

HOFFER CONSULTING INC.

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2699
Jefferson P. Hoffer, PG
Stratton C. French, CGWP
Timothy F. Schmalz
www.connriver.net/hoffer

March 27, 2000

Chuck Schwer, Supervisor
Sites Management Section
VTDEC - Waste Management Division
103 South Main Street/West Office
Waterbury, VT 05671-0404

Re: Preliminary Site Investigation,
North Main Exxon, St. Albans, Vermont, SMS Site #99-2699

Dear Mr. Schwer:

This letter presents the results of a preliminary site investigation at S.B. Collins' North Main Exxon site in St. Albans. This investigation was initiated in response to petroleum contamination observed in site soils during UST closure and piping replacement activities in September and October 1999. Details of the piping replacement and UST closure activities are outlined in site assessment reports previously submitted to the Waste Management Division. The site investigation included sampling three pre-existing monitoring wells, groundwater level surveys, indoor air screening, and a review of available information on the site and surrounding area. Site location and base maps are provided as Figures 1 and 2.

General Site Characterization

The North Main Exxon (site) is located at 226 North Main Street, immediately north of the St. Albans City line. The site is in a commercial and light industrial district along Main Street (US Route 7). Most of the development located on the side roads off of Main Street is limited to residences. The area to the west of the site consists of undeveloped agricultural fields and a railroad right of way. S.B. Collins purchased the property in 1982 from the Exxon Corporation. Figure 3 is a site map.

The site is located in the Champlain Valley province, at approximately 400 feet above sea level. Topography in the area slopes generally to the west, toward the undeveloped areas and eventually Lake Champlain, which is located approximately three miles west of the site. Stewart (1974) mapped the surficial materials in the area as lacustrine sands and gravels. The bedrock was mapped by Doll (1961) as the Morses Line Formation, a middle Ordovician calcareous shale.

During UST closures in 1999, soils surrounding the USTs were observed to be gravelly silty sands. Native undisturbed soils were not observed during the UST closures. At the time of the UST closures, groundwater levels measured in existing monitoring wells ranged from 13 to 14 feet below.

The nearest surface water feature is an unnamed intermittent stream, located about 600 feet west of the site. This stream is a tributary of Stevens Brook, located about 1400 feet west. Stevens Brook flows northward in the vicinity of the site, eventually draining into Lake Champlain in St. Albans Bay.

Potential receptors in the vicinity include the stream mentioned above, indoor air in the neighboring buildings, and utilities along Main Street. The area residences and businesses are served by municipal water and sewer.

Groundwater Elevations and Flow Direction

Groundwater levels were measured in the three site monitoring wells on December 9, 1999, and on January 25, 2000. Groundwater level data is summarized on Table 1. Depth to groundwater at the site is between 10 and 15 feet below grade. A water-table map for the January 25 data is provided on Figure 4, and illustrates a northwestward flow direction, under a relatively steep gradient of 7%. This relatively steep hydraulic gradient suggests that the water table is present within relatively fine-grained soils.

Groundwater Sampling and Analysis

The three existing monitoring wells were sampled on January 25, 2000. Samples were analyzed by ENDYNE, Inc., for volatile organic compounds (VOCs) by EPA Method 8260, and for total petroleum hydrocarbon (TPH) analysis by EPA Method 8015B. Quality Assurance/Quality Control (QA/QC) samples included a trip blank, a field blank, and a blind duplicate, collected from MW-3 and labeled MW-100 on the sample vials and the chain of custody. Copies of the field sampling data sheet and the chain of custody forms are enclosed.

Laboratory reports are enclosed, and the results are summarized on Table 2. Relatively high concentrations of petroleum-related VOCs were detected in MW-3. In MW-1, MTBE was detected at 4.5 ug/L, and 1,2-dichloroethane was detected at 3.2 ug/L. Neither MTBE nor 1,2-dichloroethane were detected in MW-3. No compounds were detected in MW-2. Vermont groundwater enforcement standards were exceeded in MW-3 for several compounds. The TPH analyses indicate 13.2 mg/L for MW-3, and below detection (0.4 mg/L) for MW-1 and MW-2.

Figure 4 includes benzene and MTBE concentrations detected in the site wells.

Potential Receptor Survey

On February 29, 2000, indoor air in the neighboring buildings was screened using a Photovac 2020 photoionization detector (PID) for the presence of petroleum vapors. Buildings screened included the Hungerford Insurance Agency immediately north of the site, and the Family Chiropractic office across Main Street from the site. The service station located across Main Street was not screened, because of the potential for interference from petroleum within the building. The actual North Main Exxon building was not screened during this event because the building is not currently in use and is boarded up. There was no answer at the martial arts academy immediately south of the site during the indoor air screening.

In neither of the two basements screened (the chiropractic office or the insurance office) were there any PID readings above background.

A brief visual survey of the intermittent streambed west of the site did not indicate impact to the stream. There are numerous subsurface utilities beneath the site and adjacent properties, although these utilities are believed to be much shallower than the surface of the water table

beneath the site.

Summary, Conclusions, and Recommendations

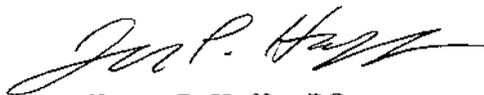
A preliminary site investigation at the North Main Exxon site in St. Albans was conducted in order to determine whether contamination observed in soils during the UST and piping closures in autumn 1999 have impacted groundwater beneath the site or sensitive receptors in the vicinity of the site. The site investigation included water level measurement and sampling in the three existing monitoring wells, an indoor air survey, and a visual inspection of a streambed located downgradient of the site. Water levels were obtained on two occasions, and indicate that the groundwater flow direction is to the northwest. Petroleum related compounds were detected in groundwater samples from two of the three wells, with concentrations exceeding enforcement standards in MW-3. There were no indications of impact to indoor air in either of the structures surveyed with a PID, or to the intermittent stream located downgradient of the site.

The relatively high concentrations of contamination detected in MW-3 indicate that there has been an impact to groundwater beneath the site. The extent of contamination has not been delineated. We therefore recommend the installation and sampling of four additional monitoring wells, the locations of which are included on Figure 4. One well is to be located immediately downgradient of the former waste-oil UST, to ascertain the impact to groundwater in this area. Three additional wells will be located along the western property line to delineate the downgradient contaminant plume. Since these locations are located on off-site property, their installation will be dependent upon obtaining landowner permission.

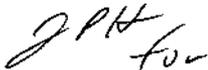
A cost estimate for additional well installations and groundwater monitoring is provided on Table 3. The total cost for this effort is estimated to be \$4,000, and will include a full round of groundwater monitoring using EPA Method 8021B.

The estimated time frame from your approval to submittal of the report is approximately eight weeks. If you have any questions or comments concerning this work plan or cost estimate, please do not hesitate to call.

Sincerely,
HOFFER CONSULTING INC.



Jefferson P. Hoffer, PG
Principal Hydrogeologist



Timothy F. Schmalz
Project Geologist

enc.

cc: Carl Ruprecht, S.B. Collins

TABLE 1
 Groundwater level data,
 North Main Exxon, St. Albans, Vermont, SMS Site # 99-2699.

DEPTH TO WATER (feet below TOC)			
<u>Well ID</u>	<u>Elev. of TOC (ft)</u>	<u>12/9/99</u>	<u>1/25/00</u>
MW-1	99.00	12.04	12.58
MW-2	98.62	11.72	12.33
MW-3	98.59	13.87	14.62

GROUNDWATER ELEVATIONS (feet)			
<u>WELL ID</u>	<u>Elev. of TOC (ft)</u>	<u>12/9/99</u>	<u>1/25/00</u>
MW-1	99.00	86.96	86.42
MW-2	98.62	86.90	86.29
MW-3	98.59	84.72	83.97

Notes:
 TOC = top of casing (PVC for monitoring wells)
 elevations are relative to NW corner (100.00 feet) of pump island closest to MW-2

Analyses performed by Endyme, Inc.
 VT GES = Vermont Primary Groundwater Enforcement Standard (Groundwater Protection Rule & Strategy, 11/15/97)
 Field Duplicate Collected from MW-3 labeled MW-100 on sample vial and chain-of-custody
 < 1.0 = less than a detection limit of 1.0 micrograms per liter

MTBE = methyl-tert-butyl-ether

NOTES:

WELL	ID	EPA 8015 B	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	1,2,4-TRIMETHYLBENZENE	1,2,3-TRIMETHYLBENZENE	NAPHTHALENE	PROPYLENBENZENE	CHLOROETHANE
MW-1		< 0.4	4.5	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 5.0	< 1.0	3.2
MW-2		< 0.4	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
MW-3		13.2	< 200	7390	1440	2200	7040	1930	611	518	187	< 100
MW-3 Duplicate		not tested	< 200	7910	1540	2250	7410	1990	628	516	204	< 100
Trip Blank		not tested	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
Field Blank		not tested	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
VTGES		-	40	5.0	1000	700	10000	5.0	4.0	20.0	-	5.0

VOCS DETECTED BY EPA METHOD 8260 (results in micrograms per liter)

TABLE 2

Groundwater sampling results for January 25, 2000,

North Main Exxon, St. Albans, Vermont, SMS Site # 99-2699.

TABLE 3

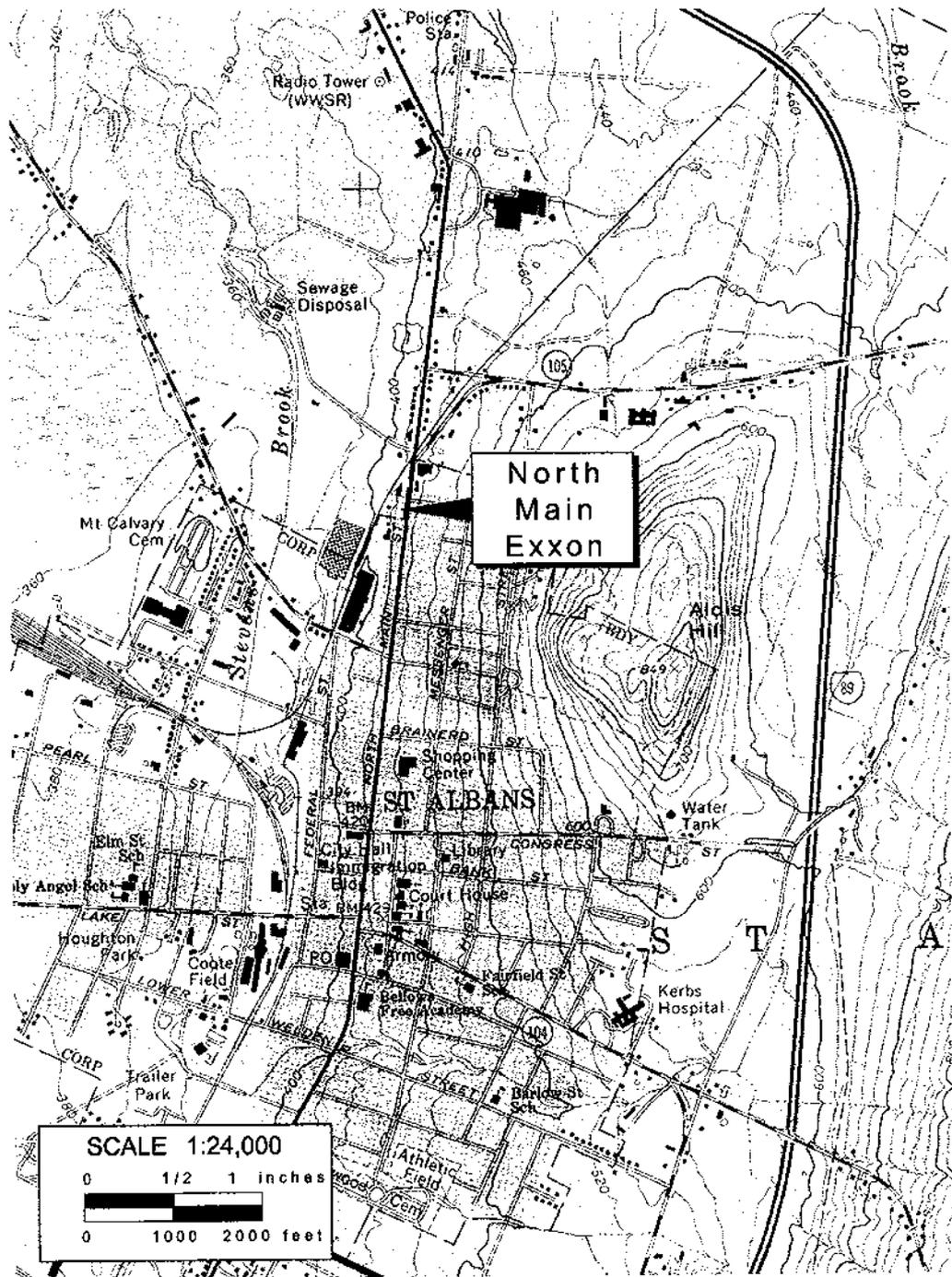
Cost estimate for installation of additional monitoring wells & groundwater monitoring,
North Main Exxon, St. Albans, Vermont, SMS Site #99-2699.

LABOR				
Task/Item	Staff	Hours	Rate	Amount
Project Management/Review	JPH	2	\$55	\$110.00
Dig-Safe, Landowner Permission, Planning	TFS	4	\$45	\$180.00
Monitoring Well Installations	TFS	10	\$45	\$450.00
Groundwater Sampling	TFS	8	\$45	\$360.00
Report Preparation	TFS	16	\$45	\$720.00
Figure Generation	CAD	2	\$40	\$70.00
Report Preparation/Review	JPH	2	\$55	\$110.00
<i>HCI Labor</i>				\$2,000.00

HCI EXPENSES			
Item	Quantity	Rate	Amount
Mileage (2 trips)	300	\$0.35	\$105.00
Survey Equipment Rental	1	\$35	\$35.00
PID Rental	1	\$75	\$75.00
<i>HCI Expense</i>			\$215.00

SUB-CONTRACTORS			
Contractor/Item	HCI Cost	Mark Up	Amount
ADAMS ENGINEERING			
- Mobilization	\$175.00	\$0.00	\$175.00
- Four 1.5-inch Monitoring Wells	\$1,200.00	\$0.00	\$1,200.00
ENDYNE LABORATORY			
- 8021B Analyses (7 MWs, TB, FB, DUP), 10 @ \$40/pe	\$400.00	\$0.00	\$400.00
<i>Sub-Contractor Expense</i>			\$1,775.00

ESTIMATED TOTAL **\$3,990.00**



Base from U.S. Geological Survey,
1:24,000;
St. Albans, VT, Photorevised 1987

FIGURE 1
 SITE LOCATION MAP, NORTH MAIN EXXON
 ST. ALBANS, VERMONT (SMS SITE #99-2699).



Base from Vermont Mapping Program
St. Albans City, Lakeview Terrace, Sheet
No. 106258, Series 1250, 1978

FIGURE 2
SITE VICINITY MAP, NORTH MAIN EXXON
ST. ALBANS, VERMONT (SMS SITE #99-2699).

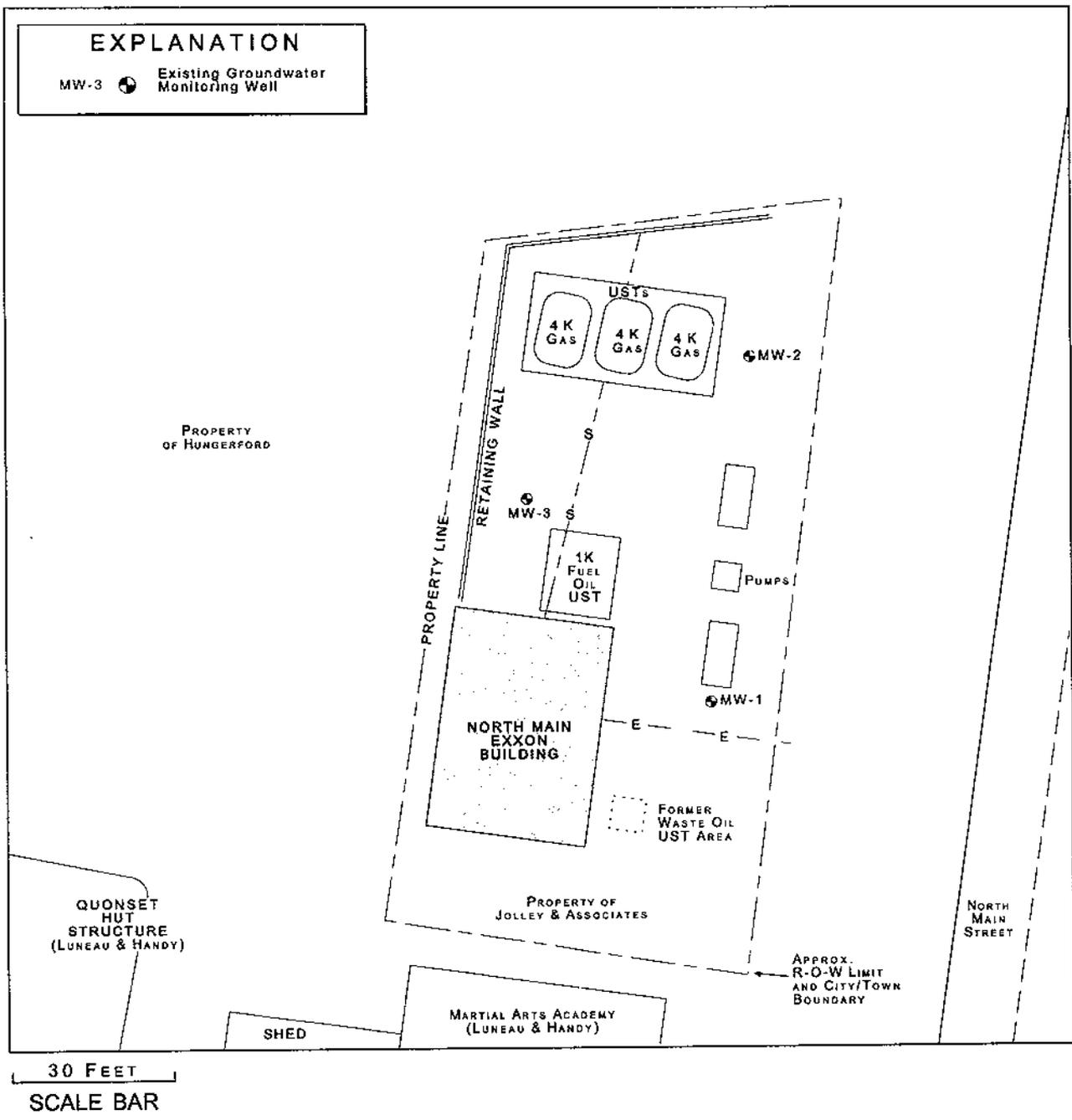


FIGURE 3
 SITE MAP, NORTH MAIN EXXON
 ST. ALBANS, VERMONT (SMS SITE #99-2699).

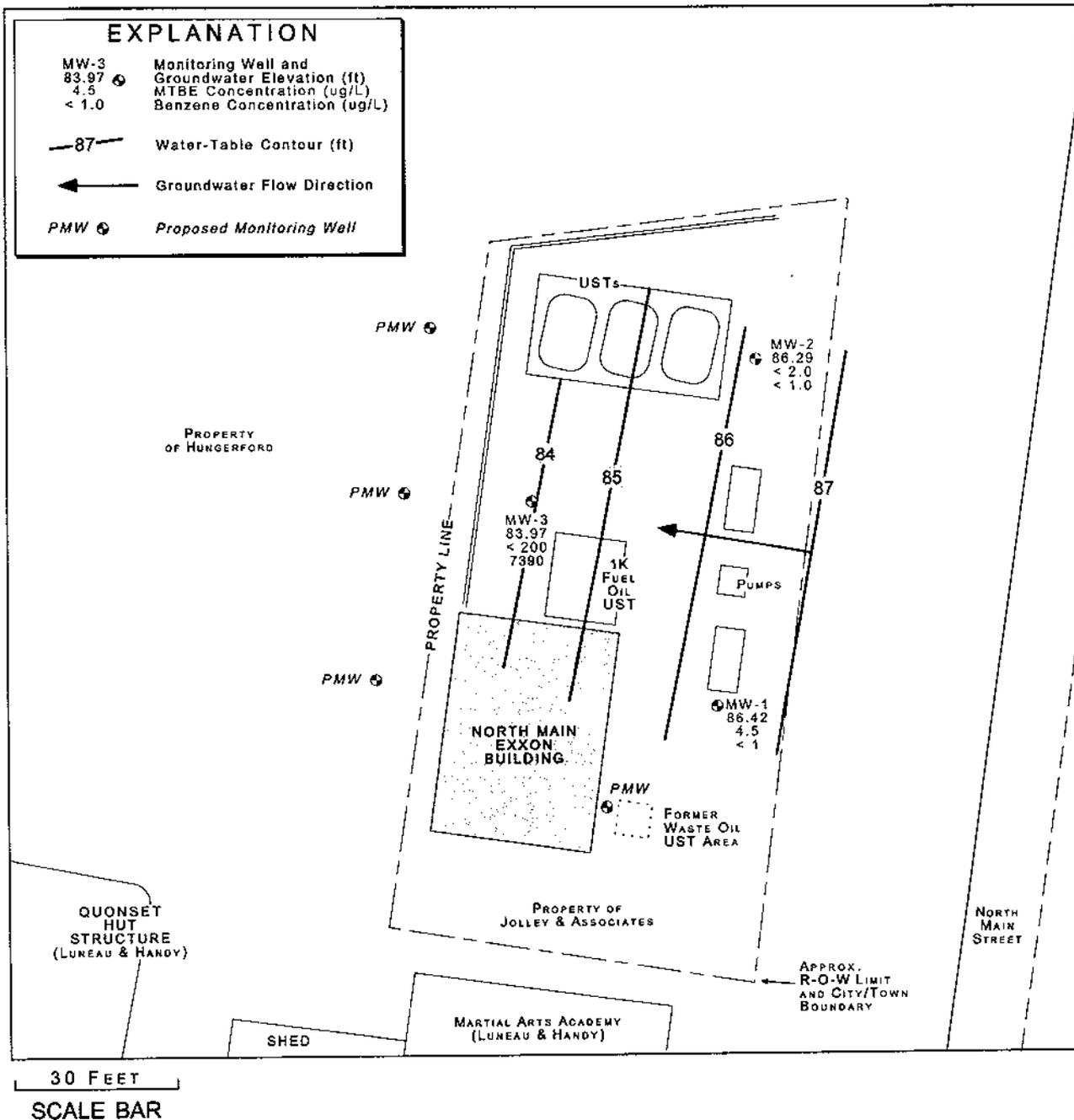
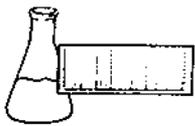


FIGURE 4
WATER-TABLE MAP AND BENZENE AND MTBE CONCENTRATIONS,
JANUARY 25, 2000
NORTH MAIN EXXON, ST. ALBANS, VERMONT (SMS SITE #99-2699)



LABORATORY REPORT

CLIENT: Hoffer Consulting Inc.
PROJECT: SBC/North Main Exxon
REPORT DATE: February 2, 2000

ORDER ID: 5776
DATE RECEIVED: January 25, 2000
SAMPLER: NI
ANALYST: 128

Ref. Number: 149944 Site: MW-01 Date Sampled: January 25, 2000 Time: 12:15 PM

<u>Parameter</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>	<u>Analysis Date</u>
TPH 8015 DRO	< 0.40	mg/L	SW 8015B	2/1/00

Ref. Number: 149945 Site: MW-02 Date Sampled: January 25, 2000 Time: 12:30 PM

<u>Parameter</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>	<u>Analysis Date</u>
TPH 8015 DRO	< 0.40	mg/L	SW 8015B	2/1/00

Ref. Number: 149946 Site: MW-03 Date Sampled: January 25, 2000 Time: 12:45 PM

<u>Parameter</u>	<u>Result</u>	<u>Unit</u>	<u>Method</u>	<u>Analysis Date</u>
TPH 8015 DRO	13.2	mg/L	SW 8015B	2/1/00



ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

CLIENT: Hoffer Consulting Inc.

ORDER ID: 5776

PROJECT: SBC/North Main Exxon

DATE RECEIVED: January 25, 2000

REPORT DATE: February 2, 2000

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. Different groups of analyses may be reported under separate cover.

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 was 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, unless otherwise noted.

Reviewed by,

Harry B. Locker, Ph.D.
Laboratory Director

enclosures



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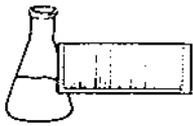
LABORATORY REPORT

SW 8260

CLIENT: Hoffer Consulting Inc.
PROJECT: SBC/North Main Exxon
SITE: MW-01
DATE RECEIVED: January 25, 2000
REPORT DATE: February 2, 2000
ANALYSIS DATE: January 28, 2000

ORDER ID: 5776
REFERENCE NUMBER: 149944
DATE SAMPLED: January 25, 2000
TIME SAMPLED: 12:15 PM
SAMPLER: NI
ANALYST: 725

<u>Parameter</u>	<u>Result</u> <u>ug/L</u>	<u>Parameter</u>	<u>Result</u> <u>ug/L</u>
Benzene	< 1.0	1,1-Dichloropropene	< 1.0
Bromobenzene	< 1.0	cis-1,3-Dichloropropene	< 1.0
Bromochloromethane	< 2.0	trans-1,3-Dichloropropene	< 1.0
Bromodichloromethane	< 1.0	Ethylbenzene	< 1.0
Bromoform	< 1.0	Hexachlorobutadiene	< 5.0
Bromomethane	< 5.0	Isopropylbenzene	< 1.0
n-Butylbenzene	< 1.0	p-Isopropyltoluene	< 1.0
sec-Butylbenzene	< 1.0	Methylene Chloride	< 5.0
tert-Butylbenzene	< 1.0	MTBE	4.5
Carbon Tetrachloride	< 1.0	Naphthalene	< 5.0
Chlorobenzene	< 1.0	n-Propylbenzene	< 1.0
Chloroethane	< 5.0	Styrene	< 1.0
Chloroform	< 1.0	1,1,1,2-Tetrachloroethane	< 2.0
Chloromethane	< 10.0	1,1,2,2-Tetrachloroethane	< 2.0
2-Chlorotoluene	< 1.0	Tetrachloroethene	< 1.0
4-Chlorotoluene	< 1.0	Toluene	< 1.0
Dibromochloromethane	< 1.0	1,2,3-Trichlorobenzene	< 2.0
1,2-Dibromo-3-Chloropropane	< 2.0	1,2,4-Trichlorobenzene	< 2.0
1,2-Dibromoethane	< 2.0	1,1,1-Trichloroethane	< 1.0
Dibromomethane	< 2.0	1,1,2-Trichloroethane	< 1.0
1,2-Dichlorobenzene	< 1.0	Trichloroethene	< 1.0
1,3-Dichlorobenzene	< 1.0	Trichlorofluoromethane	< 2.0
1,4-Dichlorobenzene	< 1.0	1,2,3-Trichloropropane	< 2.0
Dichlorodifluoromethane	< 10.0	1,2,4-Trimethylbenzene	< 1.0
1,1-Dichloroethane	< 1.0	1,3,5-Trimethylbenzene	< 1.0
1,2-Dichloroethane	3.2	Vinyl Chloride	< 5.0
1,1-Dichloroethene	< 1.0	Xylenes, Total	< 2.0
cis-1,2-Dichloroethene	< 1.0	Surrogate 1	103.0%
trans-1,2-Dichloroethene	< 1.0	Surrogate 2	102.0%
1,2-Dichloropropane	< 1.0	Surrogate 3	90.0%
1,3-Dichloropropane	< 1.0	UIP's	0.0%
2,2-Dichloropropane	< 1.0		



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LABORATORY REPORT

SW 8260

CLIENT: Hoffer Consulting Inc.
PROJECT: SBC/North Main Exxon
SITE: MW-02
DATE RECEIVED: January 25, 2000
REPORT DATE: February 2, 2000
ANALYSIS DATE: January 28, 2000

ORDER ID: 5776
REFERENCE NUMBER: 149945
DATE SAMPLED: January 25, 2000
TIME SAMPLED: 12:30 PM
SAMPLER: NI
ANALYST: 725

Parameter	Result ug/L	Parameter	Result ug/L
Benzene	< 1.0	1,1-Dichloropropene	< 1.0
Bromobenzene	< 1.0	cis-1,3-Dichloropropene	< 1.0
Bromochloromethane	< 2.0	trans-1,3-Dichloropropene	< 1.0
Bromodichloromethane	< 1.0	Ethylbenzene	< 1.0
Bromoform	< 1.0	Hexachlorobutadiene	< 5.0
Bromomethane	< 5.0	Isopropylbenzene	< 1.0
n-Butylbenzene	< 1.0	p-Isopropyltoluene	< 1.0
sec-Butylbenzene	< 1.0	Methylene Chloride	< 5.0
tert-Butylbenzene	< 1.0	MTBE	< 2.0
Carbon Tetrachloride	< 1.0	Naphthalene	< 5.0
Chlorobenzene	< 1.0	n-Propylbenzene	< 1.0
Chloroethane	< 5.0	Styrene	< 1.0
Chloroform	< 1.0	1,1,1,2-Tetrachloroethane	< 2.0
Chloromethane	< 10.0	1,1,2,2-Tetrachloroethane	< 2.0
2-Chlorotoluene	< 1.0	Tetrachloroethene	< 1.0
4-Chlorotoluene	< 1.0	Toluene	< 1.0
Dibromochloromethane	< 1.0	1,2,3-Trichlorobenzene	< 2.0
1,2-Dibromo-3-Chloropropane	< 2.0	1,2,4-Trichlorobenzene	< 2.0
1,2-Dibromoethane	< 2.0	1,1,1-Trichloroethane	< 1.0
Dibromomethane	< 2.0	1,1,2-Trichloroethane	< 1.0
1,2-Dichlorobenzene	< 1.0	Trichloroethene	< 1.0
1,3-Dichlorobenzene	< 1.0	Trichlorofluoromethane	< 2.0
1,4-Dichlorobenzene	< 1.0	1,2,3-Trichloropropane	< 2.0
Dichlorodifluoromethane	< 10.0	1,2,4-Trimethylbenzene	< 1.0
1,1-Dichloroethane	< 1.0	1,3,5-Trimethylbenzene	< 1.0
1,2-Dichloroethane	< 2.0	Vinyl Chloride	< 5.0
1,1-Dichloroethene	< 1.0	Xylenes, Total	< 2.0
cis-1,2-Dichloroethene	< 1.0	Surrogate 1	104.0%
trans-1,2-Dichloroethene	< 1.0	Surrogate 2	102.0%
1,2-Dichloropropane	< 1.0	Surrogate 3	91.0%
1,3-Dichloropropane	< 1.0	UIP's	0.0%
2,2-Dichloropropane	< 1.0		



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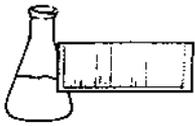
LABORATORY REPORT

SW 8260

CLIENT: Hoffer Consulting Inc.
PROJECT: SBC/North Main Exxon
SITE: MW-03
DATE RECEIVED: January 25, 2000
REPORT DATE: February 2, 2000
ANALYSIS DATE: January 31, 2000

ORDER ID: 5776
REFERENCE NUMBER: 149946
DATE SAMPLED: January 25, 2000
TIME SAMPLED: 12:45 PM
SAMPLER: NI
ANALYST: 725

<u>Parameter</u>	<u>Result</u> <u>ug/L</u>	<u>Parameter</u>	<u>Result</u> <u>ug/L</u>
Benzene	7,390.	1,1-Dichloropropene	< 100.
Bromobenzene	< 100.	cis-1,3-Dichloropropene	< 100.
Bromochloromethane	< 200.	trans-1,3-Dichloropropene	< 100.
Bromodichloromethane	< 100.	Ethylbenzene	2,200.
Bromoform	< 100.	Hexachlorobutadiene	< 500.
Bromomethane	< 500.	Isopropylbenzene	< 100.
n-Butylbenzene	< 100.	p-Isopropyltoluene	< 100.
sec-Butylbenzene	< 100.	Methylene Chloride	< 500.
tert-Butylbenzene	< 100.	MTBE	< 200.
Carbon Tetrachloride	< 100.	Naphthalene	518.
Chlorobenzene	< 100.	n-Propylbenzene	187.
Chloroethane	< 500.	Styrene	< 100.
Chloroform	< 100.	1,1,1,2-Tetrachloroethane	< 200.
Chloromethane	< 1,000.	1,1,2,2-Tetrachloroethane	< 200.
2-Chlorotoluene	< 100.	Tetrachloroethene	< 100.
4-Chlorotoluene	< 100.	Toluene	1,440.
Dibromochloromethane	< 100.	1,2,3-Trichlorobenzene	< 200.
1,2-Dibromo-3-Chloropropane	< 200.	1,2,4-Trichlorobenzene	< 200.
1,2-Dibromoethane	< 200.	1,1,1-Trichloroethane	< 100.
Dibromomethane	< 200.	1,1,2-Trichloroethane	< 100.
1,2-Dichlorobenzene	< 100.	Trichloroethene	< 100.
1,3-Dichlorobenzene	< 100.	Trichlorofluoromethane	< 200.
1,4-Dichlorobenzene	< 100.	1,2,3-Trichloropropane	< 200.
Dichlorodifluoromethane	< 1,000.	1,2,4-Trimethylbenzene	1,930.
1,1-Dichloroethane	< 100.	1,3,5-Trimethylbenzene	611.
1,2-Dichloroethane	< 100.	Vinyl Chloride	< 500.
1,1-Dichloroethene	< 100.	Xylenes, Total	7,040.
cis-1,2-Dichloroethene	< 100.	Surrogate 1	107.%
trans-1,2-Dichloroethene	< 100.	Surrogate 2	101.%
1,2-Dichloropropane	< 100.	Surrogate 3	100.%
1,3-Dichloropropane	< 100.	UIP's	> 10.
2,2-Dichloropropane	< 100.		



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LABORATORY REPORT

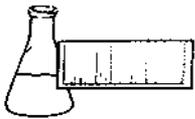
SW 8260

CLIENT: Hoffer Consulting Inc.
PROJECT: SBC/North Main Exxon
SITE: MW-100
DATE RECEIVED: January 25, 2000
REPORT DATE: February 2, 2000
ANALYSIS DATE: January 31, 2000

ORDER ID: 5776
REFERENCE NUMBER: 149947
DATE SAMPLED: January 25, 2000
TIME SAMPLED: 1:00 PM
SAMPLER: NI
ANALYST: 725

<u>Parameter</u>	<u>Result</u> <u>ug/L</u>
Benzene	7,910.
Bromobenzene	< 100.
Bromochloromethane	< 200.
Bromodichloromethane	< 100.
Bromoform	< 100.
Bromomethane	< 500.
n-Butylbenzene	< 100.
sec-Butylbenzene	< 100.
tert-Butylbenzene	< 100.
Carbon Tetrachloride	< 100.
Chlorobenzene	< 100.
Chloroethane	< 500.
Chloroform	< 100.
Chloromethane	< 1,000.
4-Chlorotoluene	< 100.
2-Chlorotoluene	< 100.
Dibromochloromethane	< 100.
1,2-Dibromo-3-Chloropropane	< 200.
1,2-Dibromoethane	< 200.
Dibromomethane	< 200.
1,2-Dichlorobenzene	< 100.
1,3-Dichlorobenzene	< 100.
1,4-Dichlorobenzene	< 100.
Dichlorodifluoromethane	< 1,000.
1,1-Dichloroethane	< 100.
1,2-Dichloroethane	< 100.
1,1-Dichloroethene	< 100.
cis-1,2-Dichloroethene	< 100.
trans-1,2-Dichloroethene	< 100.
1,2-Dichloropropane	< 100.
1,3-Dichloropropane	< 100.
2,2-Dichloropropane	< 100.

<u>Parameter</u>	<u>Result</u> <u>ug/L</u>
1,1-Dichloropropene	< 100.
cis-1,3-Dichloropropene	< 100.
trans-1,3-Dichloropropene	< 100.
Ethylbenzene	2,250.
Hexachlorobutadiene	< 500.
Isopropylbenzene	< 100.
p-Isopropyltoluene	< 100.
Methylene Chloride	< 500.
MTBE	< 200.
Naphthalene	516.
n-Propylbenzene	204.
Styrene	< 100.
1,1,1,2-Tetrachloroethane	< 200.
1,1,2,2-Tetrachloroethane	< 200.
Tetrachloroethene	< 100.
Toluene	1,540.
1,2,3-Trichlorobenzene	< 200.
1,2,4-Trichlorobenzene	< 200.
1,1,1-Trichloroethane	< 100.
1,1,2-Trichloroethane	< 100.
Trichloroethene	< 100.
Trichlorofluoromethane	< 200.
1,2,3-Trichloropropane	< 200.
1,2,4-Trimethylbenzene	1,990.
1,3,5-Trimethylbenzene	628.
Vinyl Chloride	< 500.
Xylenes, Total	7,410.
Surrogate 1	115.%
Surrogate 2	103.%
Surrogate 3	102.%
UIP's	> 10.



32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

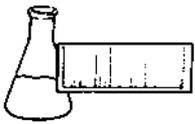
LABORATORY REPORT

SW 8260

CLIENT: Hoffer Consulting Inc.
PROJECT: SBC/North Main Exxon
SITE: FB-01
DATE RECEIVED: January 25, 2000
REPORT DATE: February 2, 2000
ANALYSIS DATE: January 28, 2000

ORDER ID: 5776
REFERENCE NUMBER: 149948
DATE SAMPLED: January 25, 2000
TIME SAMPLED: 1:05 PM
SAMPLER: NI
ANALYST: 725

Parameter	Result ug/L	Parameter	Result ug/L
Benzene	< 1.0	1,1-Dichloropropene	< 1.0
Bromobenzene	< 1.0	cis-1,3-Dichloropropene	< 1.0
Bromochloromethane	< 2.0	trans-1,3-Dichloropropene	< 1.0
Bromodichloromethane	< 1.0	Ethylbenzene	< 1.0
Bromoform	< 1.0	Hexachlorobutadiene	< 5.0
Bromomethane	< 5.0	Isopropylbenzene	< 1.0
n-Butylbenzene	< 1.0	p-Isopropyltoluene	< 1.0
sec-Butylbenzene	< 1.0	Methylene Chloride	< 5.0
tert-Butylbenzene	< 1.0	MTBE	< 2.0
Carbon Tetrachloride	< 1.0	Naphthalene	< 5.0
Chlorobenzene	< 1.0	n-Propylbenzene	< 1.0
Chloroethane	< 5.0	Styrene	< 1.0
Chloroform	< 1.0	1,1,1,2-Tetrachloroethane	< 2.0
Chloromethane	< 10.0	1,1,2,2-Tetrachloroethane	< 2.0
4-Chlorotoluene	< 1.0	Tetrachloroethene	< 1.0
2-Chlorotoluene	< 1.0	Toluene	< 1.0
Dibromochloromethane	< 1.0	1,2,3-Trichlorobenzene	< 2.0
1,2-Dibromo-3-Chloropropane	< 2.0	1,2,4-Trichlorobenzene	< 2.0
1,2-Dibromoethane	< 2.0	1,1,1-Trichloroethane	< 1.0
Dibromomethane	< 2.0	1,1,2-Trichloroethane	< 1.0
1,2-Dichlorobenzene	< 1.0	Trichloroethene	< 1.0
1,3-Dichlorobenzene	< 1.0	Trichlorofluoromethane	< 2.0
1,4-Dichlorobenzene	< 1.0	1,2,3-Trichloropropane	< 2.0
Dichlorodifluoromethane	< 10.0	1,2,4-Trimethylbenzene	< 1.0
1,1-Dichloroethane	< 1.0	1,3,5-Trimethylbenzene	< 1.0
1,2-Dichloroethane	< 1.0	Vinyl Chloride	< 5.0
1,1-Dichloroethene	< 1.0	Xylenes, Total	< 2.0
cis-1,2-Dichloroethene	< 1.0	Surrogate 1	104.0%
trans-1,2-Dichloroethene	< 1.0	Surrogate 2	100.0%
1,2-Dichloropropane	< 1.0	Surrogate 3	90.0%
1,3-Dichloropropane	< 1.0	UIP's	0.
2,2-Dichloropropane	< 1.0		



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LABORATORY REPORT

SW 8260

CLIENT: Hoffer Consulting Inc.
PROJECT: SBC/North Main Exxon
SITE: TB-01
DATE RECEIVED: January 25, 2000
REPORT DATE: February 2, 2000
ANALYSIS DATE: January 28, 2000

ORDER ID: 5776
REFERENCE NUMBER: 149949
DATE SAMPLED: January 25, 2000
TIME SAMPLED: 9:00 AM
SAMPLER: NI
ANALYST: 725

<u>Parameter</u>	<u>Result</u> <u>ug/L</u>	<u>Parameter</u>	<u>Result</u> <u>ug/L</u>
Benzene	< 1.0	1,1-Dichloropropene	< 1.0
Bromobenzene	< 1.0	cis-1,3-Dichloropropene	< 1.0
Bromochloromethane	< 2.0	trans-1,3-Dichloropropene	< 1.0
Bromodichloromethane	< 1.0	Ethylbenzene	< 1.0
Bromoform	< 1.0	Hexachlorobutadiene	< 5.0
Bromomethane	< 5.0	Isopropylbenzene	< 1.0
n-Butylbenzene	< 1.0	p-Isopropyltoluene	< 1.0
sec-Butylbenzene	< 1.0	Methylene Chloride	< 5.0
tert-Butylbenzene	< 1.0	MTBE	< 2.0
Carbon Tetrachloride	< 1.0	Naphthalene	< 5.0
Chlorobenzene	< 1.0	n-Propylbenzene	< 1.0
Chloroethane	< 5.0	Styrene	< 1.0
Chloroform	< 1.0	1,1,1,2-Tetrachloroethane	< 2.0
Chloromethane	< 10.0	1,1,2,2-Tetrachloroethane	< 2.0
4-Chlorotoluene	< 1.0	Tetrachloroethene	< 1.0
2-Chlorotoluene	< 1.0	Toluene	< 1.0
Dibromochloromethane	< 1.0	1,2,3-Trichlorobenzene	< 2.0
1,2-Dibromo-3-Chloropropane	< 2.0	1,2,4-Trichlorobenzene	< 2.0
1,2-Dibromoethane	< 2.0	1,1,1-Trichloroethane	< 1.0
Dibromomethane	< 2.0	1,1,2-Trichloroethane	< 1.0
1,2-Dichlorobenzene	< 1.0	Trichloroethene	< 1.0
1,3-Dichlorobenzene	< 1.0	Trichlorofluoromethane	< 2.0
1,4-Dichlorobenzene	< 1.0	1,2,3-Trichloropropane	< 2.0
Dichlorodifluoromethane	< 10.0	1,2,4-Trimethylbenzene	< 1.0
1,1-Dichloroethane	< 1.0	1,3,5-Trimethylbenzene	< 1.0
1,2-Dichloroethane	< 1.0	Vinyl Chloride	< 5.0
1,1-Dichloroethene	< 1.0	Xylenes, Total	< 2.0
cis-1,2-Dichloroethene	< 1.0	Surrogate 1	110.0%
trans-1,2-Dichloroethene	< 1.0	Surrogate 2	100.0%
1,2-Dichloropropane	< 1.0	Surrogate 3	89.0%
1,3-Dichloropropane	< 1.0	UIP's	0.
2,2-Dichloropropane	< 1.0		

CHAIN-OF-CUSTODY-RECORD

ENDYNE, INC.
 160 James Brown Drive
 Williston, Vermont 05495
 (802) 879-4333

CC RESULTS TO HCI

Project Name: **SB COLLINS - NORTH MAIN EXON**
 Reporting Address: **HOFFER CONSULTING, INC. 641 COMSTOCK RD UNIT 2 BERRING, VT 05602**
 Billing Address: **CARL RUPRECHT/SB COLLINS 54 LOWER WELDEN ST ST. ALBANS, VT 05470 RESULTS ORIG**

Endyne Order ID: **5776**
 (Lab Use Only)

Company: **HOFFER CONSULTING, INC.**
 Contact Name/Phone #: **05602**

Sampler Name: _____
 Phone #: _____

Ref # (Lab Use Only)	Sample Identification	Matrix	C K B	C O M P	Date/Time	Sample Containers		Field Results/Remarks	Analysis Required	Sample Preservation	Rush
						No.	Type/Size				
149944	MW-01	GW			1/25/0 1215	2	GLASS 40		8260		
149945	MW-02				1/25 1215	2			8015 DR0		
149946	MW-03				1/25 1230	2			8060		
149947	MW-100				1230	2			8015 DR0		
149948	FA-01				1245	2			8260		
149949	TB-01				1245	2			8015 DR0		
					1300	2			8260		
					1305	2			8260		
					0900	2			8260		

Relinquished by: **Quinn Y. P. Ricci** Date/Time: **1/25/00 1:26**

Received by: _____ Date/Time: _____

New York State Project: Yes No Requested Analyses

Requested Analyses	Received by:	Date/Time
1 pH	11	Total Solids
2 Chloride	12	TSS
3 Ammonia N	13	TDS
4 Nitrite N	14	Turbidity
5 Nitrate N	15	Conductivity
6 TKN	16	Sulfate
7 Total P	17	Coliform (Specify)
8 Total Diss. P	18	COD
9 BOD	19	8021B
10 Alkalinity	20	8010/8020
21	21	1664 TPH/FOG
22	22	8015 GRO
23	23	8015 DRO
24	24	8260/8260B
25	25	8270 B/N or Acid
26	26	8270 PAH
27	27	PP13 Metals
28	28	RCRA8 Metals
29	29	
30	30	
31	Metals (As, Total, Diss.) Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Si, Sr, Ti, Tl, V, Zn	
32	TCCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)	
33	33	
34	Other	

