0005U	0.0010U	0.0010U	0.0030U	0.600U
	Mar-13	0.0005U	0.0010U	0.0010U	0.0020U	0.600U
SW9	Aug-08	0.00848	0.0020U	0.00901	0.0523	0.513U
	Nov-08	0.00730	0.0020U	0.0153	0.01893	0.357U
	Oct-09	0.00353	0.0020U	0.0211	0.0135	0.769U
	Jan-11	0.00179	0.0020U	0.0122	0.0040U	0.714U
Field Duplicate	Jan-11	0.00184	0.0020U	0.0125	0.0040U	0.714U
	Mar-12	0.00098	0.0010U	0.00162	0.0030U	0.600U
	Mar-13	0.0005U	0.0010U	0.0010U	0.0020U	0.600U
Field Duplicate	Mar-13	0.0005U	0.0010U	0.0010U	0.0020U	0.600U
CRW1	Jul-07	0.0005U	0.002U	0.002U	0.002U	1.10
	Aug-08	0.0005U	0.0020U	0.0020U	0.0040U	0.400U
	Nov-08	0.0005U	0.0020U	0.0020U	0.0040U	0.358
	Oct-09	0.0005U	0.0020U	0.0020U	0.0040U	0.400U
	Jan-11		Fr	ozen no samp	ole	
	Mar-12		Fr	ozen no samp	ole	
	Mar-13		Fr	ozen no samp	ole	
FRW2	Aug-08	0.0005U	0.0020U	0.0020U	0.01042	0.574
	Nov-08	0.0005U	0.0020U	0.0020U	0.0040U	0.357U
	Oct-09	0.0005U	0.0020U	0.0020U	0.01042	0.714U
	Jan-11	0.0005U	0.0020U	0.0020U	0.0040U	0.714U
	Mar-11	0.0005U	0.0020U	0.0020U	0.0040U	0.800U
	Mar-12	0.0005U	0.0010U	0.0010U	0.0030U	0.600U
	Mar-13	0.0005U	0.0010U	0.0010U	0.002U	0.659U
DWW (Old Well)	Jul-07	0.00321	0.110	0.120	0.644	14.4
	Aug-08	0.00209	0.0020U	0.036	0.10545	0.658
	Nov-08	0.00154	0.0020U	0.0309	0.07455	0.860
	Oct-09	0.0005U	0.0020U	0.0124	0.02276	0.769U
	Jan-11	·				
	Mar-12			ozen no samp		
	Mar-13	0.0005U	0.0010U	0.007	0.016	0.632U
Field Duplicate	Mar-13	0.0005U	0.0010U	0.007	0.015	0.652U

Notes:

U Analyte not detected at the listed detection limit

Shade	Analyte detected in concentration below the ADEC Cleanup level
Bold	Analyte detected in concentration exceeding the ADEC Cleanup level

When duplicate sample values are greater than primary sample values, duplicate sample values are use

Laboratory Reports

Laboratory Data Review Checklist

Compl	leted by:	Susan Vogt						
Title:		Senior Profess	ional	Date:	May 9, 2013			
CS Re	port Name:	Canoro Road			Report Date:	April 15, 2013		
Consu	ltant Firm:	Nortech						
Labora	ntory Name:	SGS		Laboratory Report Nu	mber: 1137642			
ADEC	File Number:	100.38.217		ADEC RecKey Numb	per:			
1. <u>L</u> a	aboratory	ADEC CS approx	oved laboratory	raceive and perform all co	f the submitted	comple analyses?		
	a. Did an A	No	•	receive and <u>perform</u> all of ase explain.)	Comments:	sample analyses?		
[ase emplaini,	Comments.			
L		1		er "network" laboratory og the analyses ADEC CS		d to an alternate		
	○ Yes	○ No	• NA (Pleas	se explain) Comments:				
5	Samples were n	ot transferred.						
2. <u>Ch</u>	ain of Custody	(COC)						
	a. COC infor	mation complet	ed, signed, and d	lated (including released/	received by)?			
_	• Yes	○ No	○ NA (Pleas	se explain)	Comments:			
L	b. Correct an	alyses requeste	d?					
• Yes O No		•		ase explain)	Comments:			
3. <u>Laboratory Sample Receipt Documentation</u>				d within rongs of receive	(10 + 20 C\2			
a. Sample/cooler tempera • Yes No		-		d within range at receipt case explain)	$(4^{\circ} \pm 2^{\circ} C)$? Comments:			
Γ	e les Cho Cha (la							

c. Sample cond		ONA (Please explain)	Comments:
•		ntod huokon laskina (Mathan 1)	
•		ntad buolean lasking (Markar I)	
• Yes	O 3.7	meu - broken, leaking (Methanol),	zero headspace (VOC vials)?
	○ No	○NA (Please explain)	Comments:
	•	•	or example, incorrect sample contains insufficient or missing samples, etc.?
○ Yes	No	ONA (Please explain)	Comments:
e. Data quality	or usability at	ffected? (Please explain)	
			Comments:
NA			
Case Narrative			
a. Present and u	nderstandable	e?	
• Yes	○ No	○ NA (Please explain)	Comments:
b. Discrepancie	es, errors or Q	C failures identified by the lab?	
○ Yes	○ No	ONA (Please explain)	Comments:
SW-5 and SW-6 A interference.	K101 - BFB	(surrogate) recoveries do not meet	QC criteria (biased high) due to ma
c. Were all corr	ective actions	s documented?	
• Yes	○ No	ONA (Please explain)	Comments:
d. What is the e	effect on data	quality/usability according to the c	case narrative? Comments:

• Yes	○ No	○ NA (Please explain)	Comments:
b. All applical	ole holding tim	nes met?	
• Yes	○ No	○ NA (Please explain)	Comments:
c. All soils rep	oorted on a dry	weight basis?	
○ Yes	○ No	• NA (Please explain)	Comments:
Vater Samples			
d. Are the repoproject?	orted PQLs les	ss than the Cleanup Level or the min	nimum required detection level for t
○ Vaa	○ No	○NA (Please explain)	Comments:
		ffected? (Please explain)	Comments:
e. Data quality No C Samples	or usability a		
e. Data quality No C Samples a. Method Blar	or usability a		Comments:
e. Data quality No C Samples a. Method Blar	or usability a	ffected? (Please explain) ported per matrix, analysis and 20 sa	Comments:
e. Data quality No C Samples a. Method Blar i. One me	or usability a	ffected? (Please explain) ported per matrix, analysis and 20 sa	Comments:
e. Data quality No C Samples a. Method Blar i. One me	or usability a nk ethod blank rep s	ffected? (Please explain) oorted per matrix, analysis and 20 sa ONA (Please explain)	Comments: Comments:
e. Data quality No C Samples a. Method Blar i. One me	or usability a nk ethod blank rep s	ffected? (Please explain) oorted per matrix, analysis and 20 sa ONA (Please explain)	Comments:

5. <u>Samples Results</u>

	○ Yes	○ No	• NA (Please explain)	Comments:
	y Data qu	iality or usabil	lity affected? (Please explain)	Comments:
NA	··· Butu qu		inty arrected. (Freuse explain)	Comments.
1111				
b.	Laboratory	Control Samp	ple/Duplicate (LCS/LCSD)	
	_		CSD reported per matrix, analysis a equired per SW846)	and 20 samples? (LCS/LCSD required
	• Yes	○ No	○ NA (Please explain)	Comments:
	ii. Metals/samples?	Inorganics - C	One LCS and one sample duplicate r	eported per matrix, analysis and 20
	○ Yes	○ No	• NA (Please explain)	Comments:
	project spe	ecified DQOs	ent recoveries (%R) reported and wing, if applicable. (AK Petroleum methologies), all other analyses see the la	
	• Yes	○ No	ONA (Please explain)	Comments:
	limits? An	nd project spec	cified DQOs, if applicable. RPD rep	ed and less than method or laboratory orted from LCS/LCSD, MS/DMSD, an all other analyses see the laboratory QC
	• Yes	○ No	○ NA (Please explain)	Comments:
		p.p.;		00
	v. If %R o	or RPD is outs	ide of acceptable limits, what sampl	es are affected? Comments:
NA				

Not affected c. Surrogates - Orga i. Are surrogate r		affected? (Please explain)	Comments:
c. Surrogates - Orga i. Are surrogate r	nics Only		
i. Are surrogate r	nics Only		
i. Are surrogate r	nics Only		
9		. 10	
	•	•	field, QC and laboratory samples?
• Yes	No (ONA (Please explain)	Comments:
•	DQOs, if ap		ithin method or laboratory limits? And hods 50-150 %R; all other analyses see
○ Yes •	No (NA (Please explain)	Comments:
See answer to question	1 4b above		
iii. Do the sampl clearly defined?	e results wit	h failed surrogate recoveries l	have data flags? If so, are the data flags
• Yes	No	ONA (Please explain)	Comments:
iv. Data quality	or usability a	ffected? (Use the comment be	ox to explain.). Comments:
AK 101 results on two	samples are	biased high 8021 results are	not affected
Soil	reported per	matrix, analysis and for each	Chlorinated Solvents, etc.): Water and a cooler containing volatile samples?
• Yes	No	○ NA (Please explain.)	Comments:
		port the trip blank and VOA sing why must be entered below	amples clearly indicated on the COC?
○ Yes •	No	O NA (Please explain.)	Comments:

iii. All resi	ılts less than F	PQL?	
Yes	○ No	O NA (Please explain.)	Comments:
iv. If abov	ve PQL, what	samples are affected?	
			Comments:
v. Data qu	ality or usabil	ity affected? (Please explain.)	
1	,		Comments:
e. Field Duplic	ate		
i. One field	d duplicate sub	omitted per matrix, analysis and 10	project samples?
• Yes	○ No	○NA (Please explain)	Comments:
		-	
ii. Submit	ted blind to la	b?	
• Yes	○ No	O NA (Please explain.)	Comments:
		ve percent differences (RPD) less the water, 50% soil)	nan specified DQOs?
	I	RPD (%) = Absolute Value of: (R_{1-})	
Where R	a ₁ = Sample Co		-,
R	₂ = Field Dupl	icate Concentration	
○ Yes	No	○NA (Please explain)	Comments:
The RPD for sar	nples TW1 an	d TW2 were at 37.7% for toluene.	
iv. Data q	uality or usabi	lity affected? (Use the comment bo	x to explain why or why not.)
○ Yes	No	○ NA (Please explain)	Comments:
The results were	consistent wi	th previous results and both were w	rell below the cleanup level.

f. I	Decontamina	ation or Equip	ment Blank (if applicable)	
	○ Yes	○ No	○ NA (Please explain)	Comments:
NA				
	i. All result	ts less than PQ	L?	
	○ Yes	○ No	ONA (Please explain)	Comments:
	·· TC 1	DOI 1	1	
	11. If above	PQL, what sa	mples are affected?	Comments:
	iii. Data qu	ality or usabil	ity affected? (Please explain.)	Comments:
		ualifiers (ACO	DE, AFCEE, Lab Specific, etc.)	
	○ Yes	○ No	NA (Please explain)	Comments:
No ot	ther data flag	gs		
		<u> </u>		

Reset Form



Laboratory Report of Analysis

To: Nortech

2400 College Rd. Fairbanks, AK 99709 (907)452-5688

Report Number: 1137642

Client Project: Conoro Road

Dear Peter Beardsley,

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 five 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 thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or services performed during this project, please call Jennifer 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.

Stephen Ede 2013.04.15

ka Division Tashnical Director

08:43:39 -08'00'

Jennifer Dawkins Project Manager Date

Print Date: 04/15/2013 8:24:43AM



Case Narrative

SGS Client: Nortech SGS Project: 1137642 Project Name/Site: Conoro Road Project Contact: Peter Beardsley

Refer to sample receipt form for information on sample condition.

SW-6 (1137642009) PS

AK101 - BFB (surrogate) recovery does not meet QC criteria (biased high) due to matrix interference.

SW-5 (1137642012) PS

AK101 - BFB (surrogate) recovery does not meet QC criteria (biased high) due to matrix interference.

AK102 - Unknown hydrocarbon with several peaks is present.

DW-2 (1137642013) PS

AK102 - The pattern is consistent with a weathered middle distillate.

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

Print Date: 04/15/2013 8:24:43AM



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. If you have any questions regarding this report, or if we can be of any other assistance, please contact your SGS Project Manager at 907-562-2343. All work is provided under SGS general terms and conditions (http://www.sgs.com/terms_and_conditions.htm), unless other written agreements have been accepted by both parties.

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/ISO17025 (RCRA methods: 1020A, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035B, 6020, 7470A, 7471B, 8021B, 8082A, 8260B, 8270D, 8270D-SIM, 9040B, 9045C, 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 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., 2xDL)

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 RL Reporting Limit

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.

Print Date: 04/15/2013 8:24:44AM



Sam	nle	Sum	mary
Jaili	PIE	Julii	ıııaı y

Client Sample ID	Lab Sample ID	<u>Collected</u>	Received	<u>Matrix</u>
SW-8	1137642001	03/30/2013	04/02/2013	Water (Surface, Eff., Ground)
SW-2	1137642002	03/30/2013	04/02/2013	Water (Surface, Eff., Ground)
DW-1	1137642003	03/30/2013	04/02/2013	Water (Surface, Eff., Ground)
SW-7	1137642004	03/30/2013	04/02/2013	Water (Surface, Eff., Ground)
SW-9	1137642005	03/30/2013	04/02/2013	Water (Surface, Eff., Ground)
SW-19	1137642006	03/30/2013	04/02/2013	Water (Surface, Eff., Ground)
SW-3	1137642007	03/30/2013	04/02/2013	Water (Surface, Eff., Ground)
SW-1	1137642008	03/30/2013	04/02/2013	Water (Surface, Eff., Ground)
SW-6	1137642009	03/30/2013	04/02/2013	Water (Surface, Eff., Ground)
SW-4	1137642010	03/30/2013	04/02/2013	Water (Surface, Eff., Ground)
FRW-2	1137642011	03/30/2013	04/02/2013	Water (Surface, Eff., Ground)
SW-5	1137642012	03/30/2013	04/02/2013	Water (Surface, Eff., Ground)
DW-2	1137642013	03/30/2013	04/02/2013	Water (Surface, Eff., Ground)
DWW	1137642014	03/30/2013	04/02/2013	Water (Surface, Eff., Ground)
DWW2	1137642015	03/30/2013	04/02/2013	Water (Surface, Eff., Ground)
Trip Blank	1137642016	03/30/2013	04/02/2013	Water (Surface, Eff., Ground)
TW1	1137642017	03/30/2013	04/02/2013	Drinking Water
TW2	1137642018	03/30/2013	04/02/2013	Drinking Water
Trip Blank	1137642019	03/30/2013	04/02/2013	Drinking Water

 Method
 Method Description

 AK101
 AK101/8021 Combo.

 SW8021B
 AK101/8021 Combo.

AK102 Diesel/Residual Range Organics Water
AK103 Diesel/Residual Range Organics Water
EPA 524.2 Volatile Organics by 524.2 (DW)



Detectable Results Summary

Client Sample ID: SW-6			
Lab Sample ID: 1137642009	<u>Parameter</u>	Result	<u>Units</u>
Volatile Fuels	Ethylbenzene	20.9	ug/L
	Gasoline Range Organics	0.249	mg/L
	P & M -Xylene	23.1	ug/L
Client Sample ID: SW-5			
Lab Sample ID: 1137642012	Parameter	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	1.70	mg/L
Volatile Fuels	Benzene	9.17	ug/L
volutilo i dolo	Ethylbenzene	279	ug/L
	Gasoline Range Organics	4.77	mg/L
	o-Xylene	579	ug/L
	P & M -Xylene	1150	ug/L
	Toluene	77.9	ug/L
Client Sample ID: DW-2			
Lab Sample ID: 1137642013	Davamatar	Desult	l laita
·	<u>Parameter</u> Diesel Range Organics	<u>Result</u> 0.730	<u>Units</u> mg/L
Semivolatile Organic Fuels	Diesei Kange Organics	0.730	IIIg/L
Client Sample ID: DWW			
Lab Sample ID: 1137642014	<u>Parameter</u>	Result	<u>Units</u>
Volatile Fuels	Ethylbenzene	7.06	ug/L
	Gasoline Range Organics	0.214	mg/L
	o-Xylene	2.60	ug/L
	P & M -Xylene	13.2	ug/L
Client Sample ID: DWW2			
Lab Sample ID: 1137642015	<u>Parameter</u>	Result	<u>Units</u>
Volatile Fuels	Ethylbenzene	6.95	ug/L
	Gasoline Range Organics	0.208	mg/L
	o-Xylene	2.33	ug/L
	P & M -Xylene	12.6	ug/L
Client Sample ID: TW1			
Lab Sample ID: 1137642017	Parameter	Result	Units
Volatile GC/MS	P & M -Xylene	0.630	ug/L
	Toluene	1.86	ug/L
Client Sample ID: TW2			Ü
Client Sample ID: TW2 Lab Sample ID: 1137642018	Davanatas	Desult	L lm:t-
·	<u>Parameter</u> Toluene	Result 1.27	<u>Units</u> ug/L
Volatile GC/MS	lolucite	1.41	ug/L

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SGS North America Inc.

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



Client Sample ID: **SW-8**Client Project ID: **Conoro Road**Lab Sample ID: 1137642001
Lab Project ID: 1137642

Collection Date: 03/30/13 10:30 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Semivolatile Organic Fuels

<u>Parameter</u>	Result Qual	LOQ/CL DI	<u>Units</u>	<u>DF</u>	Date Analyzed
Diesel Range Organics	0.600 U	0.600 0.	180 mg/L	1	04/10/13 18:37
Surrogates					
5a Androstane	87.3	50-150	%	1	04/10/13 18:37

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK102

Analyst: EAB

Analytical Date/Time: 04/10/13 18:37 Container ID: 1137642001-E Prep Batch: XXX28866
Prep Method: SW3520C
Prep Date/Time: 04/09/13 10:30
Prep Initial Wt./Vol.: 1000 mL
Prep Extract Vol: 1 mL

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Residual Range Organics	0.500 U	0.500	0.150	mg/L	1	04/10/13 18:37
Surrogates						
n-Triacontane-d62	93.4	50-150		%	1	04/10/13 18:37

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK103

Analyst: EAB

Analytical Date/Time: 04/10/13 18:37 Container ID: 1137642001-E Prep Batch: XXX28866 Prep Method: SW3520C Prep Date/Time: 04/09/13 10:30 Prep Initial Wt./Vol.: 1000 mL Prep Extract Vol: 1 mL



Client Sample ID: SW-8

Client Project ID: **Conoro Road** Lab Sample ID: 1137642001 Lab Project ID: 1137642 Collection Date: 03/30/13 10:30 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Volatile Fuels

Parameter Gasoline Range Organics	Result Qual 0.100 U	LOQ/CL 0.100	<u>DL</u> 0.0310	<u>Units</u> mg/L	<u>DF</u> 1	Date Analyzed 04/04/13 11:36
Surrogates 4-Bromofluorobenzene	97.5	50-150		%	1	04/04/13 11:36

Batch Information

Analytical Batch: VFC11383 Analytical Method: AK101

Analyst: ST

Analytical Date/Time: 04/04/13 11:36 Container ID: 1137642001-A Prep Batch: VXX24606
Prep Method: SW5030B
Prep Date/Time: 04/04/13 08:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

<u>Parameter</u>	Result	Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Benzene	0.500	U	0.500	0.150	ug/L	1	04/04/13 11:36
Ethylbenzene	1.00	U	1.00	0.310	ug/L	1	04/04/13 11:36
o-Xylene	1.00	U	1.00	0.310	ug/L	1	04/04/13 11:36
P & M -Xylene	2.00	U	2.00	0.620	ug/L	1	04/04/13 11:36
Toluene	1.00	U	1.00	0.310	ug/L	1	04/04/13 11:36
Surrogates							
1,4-Difluorobenzene	94.4		77-115		%	1	04/04/13 11:36

Batch Information

Analytical Batch: VFC11383 Analytical Method: SW8021B

Analyst: ST

Analytical Date/Time: 04/04/13 11:36 Container ID: 1137642001-A Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL



Client Sample ID: **SW-2**Client Project ID: **Conoro Road**Lab Sample ID: 1137642002
Lab Project ID: 1137642

Collection Date: 03/30/13 10:45 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Semivolatile Organic Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Diesel Range Organics	0.600 U	0.600	0.180	mg/L	1	04/10/13 18:47
Surrogates						
5a Androstane	77	50-150		%	1	04/10/13 18:47

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK102

Analyst: EAB

Analytical Date/Time: 04/10/13 18:47 Container ID: 1137642002-E Prep Batch: XXX28866
Prep Method: SW3520C
Prep Date/Time: 04/09/13 10:30
Prep Initial Wt./Vol.: 1000 mL
Prep Extract Vol: 1 mL

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Residual Range Organics	0.500 U	0.500	0.150	mg/L	1	04/10/13 18:47
Surrogates						
n-Triacontane-d62	81.3	50-150		%	1	04/10/13 18:47

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK103

Analyst: EAB

Analytical Date/Time: 04/10/13 18:47 Container ID: 1137642002-E Prep Batch: XXX28866 Prep Method: SW3520C Prep Date/Time: 04/09/13 10:30 Prep Initial Wt./Vol.: 1000 mL Prep Extract Vol: 1 mL



Client Sample ID: SW-2

Client Project ID: **Conoro Road** Lab Sample ID: 1137642002 Lab Project ID: 1137642 Collection Date: 03/30/13 10:45 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Volatile Fuels

Parameter Gasoline Range Organics	Result Qual 0.100 U	LOQ/CL 0.100	<u>DL</u> 0.0310	<u>Units</u> mg/L	<u>DF</u> 1	<u>Date Analyzed</u> 04/04/13 11:55
Surrogates 4-Bromofluorobenzene	94.2	50-150		%	1	04/04/13 11:55

Batch Information

Analytical Batch: VFC11383 Analytical Method: AK101

Analyst: ST

Analytical Date/Time: 04/04/13 11:55 Container ID: 1137642002-A Prep Batch: VXX24606
Prep Method: SW5030B
Prep Date/Time: 04/04/13 08:00
Prep Initial Wt./Vol.: 5 mL

Prep Initial Wt./Vol.: 5 m Prep Extract Vol: 5 mL

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Benzene	0.500 U	0.500	0.150	ug/L	1	04/04/13 11:55
Ethylbenzene	1.00 U	1.00	0.310	ug/L	1	04/04/13 11:55
o-Xylene	1.00 U	1.00	0.310	ug/L	1	04/04/13 11:55
P & M -Xylene	2.00 U	2.00	0.620	ug/L	1	04/04/13 11:55
Toluene	1.00 U	1.00	0.310	ug/L	1	04/04/13 11:55
Surrogates						
1,4-Difluorobenzene	95.4	77-115		%	1	04/04/13 11:55

Batch Information

Analytical Batch: VFC11383 Analytical Method: SW8021B

Analyst: ST

Analytical Date/Time: 04/04/13 11:55 Container ID: 1137642002-A Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL



Client Sample ID: DW-1

Client Project ID: **Conoro Road** Lab Sample ID: 1137642003 Lab Project ID: 1137642 Collection Date: 03/30/13 10:45
Received Date: 04/02/13 08:50
Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Semivolatile Organic Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	DF	Date Analyzed
Diesel Range Organics	0.706 U	0.706	0.212	mg/L	1	04/10/13 18:56

Surrogates

5a Androstane 64.9 50-150 % 1 04/10/13 18:56

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK102

Analyst: EAB

Analytical Date/Time: 04/10/13 18:56 Container ID: 1137642003-E Prep Batch: XXX28866 Prep Method: SW3520C Prep Date/Time: 04/09/13 10:30 Prep Initial Wt./Vol.: 850 mL

Prep Extract Vol: 1 mL

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Residual Range Organics	0.588 U	0.588	0.176	mg/L	1	04/10/13 18:56
Surrogates						
n-Triacontane-d62	65.4	50-150		%	1	04/10/13 18:56

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK103

Analyst: EAB

Analytical Date/Time: 04/10/13 18:56 Container ID: 1137642003-E Prep Batch: XXX28866
Prep Method: SW3520C
Prep Date/Time: 04/09/13 10:30
Prep Initial Wt./Vol.: 850 mL
Prep Extract Vol: 1 mL



Client Sample ID: DW-1

Client Project ID: **Conoro Road** Lab Sample ID: 1137642003 Lab Project ID: 1137642 Collection Date: 03/30/13 10:45
Received Date: 04/02/13 08:50
Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Volatile Fuels

<u>Parameter</u>	Result Qual	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics	0.100 U	0.100	0.0310	mg/L	1	04/04/13 12:13
Surrogates 4-Bromofluorobenzene	105	50-150		%	1	04/04/13 12:13

Batch Information

Analytical Batch: VFC11383 Analytical Method: AK101

Analyst: ST

Analytical Date/Time: 04/04/13 12:13 Container ID: 1137642003-A Prep Batch: VXX24606
Prep Method: SW5030B
Prep Date/Time: 04/04/13 08:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

<u>Parameter</u> Result Qual LOQ/CL DL <u>Units</u> <u>DF</u> **Date Analyzed** Benzene 0.500 U 0.500 0.150 ug/L 1 04/04/13 12:13 Ethylbenzene U 1.00 0.310 ug/L 04/04/13 12:13 1.00 1 o-Xylene 1.00 U 1.00 0.310 ug/L 1 04/04/13 12:13 P & M -Xylene 2.00 U 2.00 0.620 ug/L 1 04/04/13 12:13 Toluene 1.00 U 1.00 0.310 04/04/13 12:13 ug/L 1 **Surrogates**

77-115

95.2

1,4-Difluorobenzene Batch Information

Analytical Batch: VFC11383 Analytical Method: SW8021B

Analyst: ST

Analytical Date/Time: 04/04/13 12:13 Container ID: 1137642003-A Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

%

Print Date: 04/15/2013 8:24:46AM

04/04/13 12:13



Client Sample ID: SW-7

Client Project ID: **Conoro Road** Lab Sample ID: 1137642004 Lab Project ID: 1137642 Collection Date: 03/30/13 11:45
Received Date: 04/02/13 08:50
Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Semivolatile Organic Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Diesel Range Organics	0.600 U	0.600	0.180	mg/L	1	04/10/13 19:05

Surrogates

5a Androstane 90.1 50-150 % 1 04/10/13 19:05

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK102

Analyst: EAB

Analytical Date/Time: 04/10/13 19:05 Container ID: 1137642004-E Prep Batch: XXX28866
Prep Method: SW3520C
Prep Date/Time: 04/09/13 10:30
Prep Initial Wt./Vol.: 1000 mL
Prep Extract Vol: 1 mL

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Residual Range Organics	0.500 U	0.500	0.150	mg/L	1	04/10/13 19:05
Surrogates						
n-Triacontane-d62	95.4	50-150		%	1	04/10/13 19:05

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK103

Analyst: EAB

Analytical Date/Time: 04/10/13 19:05 Container ID: 1137642004-E Prep Batch: XXX28866 Prep Method: SW3520C Prep Date/Time: 04/09/13 10:30 Prep Initial Wt./Vol.: 1000 mL Prep Extract Vol: 1 mL



Client Sample ID: SW-7

Client Project ID: **Conoro Road** Lab Sample ID: 1137642004 Lab Project ID: 1137642 Collection Date: 03/30/13 11:45 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Volatile Fuels

<u>Parameter</u>	Result Qual	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics	0.100 U	0.100	0.0310	mg/L	1	04/04/13 12:32
Surrogates 4-Bromofluorobenzene	94.3	50-150		%	1	04/04/13 12:32

Batch Information

Analytical Batch: VFC11383 Analytical Method: AK101

Analyst: ST

Analytical Date/Time: 04/04/13 12:32 Container ID: 1137642004-A

Prep Batch: VXX24606
Prep Method: SW5030B
Prep Date/Time: 04/04/13 08:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

<u>Parameter</u> Result Qual LOQ/CL DL <u>Units</u> <u>DF</u> **Date Analyzed** Benzene 0.500 U 0.500 0.150 ug/L 1 04/04/13 12:32 Ethylbenzene U 1.00 0.310 ug/L 04/04/13 12:32 1.00 1 o-Xylene 1.00 U 1.00 0.310 ug/L 1 04/04/13 12:32 P & M -Xylene 2.00 U 2.00 0.620 ug/L 1 04/04/13 12:32 Toluene 1.00 U 1.00 0.310 04/04/13 12:32 ug/L 1 **Surrogates** 1,4-Difluorobenzene 94.6 77-115 % 04/04/13 12:32

Batch Information

Analytical Batch: VFC11383 Analytical Method: SW8021B

Analyst: ST

Analytical Date/Time: 04/04/13 12:32 Container ID: 1137642004-A Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL



Client Sample ID: SW-9 Client Project ID: Conoro Road Lab Sample ID: 1137642005 Lab Project ID: 1137642

Collection Date: 03/30/13 12:30 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Semivolatile Organic Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Diesel Range Organics	0.600 U	0.600	0.180	mg/L	1	04/10/13 19:15
Surrogates						
5a Androstane	86.8	50-150		%	1	04/10/13 19:15

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK102

Analyst: EAB

Analytical Date/Time: 04/10/13 19:15 Container ID: 1137642005-E

Prep Batch: XXX28866 Prep Method: SW3520C Prep Date/Time: 04/09/13 10:30 Prep Initial Wt./Vol.: 1000 mL Prep Extract Vol: 1 mL

<u>Parameter</u>	Result Qual	LOQ/CL	DL	<u>Units</u>	<u>DF</u>	Date Analyzed
Residual Range Organics Surrogates	0.500 U	0.500	0.150	mg/L	1	04/10/13 19:15
n-Triacontane-d62	93.2	50-150		%	1	04/10/13 19:15

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK103

Analyst: EAB

Analytical Date/Time: 04/10/13 19:15 Container ID: 1137642005-E

Prep Batch: XXX28866 Prep Method: SW3520C Prep Date/Time: 04/09/13 10:30 Prep Initial Wt./Vol.: 1000 mL Prep Extract Vol: 1 mL



Client Sample ID: SW-9

Client Project ID: **Conoro Road** Lab Sample ID: 1137642005 Lab Project ID: 1137642 Collection Date: 03/30/13 12:30 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Volatile Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Gasoline Range Organics	0.100 U	0.100	0.0310	mg/L	1	04/04/13 12:50
Surrogates						
4-Bromofluorobenzene	122	50-150		%	1	04/04/13 12:50

Batch Information

Analytical Batch: VFC11383 Analytical Method: AK101

Analyst: ST

Analytical Date/Time: 04/04/13 12:50 Container ID: 1137642005-A

Prep Batch: VXX24606
Prep Method: SW5030B
Prep Date/Time: 04/04/13 08:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

<u>Parameter</u>	Result	Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Benzene	0.500	U	0.500	0.150	ug/L	1	04/04/13 12:50
Ethylbenzene	1.00	U	1.00	0.310	ug/L	1	04/04/13 12:50
o-Xylene	1.00	U	1.00	0.310	ug/L	1	04/04/13 12:50
P & M -Xylene	2.00	U	2.00	0.620	ug/L	1	04/04/13 12:50
Toluene	1.00	U	1.00	0.310	ug/L	1	04/04/13 12:50
Surrogates							
1,4-Difluorobenzene	94.7		77-115		%	1	04/04/13 12:50

Batch Information

Analytical Batch: VFC11383 Analytical Method: SW8021B

Analyst: ST

Analytical Date/Time: 04/04/13 12:50 Container ID: 1137642005-A Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL



Client Sample ID: **SW-19**Client Project ID: **Conoro Road**Lab Sample ID: 1137642006
Lab Project ID: 1137642

Collection Date: 03/30/13 12:30 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Semivolatile Organic Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Diesel Range Organics	0.600 U	0.600	0.180	mg/L	1	04/10/13 19:24
Surrogates						
5a Androstane	82.6	50-150		%	1	04/10/13 19:24

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK102

Analyst: EAB

Analytical Date/Time: 04/10/13 19:24 Container ID: 1137642006-E Prep Batch: XXX28866
Prep Method: SW3520C
Prep Date/Time: 04/09/13 10:30
Prep Initial Wt./Vol.: 1000 mL
Prep Extract Vol: 1 mL

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Residual Range Organics	0.500 U	0.500	0.150	mg/L	1	04/10/13 19:24
Surrogates						
n-Triacontane-d62	88.7	50-150		%	1	04/10/13 19:24

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK103

Analyst: EAB

Analytical Date/Time: 04/10/13 19:24 Container ID: 1137642006-E Prep Batch: XXX28866
Prep Method: SW3520C
Prep Date/Time: 04/09/13 10:30
Prep Initial Wt./Vol.: 1000 mL
Prep Extract Vol: 1 mL



Client Sample ID: **SW-19**Client Project ID: **Conoro Road**Lab Sample ID: 1137642006
Lab Project ID: 1137642

Collection Date: 03/30/13 12:30 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Volatile Fuels

<u>Parameter</u> Gasoline Range Organics	Result Qual	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
	0.100 U	0.100	0.0310	mg/L	1	04/04/13 13:09
Surrogates 4-Bromofluorobenzene	121	50-150		%	1	04/04/13 13:09

Batch Information

Analytical Batch: VFC11383 Analytical Method: AK101

Analyst: ST

Analytical Date/Time: 04/04/13 13:09 Container ID: 1137642006-A Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL

Prep Extract Vol: 5 mL

<u>Parameter</u>	Result	Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Benzene	0.500	U	0.500	0.150	ug/L	1	04/04/13 13:09
Ethylbenzene	1.00	U	1.00	0.310	ug/L	1	04/04/13 13:09
o-Xylene	1.00	U	1.00	0.310	ug/L	1	04/04/13 13:09
P & M -Xylene	2.00	U	2.00	0.620	ug/L	1	04/04/13 13:09
Toluene	1.00	U	1.00	0.310	ug/L	1	04/04/13 13:09
Surrogates							
1,4-Difluorobenzene	96.8		77-115		%	1	04/04/13 13:09

Batch Information

Analytical Batch: VFC11383 Analytical Method: SW8021B

Analyst: ST

Analytical Date/Time: 04/04/13 13:09 Container ID: 1137642006-A Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL



Client Sample ID: SW-3

Client Project ID: **Conoro Road** Lab Sample ID: 1137642007 Lab Project ID: 1137642 Collection Date: 03/30/13 13:42 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Semivolatile Organic Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	DF	Date Analyzed
Diesel Range Organics	0.600 U	0.600	0.180	mg/L	1	04/10/13 19:33
Surrogatos						

Surrogates

5a Androstane 82.2 50-150 % 1 04/10/13 19:33

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK102

Analyst: EAB

Analytical Date/Time: 04/10/13 19:33 Container ID: 1137642007-E Prep Batch: XXX28866 Prep Method: SW3520C Prep Date/Time: 04/09/13 10:30 Prep Initial Wt./Vol.: 1000 mL

Prep Extract Vol: 1 mL

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Residual Range Organics	0.500 U	0.500	0.150	mg/L	1	04/10/13 19:33
Surrogates						
n-Triacontane-d62	87.9	50-150		%	1	04/10/13 19:33

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK103

Analyst: EAB

Analytical Date/Time: 04/10/13 19:33 Container ID: 1137642007-E Prep Batch: XXX28866
Prep Method: SW3520C
Prep Date/Time: 04/09/13 10:30
Prep Initial Wt./Vol.: 1000 mL
Prep Extract Vol: 1 mL



Client Sample ID: SW-3

Client Project ID: **Conoro Road** Lab Sample ID: 1137642007 Lab Project ID: 1137642 Collection Date: 03/30/13 13:42 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Volatile Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Gasoline Range Organics	0.100 U	0.100	0.0310	mg/L	1	04/04/13 13:27
Surrogates						
4-Bromofluorobenzene	97	50-150		%	1	04/04/13 13:27

Batch Information

Analytical Batch: VFC11383 Analytical Method: AK101

Analyst: ST

Analytical Date/Time: 04/04/13 13:27 Container ID: 1137642007-A Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

<u>Parameter</u>	Result	Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Benzene	0.500	U	0.500	0.150	ug/L	1	04/04/13 13:27
Ethylbenzene	1.00	U	1.00	0.310	ug/L	1	04/04/13 13:27
o-Xylene	1.00	U	1.00	0.310	ug/L	1	04/04/13 13:27
P & M -Xylene	2.00	U	2.00	0.620	ug/L	1	04/04/13 13:27
Toluene	1.00	U	1.00	0.310	ug/L	1	04/04/13 13:27
Surrogates							
1,4-Difluorobenzene	94.6		77-115		%	1	04/04/13 13:27

Batch Information

Analytical Batch: VFC11383 Analytical Method: SW8021B

Analyst: ST

Analytical Date/Time: 04/04/13 13:27 Container ID: 1137642007-A Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 04/15/2013 8:24:46AM

Page 19 of 63



Client Sample ID: SW-1

Client Project ID: **Conoro Road** Lab Sample ID: 1137642008 Lab Project ID: 1137642 Collection Date: 03/30/13 10:15
Received Date: 04/02/13 08:50
Matrix: Water (Surface, Eff., Ground)

1

Solids (%):

Results by Semivolatile Organic Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Diesel Range Organics	0.600 U	0.600	0.180	mg/L	1	04/10/13 17:51
Surrogates						

50-150

78.4

Batch Information

5a Androstane

Analytical Batch: XFC10859 Analytical Method: AK102

Analyst: EAB

Analytical Date/Time: 04/10/13 17:51 Container ID: 1137642008-E Prep Batch: XXX28866 Prep Method: SW3520C Prep Date/Time: 04/09/13 10:30 Prep Initial Wt./Vol.: 1000 mL

Prep Extract Vol: 1 mL

<u>Parameter</u> Result Qual LOQ/CL DL <u>Units</u> <u>DF</u> **Date Analyzed** Residual Range Organics 0.500 U 0.500 0.150 mg/L 1 04/10/13 17:51 **Surrogates** n-Triacontane-d62 82.4 50-150 % 1 04/10/13 17:51

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK103

Analyst: EAB

Analytical Date/Time: 04/10/13 17:51 Container ID: 1137642008-E Prep Batch: XXX28866
Prep Method: SW3520C
Prep Date/Time: 04/09/13 10:30
Prep Initial Wt./Vol.: 1000 mL
Prep Extract Vol: 1 mL

Print Date: 04/15/2013 8:24:46AM

04/10/13 17:51



Client Sample ID: SW-1

Client Project ID: **Conoro Road** Lab Sample ID: 1137642008 Lab Project ID: 1137642 Collection Date: 03/30/13 10:15
Received Date: 04/02/13 08:50
Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Volatile Fuels

Parameter Gasoline Range Organics	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
	0.100 U	0.100	0.0310	mg/L	1	04/04/13 13:46
Surrogates 4-Bromofluorobenzene	116	50-150		%	1	04/04/13 13:46

Batch Information

Analytical Batch: VFC11383 Analytical Method: AK101

Analyst: ST

Analytical Date/Time: 04/04/13 13:46 Container ID: 1137642008-A Prep Batch: VXX24606
Prep Method: SW5030B
Prep Date/Time: 04/04/13 08:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

<u>Parameter</u> Result Qual LOQ/CL DL <u>Units</u> <u>DF</u> **Date Analyzed** Benzene 0.500 U 0.500 0.150 ug/L 1 04/04/13 13:46 Ethylbenzene U 1.00 0.310 ug/L 04/04/13 13:46 1.00 1 o-Xylene 1.00 U 1.00 0.310 ug/L 1 04/04/13 13:46 P & M -Xylene 2.00 U 2.00 0.620 ug/L 1 04/04/13 13:46 Toluene 1.00 U 1.00 0.310 04/04/13 13:46 ug/L 1 **Surrogates**

77-115

95.4

Batch Information

1,4-Difluorobenzene

Analytical Batch: VFC11383 Analytical Method: SW8021B

Analyst: ST

Analytical Date/Time: 04/04/13 13:46 Container ID: 1137642008-A Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

%

Print Date: 04/15/2013 8:24:46AM

04/04/13 13:46



Client Sample ID: **SW-6**Client Project ID: **Conoro Road**Lab Sample ID: 1137642009
Lab Project ID: 1137642

Collection Date: 03/30/13 11:15 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Semivolatile Organic Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	DF	<u>Date Analyzed</u>
Diesel Range Organics	0.667 U	0.667	0.200	mg/L	1	04/10/13 19:42
Surrogates						
5a Androstane	77.5	50-150		%	1	04/10/13 19:42

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK102

Analyst: EAB

Analytical Date/Time: 04/10/13 19:42 Container ID: 1137642009-E Prep Batch: XXX28866
Prep Method: SW3520C
Prep Date/Time: 04/09/13 10:30
Prep Initial Wt./Vol.: 900 mL
Prep Extract Vol: 1 mL

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Residual Range Organics	0.556 U	0.556	0.167	mg/L	1	04/10/13 19:42
Surrogates						
n-Triacontane-d62	83	50-150		%	1	04/10/13 19:42

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK103

Analyst: EAB

Analytical Date/Time: 04/10/13 19:42 Container ID: 1137642009-E Prep Batch: XXX28866 Prep Method: SW3520C Prep Date/Time: 04/09/13 10:30 Prep Initial Wt./Vol.: 900 mL Prep Extract Vol: 1 mL



Client Sample ID: SW-6

Client Project ID: **Conoro Road** Lab Sample ID: 1137642009 Lab Project ID: 1137642 Collection Date: 03/30/13 11:15
Received Date: 04/02/13 08:50
Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Volatile Fuels

<u>Parameter</u> Gasoline Range Organics	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
	0.249	0.100	0.0310	mg/L	1	04/04/13 14:04
Surrogates 4-Bromofluorobenzene	154 *	50-150		%	1	04/04/13 14:04

Batch Information

Analytical Batch: VFC11383 Analytical Method: AK101

Analyst: ST

Analytical Date/Time: 04/04/13 14:04 Container ID: 1137642009-A Prep Batch: VXX24606
Prep Method: SW5030B
Prep Date/Time: 04/04/13 08:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

<u>Parameter</u>	Result	Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Benzene	0.500	U	0.500	0.150	ug/L	1	04/04/13 14:04
Ethylbenzene	20.9		1.00	0.310	ug/L	1	04/04/13 14:04
o-Xylene	1.00	U	1.00	0.310	ug/L	1	04/04/13 14:04
P & M -Xylene	23.1		2.00	0.620	ug/L	1	04/04/13 14:04
Toluene	1.00	U	1.00	0.310	ug/L	1	04/04/13 14:04
Surrogates							
1,4-Difluorobenzene	96.7		77-115		%	1	04/04/13 14:04

Batch Information

Analytical Batch: VFC11383 Analytical Method: SW8021B

Analyst: ST

Analytical Date/Time: 04/04/13 14:04 Container ID: 1137642009-A Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL



Client Sample ID: **SW-4**Client Project ID: **Conoro Road**Lab Sample ID: 1137642010
Lab Project ID: 1137642

Collection Date: 03/30/13 12:30 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Semivolatile Organic Fuels

<u>Parameter</u>	Result Qual	LOQ/CL DL	<u>Units</u>	<u>DF</u>	Date Analyzed
Diesel Range Organics	0.667 U	0.667 0.200	mg/L	1	04/10/13 19:52
Surrogates					
5a Androstane	71.3	50-150	%	1	04/10/13 19:52

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK102

Analyst: EAB

Analytical Date/Time: 04/10/13 19:52 Container ID: 1137642010-E Prep Batch: XXX28866 Prep Method: SW3520C Prep Date/Time: 04/09/13 10:30 Prep Initial Wt./Vol.: 900 mL

Prep Extract Vol. 1 mL

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Residual Range Organics	0.556 U	0.556	0.167	mg/L	1	04/10/13 19:52
Surrogates						
n-Triacontane-d62	76.7	50-150		%	1	04/10/13 19:52

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK103

Analyst: EAB

Analytical Date/Time: 04/10/13 19:52 Container ID: 1137642010-E Prep Batch: XXX28866 Prep Method: SW3520C Prep Date/Time: 04/09/13 10:30 Prep Initial Wt./Vol.: 900 mL Prep Extract Vol: 1 mL



Client Sample ID: SW-4

Client Project ID: **Conoro Road** Lab Sample ID: 1137642010 Lab Project ID: 1137642 Collection Date: 03/30/13 12:30 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Volatile Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Gasoline Range Organics	0.100 U	0.100	0.0310	mg/L	1	04/04/13 14:23
Surrogates						
4-Bromofluorobenzene	96.9	50-150		%	1	04/04/13 14:23

Batch Information

Analytical Batch: VFC11383 Analytical Method: AK101

Analyst: ST

Analytical Date/Time: 04/04/13 14:23 Container ID: 1137642010-A Prep Batch: VXX24606
Prep Method: SW5030B
Prep Date/Time: 04/04/13 08:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

<u>Parameter</u>	Result Qu	ual LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Benzene	0.500 l	J 0.500	0.150	ug/L	1	04/04/13 14:23
Ethylbenzene	1.00 l	J 1.00	0.310	ug/L	1	04/04/13 14:23
o-Xylene	1.00 l	J 1.00	0.310	ug/L	1	04/04/13 14:23
P & M -Xylene	2.00 l	J 2.00	0.620	ug/L	1	04/04/13 14:23
Toluene	1.00 l	J 1.00	0.310	ug/L	1	04/04/13 14:23
Surrogates						
1,4-Difluorobenzene	95.8	77-115		%	1	04/04/13 14:23

Batch Information

Analytical Batch: VFC11383 Analytical Method: SW8021B

Analyst: ST

Analytical Date/Time: 04/04/13 14:23 Container ID: 1137642010-A Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL



Results of FRW-2

Client Sample ID: FRW-2 Client Project ID: Conoro Road Lab Sample ID: 1137642011 Lab Project ID: 1137642 Collection Date: 03/30/13 13:15 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Semivolatile Organic Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Diesel Range Organics	0.659 U	0.659	0.198	mg/L	1	04/10/13 20:01
Surrogates						
5a Androstane	81.2	50-150		%	1	04/10/13 20:01

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK102

Analyst: EAB

Analytical Date/Time: 04/10/13 20:01 Container ID: 1137642011-E Prep Batch: XXX28866 Prep Method: SW3520C Prep Date/Time: 04/09/13 10:30

Prep Initial Wt./Vol.: 910 mL Prep Extract Vol: 1 mL

<u>Parameter</u> Residual Range Organics	Result Qual 0.549 U	<u>LOQ/CL</u> <u>DL</u> 0.549 0.165	<u>Units</u> mg/L	<u>DF</u> 1	<u>Date Analyzed</u> 04/10/13 20:01
Surrogates					
n-Triacontane-d62	85.1	50-150	%	1	04/10/13 20:01

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK103

Analyst: EAB

Analytical Date/Time: 04/10/13 20:01 Container ID: 1137642011-E Prep Batch: XXX28866
Prep Method: SW3520C
Prep Date/Time: 04/09/13 10:30
Prep Initial Wt./Vol.: 910 mL
Prep Extract Vol: 1 mL



Results of FRW-2

Client Sample ID: FRW-2 Client Project ID: Conoro Road Lab Sample ID: 1137642011 Lab Project ID: 1137642 Collection Date: 03/30/13 13:15 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Volatile Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics	0.100 U	0.100	0.0310	mg/L	1	04/04/13 14:41
Surrogates 4-Bromofluorobenzene	94.7	50-150		%	1	04/04/13 14:41

Batch Information

Analytical Batch: VFC11383 Analytical Method: AK101

Analyst: ST

Analytical Date/Time: 04/04/13 14:41 Container ID: 1137642011-A

Prep Batch: VXX24606
Prep Method: SW5030B
Prep Date/Time: 04/04/13 08:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Benzene	0.500 U	0.500	0.150	ug/L	1	04/04/13 14:41
Ethylbenzene	1.00 U	1.00	0.310	ug/L	1	04/04/13 14:41
o-Xylene	1.00 U	1.00	0.310	ug/L	1	04/04/13 14:41
P & M -Xylene	2.00 U	2.00	0.620	ug/L	1	04/04/13 14:41
Toluene	1.00 U	1.00	0.310	ug/L	1	04/04/13 14:41
Surrogates						
1,4-Difluorobenzene	94.1	77-115		%	1	04/04/13 14:41

Batch Information

Analytical Batch: VFC11383 Analytical Method: SW8021B

Analyst: ST

Analytical Date/Time: 04/04/13 14:41 Container ID: 1137642011-A Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL



Client Sample ID: **SW-5**Client Project ID: **Conoro Road**Lab Sample ID: 1137642012
Lab Project ID: 1137642

Collection Date: 03/30/13 16:15 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Semivolatile Organic Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Diesel Range Organics	1.70	0.600	0.180	mg/L	1	04/10/13 20:10
Surrogates						
5a Androstane	72 2	50-150		%	1	04/10/13 20:10

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK102

Analyst: EAB

Analytical Date/Time: 04/10/13 20:10 Container ID: 1137642012-E

Prep Batch: XXX28866 Prep Method: SW3520C Prep Date/Time: 04/09/13 10:30 Prep Initial Wt./Vol.: 1000 mL

Prep Extract Vol: 1 mL

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Residual Range Organics	0.500 U	0.500	0.150	mg/L	1	04/10/13 20:10
Surrogates						
n-Triacontane-d62	76.1	50-150		%	1	04/10/13 20:10

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK103

Analyst: EAB

Analytical Date/Time: 04/10/13 20:10 Container ID: 1137642012-E

Prep Batch: XXX28866 Prep Method: SW3520C Prep Date/Time: 04/09/13 10:30 Prep Initial Wt./Vol.: 1000 mL Prep Extract Vol: 1 mL



Client Sample ID: SW-5

Client Project ID: **Conoro Road** Lab Sample ID: 1137642012 Lab Project ID: 1137642 Collection Date: 03/30/13 16:15
Received Date: 04/02/13 08:50
Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Volatile Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics	4.77	0.500	0.155	mg/L	5	04/05/13 19:30
Surrogates 4-Bromofluorobenzene	157 *	50-150		%	5	04/05/13 19:30

Batch Information

Analytical Batch: VFC11384 Analytical Method: AK101

Analyst: ST

Analytical Date/Time: 04/05/13 19:30 Container ID: 1137642012-A

Prep Batch: VXX24608
Prep Method: SW5030B
Prep Date/Time: 04/05/13 08:00
Prep Initial Wt./Vol.: 5 mL

Prep Extract Vol: 5 mL

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Benzene	9.17	0.500	0.150	ug/L	1	04/04/13 15:00
Ethylbenzene	279	5.00	1.55	ug/L	5	04/05/13 19:30
o-Xylene	579	5.00	1.55	ug/L	5	04/05/13 19:30
P & M -Xylene	1150	10.0	3.10	ug/L	5	04/05/13 19:30
Toluene	77.9	1.00	0.310	ug/L	1	04/04/13 15:00
Surrogates						
1,4-Difluorobenzene	98.3	77-115		%	1	04/04/13 15:00

Batch Information

Analytical Batch: VFC11383 Analytical Method: SW8021B

Analyst: ST

Analytical Date/Time: 04/04/13 15:00 Container ID: 1137642012-A

Analytical Batch: VFC11384 Analytical Method: SW8021B

Analyst: ST

Analytical Date/Time: 04/05/13 19:30 Container ID: 1137642012-A

Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Prep Batch: VXX24608 Prep Method: SW5030B Prep Date/Time: 04/05/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL



Client Sample ID: **DW-2**Client Project ID: **Conoro Road**Lab Sample ID: 1137642013
Lab Project ID: 1137642

Collection Date: 03/30/13 15:00 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Semivolatile Organic Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Diesel Range Organics	0.730	0.632	0.189	mg/L	1	04/10/13 20:19
Surrogates						
5a Androstane	84.2	50-150		%	1	04/10/13 20:19

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK102

Analyst: EAB

Analytical Date/Time: 04/10/13 20:19 Container ID: 1137642013-E Prep Batch: XXX28866 Prep Method: SW3520C Prep Date/Time: 04/09/13 10:30

Prep Initial Wt./Vol.: 950 mL Prep Extract Vol: 1 mL

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Residual Range Organics	0.526 U	0.526	0.158	mg/L	1	04/10/13 20:19
Surrogates						
n-Triacontane-d62	89.1	50-150		%	1	04/10/13 20:19

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK103

Analyst: EAB

Analytical Date/Time: 04/10/13 20:19 Container ID: 1137642013-E Prep Batch: XXX28866
Prep Method: SW3520C
Prep Date/Time: 04/09/13 10:30
Prep Initial Wt./Vol.: 950 mL
Prep Extract Vol: 1 mL



Client Sample ID: **DW-2**Client Project ID: **Conoro Road**Lab Sample ID: 1137642013
Lab Project ID: 1137642

Collection Date: 03/30/13 15:00 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Volatile Fuels

<u>Parameter</u>	Result Qual	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics	0.100 U	0.100	0.0310	mg/L	1	04/04/13 15:18
Surrogates 4-Bromofluorobenzene	117	50-150		%	1	04/04/13 15:18

Batch Information

Analytical Batch: VFC11383 Analytical Method: AK101

Analyst: ST

Analytical Date/Time: 04/04/13 15:18 Container ID: 1137642013-A

Prep Batch: VXX24606
Prep Method: SW5030B
Prep Date/Time: 04/04/13 08:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

<u>Parameter</u>	Result	Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Benzene	0.500	U	0.500	0.150	ug/L	1	04/04/13 15:18
Ethylbenzene	1.00	U	1.00	0.310	ug/L	1	04/04/13 15:18
o-Xylene	1.00	U	1.00	0.310	ug/L	1	04/04/13 15:18
P & M -Xylene	2.00	U	2.00	0.620	ug/L	1	04/04/13 15:18
Toluene	1.00	U	1.00	0.310	ug/L	1	04/04/13 15:18
Surrogates							
1,4-Difluorobenzene	93.4		77-115		%	1	04/04/13 15:18

Batch Information

Analytical Batch: VFC11383 Analytical Method: SW8021B

Analyst: ST

Analytical Date/Time: 04/04/13 15:18 Container ID: 1137642013-A Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL



Client Sample ID: DWW Client Project ID: Conoro Road Lab Sample ID: 1137642014 Lab Project ID: 1137642

Collection Date: 03/30/13 15:30 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Semivolatile Organic Fuels

<u>Parameter</u>	Result Qual	LOQ/CL DL	<u>Units</u>	DF Date Analyzed
Diesel Range Organics	0.632 U	0.632 0.189	mg/L	1 04/10/13 20:29
Surrogates				
5a Androstane	79.7	50-150	%	1 04/10/13 20:29

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK102

Analyst: EAB

Analytical Date/Time: 04/10/13 20:29 Container ID: 1137642014-E

Prep Batch: XXX28866 Prep Method: SW3520C

Prep Date/Time: 04/09/13 10:30 Prep Initial Wt./Vol.: 950 mL Prep Extract Vol: 1 mL

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Residual Range Organics	0.526 U	0.526	0.158	mg/L	1	04/10/13 20:29
Surrogates						
n-Triacontane-d62	83.5	50-150		%	1	04/10/13 20:29

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK103

Analyst: EAB

Analytical Date/Time: 04/10/13 20:29 Container ID: 1137642014-E

Prep Batch: XXX28866 Prep Method: SW3520C Prep Date/Time: 04/09/13 10:30 Prep Initial Wt./Vol.: 950 mL Prep Extract Vol: 1 mL



Client Sample ID: **DWW**

Client Project ID: **Conoro Road** Lab Sample ID: 1137642014 Lab Project ID: 1137642 Collection Date: 03/30/13 15:30 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Volatile Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Date Analyzed</u>
Gasoline Range Organics	0.214	0.100	0.0310	mg/L	1	04/04/13 15:37
Surrogates 4-Bromofluorobenzene	133	50-150		%	1	04/04/13 15:37

Batch Information

Analytical Batch: VFC11383 Analytical Method: AK101

Analyst: ST

Analytical Date/Time: 04/04/13 15:37 Container ID: 1137642014-A Prep Batch: VXX24606
Prep Method: SW5030B
Prep Date/Time: 04/04/13 08:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Benzene	0.500 U	0.500	0.150	ug/L	1	04/04/13 15:37
Ethylbenzene	7.06	1.00	0.310	ug/L	1	04/04/13 15:37
o-Xylene	2.60	1.00	0.310	ug/L	1	04/04/13 15:37
P & M -Xylene	13.2	2.00	0.620	ug/L	1	04/04/13 15:37
Toluene	1.00 U	1.00	0.310	ug/L	1	04/04/13 15:37
Surrogates						
1,4-Difluorobenzene	96	77-115		%	1	04/04/13 15:37

Batch Information

Analytical Batch: VFC11383 Analytical Method: SW8021B

Analyst: ST

Analytical Date/Time: 04/04/13 15:37 Container ID: 1137642014-A Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL



Client Sample ID: **DWW2**Client Project ID: **Conoro Road**Lab Sample ID: 1137642015
Lab Project ID: 1137642

Collection Date: 03/30/13 15:30 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Semivolatile Organic Fuels

<u>Parameter</u>	Result Qual	LOQ/CL DL	<u>Units</u> <u>DF</u>	Date Analyzed
Diesel Range Organics	0.652 U	0.652 0.196	mg/L 1	04/10/13 20:38
Surrogates				
5a Androstane	81.4	50-150	% 1	04/10/13 20:38

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK102

Analyst: EAB

Analytical Date/Time: 04/10/13 20:38 Container ID: 1137642015-E

Prep Batch: XXX28866
Prep Method: SW3520C
Prep Date/Time: 04/09/13 10:30
Prep Initial Wt./Vol.: 920 mL

Prep Extract Vol: 1 mL

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<u>Parameter</u> Result Qual LOQ/CL DL <u>Units</u> <u>DF</u> Date Analyzed Residual Range Organics 0.543 U 0.543 0.163 mg/L 1 04/10/13 20:38 **Surrogates** n-Triacontane-d62 86.3 50-150 % 04/10/13 20:38

Batch Information

Analytical Batch: XFC10859 Analytical Method: AK103

Analyst: EAB

Analytical Date/Time: 04/10/13 20:38 Container ID: 1137642015-E Prep Batch: XXX28866 Prep Method: SW3520C Prep Date/Time: 04/09/13 10:30 Prep Initial Wt./Vol.: 920 mL Prep Extract Vol: 1 mL



Client Sample ID: **DWW2**Client Project ID: **Conoro Road**Lab Sample ID: 1137642015
Lab Project ID: 1137642

Collection Date: 03/30/13 15:30 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Volatile Fuels

Parameter Gasoline Range Organics	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
	0.208	0.100	0.0310	mg/L	1	04/04/13 15:56
Surrogates 4-Bromofluorobenzene	135	50-150		%	1	04/04/13 15:56

Batch Information

Analytical Batch: VFC11383 Analytical Method: AK101

Analyst: ST

Analytical Date/Time: 04/04/13 15:56 Container ID: 1137642015-A Prep Batch: VXX24606
Prep Method: SW5030B
Prep Date/Time: 04/04/13 08:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

<u>Parameter</u>	Result Qu	ial LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Benzene	0.500 U	0.500	0.150	ug/L	1	04/04/13 15:56
Ethylbenzene	6.95	1.00	0.310	ug/L	1	04/04/13 15:56
o-Xylene	2.33	1.00	0.310	ug/L	1	04/04/13 15:56
P & M -Xylene	12.6	2.00	0.620	ug/L	1	04/04/13 15:56
Toluene	1.00 U	J 1.00	0.310	ug/L	1	04/04/13 15:56
Surrogates						
1,4-Difluorobenzene	96	77-115		%	1	04/04/13 15:56

Batch Information

Analytical Batch: VFC11383 Analytical Method: SW8021B

Analyst: ST

Analytical Date/Time: 04/04/13 15:56 Container ID: 1137642015-A Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL



Results of Trip Blank

Client Sample ID: **Trip Blank**Client Project ID: **Conoro Road**Lab Sample ID: 1137642016
Lab Project ID: 1137642

Collection Date: 03/30/13 10:30 Received Date: 04/02/13 08:50 Matrix: Water (Surface, Eff., Ground)

Solids (%):

Results by Volatile Fuels

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Gasoline Range Organics	0.100 U	0.100	0.0310	mg/L	1	04/04/13 16:33
Surrogates 4-Bromofluorobenzene	96.2	50-150		%	1	04/04/13 16:33

Batch Information

Analytical Batch: VFC11383 Analytical Method: AK101

Analyst: ST

Analytical Date/Time: 04/04/13 16:33 Container ID: 1137642016-A

Prep Batch: VXX24606
Prep Method: SW5030B
Prep Date/Time: 04/04/13 08:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Benzene	0.500 U	0.500	0.150	ug/L	1	04/04/13 16:33
Ethylbenzene	1.00 U	1.00	0.310	ug/L	1	04/04/13 16:33
o-Xylene	1.00 U	1.00	0.310	ug/L	1	04/04/13 16:33
P & M -Xylene	2.00 U	2.00	0.620	ug/L	1	04/04/13 16:33
Toluene	1.00 U	1.00	0.310	ug/L	1	04/04/13 16:33
Surrogates						
1,4-Difluorobenzene	94.8	77-115		%	1	04/04/13 16:33

Batch Information

Analytical Batch: VFC11383 Analytical Method: SW8021B

Analyst: ST

Analytical Date/Time: 04/04/13 16:33 Container ID: 1137642016-A

Prep Batch: VXX24606 Prep Method: SW5030B Prep Date/Time: 04/04/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 04/15/2013 8:24:46AM

Page 36 of 63



Client Sample ID: TW1

Client Project ID: **Conoro Road** Lab Sample ID: 1137642017 Lab Project ID: 1137642

PWSID: 0

Results by Volatile GC/MS

Collection Date: 03/30/13 15:45 Received Date: 04/02/13 08:50

Matrix: Drinking Water

Solids (%):

<u>Parameter</u>	Result	Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
1,1,1,2-Tetrachloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1,1,1-Trichloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1,1,2,2-Tetrachloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1,1,2-Trichloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1,1-Dichloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1,1-Dichloroethene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1,1-Dichloropropene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1,2,3-Trichlorobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1,2,3-Trichloropropane	0.500	U	0.500	0.180	ug/L	1	04/03/13 16:54
1,2,4-Trichlorobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1,2,4-Trimethylbenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1,2-Dibromo-3-chloropropane	2.00	U	2.00	0.620	ug/L	1	04/03/13 16:54
1,2-Dibromoethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1,2-Dichlorobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1,2-Dichloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1,2-Dichloropropane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1,3,5-Trimethylbenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1,3-Dichlorobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1,3-Dichloropropane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1,4-Dichlorobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
2,2-Dichloropropane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
2-Chlorotoluene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1-Chlorotoluene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
1-Isopropyltoluene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Benzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Bromobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Bromochloromethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Bromodichloromethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Bromoform	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Bromomethane	2.00	U	2.00	0.620	ug/L	1	04/03/13 16:54
Carbon tetrachloride	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Chlorobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Chloroethane	1.00	U	1.00	0.310	ug/L	1	04/03/13 16:54
Chloroform	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Chloromethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
cis-1,2-Dichloroethene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
cis-1,3-Dichloropropene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Dibromochloromethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Dibromomethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Dichlorodifluoromethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Ethylbenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Hexachlorobutadiene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Isopropylbenzene (Cumene)	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Methyl-t-butyl ether	1.00	U	1.00	0.500	ug/L	1	04/03/13 16:54



Client Sample ID: TW1

Client Project ID: **Conoro Road** Lab Sample ID: 1137642017 Lab Project ID: 1137642

PWSID: 0

Results by Volatile GC/MS

Collection Date: 03/30/13 15:45 Received Date: 04/02/13 08:50

Matrix: Drinking Water

Solids (%):

<u>Parameter</u>	Result	Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Methylene chloride	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
n-Butylbenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
n-Propylbenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Naphthalene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
o-Xylene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
P & M -Xylene	0.630		0.500	0.180	ug/L	1	04/03/13 16:54
sec-Butylbenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Styrene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
tert-Butylbenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Tetrachloroethene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Toluene	1.86		0.500	0.150	ug/L	1	04/03/13 16:54
Total Trihalomethanes	2.00	U	2.00	0.600	ug/L	1	04/03/13 16:54
trans-1,2-Dichloroethene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
trans-1,3-Dichloropropene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Trichloroethene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Trichlorofluoromethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:54
Vinyl chloride	0.400	U	0.400	0.120	ug/L	1	04/03/13 16:54
Xylenes (total)	1.00	U	1.00	0.310	ug/L	1	04/03/13 16:54
Surrogates							
1,2-Dichloroethane-D4	111		70-130		%	1	04/03/13 16:54
4-Bromofluorobenzene	102		70-130		%	1	04/03/13 16:54
Toluene-d8	105		70-130		%	1	04/03/13 16:54

Batch Information

Analytical Batch: VMS13439 Analytical Method: EPA 524.2

Analyst: HM

Analytical Date/Time: 04/03/13 16:54 Container ID: 1137642017-A Prep Batch: VXX24603 Prep Method: SW5030B Prep Date/Time: 04/03/13 08:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL



Client Sample ID: TW2

Client Project ID: **Conoro Road** Lab Sample ID: 1137642018 Lab Project ID: 1137642

PWSID: 0

FWSID. U

Collection Date: 03/30/13 15:45 Received Date: 04/02/13 08:50

Matrix: Drinking Water

Solids (%):

Results by Volatile GC/MS

<u>Parameter</u>	Result Q	ual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
1,1,1,2-Tetrachloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
1,1,1-Trichloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
1,1,2,2-Tetrachloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
1,1,2-Trichloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
1,1-Dichloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
1,1-Dichloroethene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
1,1-Dichloropropene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
1,2,3-Trichlorobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
1,2,3-Trichloropropane	0.500	U	0.500	0.180	ug/L	1	04/03/13 17:20
1,2,4-Trichlorobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
1,2,4-Trimethylbenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
1,2-Dibromo-3-chloropropane	2.00	U	2.00	0.620	ug/L	1	04/03/13 17:20
1,2-Dibromoethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
1,2-Dichlorobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
1,2-Dichloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
1,2-Dichloropropane	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
1,3,5-Trimethylbenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
1,3-Dichlorobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
1,3-Dichloropropane	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
1,4-Dichlorobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
2,2-Dichloropropane	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
2-Chlorotoluene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
4-Chlorotoluene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
4-Isopropyltoluene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Benzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Bromobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Bromochloromethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Bromodichloromethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Bromoform	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Bromomethane	2.00	U	2.00	0.620	ug/L	1	04/03/13 17:20
Carbon tetrachloride	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Chlorobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Chloroethane	1.00	U	1.00	0.310	ug/L	1	04/03/13 17:20
Chloroform	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Chloromethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
cis-1,2-Dichloroethene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
cis-1,3-Dichloropropene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Dibromochloromethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Dibromomethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Dichlorodifluoromethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Ethylbenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Hexachlorobutadiene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Isopropylbenzene (Cumene)	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Methyl-t-butyl ether	1.00	U	1.00	0.500	ug/L	1	04/03/13 17:20



Client Sample ID: TW2

Client Project ID: **Conoro Road** Lab Sample ID: 1137642018 Lab Project ID: 1137642

PWSID: 0

Results by Volatile GC/MS

Collection Date: 03/30/13 15:45 Received Date: 04/02/13 08:50

Matrix: Drinking Water

Solids (%):

<u>Parameter</u>	Result Q	ual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Methylene chloride	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
n-Butylbenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
n-Propylbenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Naphthalene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
o-Xylene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
P & M -Xylene	0.500	U	0.500	0.180	ug/L	1	04/03/13 17:20
sec-Butylbenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Styrene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
tert-Butylbenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Tetrachloroethene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Toluene	1.27		0.500	0.150	ug/L	1	04/03/13 17:20
Total Trihalomethanes	2.00	U	2.00	0.600	ug/L	1	04/03/13 17:20
trans-1,2-Dichloroethene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
trans-1,3-Dichloropropene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Trichloroethene	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Trichlorofluoromethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 17:20
Vinyl chloride	0.400	U	0.400	0.120	ug/L	1	04/03/13 17:20
Xylenes (total)	1.00	U	1.00	0.310	ug/L	1	04/03/13 17:20
Surrogates							
1,2-Dichloroethane-D4	112		70-130		%	1	04/03/13 17:20
4-Bromofluorobenzene	103		70-130		%	1	04/03/13 17:20
Toluene-d8	99.1		70-130		%	1	04/03/13 17:20

Batch Information

Analytical Batch: VMS13439 Analytical Method: EPA 524.2

Analyst: HM

Analytical Date/Time: 04/03/13 17:20 Container ID: 1137642018-A

Prep Batch: VXX24603
Prep Method: SW5030B
Prep Date/Time: 04/03/13 08:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Print Date: 04/15/2013 8:24:46AM

Page 40 of 63



Results of Trip Blank

Client Sample ID: **Trip Blank**Client Project ID: **Conoro Road**Lab Sample ID: 1137642019
Lab Project ID: 1137642

PWSID: 0

Results by Volatile GC/MS

Collection Date: 03/30/13 15:45 Received Date: 04/02/13 08:50

Matrix: Drinking Water

Solids (%):

<u>Parameter</u>	Result	Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
1,1,1,2-Tetrachloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
1,1,1-Trichloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
1,1,2,2-Tetrachloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
1,1,2-Trichloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
1,1-Dichloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
1,1-Dichloroethene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
1,1-Dichloropropene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
1,2,3-Trichlorobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
1,2,3-Trichloropropane	0.500	U	0.500	0.180	ug/L	1	04/03/13 16:28
1,2,4-Trichlorobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
1,2,4-Trimethylbenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
1,2-Dibromo-3-chloropropane	2.00	U	2.00	0.620	ug/L	1	04/03/13 16:28
1,2-Dibromoethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
1,2-Dichlorobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
1,2-Dichloroethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
1,2-Dichloropropane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
1,3,5-Trimethylbenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
1,3-Dichlorobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
1,3-Dichloropropane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
1,4-Dichlorobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
2,2-Dichloropropane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
2-Chlorotoluene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
4-Chlorotoluene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
4-Isopropyltoluene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
Benzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
Bromobenzene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
Bromochloromethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
Bromodichloromethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
Bromoform	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
Bromomethane	2.00	U	2.00	0.620	ug/L	1	04/03/13 16:28
Carbon tetrachloride	0.500	Ū	0.500	0.150	ug/L	1	04/03/13 16:28
Chlorobenzene	0.500	Ū	0.500	0.150	ug/L	1	04/03/13 16:28
Chloroethane	1.00	U	1.00	0.310	ug/L	1	04/03/13 16:28
Chloroform	0.500	Ū	0.500	0.150	ug/L	1	04/03/13 16:28
Chloromethane	0.500	Ü	0.500	0.150	ug/L	1	04/03/13 16:28
cis-1,2-Dichloroethene	0.500	Ū	0.500	0.150	ug/L	1	04/03/13 16:28
cis-1,3-Dichloropropene	0.500	Ū	0.500	0.150	ug/L	1	04/03/13 16:28
Dibromochloromethane	0.500	Ü	0.500	0.150	ug/L	1	04/03/13 16:28
Dibromomethane	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
Dichlorodifluoromethane	0.500	Ü	0.500	0.150	ug/L	1	04/03/13 16:28
Ethylbenzene	0.500	Ü	0.500	0.150	ug/L	1	04/03/13 16:28
Hexachlorobutadiene	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
Isopropylbenzene (Cumene)	0.500	U	0.500	0.150	ug/L	1	04/03/13 16:28
Methyl-t-butyl ether	1.00	U	1.00	0.500	ug/L	1	04/03/13 16:28

Print Date: 04/15/2013 8:24:46AM



Results of Trip Blank

Client Sample ID: **Trip Blank**Client Project ID: **Conoro Road**Lab Sample ID: 1137642019
Lab Project ID: 1137642

PWSID: 0

Results by Volatile GC/MS

Collection Date: 03/30/13 15:45 Received Date: 04/02/13 08:50

Matrix: Drinking Water

Solids (%):

<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Date Analyzed
Methylene chloride	0.500 U	0.500	0.150	ug/L	1	04/03/13 16:28
n-Butylbenzene	0.500 U	0.500	0.150	ug/L	1	04/03/13 16:28
n-Propylbenzene	0.500 U	0.500	0.150	ug/L	1	04/03/13 16:28
Naphthalene	0.500 U	0.500	0.150	ug/L	1	04/03/13 16:28
o-Xylene	0.500 U	0.500	0.150	ug/L	1	04/03/13 16:28
P & M -Xylene	0.500 U	0.500	0.180	ug/L	1	04/03/13 16:28
sec-Butylbenzene	0.500 U	0.500	0.150	ug/L	1	04/03/13 16:28
Styrene	0.500 U	0.500	0.150	ug/L	1	04/03/13 16:28
tert-Butylbenzene	0.500 U	0.500	0.150	ug/L	1	04/03/13 16:28
Tetrachloroethene	0.500 U	0.500	0.150	ug/L	1	04/03/13 16:28
Toluene	0.500 U	0.500	0.150	ug/L	1	04/03/13 16:28
Total Trihalomethanes	2.00 U	2.00	0.600	ug/L	1	04/03/13 16:28
trans-1,2-Dichloroethene	0.500 U	0.500	0.150	ug/L	1	04/03/13 16:28
trans-1,3-Dichloropropene	0.500 U	0.500	0.150	ug/L	1	04/03/13 16:28
Trichloroethene	0.500 U	0.500	0.150	ug/L	1	04/03/13 16:28
Trichlorofluoromethane	0.500 U	0.500	0.150	ug/L	1	04/03/13 16:28
Vinyl chloride	0.400 U	0.400	0.120	ug/L	1	04/03/13 16:28
Xylenes (total)	1.00 U	1.00	0.310	ug/L	1	04/03/13 16:28
Surrogates						
1,2-Dichloroethane-D4	120	70-130		%	1	04/03/13 16:28
4-Bromofluorobenzene	103	70-130		%	1	04/03/13 16:28
Toluene-d8	96.9	70-130		%	1	04/03/13 16:28

Batch Information

Analytical Batch: VMS13439 Analytical Method: EPA 524.2

Analyst: HM

Analytical Date/Time: 04/03/13 16:28 Container ID: 1137642019-A Prep Batch: VXX24603
Prep Method: SW5030B
Prep Date/Time: 04/03/13 08:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Print Date: 04/15/2013 8:24:46AM



Blank ID: MB for HBN 1429761 [VXX/24603]

Blank Lab ID: 1142996

QC for Samples:

1137642017, 1137642018, 1137642019

Matrix: Drinking Water

Results by EPA 524.2

<u>Parameter</u>	Results	LOQ/CL	<u>DL</u>	<u>Units</u>
1,1,1,2-Tetrachloroethane	0.300U	0.500	0.150	ug/L
1,1,1-Trichloroethane	0.300U	0.500	0.150	ug/L
1,1,2,2-Tetrachloroethane	0.300U	0.500	0.150	ug/L
1,1,2-Trichloroethane	0.300U	0.500	0.150	ug/L
1,1-Dichloroethane	0.300U	0.500	0.150	ug/L
1,1-Dichloroethene	0.300U	0.500	0.150	ug/L
1,1-Dichloropropene	0.300U	0.500	0.150	ug/L
1,2,3-Trichlorobenzene	0.300U	0.500	0.150	ug/L
1,2,3-Trichloropropane	0.360U	0.500	0.180	ug/L
1,2,4-Trichlorobenzene	0.300U	0.500	0.150	ug/L
1,2,4-Trimethylbenzene	0.300U	0.500	0.150	ug/L
1,2-Dibromo-3-chloropropane	1.24U	2.00	0.620	ug/L
1,2-Dibromoethane	0.300U	0.500	0.150	ug/L
1,2-Dichlorobenzene	0.300U	0.500	0.150	ug/L
1,2-Dichloroethane	0.300U	0.500	0.150	ug/L
1,2-Dichloropropane	0.300U	0.500	0.150	ug/L
1,3,5-Trimethylbenzene	0.300U	0.500	0.150	ug/L
1,3-Dichlorobenzene	0.300U	0.500	0.150	ug/L
1,3-Dichloropropane	0.300U	0.500	0.150	ug/L
1,4-Dichlorobenzene	0.300U	0.500	0.150	ug/L
2,2-Dichloropropane	0.300U	0.500	0.150	ug/L
2-Chlorotoluene	0.300U	0.500	0.150	ug/L
4-Chlorotoluene	0.300U	0.500	0.150	ug/L
4-Isopropyltoluene	0.300U	0.500	0.150	ug/L
Benzene	0.300U	0.500	0.150	ug/L
Bromobenzene	0.300U	0.500	0.150	ug/L
Bromochloromethane	0.300U	0.500	0.150	ug/L
Bromodichloromethane	0.300U	0.500	0.150	ug/L
Bromoform	0.300U	0.500	0.150	ug/L
Bromomethane	1.24U	2.00	0.620	ug/L
Carbon tetrachloride	0.300U	0.500	0.150	ug/L
Chlorobenzene	0.300U	0.500	0.150	ug/L
Chloroethane	0.620U	1.00	0.310	ug/L
Chloroform	0.300U	0.500	0.150	ug/L
Chloromethane	0.300U	0.500	0.150	ug/L
cis-1,2-Dichloroethene	0.300U	0.500	0.150	ug/L
cis-1,3-Dichloropropene	0.300U	0.500	0.150	ug/L
Dibromochloromethane	0.300U	0.500	0.150	ug/L

Print Date: 04/15/2013 8:24:50AM

SGS North America Inc.



Blank ID: MB for HBN 1429761 [VXX/24603]

Blank Lab ID: 1142996

QC for Samples:

1137642017, 1137642018, 1137642019

Matrix: Drinking Water

Results by EPA 524.2

Parameter	Results	LOQ/CL	DL	Units
Dibromomethane	0.300U	0.500	0.150	ug/L
Dichlorodifluoromethane	0.300U	0.500	0.150	ug/L
Ethylbenzene	0.300U	0.500	0.150	ug/L
Hexachlorobutadiene	0.300U	0.500	0.150	ug/L
Isopropylbenzene (Cumene)	0.300U	0.500	0.150	ug/L
Methylene chloride	0.300U	0.500	0.150	ug/L
Methyl-t-butyl ether	1.00U	1.00	0.500	ug/L
Naphthalene	0.300U	0.500	0.150	ug/L
n-Butylbenzene	0.300U	0.500	0.150	ug/L
n-Propylbenzene	0.300U	0.500	0.150	ug/L
o-Xylene	0.300U	0.500	0.150	ug/L
P & M -Xylene	0.360U	0.500	0.180	ug/L
sec-Butylbenzene	0.300U	0.500	0.150	ug/L
Styrene	0.300U	0.500	0.150	ug/L
tert-Butylbenzene	0.300U	0.500	0.150	ug/L
Tetrachloroethene	0.300U	0.500	0.150	ug/L
Toluene	0.300U	0.500	0.150	ug/L
trans-1,2-Dichloroethene	0.300U	0.500	0.150	ug/L
trans-1,3-Dichloropropene	0.300U	0.500	0.150	ug/L
Trichloroethene	0.300U	0.500	0.150	ug/L
Trichlorofluoromethane	0.300U	0.500	0.150	ug/L
Vinyl chloride	0.240U	0.400	0.120	ug/L
Surrogates				
1,2-Dichloroethane-D4	107	70-130		%
4-Bromofluorobenzene	104	70-130		%
Toluene-d8	95.2	70-130		%

Batch Information

Analytical Batch: VMS13439 Analytical Method: EPA 524.2

Instrument: Agilent 7890-75MS

Analyst: HM

Analytical Date/Time: 4/3/2013 10:34:01AM

Prep Batch: VXX24603 Prep Method: SW5030B

Prep Date/Time: 4/3/2013 8:00:00AM

Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 04/15/2013 8:24:50AM



Blank Spike ID: LCS for HBN 1137642 [VXX24603]

Blank Spike Lab ID: 1142997 Date Analyzed: 04/03/2013 11:04 Spike Duplicate ID: LCSD for HBN 1137642

[VXX24603]

Spike Duplicate Lab ID: 1142998

Matrix: Drinking Water

QC for Samples: 1137642017, 1137642018, 1137642019

Results by EPA 524.2

		Blank Spike	e (ug/L)		Spike Du	plicate ()			
<u>Parameter</u>	<u>Spike</u>	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1,1,1,2-Tetrachloroethane	30	31.7	106	30	32.5	108	(70-130)	2.60	(< 30)
1,1,1-Trichloroethane	30	34.6	115	30	33.7	112	(70-130)	2.70	(< 30)
1,1,2,2-Tetrachloroethane	30	33.8	113	30	30.1	100	(70-130)	11.60	(< 30)
1,1,2-Trichloroethane	30	30.0	100	30	30.4	101	(70-130)	1.40	(< 30)
1,1-Dichloroethane	30	30.5	102	30	28.4	95	(70-130)	7.10	(< 30)
1,1-Dichloroethene	30	32.0	107	30	30.7	102	(70-130)	4.40	(< 30)
1,1-Dichloropropene	30	34.5	115	30	33.2	111	(70-130)	3.80	(< 30)
1,2,3-Trichlorobenzene	30	33.8	113	30	33.1	110	(70-130)	1.90	(< 30)
1,2,3-Trichloropropane	30	35.1	117	30	32.0	107	(70-130)	9.10	(< 30)
1,2,4-Trichlorobenzene	30	32.7	109	30	32.4	108	(70-130)	1.00	(< 30)
1,2,4-Trimethylbenzene	30	34.8	116	30	33.0	110	(70-130)	5.20	(< 30)
1,2-Dibromo-3-chloropropane	30	33.2	111	30	32.0	107	(70-130)	3.60	(< 30)
1,2-Dibromoethane	30	31.5	105	30	32.0	107	(70-130)	1.60	(< 30)
1,2-Dichlorobenzene	30	28.8	96	30	29.4	98	(70-130)	1.80	(< 30)
1,2-Dichloroethane	30	31.1	104	30	30.8	103	(70-130)	0.90	(< 30)
1,2-Dichloropropane	30	27.8	93	30	29.9	100	(70-130)	7.20	(< 30)
1,3,5-Trimethylbenzene	30	34.9	116	30	32.8	109	(70-130)	6.20	(< 30)
1,3-Dichlorobenzene	30	31.9	106	30	30.0	100	(70-130)	6.00	(< 30)
1,3-Dichloropropane	30	29.6	99	30	30.2	101	(70-130)	2.00	(< 30)
1,4-Dichlorobenzene	30	32.6	109	30	31.0	103	(70-130)	5.00	(< 30)
2,2-Dichloropropane	30	35.2	117	30	34.3	114	(70-130)	2.60	(< 30)
2-Chlorotoluene	30	33.7	112	30	31.6	105	(70-130)	6.30	(< 30)
4-Chlorotoluene	30	32.9	110	30	31.8	106	(70-130)	3.40	(< 30)
4-Isopropyltoluene	30	35.1	117	30	32.7	109	(70-130)	6.90	(< 30)
Benzene	30	31.2	104	30	30.6	102	(70-130)	1.90	(< 30)
Bromobenzene	30	33.2	111	30	31.2	104	(70-130)	6.10	(< 30)
Bromochloromethane	30	31.2	104	30	30.8	103	(70-130)	1.20	(< 30)
Bromodichloromethane	30	30.7	102	30	31.6	105	(70-130)	2.70	(< 30)
Bromoform	30	33.1	110	30	33.8	113	(70-130)	2.20	(< 30)
Bromomethane	30	27.6	92	30	27.2	91	(70-130)	1.20	(< 30)
Carbon tetrachloride	30	36.5	122	30	35.1	117	(70-130)	3.80	(< 30)
Chlorobenzene	30	29.5	98	30	30.1	100	(70-130)	1.90	(< 30)
Chloroethane	30	28.4	95	30	26.5	88	(70-130)	7.00	(< 30)
Chloroform	30	31.0	103	30	30.0	100	(70-130)	3.40	(< 30)

Print Date: 04/15/2013 8:24:51AM



Blank Spike ID: LCS for HBN 1137642 [VXX24603]

Blank Spike Lab ID: 1142997 Date Analyzed: 04/03/2013 11:04 Spike Duplicate ID: LCSD for HBN 1137642

[VXX24603]

Spike Duplicate Lab ID: 1142998

Matrix: Drinking Water

QC for Samples: 1137642017, 1137642018, 1137642019

Results by EPA 524.2

		Blank Spike	e (ug/L)		Spike Du	plicate ()			
<u>Parameter</u>	<u>Spike</u>	Result	Rec (%)	<u>Spike</u>	Result	Rec (%)	CL	RPD (%)	RPD CL
Chloromethane	30	29.4	98	30	28.7	96	(70-130)	2.40	(< 30)
cis-1,2-Dichloroethene	30	31.9	106	30	31.2	104	(70-130)	2.40	(< 30)
cis-1,3-Dichloropropene	30	34.2	114	30	30.6	102	(70-130)	11.00	(< 30)
Dibromochloromethane	30	32.0	107	30	33.5	112	(70-130)	4.70	(< 30)
Dibromomethane	30	29.0	97	30	30.0	100	(70-130)	3.30	(< 30)
Dichlorodifluoromethane	30	34.0	113	30	32.5	108	(70-130)	4.40	(< 30)
Ethylbenzene	30	31.1	104	30	31.4	105	(70-130)	1.10	(< 30)
Hexachlorobutadiene	30	30.8	103	30	31.8	106	(70-130)	3.20	(< 30)
Isopropylbenzene (Cumene)	30	31.2	104	30	32.2	107	(70-130)	3.40	(< 30)
Methyl-t-butyl ether	45	51.9	115	45	46.4	103	(70-130)	11.20	(< 30)
Methylene chloride	30	30.0	100	30	27.9	93	(70-130)	7.30	(< 30)
n-Butylbenzene	30	33.0	110	30	31.2	104	(70-130)	5.80	(< 30)
n-Propylbenzene	30	33.6	112	30	31.2	104	(70-130)	7.50	(< 30)
Naphthalene	30	31.0	103	30	30.6	102	(70-130)	1.20	(< 30)
o-Xylene	30	30.8	103	30	31.6	105	(70-130)	2.70	(< 30)
P & M -Xylene	60	61.8	103	60	63.4	106	(70-130)	2.40	(< 30)
sec-Butylbenzene	30	34.4	115	30	31.8	106	(70-130)	7.90	(< 30)
Styrene	30	31.2	104	30	31.7	106	(70-130)	1.80	(< 30)
tert-Butylbenzene	30	35.1	117	30	32.9	110	(70-130)	6.70	(< 30)
Tetrachloroethene	30	31.5	105	30	31.6	105	(70-130)	0.60	(< 30)
Toluene	30	28.8	96	30	29.4	98	(70-130)	2.10	(< 30)
trans-1,2-Dichloroethene	30	32.9	110	30	29.8	99	(70-130)	9.90	(< 30)
trans-1,3-Dichloropropene	30	28.9	96	30	30.2	101	(70-130)	4.50	(< 30)
Trichloroethene	30	31.0	103	30	32.2	107	(70-130)	3.80	(< 30)
Trichlorofluoromethane	30	34.6	115	30	32.9	110	(70-130)	5.10	(< 30)
Vinyl chloride	30	33.5	112	30	32.0	107	(70-130)	4.70	(< 30)
Surrogates									
1,2-Dichloroethane-D4		101	101	30	98.7		(70-130)	2.70	
4-Bromofluorobenzene		114	114	30	105		(70-130)	7.60	
Toluene-d8		98.3	98	30	99		(70-130)	0.71	

Print Date: 04/15/2013 8:24:51AM



Blank Spike ID: LCS for HBN 1137642 [VXX24603]

Blank Spike Lab ID: 1142997 Date Analyzed: 04/03/2013 11:04 Spike Duplicate ID: LCSD for HBN 1137642

[VXX24603]

Spike Duplicate Lab ID: 1142998

Matrix: Drinking Water

QC for Samples: 1137642017, 1137642018, 1137642019

Results by EPA 524.2

Blank Spike (%) Spike Duplicate ()

Batch Information

Analytical Batch: VMS13439
Analytical Method: EPA 524.2

Instrument: Agilent 7890-75MS

Analyst: HM

Prep Batch: VXX24603
Prep Method: SW5030B

Prep Date/Time: 04/03/2013 08:00

Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL

Print Date: 04/15/2013 8:24:51AM



Blank ID: MB for HBN 1431267 [VXX/24606]

Blank Lab ID: 1143469

QC for Samples:

1137642001, 1137642002, 1137642003, 1137642004, 1137642005, 1137642006, 1137642007, 1137642008, 1137642009,

Matrix: Water (Surface, Eff., Ground)

1137642010, 1137642011, 1137642012, 1137642013, 1137642014, 1137642015, 1137642016

Results by AK101

ParameterResultsLOQ/CLDLUnitsGasoline Range Organics0.0620U0.1000.0310mg/L

Surrogates

4-Bromofluorobenzene 91.4 50-150 %

Batch Information

Analytical Batch: VFC11383 Prep Batch: VXX24606
Analytical Method: AK101 Prep Method: SW5030B

Instrument: Agilent 7890A PID/FID Prep Date/Time: 4/4/2013 8:00:00AM

Analyst: ST Prep Initial Wt./Vol.: 5 mL Analytical Date/Time: 4/4/2013 11:18:00AM Prep Extract Vol: 5 mL

Print Date: 04/15/2013 8:24:52AM

Page 48 of 63



Blank Spike ID: LCS for HBN 1137642 [VXX24606]

Blank Spike Lab ID: 1143472

Date Analyzed: 04/04/2013 11:00

Spike Duplicate ID: LCSD for HBN 1137642

[VXX24606]

Spike Duplicate Lab ID: 1143473 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1137642001, 1137642002, 1137642003, 1137642004, 1137642005, 1137642006, 1137642007,

92.1

92

1137642008, 1137642009, 1137642010, 1137642011, 1137642012, 1137642013, 1137642014,

1137642015, 1137642016

Results by AK101

	I	Blank Spike	(mg/L)		Spike Du	plicate ()			
<u>Parameter</u>	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Gasoline Range Organics	1.00	0.971	97	1.00	0.945	95	(60-120)	2.70	(< 20)
Surrogates									

0.0500 98.4

Batch Information

4-Bromofluorobenzene

Analytical Batch: VFC11383
Analytical Method: AK101

Instrument: Agilent 7890A PID/FID

Analyst: ST

Prep Batch: VXX24606
Prep Method: SW5030B

Prep Date/Time: 04/04/2013 08:00

Spike Init Wt./Vol.: 1.00 mg/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 1.00 mg/L Extract Vol: 5 mL

(50-150) 6.60

Print Date: 04/15/2013 8:24:52AM



Blank ID: MB for HBN 1431267 [VXX/24606]

Blank Lab ID: 1143469

QC for Samples:

1137642001, 1137642002, 1137642003, 1137642004, 1137642005, 1137642006, 1137642007, 1137642008, 1137642009,

 $1137642010,\,1137642011,\,1137642012,\,1137642013,\,1137642014,\,1137642015,\,1137642016$

Results by SW8021B

<u>Parameter</u>	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>
Benzene	0.300U	0.500	0.150	ug/L
Ethylbenzene	0.620U	1.00	0.310	ug/L
o-Xylene	0.620U	1.00	0.310	ug/L
P & M -Xylene	1.24U	2.00	0.620	ug/L
Toluene	0.620U	1.00	0.310	ug/L
Surrogates				
1,4-Difluorobenzene	94.8	77-115		%

Batch Information

Analytical Batch: VFC11383 Analytical Method: SW8021B Instrument: Agilent 7890A PID/FID

Analyst: ST

Analytical Date/Time: 4/4/2013 11:18:00AM

Prep Batch: VXX24606 Prep Method: SW5030B

Prep Date/Time: 4/4/2013 8:00:00AM

Matrix: Water (Surface, Eff., Ground)

Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 04/15/2013 8:24:53AM



Blank Spike ID: LCS for HBN 1137642 [VXX24606]

Blank Spike Lab ID: 1143470 Date Analyzed: 04/04/2013 10:41 Spike Duplicate ID: LCSD for HBN 1137642

[VXX24606]

Spike Duplicate Lab ID: 1143471 Matrix: Water (Surface, Eff., Ground)

QC for Samples:

 $1137642001, \ 1137642002, \ 1137642003, \ 1137642004, \ 1137642005, \ 1137642006, \ 1137642007, \ 1137642008, \ 1137642009, \ 1137642010, \ 1137642011, \ 1137642012, \ 1137642013, \ 1137642014, \$

1137642015, 1137642016

Results by SW8021B

		Blank Spike (ug/L)				plicate ()			
<u>Parameter</u>	<u>Spike</u>	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Benzene	100	104	104	100	105	105	(80-120)	0.90	(< 20)
Ethylbenzene	100	104	104	100	105	105	(75-125)	0.29	(< 20)
o-Xylene	100	107	107	100	107	107	(80-120)	0.37	(< 20)
P & M -Xylene	200	217	109	200	216	108	(75-130)	0.75	(< 20)
Toluene	100	103	103	100	102	102	(75-120)	0.27	(< 20)
Surrogates									
1,4-Difluorobenzene		97.7	98	50	99.3		(77-115)	1.60	

Batch Information

Analytical Batch: VFC11383 Analytical Method: SW8021B Instrument: Agilent 7890A PID/FID

Analyst: ST

Prep Batch: VXX24606
Prep Method: SW5030B

Prep Date/Time: 04/04/2013 08:00

Spike Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 100 ug/L Extract Vol: 5 mL

Print Date: 04/15/2013 8:24:54AM



Blank ID: MB for HBN 1431326 7 VVX 420] L

Blank ba9 ID: 11436] Q

CS for map els, : 113524/ 01/

Ma8ti: x a&r Wth(rfauscEff.cGro(nd)

Rs, (I8 9y AK101

 Parap s&r
 Rs, (18
 bOC Xsb
 Db
 Unt8

 Ga, oltns Rangs Organtu,
 0.02/ 0U
 0.100
 0.0310
 p g Xb

Surrogates

4-Brop ofl(oro9snzsns Q8.1 60-160 %

Batch Information

Analy&ual Ba&uh: [FS113]4 Analy&ual Ms&nod: AK101

In, 8 (p sn8 Agtlsn85] QDA PIDXFID

Analy, 8 mT

Analy&ual Da&XTtp s: 4X6X 013 2:63:00PM

Prse Ba&h: [VV/ 420]

Prse Ms&hod: mx 6030B

Prse Da&XTtp s: 4X6X 013]:00:00AM

Prse Int&al x 8¼ ol.: 6 p b Prse Ei &au8[ol: 6 p b

Prtn8Da&: 04X16X1013]:/4:66AM

mGm Nor8h Ap srtua Inu.



Blank Spike ID: LCS for HBN 1137642 [VXX2460] b

Blank Spike Lat ID: 1143Ay2
Daze dnal/uec: 04R0AR2013 10:30

Spike DspliMaze ID: LCSD for HBN 1137642

[VXX2460] b

Spike DspliMaze Lat ID: 1143Ay3

(azi, : E azer .SsrfaMeG) ffR@mrosnc%

9 C for SaQpleW 1137642012

x eVslzWt / AK101

	E	Blank Spike	.Q8 R .%		Spike Ds	oliMaze.%			
<u>garaQezer</u>	<u>Spike</u>	<u>x eV\$Iz</u>	<u>x eM.5 %</u>	Spike	<u>x eV\$Iz</u>	<u>x eM.5 %</u>	CL	<u>xgD.5%</u>	xgDCL
maVøline x an8e Or8aniMV	1F00	0Ry7A	y]	1F00	0Fy6]	у7	. 60-120 %	0F6A	.< 20 %

Surrogates

4-BroQoflsorot enuene y2 y2 0f0A00 100 . A0-1A0 %] FA0

Batch Information

dnal/ziMal BazMh: VFC11387 dnal/ziMal (ezhoc: AK101 InWtsQenz Agilent 98P0A DI/ TFI/

dnal/ W SX

grep BazMh: V2247608 grep (ezhoc: SW5030B

grep DazeRiQe: 0770574013 08:00

Spike InizE \pm RVoIP. 1P00 Q8R.) , \pm aMzVoI: AQL Dspe InizE \pm RVoIP. 1P00 Q8R.) , \pm aMzVoI: AQL

grinzDaze: 04RIAR2013]:24:A6d(



Blank ID: MB for HBN 1431326 7 VVX 420] L

Blank ba9 ID: 11436] Q

CS for map els, : 113524/ 01/

Ma8ti: x a&r Wth(rfauscEff.cGro(nd)

Rs, (18, 9y SW8021B

E&yl9sngsns 0.2/ 0U 1.00 0.310 (o-Vylsns 0.2/ 0U 1.00 0.310 (C				
E&yl9sngsns 0.2/0U 1.00 0.310 (P & M -Vylsns	1./ 4U	/ .00	0.2/ 0	(hXb
	o-Vylsns	0.2/ 0U	1.00	0.310	ďkh)
<u>Parap s&r</u> <u>Rs, (I8</u> <u>bOCX5b</u> <u>Db</u> <u>U</u>	E&yl9sngsns	0.2/ 0U	1.00	0.310	(hXb
	Parap s&r	<u>Rs, (18</u>	bOCX6b	<u>Db</u>	Unt8

Surrogates

1¢4-Dtfl(oro9sngsns Q4.3 55-116 T

Batch Information

%naly&ual Ba&iz: [AS113] 4 %naly&ual Ms&od: mx] 0/ 1B In, &(p sn8 %htlsn85] Q0%PIDXAID

%naly, 8 mF

%naly&ual Da&xFtp s: 4x6x 013 2:63:00PM

Prse Ba&z: [VV/ 420] Prse Ms&od: mx 6030B

Prse Da&XFtp s: 4X6X 013]:00:00%M

Prse Int&al x 8¼ ol.: 6 p b Prse Ei &au8[ol: 6 p b

Prtn8Da&: 04X16X1013]:/4:65%M



Blank Spike ID: LCS for HBN 1137642 [VXX2460] b

Blank Spike Lat ID: 1143Ay0
Daze dnal/uec: 04R0AR2013 10:12

Spike DspliMaze ID: LCSD for HBN 1137642

[VXX2460] b

Spike DspliMaze Lat ID: 1143Ay1

(azi, : E azer .SsrfaMeG) ffPOmrosnc%

9 C for SaQpleW 1137642012

x eVsl2Mt / SW8021B

		Blank Spike	s.s8RL%		Spike Ds	pliMaze.%			
<u>garaQezer</u>	Spike	<u>x eV&Iz</u>	<u>x eM.5 %</u>	Spike	<u>x eV&Iz</u>	<u>x eM.5 %</u>	CL	<u>xgD.5%</u>	x g D CL
) z-/It enuene	100	104	104	100	110	110	. 7A<12A %	AP60	.h 20 %
o ⊀ / lene	100	107	107	100	114	114	.]0<120 %	AP70	.h 20 %
g & (< lene	200	216	10]	200	230	11A	. 7A≤130 %	6 P 40	.h 20 %
Surrogates									
1 ⊈ Diflsorot enuene		уу	уу	A0	y6P4		. 77⊲1A %	2F70	

Batch Information

dnal/ziMal BazM: VFC1138A dnal/ziMal (ez.oc: SW8021B InVxrsQenz 7 gilent 98P07 Dl/ TFl/

dnal/ W SX

grep BazW: **V442A608** grep (ez-oc: **SW5030B**

grep DazeRiQe: 0AT05T2013 08:00

Spike InizE zPVoIP. 100 s8R.), zraMzVoI: AQL Dspe InizE zPVoIP. 100 s8R.), zraMzVoI: AQL

grinzDaze: 04F1AF2013]:24:A7d(



Blank ID: MB for HBN 1431560 [XXX/28866]

Blank Lab ID: 1143720

QC for Samples:

1137642001, 1137642002, 1137642003, 1137642004, 1137642005, 1137642006, 1137642007, 1137642008, 1137642009,

Matrix: Water (Surface, Eff., Ground)

1137642010, 1137642011, 1137642012, 1137642013, 1137642014, 1137642015

Results by AK102

 Parameter
 Results
 LOQ/CL
 DL
 Units

 Diesel Range Organics
 0.360U
 0.600
 0.180
 mg/L

Surrogates

5a Androstane 89.3 60-120 %

Batch Information

Analytical Batch: XFC10859 Prep Batch: XXX28866 Analytical Method: AK102 Prep Method: SW3520C

Instrument: HP 6890 Series II FID SV D R Prep Date/Time: 4/9/2013 10:30:00AM

Analyst: EAB Prep Initial Wt./Vol.: 1000 mL

Analytical Date/Time: 4/10/2013 4:27:00PM Prep Extract Vol: 1 mL

Print Date: 04/15/2013 8:24:58AM



Blank Spike ID: LCS for HBN 1137642 [VVV2XX660

Blank Spike La] ID: 1143721

Dabe t nalAyez: d4/1d/2d13 16:36

Spike Duplicabe ID: LCSD for HBN 1137642

[VVV2XX660

Spike Duplicabe La] ID: 1143722

Mabrix: Waber (Surface, Eff., Grounz)

QC for Samples: 1137642dd1, 1137642dd2, 1137642dd3, 1137642dd4, 1137642dd5, 1137642dd6, 1137642dd7,

1137642ddX, 1137642dd8, 1137642d1d, 1137642d11, 1137642d12, 1137642d13, 1137642d14,

1137642d15

Resulbs] AAK102

	E	Blank Spike	(mg/L)		Spike Du	plicabe ()			
<u>Parameter</u>	Spike	Resulb	Rec (%)	Spike	Resulb	Rec (%)	CL	RPD (%)	RPD CL
Diesel Range 9 rganics	5	3.X8	7X	5	3.X7	7X	(750125)	d.57	(- 2d)
Surrogates									

X1.3 X1 d.1 X3.2

Batch Information

5a t nzrosbane

t nalAbical Babc<: **XFC10859** t nalAbical Meb≤oz: **AK102**

Instrument HP 6890 Series II FID SV D R

t nalAsb EAB

Prep Babc<: XXX28866 Prep Meb≼oz: SW3520C

Prep Dabe/hime: 04/09/2013 10:30

Spike InibWb/Tol.: 5 mg/L ExtracbTol: 1 mL Dupe InibWb/Tol.: 5 mg/L ExtracbTol: 1 mL

(6dCl2d) 2.3d

PrinbDabe: d4/15/2d13 X:24:58t M



Blank ID: MB for HBN 1431560 [XXX/28866]

Blank Lab ID: 1143720

QC for Samples:

1137642001, 1137642002, 1137642003, 1137642004, 1137642005, 1137642006, 1137642007, 1137642008, 1137642009,

Matrix: Water (Surface, Eff., Ground)

1137642010, 1137642011, 1137642012, 1137642013, 1137642014, 1137642015

Results by AK103

LOQ/CL <u>Units</u> **Parameter** Results DL Residual Range Organics 0.300U 0.500 0.150 mg/L

Surrogates

nA riacontaneAd62 96 60A120 %

Batch Information

hnalytical BatcF: XKC10859 Prep BatcF: XXX28866 hnalytical MetFod: hV103 Prep MetFod: SW3520C

Instrument: HP 6890 Series II KID ST D R Prep Date/- ime: 4/9/2013 10:30:00h M

hnalyst: EhB Prep Initial Wt./Tol.: 1000 mL

hnalytical Date/- ime: 4/10/2013 4:27:00PM Prep Extract Tol: 1 mL

Print Date: 04/15/2013 8:24:59h M



Blank Spike ID: LCS for HBN 1137642 [VVV2XX660

Blank Spike La] ID: 1143721

Dabe t nalAyez: d4/1d/2d13 16:36

Spike Duplicabe ID: LCSD for HBN 1137642

[VVV2XX660

Spike Duplicabe La] ID: 1143722

Mabrix: Waber (Surface, Eff., Grounz)

QC for Samples: 1137642dd1, 1137642dd2, 1137642dd3, 1137642dd4, 1137642dd5, 1137642dd6, 1137642dd7,

 $1137642 d d X, \ 1137642 d d 8, \ 1137642 d 1 d, \ 1137642 d 1 1, \ 1137642 d 1 2, \ 1137642 d 1 3, \ 1137642 d 1 4, \\$

1137642d15

Resulbs] AAK102

		Blank Spike	(mg/L)		Spike Du	plicabe ()			
<u>Parameter</u>	<u>Spike</u>	Resulb	Rec (%)	Spike	Resulb	Rec (%)	<u>CL</u>	RPD (%)	RPD CL
Resizual Range 9 rganics	5	4.17	X3	5	4.18	X4	(6dCl2d)	d.62	(- 2d)
Surrogates									

77.X **7X** d.1

n@riaconbane@62 Batch Information

t nalAbcal Babch: **XFC10859** t nalAbcal Methoz: **AK102**

Instrument HP 6890 Series II FID SV D R

t nalAsb EAB

Prep Babch: XXXV8866
Prep Methoz: S3 25V0C

78.8

Prep Dabe/<ime: 04/09/V012 10:20

Spike InibWb/Tol.: 5 mg/L ExtracbTol: 1 mL Dupe InibWb/Tol.: 5 mg/L ExtracbTol: 1 mL

(6dCl2d) 2.Xd

PrinbDate: d4/15/2d13 X:25:ddt M



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NO

Locations Nationwide

Maryland
 New York
 Indiana
 Kentucky

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AlaskaNew JerseyNorth CarolinaWest Virginia

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	CAURO DAUKO)					SGS R	SGS Reference #:	#:			abed	7
o CONTACT:		PHONE NO:	:01					_				
	Sept Och Not	PROJECT/ PWSID/ PERMIT# ·				# (щ.,,	GS	李	 		
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INVOICE TO:		QUOTE #:	di.			∢ –	=IWI		200			_
_6		P.O. #:				ZШ	Multi	70 /2 /2 /2 /2	170			_
RESERVED for lab use	SAMPLE IDENTIFICATION	ATION	DATE	TIME	MATRIX/ CODE	ഷ ഗ	Samples			/	/ / /	REMARKS/ LOC ID
OA-E	54-8		3130 /13	10;30	N	S	8	7				
DA-E	5w.2		3/30/13	10:45	W	5	2	7				
3A.E	1-00		3/30/13	10:45	2	8	. 5	7				
WA-E	5W-7		3/30/13	11:45	3	'n		7				
BA-E	5w-9		3/30/13	12:30,	3	'n	9	7				
(C)A-E	54-19		3 /30 hz	12:34	3	Ч	6	2				
JA-E	5w.3		3/30/13	1:42	3	S	8	7				
BA-E	500-1		3/30/13	10:15	3	7	5	7				
@A-E	Sw-4		3/30/13	11:15	3	S	Ø	7				
AOA-E	SW-4		3/30/13	12:30	3	5	0	7				
Collected/Reli	Collected/Relinquished By:(1)	Date	Time	Received By	8y:	1-1-15	~	DOD Project?	YES NO		Data Deliverable Requirements:	ments:
1/2/1	of the	4/1/3	17:15	1/2	M) -	5	Cooler ID				
Relinquished By: (2)	By: (2)/	Date 4-113	Time (59)	Received By	By:	K		Requested To	urnaround Ti	Requested Turnaround Time and-or Special Instructions:	instructions:	
Réfinquished By: (3)	By: (3)	Date	Lime	Received By	By:							
								Temperature Blank °C:	Blank °C: _	1.2,5.9,10,		Chain of Custody Seal: (Circle)
Relinquished By: (4)	By:(4)	Date	Time	Received	Received For Laboratory By:	by By:			OC	or Ambient []	INTACT BRO	BROKEN ABSENT
		21/212	0820	Jan J	A			(See atta	ched Sampl	(See attached Sample Receipt Form)	(See attached Sa	(See attached Sample Receipt Form)

^{□ 200} W. Potter Drive **Anchorage, AK 99518** Tel: (907) 562-2343 Fax: (907) 564-5507 □ 5500 Business Drive **Wilmington, NC 28405** Tel: (910) 350-1903 Fax: (910) 350-1557



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Locations Nationwide

Maryland
 New York
 Indiana
 Kentucky

New Jersey
 North Carolina
 West Virginia

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Pa											ww	www.us.sgs.com	
aclient: Cox	CONDRO ROMO					SGS Ref	SGS Reference #:					page 2	of 2
OCONTACT:		PHONE NO:	4	-5608		-	Ė		\vdash		-		
	CONORO RO	PROJECT/ PWSID/ PERMIT#:	7 ::			# U	SAMPLE Used TYPE Analy	Used Analysis	034		_		
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INVOICE TO:		QUOTE #:	44				= W		5	7	<u></u>		_
2 000/5	DUSER	P.O. #:					a	2/ 72/ 12/42/	a	54.	_	/	_
RESERVED for lab use	SAMPLE IDENTIFICATION	CATION	DATE	TIME	MATRIX/ MATRIX CODE		Samples	200	>		\		REMARKS/ LOC ID
(1) A-E	FRW-2		3/30/13	1315	B	8	S	7	_				
(12)4-E	54-5		3/30/13	11015	3	5 6		2					
(B) A-E	Dm -2		3/30/13	1500	3	5 6		7	,				
MAE	DW W		3130 13	15'30	E	5		2					
(F)A-E	DW W 2		3130113	1530	E	5	``	7					
©A C	TRID		3/30/13					7					
(F)A-C	TW 1		3/30/13	1545					7				
(B) A-C	7W Z		3/20/13	1545					7				
(4) A-C	TRID		3/30/13						7				
_(t							-6						
	Collected/Relinquished By:(1)	Date	Time	Received E	By:	-177		DOD Project?	YES	ON	Data	Data Deliverable Requirements:	ents:
11/11	Il.	41,113	0:15	1	the	10/	215	Cooler ID					
Relinquished By; (2)	By;(2[/	Date (/-/-/3	Time 50% /	Received B	By:	1))	Rednested 1	urnaroun	d Time and	Requested Turnaround Time and-or Special Instructions:	structions:	
Relinquished By: (3)	3y: (3)	Date	Time	Received B	By:								
								Temperature Blank °C:	Blank °	See .	180	Chain of Custody Seal: (Circle)	/ Seal: (Circle)
Relinquished By: (4)	By: (4)	Date		Received F	For Laboratory	MBy:				or Ambient [)	INTACT BROKEN	KEN ABSENT
		4/2/13	08.80	J. J.	A.			(See att	ached Sa	(See attached Sample Receipt Form)	pt Form)	(See attached San	(See attached Sample Receipt Form)

^{□ 200} W. Potter Drive **Anchorage, AK 99518** Tel: (907) 562-2343 Fax: (907) 581-5801 □ 5500 Business Drive **Wilmington, NC 28405** Tel: (910) 350-1903 Fax: (910) 350-1557





SAMPLE RECEIPT FORM

Review Criteria:	Condition:	Comments/Action Taken:
Were custody seals intact? Note # & location, if applicable.	Yes No (N/A)	
COC accompanied samples?	Yes No N/A	
Temperature blank compliant* (i.e., 0-6°C after correction factor)?	Yes No N/A	
* Note: Exemption permitted for chilled samples collected less than 8 hours ago.		
Cooler ID: \ @ 4. \ w/ Therm.ID: \ \		
Cooler ID: Q @ 5.9 w/ Therm.ID: 7/		
Cooler ID: 3 @ \.O w/ Therm.ID: \.O \.O		
Cooler ID: 4 @ 4.8 w/ Therm.ID: 10		
Cooler ID: @ w/ Therm.ID:		
Note: If non-compliant, use form FS-0029 to document affected samples/analyses.		
If samples are 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."		
If temperature(s) <0°C, were all sample containers ice free?	Yes No (N/A)	
Delivery method (specify all that apply): (Client)	Note ABN/	
USPS Alert Courier C&D Delivery AK Air	tracking #	
Lynden Carlile ERA PenAir	tracking "	
FedEx UPS NAC Other:	See Attached	
→ For WO# with airbills, was the WO# & airbill	or N/A	
info recorded in the Front Counter eLog?	Yes No (N/A-	
		ircle one) or note:
→ For samples received in FBKS, ANCH staff will verify all criteria		SRF Initiated by: N/A
Were samples received within hold time?	(Yes) No N/A	ord intriduced by:
Note: Refer to form F-083 "Sample Guide" for hold time information.	109 110 11/11	
Do samples match COC* (i.e., sample IDs, dates/times collected)?	(Yes) No N/A	
* Note: Exemption permitted if times differ <1hr; in which case, use times on COC.		
Were analyses requested unambiguous?	(es) No N/A	
Were samples in good condition (no leaks/cracks/breakage)?	(Yes) No N/A	
Packing material used (specify all that apply): Bubble Wrap		
Separate plastic bags Vermiculite Other:		
Were all VOA vials free of headspace (i.e., bubbles ≤6 mm)?	(es) No N/A	
Were all soil VOAs field extracted with MeOH+BFB?	Yes No (N/A))
Were proper containers (type/mass/volume/preservative*) used?	Yes No N/A	
* Note: Exemption permitted for waters to be analyzed for metals.		
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	(Yes)No N/A	
For special handling (e.g., "MI" or foreign soils, lab filter, limited	Yes No N/A	
volume, Ref Lab), were bottles/paperwork flagged (e.g., sticker)?		
	Yes No N/A	
microbiological analyses), was pH verified and compliant?	V V	
If pH was adjusted, were bottles flagged (i.e., stickers)?	Yes No MA	
For RUSH/SHORT Hold Time, were COC/Bottles flagged	Yes No N/A	,
accordingly? Was Rush/Short HT email sent, if applicable?	Vac Na STA	
For SITE-SPECIFIC QC, e.g. BMS/BMSD/BDUP, were	Yes No N/A	
containers / paperwork flagged accordingly? For any question answered "No," has the PM been notified and the	Yes No NTA	SRF Completed by
problem resolved (or paperwork put in their bin)?	Tes No AVA	PM =
Was PEER REVIEW of sample numbering/labeling completed?	Yes No N/A	
	Tes No NA	Peer Reviewed by: N/A
Additional notes (if applicable):		
Note to Client: Any "no" sixeled shows indicates you sound	lianca with atom In-	rd procedures and may import data quality
Note to Client: Any "no" circled above indicates non-complements Page 62 of 63	unce wiin siandai	a procedures and may impact adia quality.



SAMPLE RECEIPT FORM FOR TRANSFERS

Note: This form is to be completed by Anchorage Sample Receiving staff for all shipments received at SGS-Anchorage from SGS-Fairbanks.

Were samples received numbered with all criteria on Sample Receipt Form F0004 documented by Fairbanks Sample Receiving staff? If "No," Anchorage Sample Receiving staff must complete the receiving process & document pH verification, sample condition, etc. on the SRF initiated by Fairbanks staff (attached).	Yes No N/A	Use space below for additional notes
		*
		### (FEEE TO THE
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	<u> </u>	
	3	
Review Criteria:	_Condition:	Comments/Action Taken:
Were custody seals intact?	(Yes) No N/A	185,165
Note # & location:		
COC accompanied samples?	Yes No N/A	
Temperature blank compliant (i.e., 0-6°C after correction factor)? Cooler ID: / @ 1.9° w/ Therm.ID: Zo S Cooler ID: Z @ 1.9° w/ Therm.ID: Zo S Cooler ID: @ w/ Therm.ID: Cooler ID: @ w/ Therm.ID: Cooler ID: @ w/ Therm.ID: W/ Therm.ID: Cooler ID: @ w/ Therm.ID: Cooler ID: @ w/ Therm.ID: Cooler ID: @ w/ Therm.ID: Note: If non-compliant, use form FS-0029 to document affected samples/analyses. If samples are 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." If temperature(s) <0°C, were all containers ice free? Delivery method: Lynden	Yes No N/A	
Other:		
Completed by:		: