

Excavation Report  
(899 Tank Brown)



**AGASSIZ**  
**Environmental/Geotechnical**

FAX TRANSMITTAL

DATE: 05/02/2001  
TO: John Vigna  
COMPANY: MPCA  
PHONE:  
FAX NUMBER: 507-537-6001  
FROM: Jason Coyle

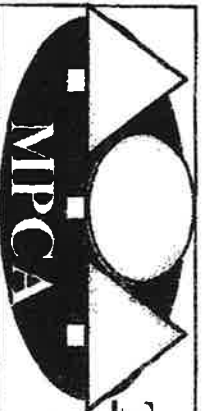
Number of Pages, Including Cover Sheet: many

John,

Please find attached the excavation report for Union Coop Oil. This is the info I was able to scratch up from my office. There should be more info in the file at the Chisago City office. If you need any additional information, please free to contact me at 320-759-6535.

Thanks,  
Jason Coyle

933 Highway 29 North • P.O. Box 847  
Alexandria, Minnesota  
Phone: 320-759-6535 • Fax: 320-759-6544  
e-mail: [agassiz@rea-ajp.com](mailto:agassiz@rea-ajp.com)  
[www.agassizenvironmental.com](http://www.agassizenvironmental.com)



**Tanks and Emergency Response Section**  
**Minnesota Pollution Control Agency**

## **EXCAVATION REPORT WORKSHEET FOR PETROLEUM RELEASE SITES**

Fact Sheet #3.7

April 1996

Complete the information below and submit to the Minnesota Pollution Control Agency (MPCA) Tanks and Emergency Response Section to document excavation and treatment of petroleum contaminated soil. Conduct excavations in accordance with "Excavation of Petroleum Contaminated Soil" (fact sheet #3.6). Please attach any available preliminary site investigation reports to this excavation report.

Attach additional pages if necessary. Please type or print clearly.

The excavation reporting deadline is 10 months from the date of receipt of the standard letter. A shorter deadline may be established by MPCA staff for high priority sites.

### **PART I: BACKGROUND**

#### **A. Site: Union Coop Oil Company**

Street: 100 Main Street  
City, Zip: Hector, MN  
County: Renville

MPCA Site ID#: LEAK00000068

#### **B. Tank Owner/Operator:**

Union Coop Oil Company  
Mailing Address:

Street/Box: 100 Main Street  
City, Zip: Hector, MN  
Telephone: 320-848-6288

#### **C. Excavating Contractor:**

Petro Tank Services  
Contact: Dana Nelson  
Telephone:  
Tank Contractor Certification Number:  
0013

#### **D. Consultant:**

Agassiz Environmental Systems, Inc.  
Contact: Jason Coyle  
Street/Box: 29417 Isabel Street  
City, Zip: Chisago City, MN  
Telephone: 651-257-5545

#### **E. Others on-site during site work (e.g., fire marshal, local officials, MPCA staff, etc.):**

Note: If person other than tank owner and/or operator is conducting the cleanup, provide name, address, and relationship to site on a separate attached sheet.

**PART II: DATES**

A. Date release reported to MPCA: **3/25/1981**

B. Dates site work performed (tanks removed, soil excavation, soil borings, etc.):

Work Performed Date

Tanks removed 8-20-99. For other work please see MPCA 8-20-99

project file for Leak # 68

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**PART III: SITE AND RELEASE INFORMATION**

A. Describe the land use and pertinent geographic features within 1000 feet of the site.  
(i.e. residential property, industrial, wetlands, etc.)

The subject Property lies within the downtown area of Hector, MN. The area consists of both residential and commercial property. There are no wetlands, bodies of water, or drinking water wells within 1000 feet of the site.

**Table 1.**

B. Provide the following information for all tanks at the site at the time of the release:

Tank #	UST or AST	Capacity (gallons)	Contents (product type)	Age	Status*	Condition of Tank
001	UST	6000	Gasoline		Removed 8/17/99	Good
002	UST	6000	Gasoline		Removed 8/17/99	Good
003	UST	1000	Diesel		Removed 8/17/99	Poor

\*Indicate: removed (date), abandoned in place (date), or currently used

Notes:

All tanks have now been removed from subject property.

- C. Describe the status of the other components of the tank system(s), (i.e., piping and dispensers) for those tanks listed above.  
**All components of the tank system were removed.**

- D. Identify and describe the source or suspected source(s) of the release.

**The source of the release was the tanks. The gasoline tanks before the STIP3's that were removed, released product as well as the bare steel, diesel tank that removed 8-17-99.**

- E. What was the volume of the release? (if known): \_\_\_\_\_ gallons

- F. When did the release occur? (if known): \_\_\_\_\_

- G. Describe source of on-site drinking water.

**The city of Hector supplies water to all businesses and residences within the city limits.**

#### **PART IV: EXCAVATION INFORMATION**

- A. Dimensions of excavation: Excavation #1 Length 25 Width 22 Depth 10  
Excavation #2 Length 15 Width 11 Depth 7

- B. Original tank backfill material (sand, gravel, etc.): Gravel

- C. Native soil type (clay, sand, etc.): Clay

- D. Quantity of contaminated soil removed for treatment (cubic yards): None

[Note: If more than 150 cubic yards removed, please attach copy of written approval from MPCA.]

- E. Were new tanks installed at the site? (yes/no) If yes, how much soil was excavated to accommodate the installation of the new tanks?  
\_\_\_\_\_

- F. Was ground water encountered or was there evidence of a seasonally high ground water table? (yes/no) At what depth? 7' (Only in excavation #1)

- G. If ground water was not encountered during the excavation, what is the expected depth of ground water? The water level in Excavation #2 is very likely to be the same as in Excavation #1 (7'). In Quarterly groundwater monitoring of the site, the groundwater was usually in the range of 6' to 8' below ground level.

H. If a soil boring was required (see fact sheet #3.6 "Excavation of Petroleum Contaminated Soil," Part VI Additional Investigation) describe the soil screening and analytical results. Attach the boring logs and laboratory results to this report.

I. If no soil boring was required, explain.

**No soil borings have been completed yet. Agassiz will place borings around the diesel UST basin.**

J. If ground water was encountered or if a soil boring was conducted, was there evidence of ground water contamination? **(Yes/no) In excavation 1 only.** Describe this evidence of contamination, e.g., free product (specify thickness), product sheen, ground water in contact with petroleum contaminated soil, water analytical results, etc.

[NOTE: If free product was observed, contact MPCA staff immediately as outlined in fact sheet #3.3 "Free Product: Evaluation and Recovery"1].

**No free product was noted in water, although a slight sheen was noticed (excavation #1 only). A petroleum odor was also noticed emitting from the excavation.**

K. Was bedrock encountered in the excavation? **(yes/no)** At what depth?

L. Were other unique conditions associated with this site? **(yes/no)** If so, explain.

Per a MPCA letter dated June 30, 1999 from Mr. Brian Livingston and Mr. John Vigna, the intent, in conjunction with the tank removal, was to remove contaminated soils. Due to circumstances with a lightpole, its power supply, and city utilities on the east end of the property, the contaminated soils were not removed. None of the soils in the excavation appeared to be "petroleum saturated."

#### PART V: SAMPLING INFORMATION

A. Briefly describe the field screening methods used to distinguish contaminated from uncontaminated soil:

**Soil field screening was performed in compliance with MPCA Fact Sheet #3.22 using a Photoionization Detector (PID). Note that all soils screened showed some level above detectable limits of petroleum hydrocarbons.**

B. List all soil vapor headspace analysis results. Indicate all sampling locations using sample codes (with sampling depths in parentheses), e.g. R-1 (2 feet), R-2 (10 feet), etc. "R" stands for "removed." Samples collected at different depths at the same location should be labeled

R-1A (2 feet), R-1B (4 feet), R-1C (6 feet), etc. If the sample was collected from the sidewall or bottom after excavation was complete, label it S-1 (for sidewall) or B-1 (for "bottom"). Be sure the sample codes correspond with the site map required in part VI, below.

Sample Code	Soil Type	Reading ppm	Sample Code	Soil Type	Reading ppm
S-1(9')-N	CLAY	160	S-5(7')-N	CLAY	131
S-2(9')-E	CLAY	489	S-6(7')-E	CLAY	132
S-3(9')-S	CLAY	150	S-7(7')-S	CLAY	18
S-4(9')-W	CLAY	182	S-8(7')-W	CLAY	122
B1-1(12')-W	CLAY	14	B2-3(8')	CLAY	178
B1-2(12')-E	CLAY	7			

C. Briefly describe the soil analytical sampling and handling procedures used:

Soil Samples were submitted for laboratory analysis of Benzene, Toluene, Ethyl Benzene, Xylenes (BTEX), and Total Hydrocarbons as GRO in excavation #1, and Total Hydrocarbons as DRO in excavation #2, via MPCA Facts Sheet #3.22.

D. List below all soil sample analytical results from bottom and sidewall samples (i.e., soils left in place when excavation is complete). Code the samples with sampling depths in parentheses as follows: sidewall samples S-1 (8 feet), S-2 (4 feet), etc.; bottom samples B-1 (13 feet), B-2 (14 feet), etc. Be sure the sample codes correspond to the site map required in part VI. Do not include analyses from the stockpiled soils.

Sample Code	GRO/ DRO	Benzene ppm	Ethyl-benzene ppm	Toluene ppm	Xylene ppm	MTBE ppm	Lead ppm
S-1(9')-N	1790	7.67	32.5	10.2	144	25.7	N/T
S-2(9')-E	1980	1.74	27.7	4.44	119	4.40	N/T
S-3(9')-S	2230	10.9	39.8	29.8	194	43.8	N/T
S-4(9')-W	4120	14.0	79.9	195	387	58.3	N/T
S-5(7')-N	5080						
S-6(7')-E	1870						

S-7(7')-S      9520

S-8(7')-W      BDL

NOTE: ATTACH COPIES OF LABORATORY REPORTS AND CHAIN OF CUSTODY FORMS.



**PART VI: FIGURES**

Attach the following figures to this report:

1. Site location map.
2. Site map(s) drawn to scale illustrating the following:
  - a. Location (or former location) of all present and former tanks, lines, and dispensers;
  - b. Location of other structures (buildings, canopies, etc.);
  - c. Adjacent city, township, or county roadways;
  - d. Final extent and depth of excavation;
  - e. Location of soil screening samples (e.g. R-1), soil analytical samples (e.g., S-1 or B-1), (e.g. SB-1). Also, attach all boring logs.
  - f. North arrow, bar scale and map legend.
  - g. Provide location of any on-site water wells. If on-site water wells exist please provide well logs and/or construction diagrams.

**PART VII: SUMMARY**

Briefly summarize evidence indicating whether additional investigation is necessary at the site, as discussed in parts VI and VII of "Excavation of Petroleum Contaminated Soil" (fact sheet #3,6). If no further action is recommended, the MPCA staff will review this report following notification of soil treatment.

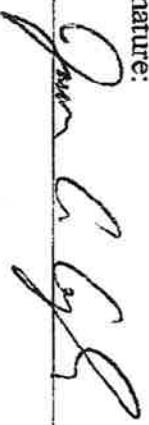
**Prior to removal Agassiz was not aware of the Diesel UST on site. The lab results show that a release has occurred from this UST and Agassiz feels it is necessary to further investigate around this tank to further delineate the contamination.**

**PART VIII: SOIL TREATMENT INFORMATION**

- A. Soil treatment method used (thermal, land application, composting, other). If you choose "other" specify treatment method: \_\_\_\_\_
- B. Location of treatment site/facility: \_\_\_\_\_
- C. Date MPCA approved soil treatment (if thermal treatment was used after May 1, 1991, indicate date that the MPCA permitted thermal treatment facility agreed to accept soil):  
\_\_\_\_\_
- D. Identify the location of stockpiled contaminated soil:  
\_\_\_\_\_

**PART IX: CONSULTANT (OR OTHER) PREPARING THIS REPORT**

*By signing this document, I/we acknowledge that we are submitting this document on behalf of and as agents of the responsible person or volunteer for this leaksite. I/we acknowledge that if information in this document is inaccurate or incomplete, it will delay the completion of remediation and may harm the environment and may result in reduction of reimbursement awards. In addition, I/we acknowledge on behalf of the responsible person or volunteer for this leaksite that if this document is determined to contain a false material statement, representation, or certification, or if it omits material information, the responsible person or volunteer may be found to be in violation of Minn. Stat. § 115.075 (1994) or Minn. Rules 7000.0300 (Duty of Candor), and that the responsible person or volunteer may be liable for civil penalties.*

Name and Title:	Signature:	Date signed:
Jason C. Coyle Environmental Geologist Project Manager		<del>3</del> 20 00 4 1 1
_____	_____	____/____/____
_____	_____	____/____/____
_____	_____	____/____/____

Company and mailing address: Agassiz Environmental Systems, Inc.  
29417 Isabel Street  
Chicago City, MN 55013  
Phone: 651-257-5545  
Fax: 651-257-1661

If additional investigation is not required at the site, please mail this form and all necessary attachments to:

Denise Oakes  
Minnesota Pollution Control Agency  
2116 Campus Dr. SE  
Rochester, MN 55904

If additional investigation is required at the site, include this form as an appendix to the "Remedial Investigation Report Form." Excavation reports indicating a limited site investigation (LSI) is necessary will not be reviewed by MPCA staff until the LSI has been completed.

Upon request, this document can be made available in other formats, including Braille, large print and audio tape. TTY users call 612/282-5332 or 1-800-657-3864 (voice/TTY).

Printed on recycled paper containing at least 10 percent fibers from paper recycled by consumers.

MIDWEST ANALYTICAL SERVICES

330 SO. CLEVELAND ST.  
P.O. BOX 349  
CAMBRIDGE, MN 55008  
LAB (612) 689-2175  
METRO (612) 444-9270  
FAX (612) 689-3660



205 WEST 2ND STREET  
SUITE 105  
DULUTH, MN 55802  
LAB (218) 722-9884  
FAX (218) 722-9964

August 31, 1999

Agassiz Environmental Systems, Inc.  
29385 Isabel Street  
Chicago City, MN 55013

**Chain of Custody**

Project ID: 4002-Hector/Union Co-op Oil

Chain of Custody: 28795

Date Received: 8/20/99 9:44:47 AM by Kris Harper

**Sample Information**

SampleID	Description	Date	Matrix
47370	SW-1-N	8/18/99	Soil
47371	SW-4-W	8/18/99	Soil
47372	SW-2-E	8/18/99	Soil
47373	SW-3-S	8/18/99	Soil
47374	SW-6-N	8/18/99	Soil
47375	SW-8-W	8/18/99	Soil
47376	SW-5-E	8/18/99	Soil
47377	SW-7-S	8/18/99	Soil

Analytical results are listed on the following page(s).

Reviewed By

*Carrie James 8-31-99*

Carrie James  
Organic Chemist

MIDWEST ANALYTICAL SERVICES

August 31, 1999

Page 2

COC 28795

Date Analyzed: 8/30/99

Parameter:	MTBE (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylenes (mg/kg)	Total Hydrocarbons as		Percent Moisture (%)
						GRO (mg/kg)	DRO (mg/kg)	
MDL:	0.500	0.050	0.050	0.050	0.150	40.0	10.0	
47370 SW-1-N	25.7	7.67	10.2	32.5	144	1790		22.2
47371 SW-4-W	4.40	1.74	4.44	27.7	119	1980		27.8
47372 SW-2-E	43.8	10.9	29.8	39.8	194	2230		24.5
47373 SW-3-S	58.3	14.0	195	79.9	387	4120		17.7
47374 SW-6-N							5080	7.2
47375 SW-8-W							1870	17.9
47376 SW-5-E							9520	15.7
47377 SW-7-S							BDL	23.3

BDL = Below Detection Limit, MDL = Method Detection Limit



MIDWEST ANALYTICAL SERVICES

330 SO. CLEVELAND ST.  
P.O. BOX 349  
CAMBRIDGE, MN 55008  
LAB (612) 689-2175  
FAX (612) 689-3660

# CHAIN OF CUSTODY RECORD

AND

## REQUEST FOR ANALYSIS

(Instructions on Back of Form)

NO 28795

DULUTH OFFICE:

205 WEST 2ND STREET  
DULUTH, MN 55802  
PHONE (218) 722-9884  
FAX (218) 722-8964

Copy to: Agassiz Attn Jason

CLIENT: Union Coop Oil		SAMPLER NAME: Jason Coyle		SHADED AREAS FOR LABORATORY USE ONLY																																													
PROJECT I.D.: 4002 - Hector		SAMPLER SIGNATURE: Jason Coyle																																															
REPORTS TO BE SENT TO: Union Coop Oil - Larry		REMARKS:		<table border="1"> <tr> <th colspan="15">PRESERVATIVE</th> </tr> <tr> <th>HCl</th> <th>HNO<sub>3</sub></th> <th>H<sub>2</sub>SO<sub>4</sub></th> <th>ICE</th> <th>OTHER</th> <th colspan="11"></th> </tr> </table>															PRESERVATIVE															HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	ICE	OTHER											
PRESERVATIVE																																																	
HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	ICE	OTHER																																													
NO. OF CONTAINERS	COMP.	GRAB	DATE	TIME	MATRIX			SAMPLE IDENTIFICATION			GRO (Includes BTEX)	DRO	BTEX	VOC (MMA65)	PH	Pb (DIS. OR TOTAL)	PCRA & METALS	BOD OR CBOD	TS6	FOOL OR TOOL	MIBK	MIBK/THF																											
					WATER	SOIL	OTHER	SAMPLE	SAMPLE NO.	LABORATORY ID. NO.													HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	ICE	OTHER																						
2	X	X	8-18	9:50	X			SW-1-N											X	X					X	X																							
2	X	X	8-18	9:53	X			SW-4-N											X	X					X	X																							
2	X	X	8-18	9:57	X			SW-7-E											X	X					X	X																							
2	X	X	8-18	10:00	X			SW-3-S											X	X					X	X																							
2	X	X	8-18	10:45	X			SW-1-N		X										X					X																								
2	X	X	8-18	10:48	X			SW-9-W		X										X					X																								
2	X	X	8-18	11:50	X			SW-5-E		X										X					X																								
2	X	X	8-18	11:51	X			SW-7-S		X										X					X																								
Relinquished by: (Signature) Jason Coyle		Date / Time 8-18/11:00		Received by: (Signature) Jason Coyle		Date / Time 8-18/11:00		Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Date / Time		Received by: (Signature)		Date / Time		Received by: (Signature)		CHECK HERE FOR DRINKING WATER DETECTION LIMITS <input type="checkbox"/>																											
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Date / Time		Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Date / Time		Received by: (Signature)		Date / Time		Received by: (Signature)		TURNAROUND TIME REQUIRED: <input type="checkbox"/> NORMAL <input type="checkbox"/> RUSH																											
Relinquished by: (Signature) Jason Coyle		Date / Time 8-19/9:44		Received by: (Signature) Jason Coyle		Date / Time 8-19/9:44		Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Date / Time		Received by: (Signature)		Date / Time		Received by: (Signature)		DATE REQUIRED:																											

EXCAVATION

Dimension of excavation: 21' X 25' X 10' 11' X 15' X 7'

Tank Backfill: Clay Native Soil: Clay

Quantity of Contaminated Soil: \_\_\_\_\_

Action for contaminated Soil: \_\_\_\_\_

Ground Water Encountered: yes Depth: 10' ~~8~~ 7'

G.W. Contamination: yes

Bedrock Encountered: No

Unique Conditions: \_\_\_\_\_

Summary of Site: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PREVIOUS WORK FROM

Consultant or Contractor: Agassiz Environmental

Name: \_\_\_\_\_ Phone: 651-257-5545

Address: 29417 Isabel St.

Description of Work Performed: GW Monitoring - Quarterly

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

EXCAVATION REPORT FORM

Contractor: Petro Tank Services

Certification # (company & individual): \_\_\_\_\_

Address: \_\_\_\_\_

Phone #: \_\_\_\_\_ MPCA Leak #: 68 Who Reported: \_\_\_\_\_

P.M. \_\_\_\_\_ Date & Time Reported: \_\_\_\_\_

\_\_\_\_\_

Site Address: Main Street Haverhill MA  
Other: \_\_\_\_\_

**TANK INFORMATION**

(TANK #1)

Capacity & Size: 6000 gal  
Type: STIP3 Age: 4 years  
Condition: Good  
Product History: Garage  
Quantity of Release: \_\_\_\_\_  
Cause of Release: \_\_\_\_\_

(TANK #2)

Capacity & Size: 6000 gal  
Type: STIP3 Age: 4 years  
Condition: Good  
Product History: Garage  
Quantity of Release: \_\_\_\_\_  
Cause of Release: \_\_\_\_\_

(TANK #3)

Capacity & Size: 1000 gal  
Type: Enc Steel Age: N/A  
Condition: Poor  
Product History: Diesel  
Quantity of Release: Unknown  
Cause of Release: Corrosion

Summary:



NATIVE SOIL LOG  
AGASSIZ ENVIRONMENTAL SYSTEMS INC.

PROJECT NAME:  
LOGGED BY:

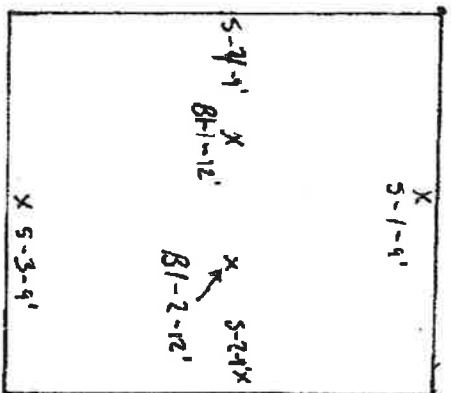
PROJECT #:  
DATE:

DEPTH	REMARKS/DESCRIPTION
0'	
1'	<i>Stiff Lean Clay w/ Trace Sand and Gravel</i>
2'	
3'	
4'	
5'	
6'	
7'	
8'	
9'	
10'	
11'	
12'	
13'	
14'	
15'	
16'	
17'	
18'	
19'	
20'	
21'	
22'	
23'	
24'	
25'	

PICTURE COVER

SITE NAME: *Healy Camp*  
PROJECT #: *4002*  
DATE:

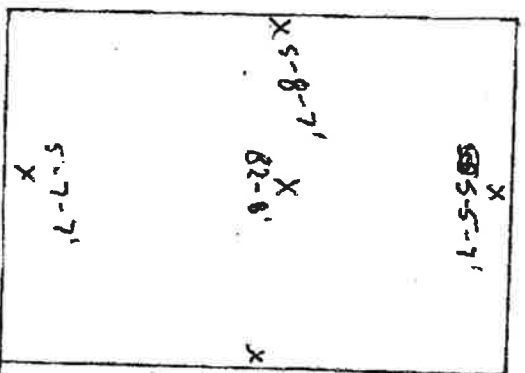
*Excavation #1*



*N ↗*

*1" = 10'*

*Excavation #2*  
*1" = 5'*



*N ↗*

