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August 15, 1997

Chuck Schwer  
State of Vermont  
Department of Environmental Conservation  
Waste Management Division  
Sites Management Section  
103 South Main St.  
Waterbury, VT 06571-0404

RE: Initial Site Investigation Report  
Airport Exxon, South Burlington, VT  
VTDEC Site #97-2140  
ATC Project #41306-0011

Dear Mr. Schwer:

This letter serves as the report on the Initial Site Investigation conducted at Airport Exxon, in South Burlington. The investigation has been conducted by ATC Associates Inc. (ATC) for WESCO, Inc., owner of Airport Exxon, as per your request which was contained in a February 25, 1997 letter to David Simendinger, of WESCO. The investigation has been conducted to determine the extent of petroleum contamination detected in on-site soils during installation of replacement piping and fuel dispenser systems on November 1, 1996. Soils associated with the piping and dispenser system replacement and installation were screened by ATC. ATC submitted a report, dated January 7, 1997, on the soil screening to your department.

On July 24, 1997, ATC supervised the drilling of one soil boring in the location of the former dispenser island at Airport Exxon (see attached Site Map, for soil boring location). The soil boring was drilled by Tri-State Drilling and Boring, of West Burke, under the direct supervision of an ATC Senior Project Scientist. Soil samples were collected from the borehole, using a split spoon sampler, at five foot intervals, beginning at a depth of ten feet below grade. Soil samples were logged by the Project Scientist and placed in plastic bags for screening by PID, as per VTDEC soil screening guidelines. The samples were screened with an HNU Model PI-101 PID, calibrated with isobutylene referenced to benzene. The attached soil boring log shows soil types and PID readings in each sample. The sample collected from a depth of 15 to 17 feet below grade was placed into glass jars and transported to Endyne, Inc. for laboratory analysis for VOCs by EPA Method 8200, and for TPH by EPA Method 8100. As the soil boring log indicates, there were no PID readings in



Chuck Schwer  
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soil samples collected from the boring. In addition, there were no noticeable petroleum odors in the samples. Since the 15 to 17 foot sample was collected from below the water table, the sample was collected for laboratory analysis to determine if soil contamination detected during excavation of the former dispensers had impacted underlying soils and groundwater. As the attached laboratory analytical results indicate, no VOCs or TPH were detected in the sample. After collecting the 15 to 17 foot sample, the boring was advanced to a depth of 22 feet, to confirm that the wet soils encountered at 15 to 17 feet represented the water table. The sample collected from 20 to 22 feet was also wet, indicating that the water table at this site was at a depth of less than fifteen feet.

ATC also conducted a sensitive receptor survey and a PID assay of storm drains in the area on July 24, 1997. The attached site map shows the locations of the storm drains. No PID readings were detected in the storm drains. In addition, no visible sheens were observed in storm drains which had standing water. Potential receptors identified in the area include several commercial buildings within a five hundred foot radius of the site. There were no residences identified in this 500 foot radius. In addition, there are no water supply wells identified within a one half mile radius of the site. All homes and businesses in the area are reported to be served by the Champlain Water District, which pumps water from Lake Champlain, in Shelburne Bay. Groundwater in the area likely flows southeast, toward Potash Brook, which is located approximately 400 feet southeast of the site.

In summary, based on the lack of detectable VOCs and TPH in soils collected from the borehole, it appears that the extent of soil contamination detected during the replacement of the dispenser island was limited to the immediate vicinity of the island. In addition, groundwater and soils beneath the former dispenser island have not been impacted. Since groundwater has not been impacted and there are no residences or water supply wells identified in the vicinity of the site, there is no risk to the environment or to public health and safety from any residual petroleum contamination that may remain in soils beneath the former dispensers.

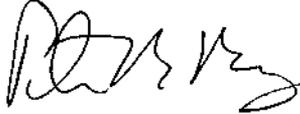
We do not recommend additional investigation or monitoring of contamination in the vicinity of the former dispenser island at Airport Exxon. We do recommend that the site be assigned Sites Management Activity Completed status by your department.

Please call me with any questions that you may have regarding this investigation.

Chuck Schwer  
August 15, 1997  
Page 3 of 3

Sincerely,

ATC ASSOCIATES INC.

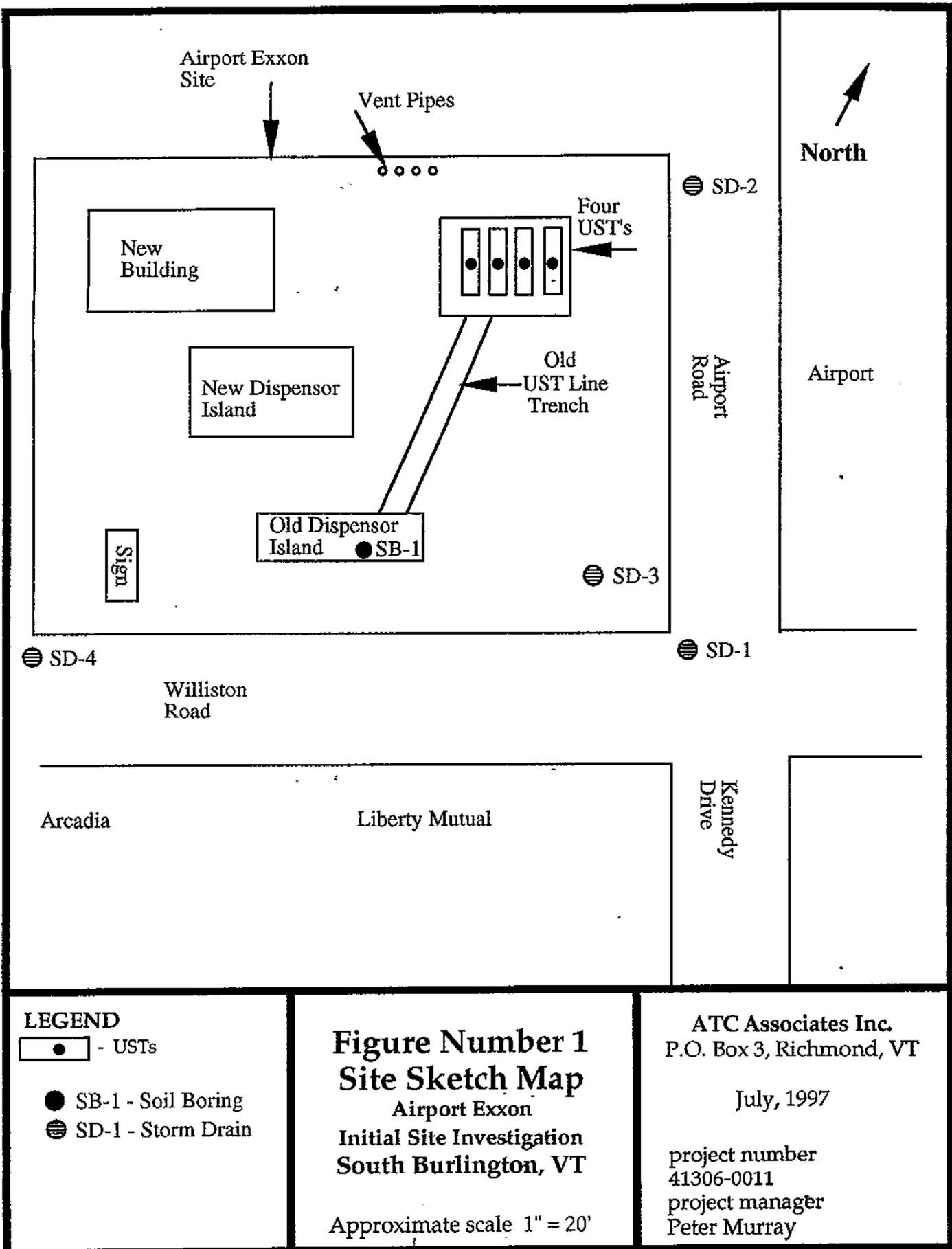
A handwritten signature in black ink, appearing to read "Peter M. Murray". The signature is fluid and cursive, with a large initial "P" and "M".

Peter M. Murray  
Senior Project Scientist

cc: WESCO, Inc.

PMM/pmm/41306-0011 Report

attachments



**LEGEND**

- USTs
- SB-1 - Soil Boring
- ⊖ SD-1 - Storm Drain

**Figure Number 1  
Site Sketch Map**

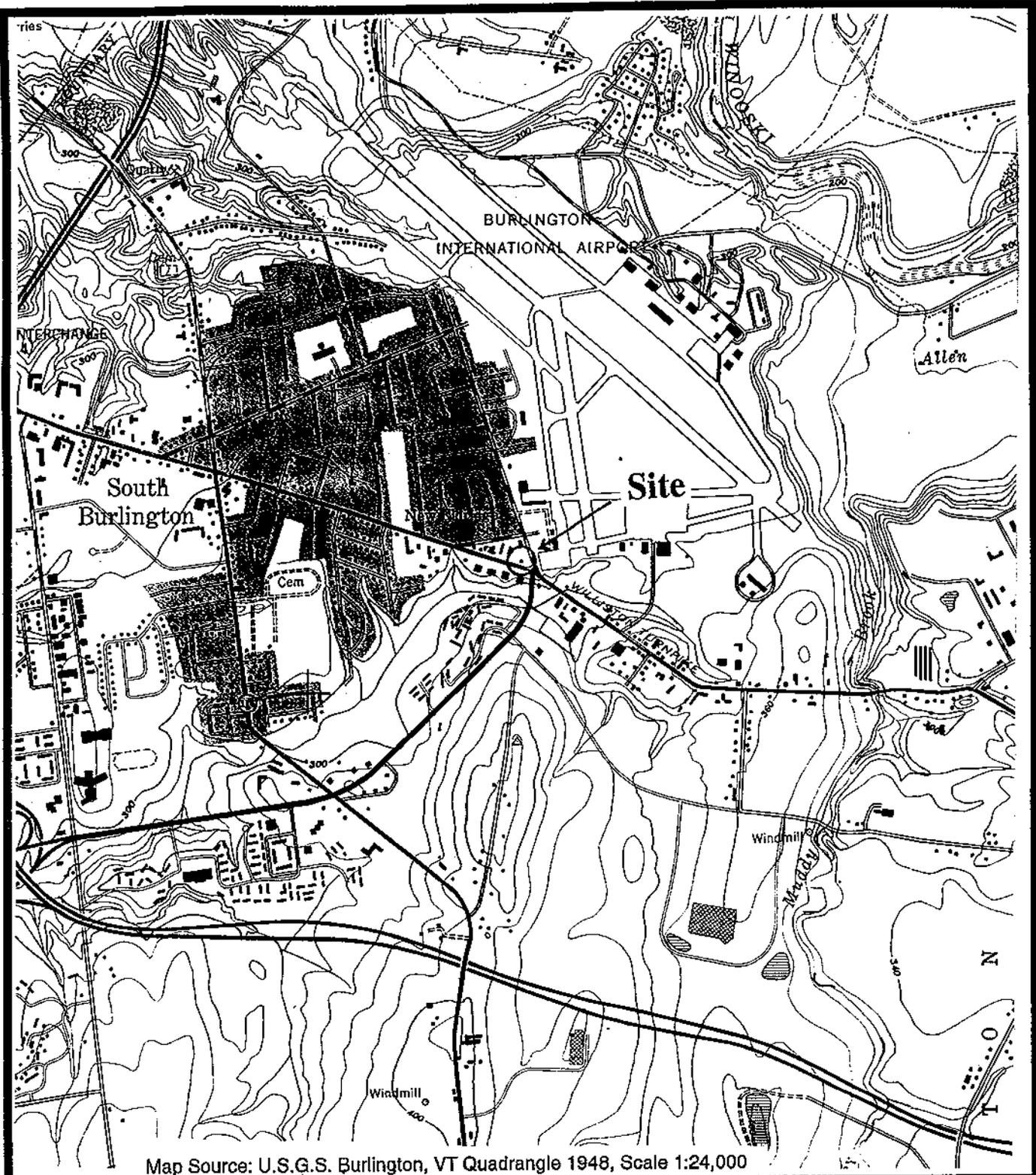
Airport Exxon  
Initial Site Investigation  
South Burlington, VT

Approximate scale 1" = 20'

ATC Associates Inc.  
P.O. Box 3, Richmond, VT

July, 1997

project number  
41306-0011  
project manager  
Peter Murray



project manager  
Peter Murray

project number  
41036-0011

**Figure 2**  
**Site Locus Map**  
Airport Exxen  
South Burlington, VT

ATC Associaters Inc.  
P.O. Box 3, Richmond, VT 05477

**ATC Associates Inc.  
Soil Boring Log**

**BORING NUMBER SB-1**

PROJECT NAME Airport Exxon  
 PROJECT # 41306-0011  
 LOCATION South Burlington, VT  
 DATE DRILLED 7/24/1997 BORING DEPTH 22'  
 DIAMETER 6"  
 SCREEN DIA. NA LENGTH NA SLOT SIZE NA  
 CASING DIA. NA LENGTH NA TYPE NA  
 DRILLING CO. Tri-State D & B DRILLING METHOD HSA  
 DRILLER Faulkner LOG BY PM

Airport Exxon

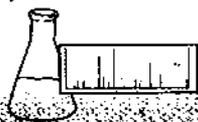
Airport Road

Old Pump Island  
 SB-1

Williston Road

Sketch Map

DEPTH IN FEET	WELL CONSTRUCTION	NOTES	PID/OVM READINGS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
GRADE				
5	[Hatched Area]	NATIVE FILL		
10			NON-DETECT	10.0'-12.0' (6,3,5,6) Dry, light brown, fine SAND, little silt
15			NON-DETECT	15.0'-17.0' (3,3,2,1) Wet, fine SAND, some silt
20			NON-DETECT	20.0'-22.0' (3,5,8,-) Wet, very fine SAND, some silt
25				
30				
35				
40				



**ENDYNE, INC.**

Laboratory Services

32 Saddle Brown Drive  
Wilmington, Vermont 05495  
(802) 879-4333  
FAX 879-7103

REPORT OF LABORATORY ANALYSIS

CLIENT: ATC  
PROJECT NAME: Airport Exxon 41306-0011  
DATE REPORTED: July 31, 1997  
DATE SAMPLED: July 24, 1997

PROJECT CODE: ATCA1510  
REF. #: 107,154

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody record.

Chain of custody indicated proper sample preservation.

All samples were prepared and analyzed by requirements outlined in the referenced methods and within the specified holding times.

All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced methods.

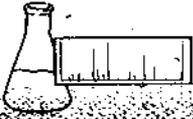
Blank contamination was not observed at levels affecting the analytical results.

Analytical method precision and accuracy were monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Reviewed by,

Harry B. Locker, Ph.D.  
Laboratory Director

enclosures



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LABORATORY REPORT

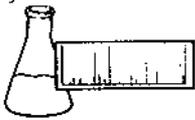
TOTAL PETROLEUM HYDROCARBONS (TPH) BY MODIFIED EPA METHOD 8015

DATE: July 31, 1997  
CLIENT: ATC  
PROJECT: Airport Exxon 41306-0011  
PROJECT CODE: ATCA1510  
COLLECTED BY: Peter Murray  
DATE SAMPLED: July 24, 1997  
DATE RECEIVED: July 24, 1997

Reference #	Sample ID	Concentration (mg/kg) <sup>1</sup>
107,154	SB-1 10'-12'; 10:30	ND <sup>2</sup>

Notes:

- 1 Method detection limit is 1.0 mg/kg.
- 2 None detected



**ENDYNE, INC.**

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REPORT OF LABORATORY ANALYSIS

CLIENT: ATC  
PROJECT NAME: Airport Exxon 41306-0011  
DATE REPORTED: July 31, 1997  
DATE SAMPLED: July 24, 1997

PROJECT CODE: ATCA1509  
REF. #: 107,153

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody record.

Chain of custody indicated proper sample preservation.

All samples were prepared and analyzed by requirements outlined in the referenced methods and within the specified holding times.

All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced methods.

Blank contamination was not observed at levels affecting the analytical results.

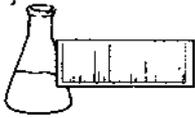
Analytical method precision and accuracy were monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Individual sample performance was monitored by the addition of surrogate analytes to each sample. All surrogate data was determined to be within Laboratory QA/QC guidelines unless otherwise noted.

Reviewed by,

Harry B. Locker, Ph.D.  
Laboratory Director

enclosures



**ENDYNE, INC.**

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32 James Brown Drive  
Williston, Vermont 05495  
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FAX 879-7103

LABORATORY REPORT

EPA METHOD 8020 COMPOUNDS BY EPA METHOD 8260

CLIENT: ATC  
PROJECT NAME: Airport Exxon 41306-0011  
REPORT DATE: July 31, 1997  
SAMPLER: Peter Murray  
DATE SAMPLED: July 24, 1997  
DATE RECEIVED: July 24, 1997

PROJECT CODE: ATCA1509  
ANALYSIS DATE: July 30, 1997  
STATION: SB-1 10'-12'  
REF.#: 107,153  
TIME SAMPLED: 1030

<u>Parameter</u>	<u>Detection Limit (ug/kg)</u>	<u>Concentration As Received (ug/kg)</u>
Benzene	10	ND <sup>1</sup>
Chlorobenzene	10	ND
1,2-Dichlorobenzene	10	ND
1,3-Dichlorobenzene	10	ND
1,4-Dichlorobenzene	10	ND
Ethylbenzene	10	ND
Toluene	10	ND
Xylene	20	ND
MTBE	20	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

ANALYTICAL SURROGATE RECOVERY:

Dibromofluoromethane: 97.%  
Toluene-d8: 104.%  
4-Bromofluorobenzene: 87.%

PERCENT SOLIDS: 78.%

NOTES:

1 None detected

**CHAIN-OF-CUSTODY RECORD**

107,153 - 107,154

Project Name: <b>Airport Exxon 41306-0011</b> Site Location: <b>South Burlington</b>	Reporting Address: <b>ATC Associates, P.O. Box 3 Richmond</b>	Billing Address: <b>SAME</b>
Endyne Project Number: <b>ATCA1509</b>	Company: <b>ATC</b> Contact Name/Phone #: <b>Peter Murray</b>	Sampler Name: <b>Peter Murray</b> Phone #: <b>434-2113</b>

Lab #	Sample Location	Matrix	G R A B	C O M P	Date/Time	Sample Containers		Field Results/Remarks	Analysis Required	Sample Preservation	Rush
						No.	Type/Size				
107,153	SB-1 10'-12'	Soil	✓		7/24/97 10:30	1		450 ML	8020	ICE	
	SB-1 10'-12'	Soil	✓		10:30	1		450 ML	TPH by 8015	ICE	

Relinquished by: Signature <i>[Signature]</i>	Received by: Signature <i>[Signature: M. Chamberlain]</i>	Date/Time <b>7-24-97</b> <span style="float:right">12:15</span>
Relinquished by: Signature	Received by: Signature	Date/Time

New York State Project: Yes  No

**Requested Analyses**

1	pH	6	TKN	11	Total Solids	16	Metals (Specify)	21	EPA 624	26	EPA 8270 B/N or Acid
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	EPA 625 B/N or A	27	EPA 8010/8020
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	EPA 418.1	28	EPA 8080 Pest/PCB
4	Nitrite N	9	BOD <sub>5</sub>	14	Turbidity	19	BTEX	24	EPA 608 Pest/PCB		
5	Nitrate N	10	Alkalinity	15	Conductivity	20	EPA 601/602	25	EPA 8240		
29	TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)										
30	Other (Specify):										

