



The Verterre Group

ENVIRONMENTAL SCIENTISTS AND FIELD SERVICES

Phase (check one)	Type (check one)
<input type="checkbox"/> Site Investigation	<input type="checkbox"/> Work Scope
<input type="checkbox"/> Corrective Action Feasibility Investigation	<input checked="" type="checkbox"/> <i>Technical Report</i>
<input type="checkbox"/> Corrective Action Plan	<input type="checkbox"/> PCF Reimbursement Request
<input type="checkbox"/> Corrective Action Summary Report	<input type="checkbox"/> General Correspondence
<input checked="" type="checkbox"/> <i>Operations & Monitoring Report</i>	

SPILL RESPONSE REPORT FEBRUARY 2015

Gagne Residence
717 Maquam Shore Road
St. Albans, Vermont

SPILL#2014-WMD-436

Verterre Project # 14028

Date Submitted: March 11, 2015

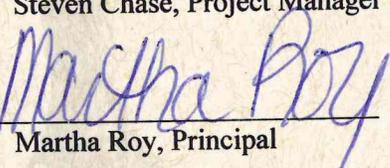
Report Prepared for:

Gabriel and Anna Gagne
717 Maquam Shore Road
St. Albans, VT 05478

Written By: _____


Steven Chase, Project Manager

Reviewed By: _____


Martha Roy, Principal

The Verterre Group
Environmental Scientists and Field Services

Abbreviations – please note not all of the abbreviations may have been used in this report.

AST	Aboveground Storage Tank
bgs	Below ground surface
ft	feet
gpm	Gallons per minute
MDL	Method Detection Limit
mg/l	Milligram per liter
PID	Photoionization detector
ppmv	Parts per million by volume
SMS	Sites Management Section
TPH-DRO	Total Petroleum Hydrocarbon as Diesel Range Organics
TPH-GRO	Total Petroleum Hydrocarbon as Gasoline Range Organics
µg/l	Microgram per liter
UST	Underground Storage Tank
VGES	Vermont Groundwater Enforcement Standard
VOC	Volatile Organic Compound

EXECUTIVE SUMMARY

This report was prepared by The Verterre Group (Verterre) to present the results of Spill Response Activities conducted at the Gagne Residence located at 717 Maquam Shore Road in St. Albans, Vermont. The Investigation was performed to address contamination resulting from an AST release that occurred during a structure fire at the residence in September of 2014.

The St. Albans Fire Department responded to a structure fire at the residence on September 3, 2014. The fire started in the garage and quickly spread to the attached house. The 275 gallon capacity fuel oil aboveground storage tank (AST) for the residence was located in the garage and during the fire the tank tipped over and ruptured, releasing an estimated 50 to 100 gallons of fuel.

The basement of the residence contains a sump hole in the small furnace room directly adjacent and below the garage. This sump hole has a four (4) inch PVC pipe that runs beneath the lawn at the back of the residence and discharges to Lake Champlain (Lake) approximately 100 feet away. Fuel and water from the fire entered this sump and flowed through the 4" pipe to the Lake. It is unknown how much fuel actually reached the Lake.

Free product was removed from the sump and the Lake by Fire department personnel and then by Verterre. Contaminated soil was removed from the Lake edge and placed into a 55 gallon drum. A gravity feed water treatment system was installed on the 4" pipe to the Lake in order to stop free product and contaminated water from reaching the Lake. A second pump driven system was installed on the boiler room sump in order to handle higher volumes of water following rain events.

Influent samples to the treatment systems and effluent samples from each system were collected twice for State of Vermont Discharge Permit #3-4204. VOC's were only detected above discharge limits during the first round of sampling. TPH-DRO was recorded at 66,000 µg/l on September 4, 2014 well above the discharge limit of 1,000 µg/l of TPH-DRO. Subsequent sampling levels of TPH-DRO fluctuated widely. The last round of influent sampling prior to system dismantling due to freezing conditions took place on December 22, 2014. The result for this sampling event was 900 µg/l of TPH-DRO, below the discharge limit of 1,000 µg/l.

Hot water for the residence had previously been heated using a solar hot water heating system. Water storage for the system was in two tanks beneath the garage floor in a concrete pit. Contamination from the AST release had contaminated a layer of ash on a portion of the garage floor and had flowed into this pit which was adjacent to the boiler room and the sump. Contamination likely entered the sump through the pit. Verterre removed the contaminated ash on November 13th, 2014 and discovered that the water tanks within the pit were surrounded by Vermiculite insulation, which is considered asbestos containing material in Vermont. TMC Services was contracted to remove the asbestos material and clean out the sump on January 13th and 14th, 2015.

Verterre removed the water treatment systems on January 23, 2015. The outfall of the 4" pipe from the sump was sampled on January 28, 2015 after the treatment systems had been removed. No odors or sheens were present on the water and no VOC's or TPH-DRO were recorded above the MDL's in the sample. A total of 802,326.8 gallons of water was treated and discharged from both systems.

Following the removal of the contaminated ash and the cleaning of the pit by TMC, the effluent concentrations from the sample taken on January 28, 2015 were all below the MDLs. Verterre recommends that the soils on the bank around the outlet pipe be examined after the snow has melted and before vegetation begins growing on the bank in the spring. The soils should be screened with a PID and any contaminated soils removed where possible. The bank is primarily a large rip-rap stone wall which will limit excavation work.

1.0 INTRODUCTION

This report was prepared by The Verterre Group (Verterre) to present the results of Spill Response Activities conducted at the Gagne Residence located at 717 Maquam Shore Road in St. Albans, Vermont. The Spill response activities were undertaken to address fuel oil contamination that resulted from the AST rupturing during a fire. A SITE Location Map is provided as **Figure 1** and a SITE Sketch is provided as **Figure 2**.

The spill response activities that were conducted include:

- Initial spill response by St. Albans Fire Department;
- Installation and monitoring of water treatment systems to address fuel oil impacted water entering Lake Champlain; and,
- Remedial work conducted by Verterre and TMC Environmental Services.

The following reporting work was also performed after the above field activities were complete:

- Preparation of a Site Sketch;
- Preparation of Discharge Reports summarizing contaminant levels and groundwater flow rates; and,
- Completion of this Spill Response Report.

2.0 BACKGROUND

The St Albans fire department responded to a structure fire at 717 Maquam Shore Road in St. Albans, Vermont on September 3, 2014. The fire started in the garage and quickly spread to the attached house. The 275 gallon capacity fuel oil aboveground storage tank (AST) for the residence was located in the garage and during the fire the tank tipped over and ruptured, releasing an estimated 50 to 100 gallons of fuel. The fire department propped the tank back up so remaining liquids would remain in the tank.

The basement of the residence contains a sump hole in the small furnace room directly adjacent and below the garage. This hole has a four (4) inch PVC pipe that runs beneath the lawn at the back of the residence and discharges to Lake Champlain (Lake) approximately 100 feet away. Fuel and water from the fire entered this sump and flowed through the 4" pipe to the Lake. Fire Department personnel put absorbent pads within the sump and at the discharge point and put absorbent booms on the shale bedrock outcrop along the edge of the Lake to catch further releases of oil. It is unknown how much fuel actually reached the Lake.

3.0 WATER TREATMENT SYSTEMS

Verterre was on Site on September 4, 2014 to perform clean-up activities. The flow of water through the 4" pipe was measured at approximately six (6) gallons per minute (gpm). Verterre checked the pads and booms at the end of the 4" pipe and along the Lake edge and changed out any that were saturated. The pads and booms directly beneath the outfall from the 4" pipe were saturated with product indicating that fuel oil was still present in the water stream coming from the pipe. Verterre installed a single carbon drum on the 4" pipe to collect and treat the water stream. The top half of the drum was filled with clay/coal in order to filter free product and the bottom was filled with Granular activated carbon (GAC). A second drum of GAC was ordered from Vermont Carbon Filters. Verterre then changed out pads in the boiler room sump and installed a small section of boom. An influent water sample was collected from the pipe for analysis of Volatile Organic Compounds (VOCs) by USEPA Method 8021 and for Total Petroleum Hydrocarbons by Diesel Range Organics (TPH-DRO) by USEPA Method 8015DRO.

Verterre returned to the Site on September 5, 2014 to finish cleanup activities and install a second drum of GAC on the treatment train. The saturated pads within the sump were changed out again and approximately ½ a drum of contaminated soils and debris was removed from the beach. Verterre performed Site visits to change out booms and pads on 9/8/14, 9/12/14 and 9/16/14. The water flow through the Lake treatment system had dropped off to approximately 2 gpm due to product and silt in the first drum. Heavy rains showed that the two carbon drum train would likely not keep up with the water flow coming from the sump. Water had begun to back up in the sump room which would potentially cause product to become trapped and spread put underground. Verterre met with GeoInsight personnel on Site on September 12, 2014 and requested that a second treatment system, using a pump in the sump, be installed.

Verterre installed the second water treatment system on September 18, 2014. A 2" trash pump was placed into the sump and the 4" pipe to the Lake was partially blocked off. The water flow to the Lake was not completely cut off to allow for backup in case of pump failure. The trash pump was set up to discharge water from the sump to a 500 gallon poly holding tank to allow for product separation. A second pump in the tank was set with a float switch to keep product from leaving the tank. The water was pumped through a bag filter housing and then through two separate carbon drum trains, out through a flow meter and then discharge to the Lake over a clean section of the bank. Electrical power for the pumps was supplied by a neighboring residence.

4.0 REMEDIAL ACTIVITIES

Verterre was on SITE on September 26, 2014 to pump out and then cut and clean the ruptured AST. Approximately 30 gallons of fuel and water was removed from the AST and placed into a 55 gallon drum for later disposal. Some of the larger metal waste had been removed from the garage allowing access to the ash debris beneath it. Verterre screened the ash in the vicinity of the AST and determined that there was a two (2) inch layer of fuel oil contaminated ash in a six (6) by fourteen (14) foot area. PID readings of the contaminated debris ranged from 86 to 416

parts per million by volume (ppmv). During this investigation, Verterre discovered a section of wooden hatch cover within the garage floor, indicating a compartment beneath the floor. Verterre spoke with the Gagne's and determined that there was a storage compartment for water tanks, part of a solar heating system, present beneath the floor. The location of this tank pit, directly adjacent to the boiler room, became the likely avenue for fuel oil contamination to have reached the boiler room sump and the Lake. The contaminated ash present on the floor of the garage and likely within the pit would contribute to elevated contaminant levels in the groundwater beneath the Site. As there was very little roof left over the garage, water would seep through the ash and into the pit during periods of rain. There was too much debris and ash present on top of the cover to investigate the pit at that time.

Verterre returned to the Site on November 13, 2014 after much of the larger non-contaminated debris had been removed, to drum the contaminated ash and clean out the water tank pit. Verterre filled five (5) drums with contaminated ash primarily from the western side of the garage in the former AST location and over the water tank pit location. Once the ash was removed the wooden pit cover was exposed. The cover was approximately three (3) feet wide by eight (8) feet long. Verterre removed the cover and exposed two (2) water storage tanks. Verterre cut the piping on the upper water tank to drain the water out of it. As the water drained out and filled the pit, water was observed flowing through holes in the wall of the boiler room. The water tanks were surrounded by fuel oil impacted, Vermiculite insulation. Vermiculite is considered to be asbestos containing material in the State of Vermont, so Verterre contacted Dave Comolli of TMC Environmental (TMC), a local Asbestos abatement contractor to examine the Site. After a brief inspection and discussion with the homeowner, it was determined that asbestos was present within the pit and certain parts of the house. Due to the presence of the Vermiculite insulation within the pit, Verterre could no longer remove the fuel oil contaminated materials. An asbestos abatement plan, approved by the State of Vermont Health Department, would be needed before further work could be completed within the house.

TMC was on Site on January 13th and 14th to remove the vermiculite and the water tanks from the pit. Once this was all removed, TMC personnel scraped the remaining soils and debris off of the shale bedrock in the bottom of the pit. The waste was considered asbestos contaminated and will be disposed of with the rest of the asbestos waste. Verterre was on Site on the 13th during this process and observed that both treatment systems and the boiler room sump had frozen. The last round of influent sampling had taken place on December 22, 2014 and the TPH-DRO result was 900 µg/l which was below the discharge limit of 1,000 µg/l. It was recommended that these systems be removed due to the possibility of the Lake system being crushed and the upper system leaking during thaw.

Verterre dismantled the treatment systems on January 23, 2015. A total of 802,326.8 gallons of water was treated and discharged from both systems. TMC was on Site with the excavator to attempt the building tear down the following week and pulled the drums up the bank from the Lake. All the waste drums at the Site will be disposed of at a later date.

5.0 SUMMARY OF SYSTEM SAMPLING ACTIVITIES

Influent samples to the treatment systems and effluent samples from each system were collected twice monthly in compliance with State of Vermont Discharge Permit #3-4204. Samples were analyzed for VOCs by USEPA Method 8021 and for TPH-DRO by USEPA Method 8015DRO. All samples were submitted to Absolute Resource Laboratories of Portsmouth, New Hampshire. All laboratory reports are provided as **Attachment 1**.

The influent sample collected on September 4, 2014 exceeded the discharge limit of 5 micrograms per liter ($\mu\text{g/l}$) of Benzene (21 $\mu\text{g/l}$) and the limit for Total BTEX of 50 $\mu\text{g/l}$, (496 $\mu\text{g/l}$). All other subsequent influent samples for VOCs had VOCs below the Method Detection Limits (MDL's). TPH-DRO was recorded at 66,000 $\mu\text{g/l}$ on September 4, 2014 well above the discharge limit of 1,000 $\mu\text{g/l}$ of TPH-DRO. Free product was likely present in this sample. Subsequent TPH-DRO influent samples varied from 350 $\mu\text{g/l}$ to 12,000 $\mu\text{g/l}$ with wide fluctuations. The higher TPH-DRO numbers were recorded usually following large rain events. The last round of influent sampling prior to system dismantling took place on December 22, 2014. The TPH-DRO result for this sampling event was 900 $\mu\text{g/l}$, below the discharge limit of 1,000 $\mu\text{g/l}$. Verterre sampled the outfall of the 4" pipe from the sump on January 28, 2015 after the treatment systems had been removed. No odors or sheens were present on the water and no VOC's or TPH-DRO were recorded above the MDL's in the sample.

The discharge permit for the Site has been terminated.

6.0 RECEPTOR ANALYSIS

The SITE is located on the western side of Maquam Shore Road in St. Albans, Vermont, 0.25 miles south of the intersection with Lower Newton Road.

Verterre conducted a sensitive receptor review of the property. The residence is served by a public water system as reportedly are the majority of the houses along the road. The residence has an on-Site septic tank and leach field. A sump that discharges groundwater to the Lake through a 4" pipe is located within the boiler room. A sump pump is used in the sump during periods of high water. Surface water flow is from the east to the west towards the Lake.

According to the State of Vermont Agency of Natural Resources internet mapping site, there are four (4) private wells located within one-half mile of the SITE and two public water systems on the Lake, located 1,500 to 2,000 feet to the north.

7.0 FINDINGS AND CONCLUSIONS

Based on the activities conducted during this reporting period and the data obtained, the following findings and conclusions were made for the SITE:

- A structure fire occurred at the Gagne residence located at 717 Maquam Shore Road in St. Albans, Vermont on September 3, 2014;
- The 275 gallon capacity fuel oil aboveground storage tank (AST) for the residence was located in the garage and during the fire the tank tipped over and ruptured, releasing an estimated 50 to 100 gallons of fuel;
- Fuel migrated into a water tank pit in the garage floor and then into a sump in the boiler room. The outlet pipe from the sump empties into Lake Champlain. An undetermined amount of fuel entered the Lake;
- Absorbent booms and pads were staged in the sump and at the Lake by the St Albans Fire Department. The booms and pads were monitored by Verterre and changed on an as needed basis;
- A water treatment system was hooked directly to the 4" drain pipe to collect product and treat discharge water. The system was unable to keep up with the flow of discharge water and a second system using pumps was set up to treat water directly from the sump. Both treatment systems were run under discharge permit #3-4204;
- Initial influent samples indicated VOC's and TPH-DRO above discharge limits. Subsequent sampling indicated TPH-DRO present at concentrations between 350 and 12,000 µg/l. The last influent sample for TPH-DRO collected on December 22, 2014 prior to the systems freezing was 900 µg/l, below the discharge standard of 1,000 µg/l;
- Five (5) drums of contaminated ash were removed from the garage on November 13, 2014. A wooden cover was discovered that covered a concrete pit in the garage floor. The pit held two water storage tanks from a solar heating system surrounded by Vermiculite insulation. Vermiculite is considered to be asbestos containing material in Vermont and TMC Environmental was contracted to handle this waste and the entire house demolition.
- All asbestos and fuel oil contamination was removed from the pit by TMC on January 13 and 14, 2015;
- The treatment systems were removed on January 23, 2015. A total of 802,326.8 gallons of water were treated and discharged through the systems;
- An effluent sample was collected from the outfall pipe on January 28, 2015 following the cleaning of the water tank pit. No VOC's or TPH-DRO was reported above the MDL's in this sample.
- The discharge permit for the residence has been terminated.

The likely route for fuel oil to have appeared in the boiler room sump was through the water tank pit. As the fire department sprayed down the fire, the pit likely filled with oil and water, then flowed to the sump and out to the Lake. Free product continued to be released during rain events and the elevated TPH-DRO numbers continued as rain water flushed down through the contaminated ash in the garage and the water tank pit. Heavier rain events likely caused groundwater to rise up into the contamination causing the larger TPH-DRO results. Following the removal of the contaminated ash and the cleaning of the pit by TMC, the effluent numbers from the sample taken on January 28, 2015 were all below the MDL's.

8.0 RECOMMENDATIONS

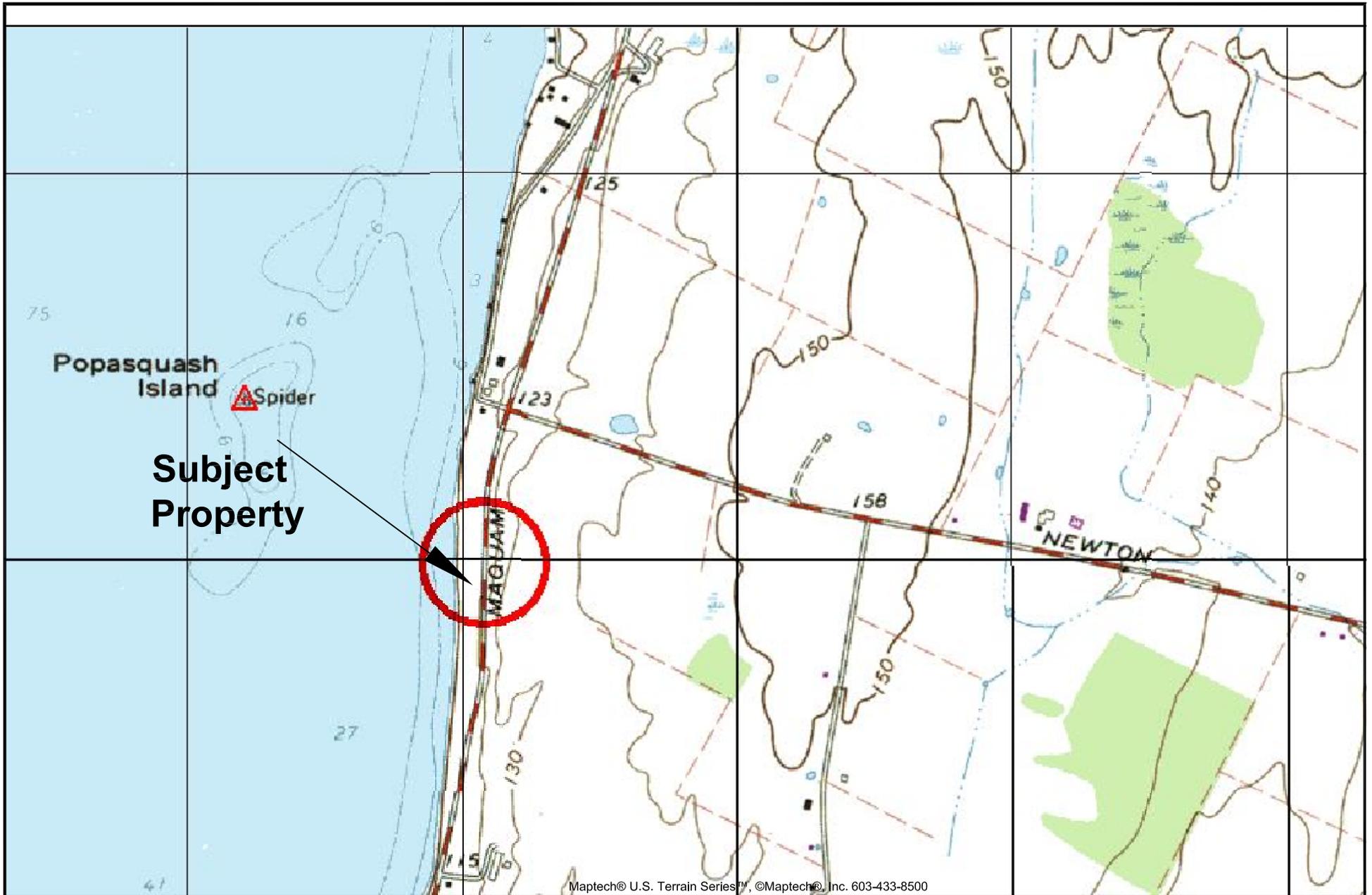
Verterre recommends that the soils on the bank around the outlet pipe be examined after the snow has melted and before vegetation begins growing on the bank in the spring. The soils should be screened with a PID and any contaminated soils removed where possible. The bank is primarily a large rip-rap stone wall which will limit excavation work.

G:\14028\2015 Spill Response report.doc

Figures

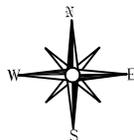


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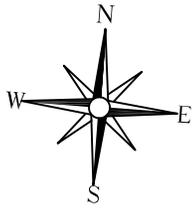
SOURCE: USGS 7.5' Minute Topographic Map Series St. Albans Vermont Quadrangle; 1964 update:1987
 44 51 29.61; 73 10 57.43

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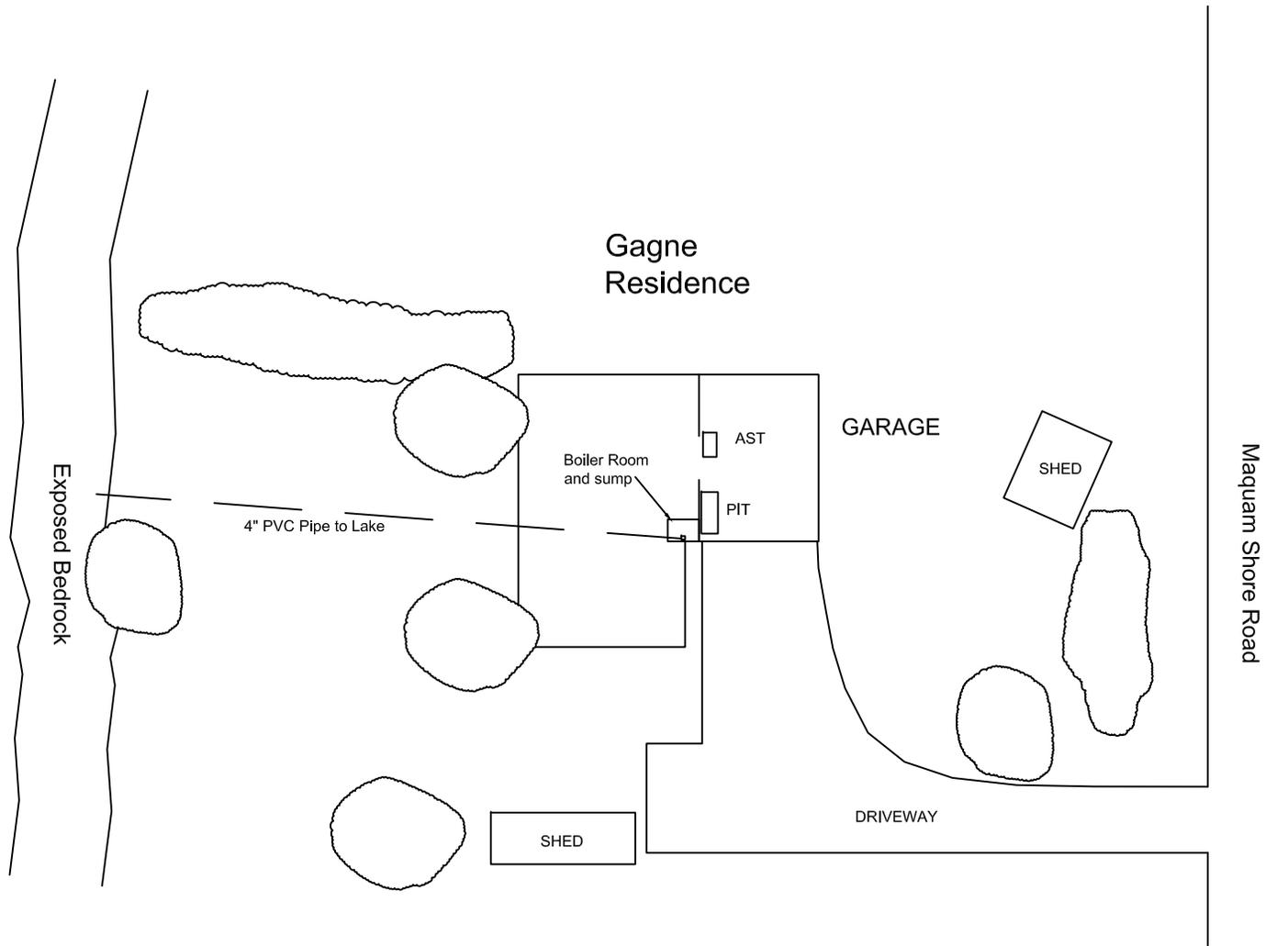


Fs1:/project/14028/Site Location Map.dwg

Project #14028	DRAWN BY: MER	The Verterre Group 414 Roosevelt Highway - Suite 200 Colchester, Vermont 05446 (802) 654-8663	FIGURE 1 SITE LOCATION MAP Gagne Residence 717 Maquam Shore Road St. Albans, Vermont
	CHECKED BY: SC		
	APPROVED BY: _____		
	DATE: 09/16/14		
	SCALE: 1" = 1,000'		



Lake Champlain



Attachment 1



The Verterre Group
Environmental Scientists and Field Services

Laboratory Report



Absolute Resource *associates*

124 Heritage Avenue Portsmouth NH 03801

Martha Roy
The Verterre Group
414 Roosevelt Highway
Suite 200
Colchester, VT 05446

PO Number: None
Job ID: 31052
Date Received: 9/24/14

Project: Gagne Release 14028

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

Sue Sylvester
Principal, General Manager

Date of Approval: 10/2/2014
Total number of pages: 5

Absolute Resource Associates Certifications

New Hampshire 1732
Maine NH903

Massachusetts M-NH902

Project ID: Gagne Release 14028

Job ID: 31052

Sample#: 31052-001

Sample ID: Inf

Matrix: Water

Sampled: 9/23/14 8:05

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Analysis			Reference
		Limit	Units	Factor	Analyst		Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1402514	9/24/14	22:02	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1402514	9/24/14	22:02	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1402514	9/24/14	22:02	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1402514	9/24/14	22:02	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1402514	9/24/14	22:02	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1402514	9/24/14	22:02	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1402514	9/24/14	22:02	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1402514	9/24/14	22:02	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1402514	9/24/14	22:02	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	98	78-114	%	1	LMM	1402514	9/24/14	22:02	SW5030C8260C	
toluene-D8 SUR	98	88-110	%	1	LMM	1402514	9/24/14	22:02	SW5030C8260C	
4-bromofluorobenzene SUR	102	86-115	%	1	LMM	1402514	9/24/14	22:02	SW5030C8260C	

Sample#: 31052-002

Sample ID: Eff-1

Matrix: Water

Sampled: 9/23/14 8:15

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Analysis			Reference
		Limit	Units	Factor	Analyst		Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1402514	9/24/14	20:32	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1402514	9/24/14	20:32	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1402514	9/24/14	20:32	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1402514	9/24/14	20:32	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1402514	9/24/14	20:32	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1402514	9/24/14	20:32	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1402514	9/24/14	20:32	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1402514	9/24/14	20:32	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1402514	9/24/14	20:32	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	98	78-114	%	1	LMM	1402514	9/24/14	20:32	SW5030C8260C	
toluene-D8 SUR	100	88-110	%	1	LMM	1402514	9/24/14	20:32	SW5030C8260C	
4-bromofluorobenzene SUR	99	86-115	%	1	LMM	1402514	9/24/14	20:32	SW5030C8260C	

Project ID: Gagne Release 14028

Job ID: 31052

Sample#: 31052-003

Sample ID: Eff-2

Matrix: Water

Sampled: 9/23/14 8:42

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Analysis			Reference
		Limit	Units	Factor	Analyst		Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1402514	9/24/14	20:03	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1402514	9/24/14	20:03	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1402514	9/24/14	20:03	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1402514	9/24/14	20:03	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1402514	9/24/14	20:03	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1402514	9/24/14	20:03	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1402514	9/24/14	20:03	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1402514	9/24/14	20:03	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1402514	9/24/14	20:03	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	96	78-114	%	1	LMM	1402514	9/24/14	20:03	SW5030C8260C	
toluene-D8 SUR	99	88-110	%	1	LMM	1402514	9/24/14	20:03	SW5030C8260C	
4-bromofluorobenzene SUR	98	86-115	%	1	LMM	1402514	9/24/14	20:03	SW5030C8260C	

Project ID: Gagne Release 14028

Job ID: 31052

Sample#: 31052-001

Sample ID: Inf

Matrix: Water

Sampled: 9/23/14 8:05

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep Date	Analysis			Reference
		Limit					Batch	Date	Time	
Diesel Range Organics (DRO) C10-C28	350	210	ug/L	1	AM	9/30/14	7255	10/1/14	11:53	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	60	40-140	%	1	AM	9/30/14	7255	10/1/14	11:53	SW3510C8015D
o-terphenyl SUR	79	40-140	%	1	AM	9/30/14	7255	10/1/14	11:53	SW3510C8015D

Sample#: 31052-002

Sample ID: Eff-1

Matrix: Water

Sampled: 9/23/14 8:15

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep Date	Analysis			Reference
		Limit					Batch	Date	Time	
Diesel Range Organics (DRO) C10-C28	< 220	220	ug/L	1	AM	9/30/14	7255	10/1/14	11:04	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	59	40-140	%	1	AM	9/30/14	7255	10/1/14	11:04	SW3510C8015D
o-terphenyl SUR	75	40-140	%	1	AM	9/30/14	7255	10/1/14	11:04	SW3510C8015D

Sample#: 31052-003

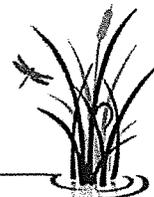
Sample ID: Eff-2

Matrix: Water

Sampled: 9/23/14 8:42

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep Date	Analysis			Reference
		Limit					Batch	Date	Time	
Diesel Range Organics (DRO) C10-C28	< 210	210	ug/L	1	AM	9/30/14	7255	10/1/14	11:22	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	56	40-140	%	1	AM	9/30/14	7255	10/1/14	11:22	SW3510C8015D
o-terphenyl SUR	70	40-140	%	1	AM	9/30/14	7255	10/1/14	11:22	SW3510C8015D

Laboratory Report



Absolute Resource *associates*

124 Heritage Avenue Portsmouth NH 03801

Martha Roy

The Verterre Group

414 Roosevelt Highway

Suite 200

Colchester, VT 05446

PO Number: None

Job ID: 30902

Date Received: 9/9/14

Project: Gagne Spill

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

A handwritten signature in black ink that reads "Sue Sylvester" followed by "(for)" in parentheses.

Sue Sylvester

Principal, General Manager

Date of Approval: 9/23/2014

Total number of pages: 3

Absolute Resource Associates Certifications

New Hampshire 1732
Maine NH903

Massachusetts M-NH902

Project ID: Gagne Spill

Job ID: 30902

Sample#: 30902-001

Sample ID: INF

Matrix: Water

Sampled: 9/4/14 15:05

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep Date	Analysis			Reference
		Limit					Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1402445	9/17/14	16:09	SW5030C8260C	
benzene	21	2	ug/L	1	LMM	1402445	9/17/14	16:09	SW5030C8260C	
toluene	120	2	ug/L	1	LMM	1402445	9/17/14	16:09	SW5030C8260C	
ethylbenzene	45	2	ug/L	1	LMM	1402445	9/17/14	16:09	SW5030C8260C	
m&p-xylenes	200	2	ug/L	1	LMM	1402445	9/17/14	16:09	SW5030C8260C	
o-xylene	110	2	ug/L	1	LMM	1402445	9/17/14	16:09	SW5030C8260C	
naphthalene	17	5	ug/L	1	LMM	1402445	9/17/14	16:09	SW5030C8260C	
1,3,5-trimethylbenzene	51	2	ug/L	1	LMM	1402445	9/17/14	16:09	SW5030C8260C	
1,2,4-trimethylbenzene	210	2	ug/L	1	LMM	1402445	9/17/14	16:09	SW5030C8260C	
1,2-dichloroethane	< 2	2	ug/L	1	LMM	1402445	9/17/14	16:09	SW5030C8260C	
1,2-dibromoethane (EDB)	< 2	2	ug/L	1	LMM	1402445	9/17/14	16:09	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	98	78-114	%	1	LMM	1402445	9/17/14	16:09	SW5030C8260C	
toluene-D8 SUR	104	88-110	%	1	LMM	1402445	9/17/14	16:09	SW5030C8260C	
4-bromofluorobenzene SUR	104	86-115	%	1	LMM	1402445	9/17/14	16:09	SW5030C8260C	

Sample#: 30902-001

Sample ID: INF

Matrix: Water

Sampled: 9/4/14 15:05

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep Date	Analysis			Reference
		Limit					Batch	Date	Time	
Diesel Range Organics (DRO) C10-C28	66000	4300	ug/L	20	JLZ	9/10/14	7211	9/16/14	20:55	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	110	40-140	%	20	JLZ	9/10/14	7211	9/16/14	20:55	SW3510C8015D
o-terphenyl SUR	104	40-140	%	20	JLZ	9/10/14	7211	9/16/14	20:55	SW3510C8015D

Laboratory Report



Absolute Resource *associates*

124 Heritage Avenue Portsmouth NH 03801

Martha Roy
The Verterre Group
414 Roosevelt Highway
Suite 200
Colchester, VT 05446

PO Number: None
Job ID: 31196
Date Received: 10/10/14

Project: Gagne 14028

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

Sue Sylvester
Principal, General Manager

Date of Approval: 10/16/2014
Total number of pages: 5

Absolute Resource Associates Certifications

New Hampshire 1732
Maine NH903

Massachusetts M-NH902

Project ID: Gagne 14028

Job ID: 31196

Sample#: 31196-001

Sample ID: Eff-1

Matrix: Water

Sampled: 10/9/14 11:50

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Analysis			Reference
		Limit	Units	Factor	Analyst		Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1402688	10/13/14	17:22	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1402688	10/13/14	17:22	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1402688	10/13/14	17:22	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1402688	10/13/14	17:22	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1402688	10/13/14	17:22	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1402688	10/13/14	17:22	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1402688	10/13/14	17:22	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1402688	10/13/14	17:22	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1402688	10/13/14	17:22	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	104	78-114	%	1	LMM	1402688	10/13/14	17:22	SW5030C8260C	
toluene-D8 SUR	104	88-110	%	1	LMM	1402688	10/13/14	17:22	SW5030C8260C	
4-bromofluorobenzene SUR	109	86-115	%	1	LMM	1402688	10/13/14	17:22	SW5030C8260C	

Sample#: 31196-002

Sample ID: Eff-2

Matrix: Water

Sampled: 10/9/14 11:45

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Analysis			Reference
		Limit	Units	Factor	Analyst		Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1402688	10/13/14	17:51	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1402688	10/13/14	17:51	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1402688	10/13/14	17:51	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1402688	10/13/14	17:51	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1402688	10/13/14	17:51	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1402688	10/13/14	17:51	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1402688	10/13/14	17:51	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1402688	10/13/14	17:51	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1402688	10/13/14	17:51	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	105	78-114	%	1	LMM	1402688	10/13/14	17:51	SW5030C8260C	
toluene-D8 SUR	103	88-110	%	1	LMM	1402688	10/13/14	17:51	SW5030C8260C	
4-bromofluorobenzene SUR	106	86-115	%	1	LMM	1402688	10/13/14	17:51	SW5030C8260C	

Project ID: Gagne 14028

Job ID: 31196

Sample#: 31196-003

Sample ID: Inf

Matrix: Water

Sampled: 10/9/14 12:00

Parameter	Reporting		Units	Instr Dil'n	Analyst	Prep Date	Analysis		Reference
	Result	Limit					Date	Time	
methyl t-butyl ether (MTBE)	<2	2	ug/L	1	LMM	1402688	10/13/14	18:21	SW5030C8260C
benzene	<2	2	ug/L	1	LMM	1402688	10/13/14	18:21	SW5030C8260C
toluene	<2	2	ug/L	1	LMM	1402688	10/13/14	18:21	SW5030C8260C
ethylbenzene	<2	2	ug/L	1	LMM	1402688	10/13/14	18:21	SW5030C8260C
m&p-xylenes	<2	2	ug/L	1	LMM	1402688	10/13/14	18:21	SW5030C8260C
o-xylene	<2	2	ug/L	1	LMM	1402688	10/13/14	18:21	SW5030C8260C
naphthalene	<5	5	ug/L	1	LMM	1402688	10/13/14	18:21	SW5030C8260C
1,3,5-trimethylbenzene	<2	2	ug/L	1	LMM	1402688	10/13/14	18:21	SW5030C8260C
1,2,4-trimethylbenzene	<2	2	ug/L	1	LMM	1402688	10/13/14	18:21	SW5030C8260C
Surrogate Recovery		Limits							
dibromofluoromethane SUR	106	78-114	%	1	LMM	1402688	10/13/14	18:21	SW5030C8260C
toluene-D8 SUR	104	88-110	%	1	LMM	1402688	10/13/14	18:21	SW5030C8260C
4-bromofluorobenzene SUR	103	86-115	%	1	LMM	1402688	10/13/14	18:21	SW5030C8260C

Project ID: Gagne 14028

Job ID: 31196

Sample#: 31196-001

Sample ID: Eff-1

Matrix: Water

Sampled: 10/9/14 11:50

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep	Batch	Analysis		Reference
		Limit				Date		Date	Time	
Diesel Range Organics (DRO) C10-C28	< 210	210	ug/L	1	AM	10/13/14	7281	10/13/14	22:02	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	74	40-140	%	1	AM	10/13/14	7281	10/13/14	22:02	SW3510C8015D
o-terphenyl SUR	81	40-140	%	1	AM	10/13/14	7281	10/13/14	22:02	SW3510C8015D

Sample#: 31196-002

Sample ID: Eff-2

Matrix: Water

Sampled: 10/9/14 11:45

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep	Batch	Analysis		Reference
		Limit				Date		Date	Time	
Diesel Range Organics (DRO) C10-C28	< 220	220	ug/L	1	AM	10/13/14	7281	10/13/14	22:21	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	78	40-140	%	1	AM	10/13/14	7281	10/13/14	22:21	SW3510C8015D
o-terphenyl SUR	87	40-140	%	1	AM	10/13/14	7281	10/13/14	22:21	SW3510C8015D

Sample#: 31196-003

Sample ID: Inf

Matrix: Water

Sampled: 10/9/14 12:00

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep	Batch	Analysis		Reference
		Limit				Date		Date	Time	
Diesel Range Organics (DRO) C10-C28	3000	200	ug/L	1	AM	10/13/14	7281	10/13/14	22:39	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	69	40-140	%	1	AM	10/13/14	7281	10/13/14	22:39	SW3510C8015D
o-terphenyl SUR	91	40-140	%	1	AM	10/13/14	7281	10/13/14	22:39	SW3510C8015D

Laboratory Report



Absolute Resource *associates*

124 Heritage Avenue Portsmouth NH 03801

Martha Roy
The Verterre Group
414 Roosevelt Highway
Suite 200
Colchester, VT 05446

PO Number: None
Job ID: 31364
Date Received: 10/28/14

Project: Gagne Spill 14028

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

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Sincerely,
Absolute Resource Associates

 (for)

Sue Sylvester
Principal, General Manager

Date of Approval: 11/4/2014
Total number of pages: 5

Absolute Resource Associates Certifications

New Hampshire 1732
Maine NH903

Massachusetts M-NH902

Project ID: Gagne Spill 14028

Job ID: 31364

Sample#: 31364-001

Sample ID: Eff-1

Matrix: Water

Sampled: 10/24/14 8:50

Parameter	Result	Reporting	Units	Instr Dil'n		Analyst	Prep Date	Analysis		Reference
		Limit		Factor	Batch			Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1402875	10/29/14	12:44	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1402875	10/29/14	12:44	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1402875	10/29/14	12:44	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1402875	10/29/14	12:44	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1402875	10/29/14	12:44	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1402875	10/29/14	12:44	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1402875	10/29/14	12:44	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1402875	10/29/14	12:44	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1402875	10/29/14	12:44	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	104	78-114	%	1	LMM	1402875	10/29/14	12:44	SW5030C8260C	
toluene-D8 SUR	105	88-110	%	1	LMM	1402875	10/29/14	12:44	SW5030C8260C	
4-bromofluorobenzene SUR	102	86-115	%	1	LMM	1402875	10/29/14	12:44	SW5030C8260C	

Sample#: 31364-002

Sample ID: Eff-2

Matrix: Water

Sampled: 10/24/14 9:00

Parameter	Result	Reporting	Units	Instr Dil'n		Analyst	Prep Date	Analysis		Reference
		Limit		Factor	Batch			Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1402875	10/29/14	13:18	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1402875	10/29/14	13:18	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1402875	10/29/14	13:18	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1402875	10/29/14	13:18	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1402875	10/29/14	13:18	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1402875	10/29/14	13:18	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1402875	10/29/14	13:18	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1402875	10/29/14	13:18	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1402875	10/29/14	13:18	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	103	78-114	%	1	LMM	1402875	10/29/14	13:18	SW5030C8260C	
toluene-D8 SUR	100	88-110	%	1	LMM	1402875	10/29/14	13:18	SW5030C8260C	
4-bromofluorobenzene SUR	99	86-115	%	1	LMM	1402875	10/29/14	13:18	SW5030C8260C	

Project ID: Gagne Spill 14028

Job ID: 31364

Sample#: 31364-003

Sample ID: Inf

Matrix: Water

Sampled: 10/24/14 9:15

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep	Analysis			Reference
		Limit		Factor		Date	Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1402875	10/29/14	13:51	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1402875	10/29/14	13:51	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1402875	10/29/14	13:51	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1402875	10/29/14	13:51	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1402875	10/29/14	13:51	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1402875	10/29/14	13:51	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1402875	10/29/14	13:51	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1402875	10/29/14	13:51	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1402875	10/29/14	13:51	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	102	78-114	%	1	LMM	1402875	10/29/14	13:51	SW5030C8260C	
toluene-D8 SUR	105	88-110	%	1	LMM	1402875	10/29/14	13:51	SW5030C8260C	
4-bromofluorobenzene SUR	110	86-115	%	1	LMM	1402875	10/29/14	13:51	SW5030C8260C	

Project ID: Gagne Spill 14028

Job ID: 31364

Sample#: 31364-001

Sample ID: Eff-1

Matrix: Water

Sampled: 10/24/14 8:50

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep	Analysis			Reference
		Limit				Date	Batch	Date	Time	
Diesel Range Organics (DRO) C10-C28	< 200	200	ug/L	1	JZ	10/30/14	7331	10/31/14	12:23	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	64	40-140	%	1	JZ	10/30/14	7331	10/31/14	12:23	SW3510C8015D
o-terphenyl SUR	82	40-140	%	1	JZ	10/30/14	7331	10/31/14	12:23	SW3510C8015D

Sample#: 31364-002

Sample ID: Eff-2

Matrix: Water

Sampled: 10/24/14 9:00

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep	Analysis			Reference
		Limit				Date	Batch	Date	Time	
Diesel Range Organics (DRO) C10-C28	< 210	210	ug/L	1	JZ	10/30/14	7331	10/31/14	12:41	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	82	40-140	%	1	JZ	10/30/14	7331	10/31/14	12:41	SW3510C8015D
o-terphenyl SUR	79	40-140	%	1	JZ	10/30/14	7331	10/31/14	12:41	SW3510C8015D

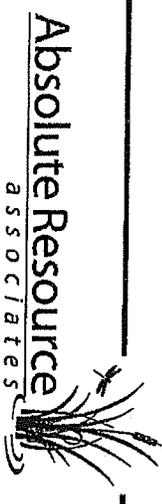
Sample#: 31364-003

Sample ID: Inf

Matrix: Water

Sampled: 10/24/14 9:15

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep	Analysis			Reference
		Limit				Date	Batch	Date	Time	
Diesel Range Organics (DRO) C10-C28	6000	1000	ug/L	5	JZ	10/30/14	7331	10/31/14	13:37	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	99	40-140	%	5	JZ	10/30/14	7331	10/31/14	13:37	SW3510C8015D
o-terphenyl SUR	81	40-140	%	5	JZ	10/30/14	7331	10/31/14	13:37	SW3510C8015D



124 Heritage Avenue #16
 Portsmouth, NH 03801
 603-436-2001
 absoluteresourceassociates.com

**CHAIN-OF-CUSTODY RECORD
 AND ANALYSIS REQUEST**
 31364
 PAGE OF

Absolute Resource Associates

Company Name: The Vetere Group
 Company Address: 414 Reservoir Rd, Dover, NH 03826
 Report To: Mark Ray
 Phone #: 603-654-8663
 Invoice to Email: _____
 Hard Copy Invoice Required

Project Name: Page 5011
 Project #: 14025
 Project Location: NH MA ME Other: VT NY
 Protocol: RCRA SDWA NPDES MCP NHDES OTHER
 Reporting Limits: QAPP GW-1 S-1 EPA DW Other
 Quote # _____ NH Reimbursement Pricing
 PO # _____

Lab Sample ID	Field ID	# CONTAINERS	Matrix			Preservation Method					Sampling		
			WATER	SOLID	OTHER	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	DATE	TIME	SAMPLER
31364-01	EPA-1	3	<input checked="" type="checkbox"/>	10/28/14	8:50	SC							
-02	EPA-2	3	<input checked="" type="checkbox"/>	10/28/14	9:00	SC							
-03	EPA-3	3	<input checked="" type="checkbox"/>	10/28/14	9:15	SC							

REPORTING INSTRUCTIONS PDF (e-mail address) FAX (FAX#) _____

SPECIAL INSTRUCTIONS
 See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.
SC Ray

RECEIVED ON ICE YES NO
 TEMPERATURE 3 °C

Relinquished by:	Date	Time	Received by:	Date	Time
<u>[Signature]</u>	10/28/14	8:30	<u>[Signature]</u>	10/27/14	18:30
<u>[Signature]</u>	10/28/14	1330	<u>[Signature]</u>	10/28/14	1330

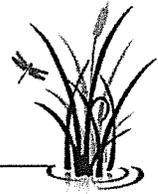
CUSTODY RECORD
 OSD-01 Revision 08/05/14

TAT REQUESTED
 Priority (24 hr)*
 Expedited (48 hr)*
 Standard (10 Business Days)
 *Date Needed _____

ANALYSIS REQUEST

VOC 8260 VOC 8260 NHDES VOC 8260 MADEP
 VOC 624 VOC BTEX MIBE, only VOC 8021VT
 VPH MADEP MEGRO GRO 8015 1,4-Dioxane
 VOC 524.2 VOC 524.2 NH List Gases-List:
 TPH BRO 8015 MEDRO EPH MADEP TPH Fingerprint
 8270PAH 8270ABN 625 EDB
 8082 PCB 8081 Pesticides 608 Pest/PCB
 O&G 1664 Mineral O&G SM5520F
 pH BOD Conductivity Turbidity
 TSS TDS TS TVS Alkalinity
 RCRA Metals Priority Pollutant Metals TAL Metals Hardness
 Total Metals-List:
 Dissolved Metals-List:
 Ammonia COO TKN TN TON TOC
 T-Phosphorus Phenols Bacteria P/A Bacteria MPN
 Cyanide Sulfide Nitrate + Nitrite Ortho P
 Nitrate Nitrite Chloride Sulfate Bromide Fluoride
 Corrosivity Reactive CN Reactive S- Ignitibility/FP
 TCLP Metals TCLP VOC TCLP SVOC TCLP Pesticide
 Subcontract: Grain Size Herbicides Formaldehyde

Laboratory Report



Absolute Resource *associates*

124 Heritage Avenue Portsmouth NH 03801

Martha Roy
The Verterre Group
414 Roosevelt Highway
Suite 200
Colchester, VT 05446

PO Number: None
Job ID: 31562
Date Received: 11/11/14

Project: Gagne Release 14028

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

 (for)

Sue Sylvester
Principal, General Manager

Date of Approval: 11/22/2014
Total number of pages: 5

Absolute Resource Associates Certifications

New Hampshire 1732
Maine NH903

Massachusetts M-NH902

Project ID: Gagne Release 14028

Job ID: 31562

Sample#: 31562-001

Sample ID: Eff-1

Matrix: Water

Sampled: 11/7/14 11:39

Parameter	Reporting		Instr Dil'n		Analyst	Prep Date	Analysis			Reference
	Result	Limit	Units	Factor			Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1403100	11/17/14	18:51	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1403100	11/17/14	18:51	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1403100	11/17/14	18:51	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1403100	11/17/14	18:51	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1403100	11/17/14	18:51	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1403100	11/17/14	18:51	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1403100	11/17/14	18:51	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1403100	11/17/14	18:51	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1403100	11/17/14	18:51	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	102	78-114	%	1	LMM	1403100	11/17/14	18:51	SW5030C8260C	
toluene-D8 SUR	103	88-110	%	1	LMM	1403100	11/17/14	18:51	SW5030C8260C	
4-bromofluorobenzene SUR	99	86-115	%	1	LMM	1403100	11/17/14	18:51	SW5030C8260C	

Sample#: 31562-002

Sample ID: Eff-2

Matrix: Water

Sampled: 11/7/14 11:45

Parameter	Reporting		Instr Dil'n		Analyst	Prep Date	Analysis			Reference
	Result	Limit	Units	Factor			Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1403100	11/17/14	19:21	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1403100	11/17/14	19:21	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1403100	11/17/14	19:21	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1403100	11/17/14	19:21	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1403100	11/17/14	19:21	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1403100	11/17/14	19:21	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1403100	11/17/14	19:21	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1403100	11/17/14	19:21	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1403100	11/17/14	19:21	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	104	78-114	%	1	LMM	1403100	11/17/14	19:21	SW5030C8260C	
toluene-D8 SUR	103	88-110	%	1	LMM	1403100	11/17/14	19:21	SW5030C8260C	
4-bromofluorobenzene SUR	99	86-115	%	1	LMM	1403100	11/17/14	19:21	SW5030C8260C	

Project ID: Gagne Release 14028

Job ID: 31562

Sample#: 31562-003

Sample ID: Inf

Matrix: Water

Sampled: 11/7/14 12:05

Parameter	Reporting		Instr Dil'n		Analyst	Prep Date	Analysis			Reference
	Result	Limit	Units	Factor			Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1403100	11/17/14	19:51	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1403100	11/17/14	19:51	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1403100	11/17/14	19:51	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1403100	11/17/14	19:51	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1403100	11/17/14	19:51	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1403100	11/17/14	19:51	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1403100	11/17/14	19:51	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1403100	11/17/14	19:51	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1403100	11/17/14	19:51	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	107	78-114	%	1	LMM	1403100	11/17/14	19:51	SW5030C8260C	
toluene-D8 SUR	103	88-110	%	1	LMM	1403100	11/17/14	19:51	SW5030C8260C	
4-bromofluorobenzene SUR	99	86-115	%	1	LMM	1403100	11/17/14	19:51	SW5030C8260C	

Project ID: Gagne Release 14028

Job ID: 31562

Sample#: 31562-001

Sample ID: Eff-1

Matrix: Water

Sampled: 11/7/14 11:39

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Diesel Range Organics (DRO) C10-C28	< 200	200	ug/L	1	JZ	11/13/14	7379	11/17/14	15:02	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	71	40-140	%	1	JZ	11/13/14	7379	11/17/14	15:02	SW3510C8015D
o-terphenyl SUR	77	40-140	%	1	JZ	11/13/14	7379	11/17/14	15:02	SW3510C8015D

Sample#: 31562-002

Sample ID: Eff-2

Matrix: Water

Sampled: 11/7/14 11:45

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Diesel Range Organics (DRO) C10-C28	< 210	210	ug/L	1	JZ	11/13/14	7379	11/17/14	15:20	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	82	40-140	%	1	JZ	11/13/14	7379	11/17/14	15:20	SW3510C8015D
o-terphenyl SUR	86	40-140	%	1	JZ	11/13/14	7379	11/17/14	15:20	SW3510C8015D

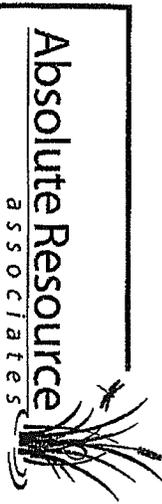
Sample#: 31562-003

Sample ID: Inf

Matrix: Water

Sampled: 11/7/14 12:05

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Diesel Range Organics (DRO) C10-C28	1200	200	ug/L	1	JZ	11/13/14	7379	11/17/14	15:38	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	82	40-140	%	1	JZ	11/13/14	7379	11/17/14	15:38	SW3510C8015D
o-terphenyl SUR	91	40-140	%	1	JZ	11/13/14	7379	11/17/14	15:38	SW3510C8015D



124 Heritage Avenue #16
 Portsmouth, NH 03801
 603-436-2001
 absoluteresourceassociates.com

**CHAIN-OF-CUSTODY RECORD
 AND ANALYSIS REQUEST**

31562

Company Name: **The Vertone Group**
 Company Address: **414 Rosevelt Highway
 Colchester VT 05726**
 Report To: **Mark Leg**
 Phone #: **802-654-8663**
 Invoice to Email: _____
 Project Name: **Issue Release**
 Project #: **14025**
 Project Location: **NH MA ME
 VT NY Other**
 Protocol: **RCRA SDWA NPDES
 MCP NHDES OTHER**
 Reporting Limits: **QAPP GW-1 S-1
 EPA DW Other**
 Quote # _____
 PO # _____
 NH Reimbursement Pricing

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix			Preservation Method					Sampling		
			WATER	SOLID	OTHER	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	DATE	TIME	SAMPLER
3152-01	EFF-1	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11/21/14	11:39 AM	
02	EFF-2	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11/21/14	11:45 AM	
01	LVP	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11/21/14	12:05 PM	

<input type="checkbox"/> VOC 8260	<input type="checkbox"/> VOC 8260 NHDES	<input type="checkbox"/> VOC 8260 MADEP
<input type="checkbox"/> VOC 624	<input type="checkbox"/> VOC BTEX	<input type="checkbox"/> MIBE, only at VOC 8021VT
<input type="checkbox"/> VPH MADEP	<input type="checkbox"/> MEGRO	<input type="checkbox"/> GRO 8015
<input type="checkbox"/> VOC 524.2	<input type="checkbox"/> VOC 524.2 NH List	<input type="checkbox"/> Gases-List:
<input type="checkbox"/> TPH MEDRO 8015	<input type="checkbox"/> MEDRO	<input type="checkbox"/> EPH MADEP
<input type="checkbox"/> 8270PAH	<input type="checkbox"/> 8270ABN	<input type="checkbox"/> 625
<input type="checkbox"/> 8082 PCB	<input type="checkbox"/> 8081 Pesticides	<input type="checkbox"/> 608 Pest/PCB
<input type="checkbox"/> O&G 1664	<input type="checkbox"/> Mineral O&G SM5520F	
<input type="checkbox"/> pH	<input type="checkbox"/> BOD	<input type="checkbox"/> Conductivity
<input type="checkbox"/> TSS	<input type="checkbox"/> TDS	<input type="checkbox"/> TS
<input type="checkbox"/> RCRA Metals	<input type="checkbox"/> Priority Pollutant Metals	<input type="checkbox"/> TAL Metals
<input type="checkbox"/> Total Metals-List:		
<input type="checkbox"/> Dissolved Metals-List:		
<input type="checkbox"/> Ammonia	<input type="checkbox"/> COD	<input type="checkbox"/> TKN
<input type="checkbox"/> T-Phosphorus	<input type="checkbox"/> Phenols	<input type="checkbox"/> Bacteria P/A
<input type="checkbox"/> Cyanide	<input type="checkbox"/> Sulfide	<input type="checkbox"/> Nitrate + Nitrite
<input type="checkbox"/> Nitrate	<input type="checkbox"/> Nitrite	<input type="checkbox"/> Chloride
<input type="checkbox"/> Corrosivity	<input type="checkbox"/> Reactive CN	<input type="checkbox"/> Reactive S-
<input type="checkbox"/> TCLP Metals	<input type="checkbox"/> TCLP VOC	<input type="checkbox"/> TCLP SVOC
Subcontract: <input type="checkbox"/> Grain Size <input type="checkbox"/> Herbicides <input type="checkbox"/> Formaldehyde		

TAT REQUESTED
 Priority (24 hr)*
 Expedited (48 hr)*
 Standard (10 Business Days)
 *Date Needed _____

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

REPORTING INSTRUCTIONS
 HARD COPY REQUIRED FAX (FAX#) _____
 PDF (e-mail address) _____

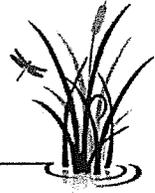
SPECIAL INSTRUCTIONS
5 Day

RECEIVED ON ICE W/SS NO
 TEMPERATURE **5** °C

CUSTODY RECORD
 OSD-01 Revision 08/05/14

Relinquished by: [Signature]	Date: 11/19/14	Time: 14:00	Received by: WPS	Date: 11/19/14	Time: 14:00
Relinquished by: [Signature]	Date: 11/19/14	Time: 15:00	Received by: [Signature]	Date: 11/19/14	Time: 15:00

Laboratory Report



Absolute Resource *associates*

124 Heritage Avenue Portsmouth NH 03801

Martha Roy
The Verterre Group
414 Roosevelt Highway
Suite 200
Colchester, VT 05446

PO Number: None
Job ID: 31731
Date Received: 11/25/14

Project: Gagne Spill 14028

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

A handwritten signature in black ink, appearing to read "Sylvester" followed by "(for)" in parentheses.

Sue Sylvester
Principal, General Manager

Date of Approval: 12/8/2014
Total number of pages: 5

Absolute Resource Associates Certifications

New Hampshire 1732
Maine NH903

Massachusetts M-NH902

Project ID: Gagne Spill 14028

Job ID: 31731

Sample#: 31731-001

Sample ID: Eff-1

Matrix: Water

Sampled: 11/24/14 10:21

Parameter	Reporting		Instr Dil'n		Analyst	Prep Date	Analysis			Reference
	Result	Limit	Units	Factor			Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1403290	12/4/14	7:42	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1403290	12/4/14	7:42	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1403290	12/4/14	7:42	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1403290	12/4/14	7:42	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1403290	12/4/14	7:42	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1403290	12/4/14	7:42	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1403290	12/4/14	7:42	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1403290	12/4/14	7:42	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1403290	12/4/14	7:42	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	102	78-114	%	1	LMM	1403290	12/4/14	7:42	SW5030C8260C	
toluene-D8 SUR	101	88-110	%	1	LMM	1403290	12/4/14	7:42	SW5030C8260C	
4-bromofluorobenzene SUR	105	86-115	%	1	LMM	1403290	12/4/14	7:42	SW5030C8260C	

Sample#: 31731-002

Sample ID: Eff-2

Matrix: Water

Sampled: 11/24/14 10:16

Parameter	Reporting		Instr Dil'n		Analyst	Prep Date	Analysis			Reference
	Result	Limit	Units	Factor			Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1403290	12/4/14	8:12	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1403290	12/4/14	8:12	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1403290	12/4/14	8:12	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1403290	12/4/14	8:12	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1403290	12/4/14	8:12	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1403290	12/4/14	8:12	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1403290	12/4/14	8:12	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1403290	12/4/14	8:12	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1403290	12/4/14	8:12	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	103	78-114	%	1	LMM	1403290	12/4/14	8:12	SW5030C8260C	
toluene-D8 SUR	103	88-110	%	1	LMM	1403290	12/4/14	8:12	SW5030C8260C	
4-bromofluorobenzene SUR	103	86-115	%	1	LMM	1403290	12/4/14	8:12	SW5030C8260C	

Project ID: Gagne Spill 14028

Job ID: 31731

Sample#: 31731-003

Sample ID: Inf

Matrix: Water

Sampled: 11/24/14 10:30

Parameter	Reporting		Instr Dil'n		Analyst	Prep	Analysis			Reference
	Result	Limit	Units	Factor		Date	Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1403290	12/4/14	8:41	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1403290	12/4/14	8:41	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1403290	12/4/14	8:41	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1403290	12/4/14	8:41	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1403290	12/4/14	8:41	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1403290	12/4/14	8:41	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1403290	12/4/14	8:41	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1403290	12/4/14	8:41	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1403290	12/4/14	8:41	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	100	78-114	%	1	LMM	1403290	12/4/14	8:41	SW5030C8260C	
toluene-D8 SUR	101	88-110	%	1	LMM	1403290	12/4/14	8:41	SW5030C8260C	
4-bromofluorobenzene SUR	104	86-115	%	1	LMM	1403290	12/4/14	8:41	SW5030C8260C	

Project ID: Gagne Spill 14028

Job ID: 31731

Sample#: 31731-001

Sample ID: Eff-1

Matrix: Water

Sampled: 11/24/14 10:21

Parameter	Result	Reporting		Instr Dil'n		Prep Analyst Date	Analysis			Reference
		Limit	Units	Factor	Batch		Date	Time		
Diesel Range Organics (DRO) C10-C28	< 200	200	ug/L	1	JZ	12/1/14	7435	12/3/14	11:53	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	66	40-140	%	1	JZ	12/1/14	7435	12/3/14	11:53	SW3510C8015D
o-terphenyl SUR	71	40-140	%	1	JZ	12/1/14	7435	12/3/14	11:53	SW3510C8015D

Sample#: 31731-002

Sample ID: Eff-2

Matrix: Water

Sampled: 11/24/14 10:16

Parameter	Result	Reporting		Instr Dil'n		Prep Analyst Date	Analysis			Reference
		Limit	Units	Factor	Batch		Date	Time		
Diesel Range Organics (DRO) C10-C28	< 200	200	ug/L	1	JZ	12/1/14	7435	12/3/14	12:11	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	62	40-140	%	1	JZ	12/1/14	7435	12/3/14	12:11	SW3510C8015D
o-terphenyl SUR	71	40-140	%	1	JZ	12/1/14	7435	12/3/14	12:11	SW3510C8015D

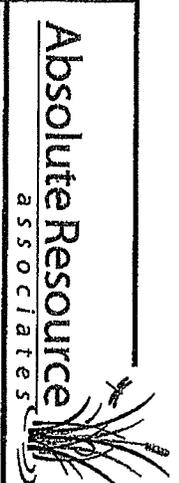
Sample#: 31731-003

Sample ID: Inf

Matrix: Water

Sampled: 11/24/14 10:30

Parameter	Result	Reporting		Instr Dil'n		Prep Analyst Date	Analysis			Reference
		Limit	Units	Factor	Batch		Date	Time		
Diesel Range Organics (DRO) C10-C28	2300	240	ug/L	1	JZ	12/1/14	7435	12/3/14	12:29	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	67	40-140	%	1	JZ	12/1/14	7435	12/3/14	12:29	SW3510C8015D
o-terphenyl SUR	75	40-140	%	1	JZ	12/1/14	7435	12/3/14	12:29	SW3510C8015D



124 Heritage Avenue #16
 Portsmouth, NH 03801
 603-436-2001
 absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD
 AND ANALYSIS REQUEST
 31731
 PAGE OF

Company Name: **The Verrier Group**
 Company Address: **414 Roosevelt Hwy Dover, NH 03844**
 Project #: **14028**
 Project Location: **NH MA ME VT NY**
 Report To: **Mutha RM**
 Phone #: **802-654-8003 X11**
 Invoice to Email: _____
 Hard Copy Invoice Required
 Quote # _____
 PO # _____

ANALYSIS REQUEST
 VOC 8260 VOC 8260 NHDES VOC 8260 MADEP
 VOC 624 VOC BTEX MIBE, only VOC 8021VT
 VPH MADEP MEGRO GRO 8015 1,4-Dioxane
 VOC 624.2 VOC 624.2 NH List Gases-List:
 TPH DRO 8015 MEDRO EPH MADEP TPH Fingerprint
 8270PAH 8270ABN 825 EDB
 8082 PCB 8081 Pesticides 608 Pest/PCB
 O&G 1864 Mineral O&G SM5520F
 pH BOD Conductivity Turbidity
 TSS TDS TS TVS Alkalinity
 RCRA Metals Priority Pollutant Metals TAL Metals Hardness
 Total Metals-list:
 Dissolved Metals-list:
 Ammonia COD TRN TN TON TOC
 T-Phosphorus Phenols Bacteria P/A Bacteria MPN
 Cyanide Sulfide Nitrate + Nitrite Ortho P
 Nitrate Nitrite Chloride Sulfate Bromide Fluoride
 Corrosivity Reactive CN Reactive S- Ignitibility/FP
 TCLP Metals TCLP VOC TCLP SVOC TCLP Pesticide
 Subcontract: Grain Size Herbicides Formaldehyde
 Grab (G) or Composite (C)

Lab Sample ID	Field ID	# CONTAINERS	Matrix			Preservation Method					Sampling		SAMPLER
			WATER	SOLID	OTHER	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	DATE	TIME	
2731-01	EFF-1	3	✓			✓					11/24/14	10:01	5c
2731-02	EFF-2	3	✓			✓					10/16		6c
2731-03	EFF-3	3	✓			✓					10/30		6c

TAX REQUESTED
 Priority (24 hr)*
 Expedited (48 hr)*
 Standard (10 Business Days)
 *Date Needed _____

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

REPORTING INSTRUCTIONS PDF (e-mail address) _____

SPECIAL INSTRUCTIONS
5 Day

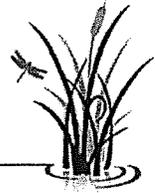
RECEIVED ON ICE YES NO
 TEMPERATURE _____ °C

CUSTODY RECORD
 OSD-01 Revision 03/03/14

Relinquished by Sampler: **WPS** Date: **11/24/14** Time: **11:25** Received by: **WPS** Date: _____ Time: _____

Relinquished by: **WPS** Date: _____ Time: _____ Received by: **WPS** Date: **11/24/14** Time: **1:05**

Laboratory Report



Absolute Resource *associates*

124 Heritage Avenue Portsmouth NH 03801

Martha Roy
The Verterre Group
414 Roosevelt Highway
Suite 200
Colchester, VT 05446

PO Number: None
Job ID: 31851
Date Received: 12/9/14

Project: Gagne Release 14028

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

Sue Sylvester
Principal, General Manager

Date of Approval: 12/19/2014
Total number of pages: 5

Absolute Resource Associates Certifications

New Hampshire 1732
Maine NH903

Massachusetts M-NH902

Project ID: Gagne Release 14028

Job ID: 31851

Sample#: 31851-001

Sample ID: Eff-1

Matrix: Water

Sampled: 12/8/14 10:15

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Analysis			Reference
		Limit	Units	Factor	Analyst		Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1403387	12/13/14	4:32	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1403387	12/13/14	4:32	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1403387	12/13/14	4:32	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1403387	12/13/14	4:32	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1403387	12/13/14	4:32	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1403387	12/13/14	4:32	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1403387	12/13/14	4:32	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1403387	12/13/14	4:32	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1403387	12/13/14	4:32	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	98	78-114	%	1	LMM	1403387	12/13/14	4:32	SW5030C8260C	
toluene-D8 SUR	98	88-110	%	1	LMM	1403387	12/13/14	4:32	SW5030C8260C	
4-bromofluorobenzene SUR	101	86-115	%	1	LMM	1403387	12/13/14	4:32	SW5030C8260C	

Sample#: 31851-002

Sample ID: Eff-2

Matrix: Water

Sampled: 12/8/14 10:22

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Analysis			Reference
		Limit	Units	Factor	Analyst		Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1403387	12/13/14	5:01	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1403387	12/13/14	5:01	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1403387	12/13/14	5:01	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1403387	12/13/14	5:01	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1403387	12/13/14	5:01	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1403387	12/13/14	5:01	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1403387	12/13/14	5:01	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1403387	12/13/14	5:01	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1403387	12/13/14	5:01	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	101	78-114	%	1	LMM	1403387	12/13/14	5:01	SW5030C8260C	
toluene-D8 SUR	98	88-110	%	1	LMM	1403387	12/13/14	5:01	SW5030C8260C	
4-bromofluorobenzene SUR	97	86-115	%	1	LMM	1403387	12/13/14	5:01	SW5030C8260C	

Project ID: Gagne Release 14028

Job ID: 31851

Sample#: 31851-003

Sample ID: Inf

Matrix: Water

Sampled: 12/8/14 10:30

Parameter	Reporting		Instr Dil'n		Analyst	Prep Date	Analysis			Reference
	Result	Limit	Units	Factor			Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1403387	12/13/14	5:31	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1403387	12/13/14	5:31	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1403387	12/13/14	5:31	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1403387	12/13/14	5:31	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1403387	12/13/14	5:31	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1403387	12/13/14	5:31	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1403387	12/13/14	5:31	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1403387	12/13/14	5:31	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1403387	12/13/14	5:31	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	103	78-114	%	1	LMM	1403387	12/13/14	5:31	SW5030C8260C	
toluene-D8 SUR	100	88-110	%	1	LMM	1403387	12/13/14	5:31	SW5030C8260C	
4-bromofluorobenzene SUR	102	86-115	%	1	LMM	1403387	12/13/14	5:31	SW5030C8260C	

Project ID: Gagne Release 14028

Job ID: 31851

Sample#: 31851-001

Sample ID: Eff-1

Matrix: Water

Sampled: 12/8/14 10:15

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep	Analysis			Reference
		Limit				Date	Batch	Date	Time	
Diesel Range Organics (DRO) C10-C28	< 210	210	ug/L	1	AM	12/11/14	7475	12/11/14	15:52	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	78	40-140	%	1	AM	12/11/14	7475	12/11/14	15:52	SW3510C8015D
o-terphenyl SUR	89	40-140	%	1	AM	12/11/14	7475	12/11/14	15:52	SW3510C8015D

Sample#: 31851-002

Sample ID: Eff-2

Matrix: Water

Sampled: 12/8/14 10:22

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep	Analysis			Reference
		Limit				Date	Batch	Date	Time	
Diesel Range Organics (DRO) C10-C28	< 200	200	ug/L	1	AM	12/11/14	7475	12/11/14	16:10	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	76	40-140	%	1	AM	12/11/14	7475	12/11/14	16:10	SW3510C8015D
o-terphenyl SUR	83	40-140	%	1	AM	12/11/14	7475	12/11/14	16:10	SW3510C8015D

Sample#: 31851-003

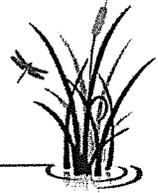
Sample ID: Inf

Matrix: Water

Sampled: 12/8/14 10:30

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep	Analysis			Reference
		Limit				Date	Batch	Date	Time	
Diesel Range Organics (DRO) C10-C28	12000	2000	ug/L	10	AM	12/11/14	7475	12/12/14	12:21	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	136	40-140	%	10	AM	12/11/14	7475	12/12/14	12:21	SW3510C8015D
o-terphenyl SUR	57	40-140	%	10	AM	12/11/14	7475	12/12/14	12:21	SW3510C8015D

Laboratory Report



Absolute Resource *associates*

124 Heritage Avenue Portsmouth NH 03801

Martha Roy
The Verterre Group
414 Roosevelt Highway
Suite 200
Colchester, VT 05446

PO Number: None
Job ID: 31977
Date Received: 12/23/14

Project: Gagne Residence 14028

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

 (for)

Sue Sylvester
Principal, General Manager

Date of Approval: 1/5/2015
Total number of pages: 5

Absolute Resource Associates Certifications

New Hampshire 1732
Maine NH903

Massachusetts M-NH902

Project ID: Gagne Residence 14028

Job ID: 31977

Sample#: 31977-001

Sample ID: EFF-2

Matrix: Water

Sampled: 12/22/14 12:45

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Analysis			Reference
		Limit	Units	Factor	Analyst		Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1403493	12/24/14	16:03	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1403493	12/24/14	16:03	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1403493	12/24/14	16:03	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1403493	12/24/14	16:03	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1403493	12/24/14	16:03	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1403493	12/24/14	16:03	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1403493	12/24/14	16:03	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1403493	12/24/14	16:03	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1403493	12/24/14	16:03	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	100	78-114	%	1	LMM	1403493	12/24/14	16:03	SW5030C8260C	
toluene-D8 SUR	101	88-110	%	1	LMM	1403493	12/24/14	16:03	SW5030C8260C	
4-bromofluorobenzene SUR	101	86-115	%	1	LMM	1403493	12/24/14	16:03	SW5030C8260C	

Sample#: 31977-002

Sample ID: MID

Matrix: Water

Sampled: 12/22/14 12:52

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Analysis			Reference
		Limit	Units	Factor	Analyst		Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1403493	12/24/14	17:31	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1403493	12/24/14	17:31	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1403493	12/24/14	17:31	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1403493	12/24/14	17:31	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1403493	12/24/14	17:31	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1403493	12/24/14	17:31	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1403493	12/24/14	17:31	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1403493	12/24/14	17:31	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1403493	12/24/14	17:31	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	102	78-114	%	1	LMM	1403493	12/24/14	17:31	SW5030C8260C	
toluene-D8 SUR	100	88-110	%	1	LMM	1403493	12/24/14	17:31	SW5030C8260C	
4-bromofluorobenzene SUR	102	86-115	%	1	LMM	1403493	12/24/14	17:31	SW5030C8260C	

Project ID: Gagne Residence 14028

Job ID: 31977

Sample#: 31977-003

Sample ID: INF

Matrix: Water

Sampled: 12/22/14 12:58

Parameter	Reporting		Instr Dil'n		Analyst	Prep	Analysis			Reference
	Result	Limit	Units	Factor		Date	Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1403493	12/24/14	18:30	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1403493	12/24/14	18:30	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1403493	12/24/14	18:30	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1403493	12/24/14	18:30	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1403493	12/24/14	18:30	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1403493	12/24/14	18:30	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1403493	12/24/14	18:30	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1403493	12/24/14	18:30	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1403493	12/24/14	18:30	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	103	78-114	%	1	LMM	1403493	12/24/14	18:30	SW5030C8260C	
toluene-D8 SUR	101	88-110	%	1	LMM	1403493	12/24/14	18:30	SW5030C8260C	
4-bromofluorobenzene SUR	102	86-115	%	1	LMM	1403493	12/24/14	18:30	SW5030C8260C	

Project ID: Gagne Residence 14028

Job ID: 31977

Sample#: 31977-001

Sample ID: EFF-2

Matrix: Water

Sampled: 12/22/14 12:45

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep	Batch	Analysis		Reference
		Limit						Date	Time	
Diesel Range Organics (DRO) C10-C28	< 200	200	ug/L	1	AM	12/29/14	7503	12/29/14	13:55	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	78	40-140	%	1	AM	12/29/14	7503	12/29/14	13:55	SW3510C8015D
o-terphenyl SUR	86	40-140	%	1	AM	12/29/14	7503	12/29/14	13:55	SW3510C8015D

Sample#: 31977-002

Sample ID: MID

Matrix: Water

Sampled: 12/22/14 12:52

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep	Batch	Analysis		Reference
		Limit						Date	Time	
Diesel Range Organics (DRO) C10-C28	< 200	200	ug/L	1	AM	12/29/14	7503	12/29/14	14:13	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	76	40-140	%	1	AM	12/29/14	7503	12/29/14	14:13	SW3510C8015D
o-terphenyl SUR	86	40-140	%	1	AM	12/29/14	7503	12/29/14	14:13	SW3510C8015D

Sample#: 31977-003

Sample ID: INF

Matrix: Water

Sampled: 12/22/14 12:58

Parameter	Result	Reporting	Units	Instr Dil'n	Analyst	Prep	Batch	Analysis		Reference
		Limit						Date	Time	
Diesel Range Organics (DRO) C10-C28	900	200	ug/L	1	AM	12/29/14	7503	12/29/14	14:32	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	80	40-140	%	1	AM	12/29/14	7503	12/29/14	14:32	SW3510C8015D
o-terphenyl SUR	88	40-140	%	1	AM	12/29/14	7503	12/29/14	14:32	SW3510C8015D

Absolute Resource Associates

124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

Project Name: *6-acre Residence*
Project #: *14038*
Project Location: NH MA ME VT Other

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

31977

Company Name: *The Verbene Group*
Company Address: *214 Roseworth Hwy. Colchester, VT 05446*
Report To: *Martha Roy*
Phone #: *802-654-8663*
Invoice To: *Verbena*

Project Name: *6-acre Residence*
Project #: *14038*
Project Location: NH MA ME VT Other
Protocol: RCRA SDWA NPDES MCP NHDES OTHER
Reporting: QAPP GW-1 S-1 Limits: EPA DW Other
Quote #: *535* NH GREEN/ODD
PO #:

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix			Preservation Method						Sampling			SAMPLER
			WATER	SOLID	OTHER	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER (Specify)	DATE	TIME		
<i>31977-01</i>	<i>EFF-2</i>	<i>3</i>	<i>X</i>			<i>X</i>							<i>12/23/14</i>	<i>14:36</i>	
<i>-02</i>	<i>MID</i>	<i>3</i>	<i>X</i>			<i>X</i>							<i>12/23/14</i>	<i>14:36</i>	
<i>-03</i>	<i>INF</i>	<i>3</i>	<i>X</i>			<i>X</i>							<i>12/23/14</i>	<i>14:36</i>	

- VOC 8260 VOC 8260 NHDES VOC 8260 MADEP
- VOC 624 VOC BTEX MIBE, only VOC 8021VT
- VPH MADEP MEGRO GRO 8015
- VOC 524.2 VOC 524.2 NH List Gases-List:
- TPH DRO 8015 MEDRO EPH MADEP TPH Fingerprint
- 8270PAH 8270ABN 625 EDB 504.1
- 8082 PCB 8081 Pesticides 608 Pest/PCB
- O&G 1664 Mineral O&G SM5520F
- pH BOD Conductivity Turbidity
- TSS TDS TS TVS Alkalinity
- RCRA Metals Priority Pollutant Metals TAL Metals Hardness
- Total Metals-list:
- Dissolved Metals-list:
- Ammonia COD TKN TN TON TOC
- T-Phosphorus Phenols Bacteria P/A Bacteria MPN
- Cyanide Sulfide Nitrate + Nitrite Ortho P
- Nitrate Nitrite Chloride Sulfate Bromide Fluoride
- Corrosivity Reactive CN Reactive S- Ignitibility/FP
- TCLP Metals TCLP VOC TCLP SVOC TCLP Pesticide
- Subcontract: Grain Size Herbicides Formaldehyde

Grab (G) or Composite (C)

TAT REQUESTED
Priority (24 hr)*
Expedited (48 hr)*
Standard (10 Business Days)
* Date Needed _____

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

REPORTING INSTRUCTIONS
 HARD COPY REQUIRED FAX (FAX#) _____
 PDF (e-mail address) _____
 OTHER (specify) _____

SPECIAL INSTRUCTIONS
5 Day

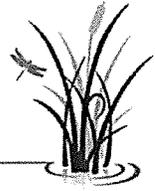
RECEIVED ON ICE - YES NO
TEMPERATURE _____ °C

CUSTODY RECORD
OSD-01 Revision 08/23/12

Relinquished by: *[Signature]* Date: *12/23/14* Time: *14:30*
Relinquished by: *[Signature]* Date: *12/23/14* Time: *14:36*

Received by: *UPS* Date: *12/23/14* Time: *14:30*
Received by: *[Signature]* Date: *12/23/14* Time: *14:36*

Laboratory Report



Absolute Resource *associates*

124 Heritage Avenue Portsmouth NH 03801

Martha Roy
The Verterre Group
414 Roosevelt Highway
Suite 200
Colchester, VT 05446

PO Number: None
Job ID: 32150
Date Received: 1/30/15

Project: Gagne Release 14028

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

A handwritten signature in black ink that reads "Sue Sylvester" followed by "(for)" in parentheses.

Sue Sylvester
Principal, General Manager

Date of Approval: 2/6/2015
Total number of pages: 3

Absolute Resource Associates Certifications

New Hampshire 1732
Maine NH903

Massachusetts M-NH902

Project ID: Gagne Release 14028

Job ID: 32150

Sample#: 32150-001

Sample ID: Eff

Matrix: Water

Sampled: 1/28/15 12:10

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Analysis			Reference
		Limit	Units	Factor	Analyst		Batch	Date	Time	
methyl t-butyl ether (MTBE)	< 2	2	ug/L	1	LMM	1500148	2/2/15	15:23	SW5030C8260C	
benzene	< 2	2	ug/L	1	LMM	1500148	2/2/15	15:23	SW5030C8260C	
toluene	< 2	2	ug/L	1	LMM	1500148	2/2/15	15:23	SW5030C8260C	
ethylbenzene	< 2	2	ug/L	1	LMM	1500148	2/2/15	15:23	SW5030C8260C	
m&p-xylenes	< 2	2	ug/L	1	LMM	1500148	2/2/15	15:23	SW5030C8260C	
o-xylene	< 2	2	ug/L	1	LMM	1500148	2/2/15	15:23	SW5030C8260C	
naphthalene	< 5	5	ug/L	1	LMM	1500148	2/2/15	15:23	SW5030C8260C	
1,3,5-trimethylbenzene	< 2	2	ug/L	1	LMM	1500148	2/2/15	15:23	SW5030C8260C	
1,2,4-trimethylbenzene	< 2	2	ug/L	1	LMM	1500148	2/2/15	15:23	SW5030C8260C	
Surrogate Recovery		Limits								
dibromofluoromethane SUR	102	78-114	%	1	LMM	1500148	2/2/15	15:23	SW5030C8260C	
toluene-D8 SUR	103	88-110	%	1	LMM	1500148	2/2/15	15:23	SW5030C8260C	
4-bromofluorobenzene SUR	96	86-115	%	1	LMM	1500148	2/2/15	15:23	SW5030C8260C	

Sample#: 32150-001

Sample ID: Eff

Matrix: Water

Sampled: 1/28/15 12:10

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Analysis			Reference
		Limit	Units	Factor	Analyst		Batch	Date	Time	
Diesel Range Organics (DRO) C10-C28	< 200	200	ug/L	1	AM	2/3/15	7570	2/3/15	15:53	SW3510C8015D
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	61	40-140	%	1	AM	2/3/15	7570	2/3/15	15:53	SW3510C8015D
o-terphenyl SUR	54	40-140	%	1	AM	2/3/15	7570	2/3/15	15:53	SW3510C8015D

