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• MATERIALS  
• ENVIRONMENTAL

File Stamp	
Name	Staff
Number	
Group #	
Category	

January 20, 1999

Tim's Sinclair  
180 North Broadway  
Trimont, MN 56176

Attn: Mr. Tim Pearson

RE: Remedial Investigation Report  
Tim's Sinclair  
Trimont, Minnesota  
MPCA Leak #11740  
AET #08-01178

Dear Mr. Pearson:

Please find attached two (2) copies of the recently completed Remedial Investigation Report for the above referenced project. One (1) additional copy of this report has been sent as noted below.

If you have any questions or need additional information, please contact us.

Sincerely,

*Kurt D. Matson*  
Kurt D. Matson  
Project Manager

*Michael R. Schmidt*  
Michael R. Schmidt, PE  
Regional Vice President

KDM/MRS/lmh

Enclosures

cc: MPCA - Abdella



RI Report

Page 1-AET #08-01178

Tim's Sinclair - Trimont, Minnesota



## Remedial Investigation Report Form

Fact Sheet #3.24

April 1996

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This form must be completed for all sites in which a remedial investigation (RI) is conducted--this includes either a *Limited Site Investigation (LSI)* or a *full RI*. Completing this form will provide the MPCA with the minimum amount of information necessary for a *full RI*. Additional information should be included if deemed important for making a site cleanup decision. If the consultant has concluded that a *Limited Site Investigation* is applicable to this site, Section 6 and Section 7 may be deleted from this report.

Refer to MPCA fact sheet #3.19 "Leaking Underground Storage Tank Investigation and Cleanup Policy" for guidance for the overall objectives of an RI and other MPCA fact sheets regarding investigations.

When a tank has been excavated, refer to fact sheets #3.6 "Excavation of Petroleum Contaminated Soil" and #3.7 "Excavation Report Worksheet for Petroleum Release Sites" for reporting requirements.

If free product is discovered the initial reporting should be done in accordance with fact sheet #3.3 "Free Product: Evaluation and Recovery" and factsheet #3.4 "Free Product Recovery Report Worksheet."

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Leak Number: LEAK000011740 Date: January 20, 1999

Responsible Party: Tim Pearson R.P. phone #: (507) 639-6081

Facility Name: Tim's Sinclair

Facility Address: 180 North Broadway City: Trimont

County: Martin Zip Code: 56176

Location of site: TWP: 104N RANGE: 32W SEC 31 Circle one: UTM/State

## TABLE OF CONTENTS

SECTION 1:	Emergency and High Priority Sites
SECTION 2:	Site and Release Information
SECTION 3:	Excavated Soil Information
SECTION 4:	Extent and Magnitude of Soil Contamination
SECTION 5:	Aquifer Characteristics/Ground Water Contamination Assessment
SECTION 6:	Extent and Magnitude of Groundwater Contamination
SECTION 7:	Evaluation of Natural Biodegradation
SECTION 8:	Well Receptor Information/Assessment
SECTION 9:	Surface Water Risk Assessment
SECTION 10:	Vapor Risk Assessment/Survey
SECTION 11:	Discussion Section
SECTION 12:	Conclusions and Recommendations
SECTION 13:	Required Figures
SECTION 14:	Appendices
SECTION 15:	Consultant (or other) information

## Section 1: Emergency and High Priority Sites

- |  |     |    |
|--|-----|----|
| 1. Is an existing drinking water well impacted?  | YES | NO |
| 2. Are there existing vapor impacts?   | YES | NO |
| 3. Is there an existing surface water impact as indicated by 1) a product sheen on the surface water or 2) a product sheen or volatile organic compounds in the part per million range in ground water in a well located close to the surface water. | YES | NO |
| 4. Has the release occurred in the last 30 days?   | YES | NO |
| 5. Has free product been detected at the site?   | YES | NO |
| 6. Is sand or gravel aquifer impacted which is tapped by water wells within or potentially within 500 feet from the edge of the plume or does impacted soil overlie a karsted limestone or fractured bedrock? If yes, explain:                       | YES | NO |

If you answered YES to any of questions 1 through 6 above describe below the actions taken to date to reduce or eliminate the risk posed by the release.

## Section 2: Site and Release Information

2.1 Describe the land use and pertinent geographic features within 1000 feet of the site.

*The property is bordered by the following:*

*North - East Beech Street followed by a vacant grass covered lot and tillable farmland*

*South - Interstate Power Electrical Substation followed by residential housing*

*East - The responsible party's house followed by additional residential housing*

*West - North Broadway Street followed by residential housing*

**Table 1.**

Provide the following for all tanks that have been at the site:

Tank #	UST or AST	Capacity	Contents	Age	Status*	Condition
001	UST	2000	Gasoline	1950's	Removed(9-1-98)	OK
002	UST	1000	Gasoline	1978	Removed(9-1-98)	OK
003	UST	1000	Diesel Fuel	1980	Removed(9-1-98)	OK

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

Notes:

2.2 Describe the status of the other components of the tank system(s), (i.e., piping and dispensers) for those tanks listed above.

*All dispensers and piping were removed.*

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

*Reportedly, from overflowing tanks and spills while fueling vehicles.*

2.4 What was the volume of the release? (if known): Unknown gallons

2.5 When did the release occur? (if known): Unknown

### Section 3: Excavated Soil Information

3.1 Was soil excavated for off-site treatment?

**YES NO**

If **YES** then complete the fact sheet #3.7 "Excavation Report Worksheet for Petroleum Release Sites" and include it as an appendix.

Date excavated:

9/1/98

Volume removed:

36 cubic yards

3.2 Indicate soil treatment type:

land treatment

thermal treatment

composting/biopiling

other ( \_\_\_\_\_ )

Name and location of treatment facility:

Wayne Harbitz landfarm near St. James, MN

### Section 4: Extent and Magnitude of Soil Contamination

4.1 Were soil borings conducted in or immediately adjacent to all likely source areas (e.g., UST basins, AST areas, piping, dispensers, remote fill pipes, known spill areas)?

**YES NO**

4.2 To adequately define the vertical extent of contamination soil borings should be completed at least five feet below the water table or ten feet below the deepest measurable (field screening and visual observation) contamination, whichever is deeper. Were all soil borings completed to the required depth?

**YES NO**

4.3 To adequately evaluate site stratigraphy at least one boring should be completed 20 feet below the water table, unless a confining layer is present. Was this done?

**YES NO**

If you answered **NO** to any of the three previous questions, explain why the borings were not conducted in the required locations or to the required depths (see fact sheet #3.19 "Soil and Ground Water Investigations Performed During Remedial Investigations" regarding exceptions and MPCA approval for depth of drilling):

4.4 Indicate the drilling method:  hollow-stem auger

sonic drilling

push probes

other ( \_\_\_\_\_ )

*Note: contact MPCA staff hydro before use of flight augers)*

**Table 2.**  
 Complete the following table indicating jar headspace results (in ppm) for soil samples from soil borings.

ASTM soil classification	Depth (ft)	Soil Boring																		
		1	2	3	4	5	6	7	8	9	10	11								
Fill/Topsoil/ Till	0-2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
Fill/Till	2-3½	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
Till	4½-6	ND	ND	ND	ND	ND	ND	ND	ND	ND	40									
Till	7-8½	ND	ND	ND	ND	ND	ND	ND	ND	ND	60									
Till	9½-11	ND	ND	ND	ND	ND	ND	ND	ND	65	100									
Till	12-13½	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
Till	14½-16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
Till	19½-21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
Till	24½-26	ND			ND						ND									
Till	29½-31	ND																		

Notes: (type of PID/FID)

**Table 3.**

Indicate the laboratory analytical results for soil samples in mg/kg.

Well/Boring, Depth(ft)	Date Analyzed	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	GRO	DRO
SB #1 (9½-11)	1/5/99	<0.025	<0.025	<0.025	<0.025	<0.025	<5.0	18
SB #2 (9½-11)	1/5/99	<0.025	<0.025	<0.025	<0.025	<0.025	6.1	<8.0
SB #3 (9½-11)	1/5/99	<0.025	<0.025	<0.025	<0.025	<0.025	<5.0	<8.0
SB #4 (9½-11)	1/5/99	<0.025	<0.025	<0.025	<0.025	<0.025	<5.0	<8.0
SB #5 (7-8½)	1/5/99	<0.025	<0.025	<0.025	<0.025	<0.025	<5.0	100
SB #5 (9½-11)	1/5/99	<0.025	<0.025	<0.025	<0.025	<0.025	<5.0	<8.0

Notes: (use less than symbols to show detection limits)

**Table 4.**

Indicate other notable contaminants (either petroleum or non-petroleum derived) detected in soil samples. Indicate contaminant and list in reported units mg/kg.

Well/Boring, Depth (ft)	Date Analyzed					

Notes:

4.5 If any non-petroleum compounds were detected list them below and identify possible sources of these compounds.

*None detected*

4.6 Describe the vertical and horizontal extent and magnitude of soil contamination.

*The vertical extent of soil contamination identified is from 4 1/2' to 11' below grade at soil boring location 6 (former tank basin area) and from 9 1/2' to 11' below grade at soil boring location 5. Based upon the available information, the horizontal extent appears to be limited to the immediate tank basin area (30' to 40' diameter).*

### Section 5: Aquifer Characteristics/Ground Water Contamination Assessment

5.1 Indicate the hydraulic conductivity and the method used to determine it. Attach all supporting information for the determination in the Methodologies appendix:

1 x 10<sup>-7</sup> cm/sec

- estimate from reference
- slug test
- permeability test
- Hazen approximation from grain-size distribution



5.2 Indicate the thickness of the aquifer. If the investigation does not provide enough information to determine the aquifer thickness, assume the aquifer is greater than 20 feet thick:  
     less than 10 feet  
     between 10 and 20 feet  
  X   20 feet or greater

5.3 Describe in detail the geology underlying the site including confining layers, bedrock formations and the lateral extent of these formations:

*All soil borings encountered clay soils from 2' to 31' below grade. The municipal well logs for the Trimont area indicates a clay thickness of 84' to 97'.*

The impacted aquifer or the aquifer that is likely to be impacted at the site is considered a resource aquifer if one of the following situations exist:

- The aquifer is a current water supply source.
- The water bearing unit has a hydraulic conductivity greater than  $1 \times 10^{-2}$  cm/sec and a minimum thickness of 10 feet.
- The water bearing unit has a hydraulic conductivity between  $1 \times 10^{-4}$  cm/sec and  $1 \times 10^{-2}$  cm/sec and a minimum thickness of 20 feet.
- The water bearing unit has a hydraulic conductivity less than  $1 \times 10^{-4}$  cm/sec and no other viable source of water supply is available. (*Bedrock may be considered a resource aquifer if it is the only water supply available.*)

5.4 Based on the aquifer characteristics and water supply availability, is the aquifer at the site a resource aquifer?                      YES    **NO**

5.5 If other water supplies are available, explain.

*The project area is serviced by municipal water. The city presently has five (5) wells ranging in depth from 120' to 400' deep. Well logs for these wells are included in Appendix F.*

5.6 Are there any other reasons the impacted aquifer should not be considered a resource aquifer?  
*No*

**Table 5.**

Indicate the water level measured in all of the soil borings.

Water level depth, ft	Soil Boring									
	1	2	3	4	5	6	7	8	9	10
27.0	6.9	6.3	15.4	16.2	15.3					

Notes:

5.7 Is contaminated soil in contact with ground water?

**YES NO**

*Contaminated soil is in contact with ground water in or near the tank basin area only. All perimeter soil borings were found to be at or below the MDL's for DRO, BETX and MTBE.*

If YES or if ground water contamination appears likely then complete tables 6 and 7 below.

**Table 6.**

Indicate the laboratory analytical results for water samples collected from the borings, temporary wells or push probes.

Well/Boring Number	Date Analyzed	Benzene	Toluene	Ethylbenzene	Xylene	GRO	DRO	MTBE
SB 1	12/30/98	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0
SB 2	12/30/98	<1.0	<1.0	<1.0	<1.0	<100	200	<5.0
SB 3	12/30/98	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0
SB 4	12/30/98	<1.0	<1.0	<1.0	<1.0	<100	<100	<5.0
SB 5	12/30/98	<1.0	<1.0	<1.0	<1.0	<100	3000	<5.0
SB 6	12/30/98	8300	18,000	2,600	4,600	79,000	17,000	<130

Notes:

**Table 7.**

Indicate other notable contaminants (either petroleum or non-petroleum derived) detected in water samples collected from the borings, temporary wells or push probes. Indicate contaminant and report in units of ug/l (ppb).

Well/Boring Number	Date Analyzed					

Notes:

5.8 If any non-petroleum compounds were detected list them below and indicate whether they exceed the HRLs. Also, identify possible sources of these compounds.

5.9 If contaminated soil is not in contact with ground water, what is the distance separating the deepest contamination from the surface of the water table? Was this distance measured during site activities, referenced from geologic information, or estimated based on professional opinion during a site visit? 0 feet

*The only significantly impacted water that was encountered was in the tank basin areas (soil borings 5 and 6). All perimeter borings were found to be at or near the MDL's for DRO, GRO, BETX and MTBE.*

**5.10** Describe observations of any evidence of a fluctuating water table and a seasonal high water table (e.g., mottling). Also, from other sources of information describe the range of natural water table fluctuations in the area.

*The water table in the Trimont area is likely relatively shallow at all times (6' to 16' below grade). We encountered mottled soils at all six (6) soil boring locations.*

**5.11** In your judgment, is there a sufficient distance separating the petroleum contaminated soil (or an impacted non-resource aquifer) from the underlying resource aquifer to prevent petroleum contamination of the resource aquifer? Please explain in detail. In your explanation consider the data and information of this section as well as the nature of the petroleum release (i.e., volume, when it occurred, petroleum product). **YES NO**

*In our opinion, it appears that the underlying resource aquifer should be protected from impact due to the small amount of impacted soil that we encountered at relatively shallow depths (7' to 11' below grade). The area is also underlain by approximately 84' to 97' of clay soils and the city drinking wells are more than 1000' from the site.*

### **Additional Ground Water Investigation**

**Complete Section 6 and Section 7** only if: *1) a resource aquifer has been impacted at or above Minnesota Department of Health Health Risk Limits (HRLs), 2) a resource aquifer has been impacted below the HRLs, but the levels are likely to reach the HRLs, or 3) there is an insufficient distance separating the petroleum contaminated soil (or an impacted non-resource aquifer) from the underlying resource aquifer.* Regardless of whether you are submitting a Limited Site Investigation or a full RI, all sections following Section 7 must be completed.

**Section 6. Extent and Magnitude of Groundwater Contamination**

**Table 8.**

Monitoring well construction.

Well Number	Unique Well Number	Date Installed	Relative Surface Elevation	Riser Height Above Grade	Bottom of Well (Elevation)	Screen Interval (Elev. - Elev.)

Notes: (location and elevation of benchmark)

**Table 9.**

Water table summary.

Well Number	Date	Depth of Water from Top of Casing	Product Thickness	Depth of Water Below Grade	Relative Groundwater Elevation

Notes: (GW above/below screen, etc.)

YES NO

**6.1 Were any deep monitoring wells completed at the site?**

If YES, which are deep wells?

Before a deep well is installed contact the MPCA project hydrologist for guidance on its necessity and placement. A deep monitoring well may be necessary if 1) contamination exist more than 10 feet below the water table or 2) the impacted aquifer is a resource aquifer or is hydraulically connected to a resource aquifer presently utilized by a water supply well located within 500 feet of the site.

Provide estimates of the following additional aquifer parameters:

- Horizontal Gradient (dh/dl): \_\_\_\_\_
- Vertical Gradient (dv/dl): \_\_\_\_\_
- Porosity: \_\_\_\_\_
- Flow direction: \_\_\_\_\_
- Hydraulic Conductivity (K) \_\_\_\_\_ ft/min
- Pore velocity: \_\_\_\_\_ meters/year

**Table 10.**

All ground water monitoring data should be collected from a minimum of two quarterly sampling events.

Indicate the laboratory analytical results for water samples.

Well #	Date	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	GRO	DRO

Notes: (e.g., free product, dry well, units etc.)

**Table 11.**

Indicate other notable contaminants (either petroleum or non-petroleum derived) detected in water samples.

Well #	Date Analyzed						

*Notes: units*

- 6.2** If any non-petroleum compounds were detected list them below and indicate whether they exceed the HRLs. Also, identify possible sources of these compounds.
- 6.3** Is there a clean or nearly clean (below HRLs) down gradient monitoring well located along the longitudinal axis of the contaminant plume? (approximately 20 degrees plus or minus the axis) YES NO
- 6.4** Is there a worst case well completed through the source area of the release? YES NO
- If you have answered *NO* to any of the above three questions, please explain why a well was not completed in the required location.
- 6.5** Provide an estimate of the longitudinal length of the dissolved contaminant plume: \_\_\_\_\_ feet
- 6.6** Describe the extent and magnitude of the ground water contamination:

**Section 7: Evaluation of natural attenuation**  
**Table 12.**

Complete the bioactivity data in the table below. Data should be from two quarterly rounds of sampling. Refer to the fact sheet #3.21 "Assessment of Natural Biodegradation at Petroleum Tank Release Sites" for acceptable methodologies and indicate the chosen method in the Methodologies appendix.

Monitoring Well	Temp. °C	pH	Dissolved oxygen (mg/l)	Nitrate (mg/l)	(Fe II) (mg/l)	(H <sub>2</sub> S, HS <sup>-</sup> ) (mg/l)

Notes:

7.1 Discuss the results of the bioactivity evaluation. Specifically, compare the concentrations of the inorganic parameters inside and outside the plume.

7.2 In your judgment, is natural biodegradation occurring at this site? Please Explain. YES NO

**Section 8: Well Receptor Information/Assessment**

Include in the appendices of this report: 1) a list of addresses within 500 feet from the edge of the plume and confirmation of status of water supply from the city utility billing department; 2) well logs; and 3) map showing ½ mile radius, 500 foot radius, water supply wells, other potential petroleum sources, and addresses for properties within 500 feet.



**Table 13.**

Complete the following table for all water supply wells located within 500 feet of the edge of the plume and any municipal or industrial wells found within ½ mile.

Unique Well #	Ground Elevation	Total Depth (ft)	Base of Casing (ft)	Static Elevation (ft)	Aquifer	Use	Owner	Distance & Direction from site
217102	1213	140	NA	76	Qbow	Municipal	City of Trimont	½ mile E
217109	N/A	400	NA	NA	Qbow	Municipal	City of Trimont	½ mile SE
217110	N/A	120	NA	75	Qbow	Municipal	City of Trimont	½ mile SE
217111	N/A	120	NA	75	Qbow	Municipal	City of Trimont	¾ mile SE
455811	N/A	142	N/A	78	Qbow	Municipal	City of Trimont	1000' SW

Notes:

- 8.1** Is municipal water available in the area? **YES NO**
- 8.2** Were all property owners within 500 feet of the nearest edge of the contaminant plume successfully contacted to determine if water wells are present? If No, please explain. **YES NO**

**8.3** Discuss the results of the ground water receptor survey and any analytical results from sampling conducted at nearby water wells. Comment on the risks to water supply wells identified within 500 feet from the edge of the plume as well as the risk posed by or to any municipal or industrial wells found within ½ mile. Specifically indicate whether water supply wells identified utilize the impacted aquifer. (Note: an impacted aquifer separated from another aquifer by a clay lens is not considered a separate aquifer.)

*No private wells were identified within 500'. The municipal wells are 120' to 400' deep and are more than 1000' from the site. Four of the wells are over one-half mile from the site. The only significantly impacted water that was encountered was in the tank basin areas. All perimeter soil borings were at or below the MDL's for DRO, GRO, BETX and MTBE.*

8.4 Are there any plans for groundwater development in the impacted aquifer within one half mile of the site, or one mile down gradient of the site if the aquifer is fractured? Please give the name, title and phone number of the person that was contacted for this information. YES NO

Norma Gates - City Clerk Phone (507) 639-2060

### Section 9: Surface Water Risk Assessment

9.1 Are there any surface waters or wetlands located within ¼ mile of the site? YES NO

If YES, indicate its name: \_\_\_\_\_

9.2 If surface water is present down gradient of the site, is there a clean down gradient soil boring or monitoring well located between the site and the surface water? YES NO N/A

If NO, we assume that contamination discharges to surface water. Therefore, complete the following information:

Name of receiving water: \_\_\_\_\_  
Plume width, (W): \_\_\_\_\_ feet  
Plume thickness, (H): \_\_\_\_\_ feet  
Hydraulic conductivity, (K): \_\_\_\_\_ gal/day/ft<sup>2</sup>  
Horizontal gradient, (dh/dl): \_\_\_\_\_ (unitless)  
Discharge, (Q) = H\*W\*K\*(dh/dl)/1440 \_\_\_\_\_ gal/min

If YES, identify them and indicate the distance to these features and discuss the contamination risk potential.

## Section 10: Vapor Risk Assessment/Survey

10.1 Is there a history of vapor impacts in the vicinity of the site ? *YES NO*

If *YES*, describe:

10.2 Is there any indication that free product or highly contaminated groundwater may be traveling offsite within the utility corridors? If *YES*, have they been investigated with borings or push probes? *YES NO*

10.3 Discuss the potential for vapor migration/accumulation near the site. In your discussion consider: soil types, product type, presence and distribution of free product or high concentrations of dissolved product. Also, compare the depth of contamination with the location of underground utility lines, location and depth of storm and sanitary sewers and location of nearby basements.

Table 14.

Location #	Date	PID reading (ppm)	Percent of the LEL

Notes:

10.4 Describe and interpret the results of the vapor survey.

**Section 11: Discussion**

11.1 Discuss the risks associated with the remaining soil contamination?

*Based upon the available information, it does not appear that there are any storm or sanitary sewers or water lines within 50' to 60' of the former tank basins. The remaining identified soil contamination consists of an impacted layer from 7' to 11' in the former tank basins. Soil impacts were found to be 100 ppm DRO at soil boring 5 and 710 ppm DRO at soil boring 6. It is our opinion that these low concentrations and relatively small amounts of impacted soil pose a fairly limited risk.*

11.2 Discuss the risks associated with the impacted ground water?

*The impacted ground water appears limited to the sand backfill present in the former tank basins. All perimeter soil borings were at or below the MDL's for the parameters tested. No storm or sanitary sewers or water lines appear to intersect the area.*

11.3 Discuss other concerns not mentioned above:

## Section 12: Conclusions and Recommendations

Recommendation for site:     site closure  
    additional vapor monitoring  
    additional ground water monitoring  
    active cleanup

The recommendation above should be based on fact sheet #3.1 "Leaking Underground Storage Tank Investigation and Cleanup Policy." Describe below how you applied the policy to support your recommendation.

*The impacted soils are relatively low in DRO concentrations and are relatively shallow (7' to 11'). The plume is likely 30' to 40' in diameter. No utilities intersect the impacted areas. In addition, 84' to 97' of clay soils apparently underlay the entire site.*

*The site is serviced by municipal water. Four (4) city wells are more than one-half mile from the site while one is located more than 1000' southwest of the site.*

If additional monitoring is recommended, indicate the proposed monitoring schedule and frequency:

If active cleanup is proposed then MPCA staff will review this remedial investigation report at a higher than normal priority to determine if active cleanup is required. We will respond with either a request for proposal for additional monitoring or a corrective action design report. Please indicate below what cleanup technology you are considering at this time.

## Section 13: Required Figures

Indicate attached figures:

- X *Figure 1*, Site location map (*approximate scale is not acceptable*) and a large scale site map show all potential receptors within 300 feet of the site. The large scale site map should show those properties with basements and wells.
- X *Figure 2*, One or more site map showing: structures; all past and present petroleum storage tanks, piping, and dispensers; extent of soil excavation; boring and well locations (including any drinking water wells on site); horizontal extent of soil contamination; horizontal extent of ground water contamination; and location of end points for all geologic cross sections.
- Figure 3*, Ground water gradient contour maps (for sites with monitoring wells).
- X *Figure 4* 3a: Well receptor survey map showing 1/2 mile radius, 500 foot radius, water supply wells, other potential sources of contamination.
- X *Figure 5*: Vapor survey map showing utilities and buildings with basements and monitoring locations (if a survey was required).
- Figure 6*: Geologic cross sections.

## Section 14: Appendices

Indicate attached appendices.

X *Appendix A* Excavation Report Worksheet for Petroleum Release Sites.

X *Appendix B* Laboratory analytical reports for soil and ground water.

     *Appendix C* Methodologies and procedures, including field screening of soil, other field analyses, soil boring, soil sampling, well installation, and water sampling.

X *Appendix D* Geologic logs for each well or boring using attached template.

     *Appendix E* Well construction diagrams and copies of the Minnesota Department of Health Well Record using attached template.

X *Appendix F* Copies of water supply well logs with legible unique numbers.

X *Appendix G* A list of addresses within 500 feet from the edge of the plume and confirmation of status of water supply from the city utility billing department.

### Section 15: Consultant (or other) information

*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.*

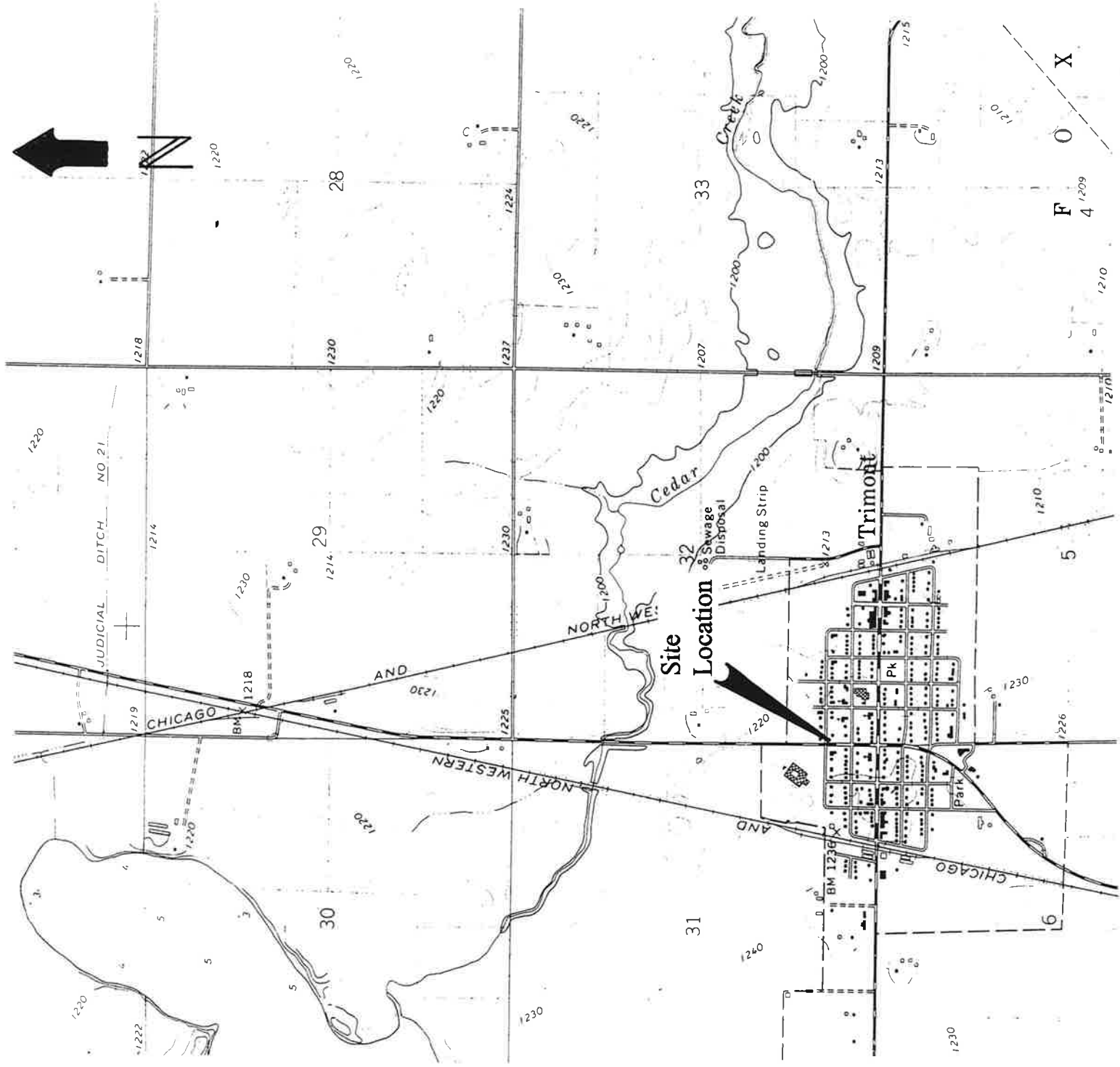
Name and Title:	Signature:	Date signed:
<u>Kurt D. Matson - Project Manager</u>	<u>Kurt D. Matson</u>	<u>1 / 20 / 99</u>
<u>Michael R. Schmidt - PE</u>	<u>Michael R. Schmidt</u>	<u>1 / 20 / 99</u>
_____	_____	<u> / /</u>
_____	_____	<u> / /</u>

Company and mailing address: American Engineering Testing, Inc.  
1730 1<sup>st</sup> Avenue  
Mankato, MN 56001

Phone: (507) 387-2222  
Fax: (507) 387-6999

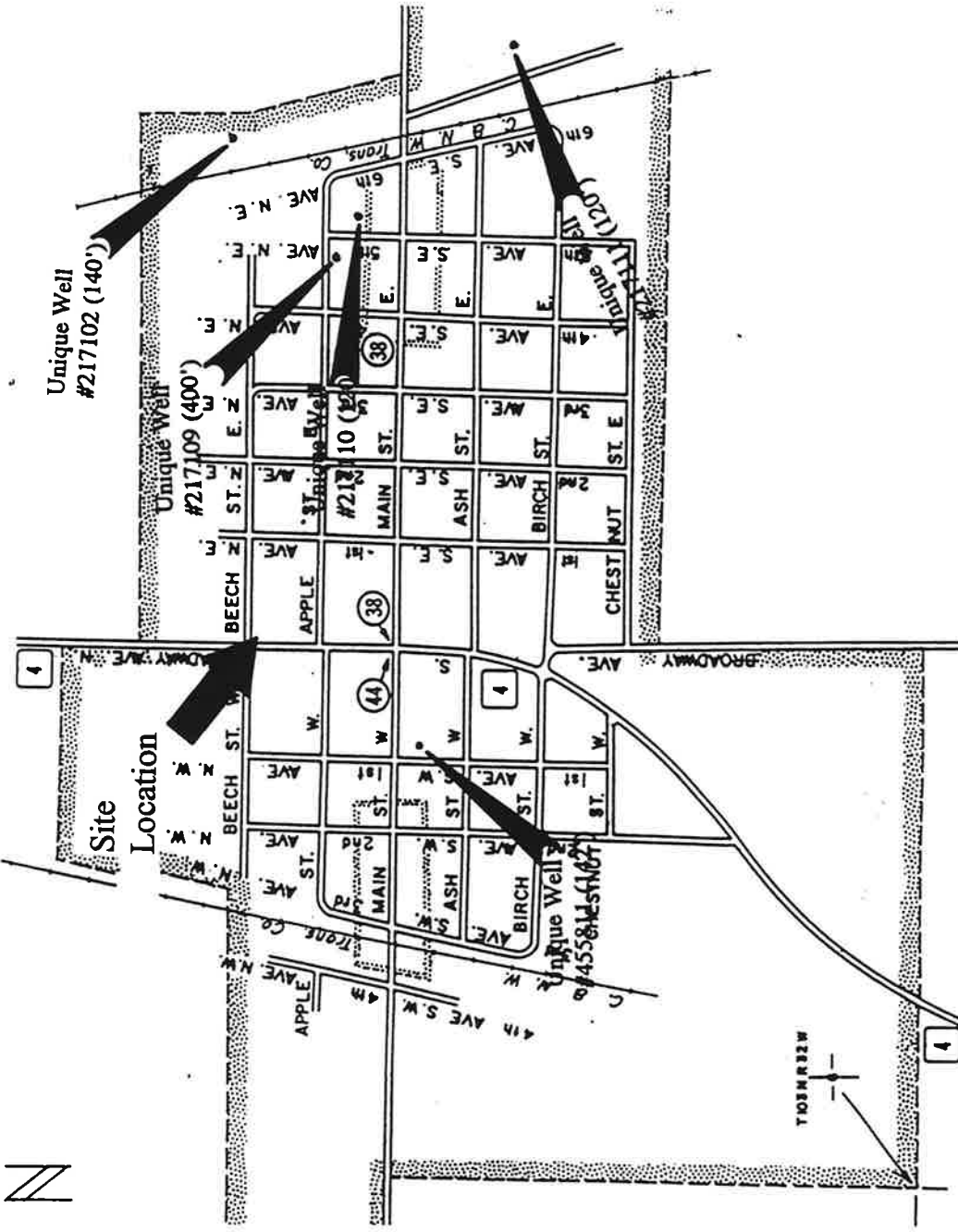
Upon request, this document can be made available in other formats, including Braille, large print and audio tape. TTY users call 612/282-5332 or Greater Minnesota 1-800-657-3864.





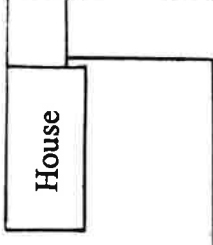
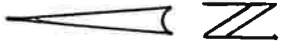
<b>AMERICAN ENGINEERING TESTING, INC.</b>	<b>PROJECT: Tim's Sinclair Trimont, Minnesota</b>		<b>AET JOB NO. 08-01178</b>		
	<b>SUBJECT: USGS Map Location</b>		<b>DATE: 1/18/99</b>		
	<b>SCALE: 1:24,000</b>		<b>PAGE: 1</b>		
		<b>DRAWN BY: KM</b>		<b>CHECKED BY: MS</b>	

TRIMONT  
MARTIN COUNTY  
POP. 745



<p>PROJECT: Tim's Sinclair Trimont, Minnesota</p>		AET JOB NO. 08-01178	
		DATE: 1/18/99	
<p>SUBJECT: City Well Locations</p>		CHECKED BY: MS	
		DRAWN BY: KM	
SCALE: NTS		PAGE: 2	

AMERICAN  
ENGINEERING  
TESTING, INC.



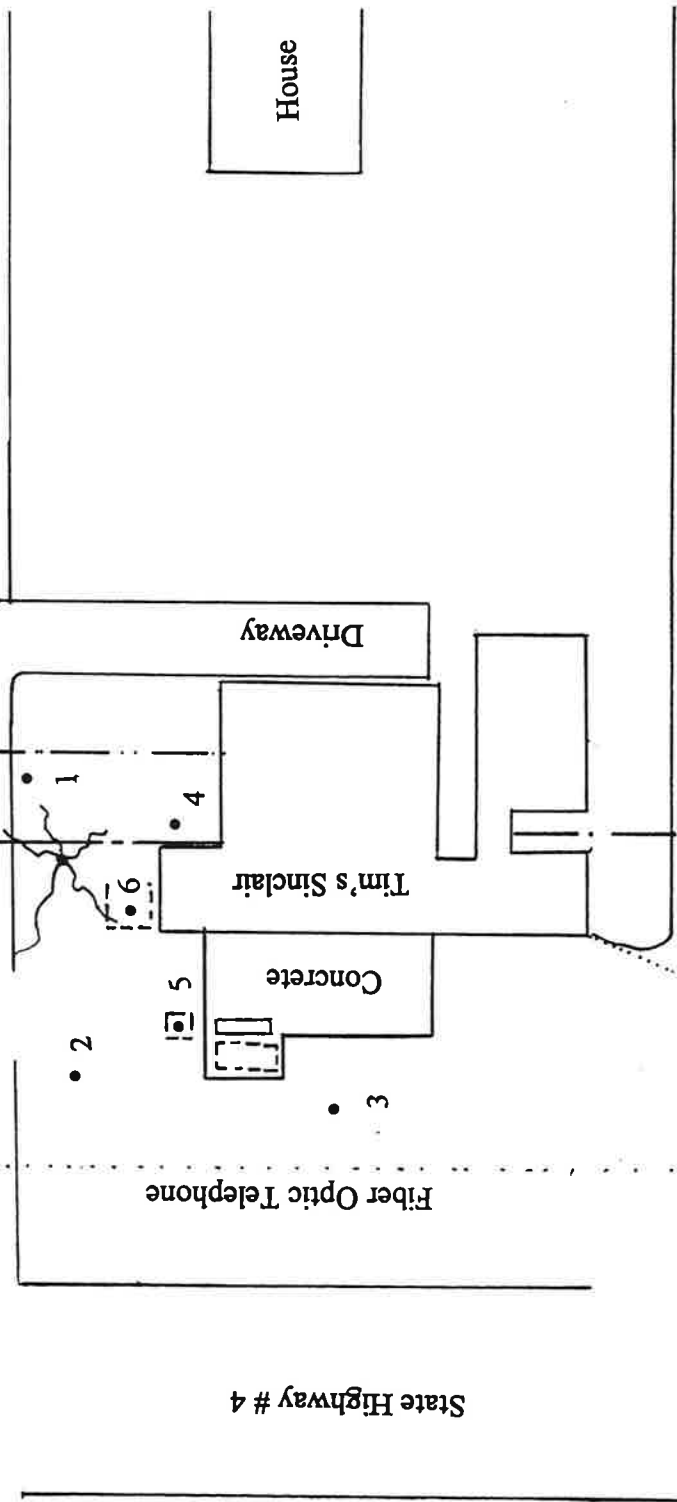
Vacant Lot

Storm Sewer Line

E. Beech Street

Sanitary Sewer Line

Water Line



Fiber Optic Telephone

State Highway # 4

Concrete

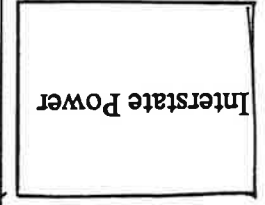
Tim's Sinclair

Driveway

House

Natural Gas Line

Alley



Interstate Power

**AMERICAN  
ENGINEERING  
TESTING, INC.**

PROJECT: Tim's Sinclair  
Trimont, Minnesota

SUBJECT: Soil Boring Locations

SCALE: 1:50

DRAWN  
BY: KM

CHECKED  
BY: MS

AET JOB NO. 08-01178

DATE: 1/21/99

PAGE: 1



## EXCAVATION REPORT WORKSHEET FOR PETROLEUM RELEASE SITES

Fact Sheet #3.7

April 1997

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: *Tim's Sinclair*  
 Street: *PO Box 307/180 No Broadway*  
 City, Zip: *TRIMONT, MN 56176*  
 County: *MARTIN*  
 MPCA Site ID#: LEAK0000 11740

B. Tank Owner/Operator:

Mailing Address:

Street/Box:

City, Zip:

Telephone:

*Same*

C. Excavating Contractor: B & H  
 PETROLEUM EQ. CO.

Contact:

Telephone:

Tank Contractor Certification Number: 0092

D. Consultant:

808 MILLARD

507-387-6629

Contact:

Street/Box:

City, Zip:

Telephone:

*American Engineering*

*1730 - 1st Ave*

*MANKATO, MN 56001*

*507-387-8822*

*AET involvement*

*Began in 12/98*

*Michael R Schilt*

## Excavation Report Worksheet for Petroleum Release Sites

Page 2

April 1997

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: 9/2/98

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

Work Performed	Date
<u>Removed Tanks</u>	<u>9-1-98</u>
<u>_____</u>	<u>_____</u>
<u>_____</u>	<u>_____</u>
<u>_____</u>	<u>_____</u>

## PART III: SITE AND RELEASE INFORMATION

A. Describe the land use and pertinent geographic features within 1,000 feet of the site.  
(i.e. residential property, industrial, wetlands, etc.) School - Commercial

## Excavation Report Worksheet for Petroleum Release Sites

Page 3

April 1997

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	1,000	Reg Gas	N/A	Removed 9/1	Dilled & Rusted
002	UST	1,000	Diesel	N/A	Removed 9/1	Pitted / Rusted
009	UST	1,000	UNL	N/A	Removed 9/1	Pitted / Rusted

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

Notes:

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

Rusted

D. Identify and describe the source or suspected source(s) of the release and how the release was discovered.

Spills when Fueling Cars.  
Overfilling TanksE. What was the volume of the release? (if known): unknown gallonsF. When did the release occur? (if known): unknown

G. Describe source of on-site drinking water.

City

## Excavation Report Worksheet for Petroleum Release Sites

Page 4

April 1997

## PART IV: EXCAVATION INFORMATION

- A. Dimensions of excavation: Length 18' 1/4" Width 10' 6" Depth 15' 11"
- B. Original tank backfill material (sand, gravel, etc.): #2 12' L 6' W SAND 11' D
- C. Native soil type (clay, sand, etc.): CLAY
- D. Quantity of contaminated soil removed for treatment (cubic yards): 36 YDS

[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?  
36 YARDS
- F. Was ground water encountered or a suspected perched water layer or was there evidence of a seasonally high ground water table (i.e. mottling)? (yes/no) At what depth?  
\_\_\_\_\_
- G. If ground water was not encountered during the excavation, what is the expected depth of ground water? UNKNOWN
- H. If soil boring was required (Additional investigation is required at sites that have visual or other evidence of contamination remaining in the suspected source area, with sandy or silty sand soil [Unified Soil Classification System/American Society for Testing Materials] and where the water table is within 25 feet of the ground surface. 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.

## Excavation Report Worksheet for Petroleum Release Sites

Page 3

April 1997

- J. If ground water was encountered or if a soil boring was conducted, was there evidence of ground water contamination? (yes/no) 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"].

- 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.

**PART V: SAMPLING INFORMATION**

- A. Briefly describe the field screening methods used to distinguish contaminated from uncontaminated soil:  
Grab samples collected with disposable gloves are placed into sealed plastic bags and are temporarily stored in a warm area. Soils are agitated every 5 minutes for 15 minutes. After 15 minutes bag is pierced with OVM probe, highest reading is taken from maximum hold reading.



## Excavation Support Worksheet for Petroleum Release Sites

Page 6

April 1997

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
	Per ATTACHED				

C. Was the "removed soil" placed back into the excavation basin? (yes/no)

If no, please complete Part VIII: Soil Treatment Information section. If yes, a Limited Site Investigation is necessary (see fact sheet #3.19, "Soil and Ground Water Investigations Performed During Remedial Investigations").

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

Grab samples taken with disposable gloves are placed in glass jars supplied by testing laboratory. Samples are weighed on an electronic scale, sealed and installed in lab provided cooler for shipment. Samples are kept cool by ice packs installed in cooler.

## Excavation Report Worksheet for Petroleum Release Sites

Page 7

April 1997

E. 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), stockpile samples SP-1, etc. Be sure the sample codes correspond to the site map required in part VI. Do not include analyses from the stockpiled soil.

Sample Code	GRO/DRO	Benzene ppm	Ethyl-benzene ppm	Toluene ppm	Xylene ppm	MTBE ppm	Lead ppm	
		<i>Per Attached</i>						

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), and any soil borings (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.~~

## Excavation Report Worksheet for Petroleum Release Sites

Page 8

April 1997

**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.

**PART VIII: SOIL TREATMENT INFORMATION**

- A. Soil treatment method used (thermal land application composting, other). If you choose "other" specify treatment method: 3694RD5
- B. Location of treatment site/facility: Wayne Horvitz - RR1 ST James, Mn 56081
- 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:

Wayne Horvitz - RR1 ST James Mn 56081

## Excavation Report Worksheet for Petroleum Release Sites

Page 9

April 1997

**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 leak site. 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 leak site 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. 7000.0300 (Duty of Candor), and that the responsible person or volunteer may be liable for civil penalties.*

Name and Title:

Bob Millars U.P.

Signature:



Date signed:

9/30/98

Company and mailing address:

B & H PETROLEUM EQ. CO.RT 8 BOX 106MANKATO MN 56001-8322

Telephone

507-387-6629

Fax:

507-345-4945

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

(Project Manager)  
 Minnesota Pollution Control Agency  
 Hazardous Waste Division  
 Tanks and Emergency Response Section  
 520 Lafayette Road North  
 St. Paul, Minnesota 55155-4194

## SOIL SAMPLING FORM

Project Tim Sinclear Work Order # \_\_\_\_\_  
 Location Tramont, Mn Recorded by \_\_\_\_\_  
 Cleaning \_\_\_\_\_ Date 9/1/98

Describe Sampling Point \_\_\_\_\_  
 Reviewed By \_\_\_\_\_ Boring \_\_\_\_\_

Sampling Method \_\_\_\_\_

Organic Vapor Detector \_\_\_\_\_

Depth	Soil Type	Sample ID	Samples Collected	Organic Vapors (ppm)	Contamination Observations
3'		SV-1		270	Light order Light color soil
6.5'		SV-1		384	Light order Heavy color soil
10'		Bottom		420	Heavy order Heavy color soil
3'		SV-2		176	Light order Light color soil
6.5'		SV-2		365	" "
12'		Bottom		543	Heavy order Light color soil
2.5'		SV-3		265	Light order Light color soil
6'		SV-3		453	Heavy order Light color soil
11'		Bottom		793	Heavy order Light color soil

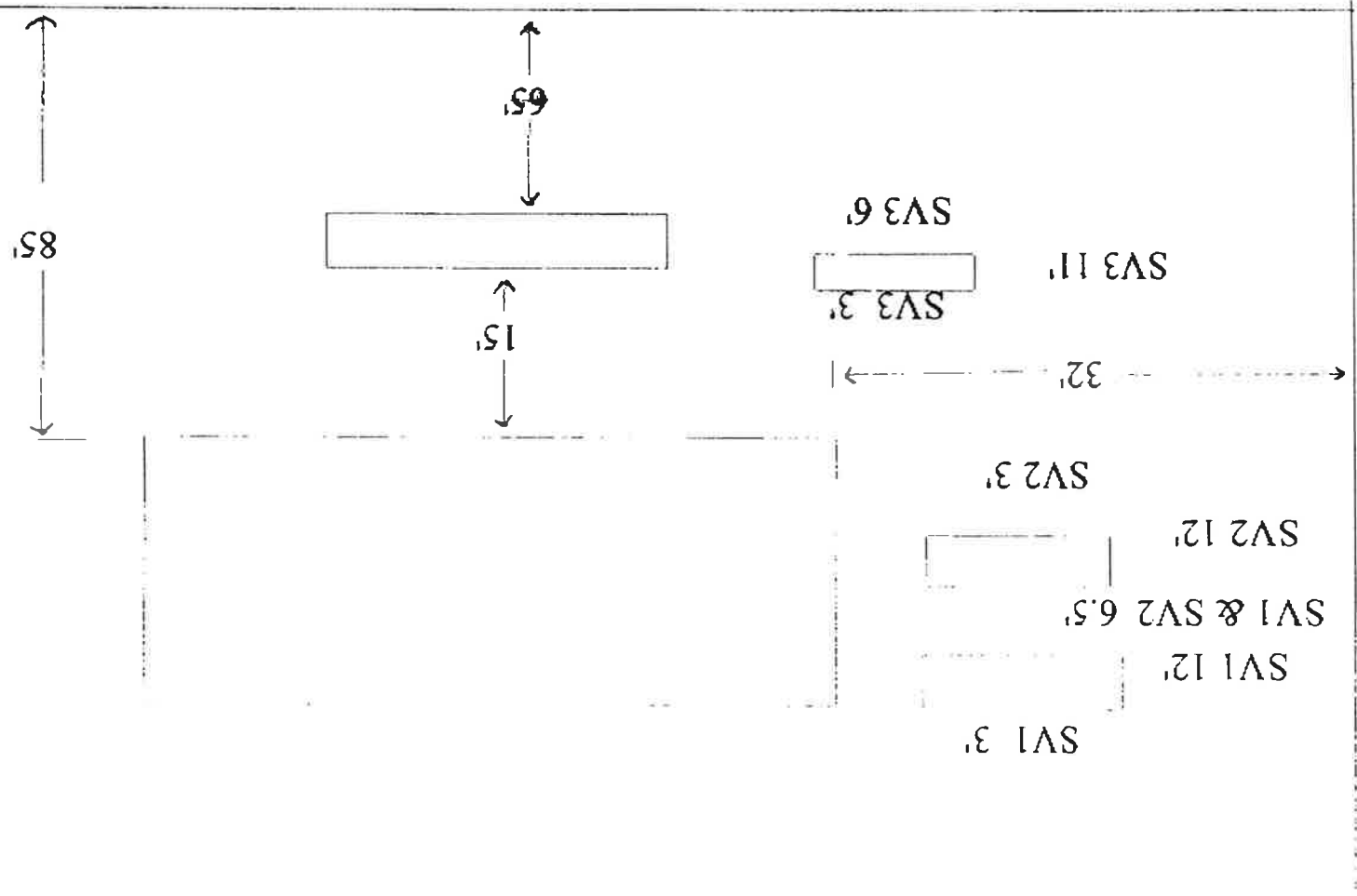
Depth to Ground Water \_\_\_\_\_ Boring Abandonment Method \_\_\_\_\_

Comments most of The contaminated come from Files  
and some of The piping

TIM'S SINCLAIR  
180 NO BROADWAY  
TRIMONT, MN.

B  
C  
A  
E  
H  
S  
T.

MINNESOTA HWY 4



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

**ANALYTICAL SERVICES**

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



**SUPERIOR LABORATORIES**  
MINNESOTA CERTIFIED LABORATORY  
NUMBER 027-059-156



## Analytical Report

October 01, 1998

**B&H Petroleum**  
P.O. Box 106  
Minnetonka, MN 56001-8322

### Chain of Custody

Project ID: Tim's Sinclair

Chain of Custody: 23701


Date Reported: 9/3/98 11:07:16 AM by Katie Christenson

### Sample Information

Sample ID	Description	Date	Matrix
33944	SS-1	9/1/98	Soil
33945	SS-2	9/1/98	Soil
33946	SS-3	9/1/98	Soil

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

Reviewed By

  
10/2  
Robert Sagarsky  
Organic Chemist

## MIDWEST ANALYTICAL SERVICES

October 1, 1998  
 Page 2  
 COC 23701

Date Analyzed: 09-14-98

Parameter:	Benzene	Toluene	Ethyl Benzene	Xylenes	Total Hydrocarbons as DRO		Percent Moisture
					GRO (mg/kg)	DRO (mg/kg)	
Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(%)
MIDL:	0.050	0.050	0.050	0.150	10.0	10.0	
33944 SS-1						156	15.3
33945 SS-2	6.49	23.3	10.9	37.2	1060		16.9
33946 SS-3	1.83	3.51	3.19	9.91	348		49.2





AMERICAN  
ENGINEERING  
TESTING, INC.

# BORING LOG

AET JOB NO: 08-00831 LOG OF BORING NO. 1 (p. 1 of 1)

PROJECT: Tim's Sinclair; Trimont, Minnesota

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	PID rfgs	FIELD & LABORATORY TESTS					
							WC	DEN	LL	PL	Pq	
1	Sandy Lean Clay w/visible organics, black (CL)	Fill	13	M	SS	ND						
2												
3												
4	Sandy Lean Clay w/a little gravel, brown, stiff (CL)	Till	11	M	SS	ND						
5												
6												
7	Sandy Lean Clay w/a little gravel, light brown mottled, stiff (CL)		10	M	SS	ND						
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24	Sandy Lean Clay w/a little gravel, grey, stiff (CL)		12	M	SS	ND						
25												
26												
27												
28												
29												
30												
31												

END OF BORING

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS				NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	
0-29 1/2'	3 1/4" HSA	31'	29.5'	29'	None	
		31'	None	29'	27'	
BORING COMPLETED:	12/18/98					
CC: TM	CA: MB					
	Rig: 24					



AMERICAN  
ENGINEERING  
TESTING, INC.

# BORING LOG

LOG OF BORING NO. 2 (p. 1 of 1)

AET JOB NO: 08-00831

PROJECT: Tim's Sinclair; Trimont, Minnesota

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	PID rdgs	FIELD & LABORATORY TESTS					
							WC	DEN	LL	PL	Pq	
1	FILL, Sand w/gravel, medium to fine grained, brown	Fill	12	M	SS	ND						
2												
3	FILL, Sandy Lean Clay, black		11	M	SS	ND						
4	Sandy Lean Clay w/a little gravel, light brown mottled, stiff (CL)	Till	9	M	SS	ND						
5												
6												
7												
8					10	M	SS	ND				
9												
10					8	M	SS	ND				
11												
12			10	M	SS	ND						
13												
14												
15												
16			13	M	SS	ND						
17												
18												
19												
20												
21			12	M	SS	ND						

END OF BORING

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS					NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG	
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH		DRILLING FLUID LEVEL
0-19 1/2'	3 1/4" HSA	12/18/98	11:00	21'	19.5'	19'		14'
		12/18/98	2:15	21'	None	19'		7'
BORING COMPLETED:	12/18/98							
CC: TM	CA: MB	Rig: 24						



# BORING LOG

AET JOB NO: **08-00831** LOG OF BORING NO. **3 (p. 1 of 1)**

PROJECT: **Tim's Sinclair; Trimont, Minnesota**

DEPTH IN FEET	SURFACE ELEVATION: _____ MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	PID rdgs	FIELD & LABORATORY TESTS			
							WC	DEN	LL	PL
1 -	FILL, Sand w/gravel, medium to fine grained, brown	Fill	14	M	SS	ND				
2 -										
3 -	FILL, Sandy Lean Clay, black		10	M	SS	ND				
4 -										
5 -	Sandy Lean Clay w/a little gravel, light brown mottled, stiff (CL)	Till	13	M	SS	ND				
6 -										
7 -			15	M	SS	ND				
8 -										
9 -			12	M	SS	ND				
10 -										
11 -			14	M	SS	ND				
12 -										
13 -			13	M	SS	ND				
14 -										
15 -			10	M	SS	ND				
16 -										
17 -										
18 -										
19 -										
20 -										
21 -	END OF BORING									

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS					NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG	
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH		DRILLING FLUID LEVEL
0-19 1/2'	3 1/4" HSA	12/18/98	11:30	21'	19.5'	19'		13'
BORING COMPLETED:	12/18/98	12/18/98	2:40	21'	None	19'		6.5'
CC: TM	CA: MB							
	Fig: 24							



AMERICAN  
ENGINEERING  
TESTING, INC.

# BORING LOG

AET JOB NO: 08-00831 LOG OF BORING NO. 4 (p. 1 of 1)

PROJECT: Tim's Sinclair; Trimont, Minnesota

DEPTH IN FEET	SURFACE ELEVATION: MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	PID rdgs	FIELD & LABORATORY TESTS					
							WC	DEN	LL	PL	Pq	
1	Sandy Lean Clay w/visible organics, black (CL)	Fill/Topsoil	14	M	SS	ND						
2												
3												
4	Sandy Lean Clay w/a little gravel, light brown mottled, stiff (CL)	Till	12	M	SS	ND						
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22	Sandy Lean Clay w/a little gravel, grey, stiff (CL)		10	M	SS	ND						
23												
24												
25												
26	END OF BORING		10	M	SS	ND						

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS						NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	
0-24 1/2'	3 1/4" HSA	12/18/98	12:00	26'	24.5'	24.5'		None
		12/18/98	3:05	26'	None	24'		15.5'
BORING COMPLETED: 12/18/98								
CC: TM CA: MB Rig: 24								



AMERICAN  
ENGINEERING  
TESTING, INC.

# BORING LOG

AET JOB NO: **08-00831** LOG OF BORING NO. **5** (p. 1 of 1)

PROJECT: **Tim's Sinclair; Trimont, Minnesota**

DEPTH IN FEET	SURFACE ELEVATION: MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	PID rdgs	FIELD & LABORATORY TESTS			
							WC	DEN	LL	PL
1	FILL, Sand w/gravel, medium to coarse grained, brown	Fill	11	M	SS	ND				
2			5	M	SS	ND				
3	FILL, Clayey Sand w/a little gravel, grey mixed	Fill	6	M	SS	ND				
4			8	M	SS	ND				
5	Clayey Sand w/a little gravel, light brown mottled, stiff (SC)	Till	10	M	SS	65				
6			13	M	SS	ND				
7			12	M	SS	ND				
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										

END OF BORING

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS					NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG	
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH		DRILLING FLUID LEVEL
0-19 1/2'	3 1/4" HSA	12/18/98	1:00	21'	19.5'	19'		None
		12/18/98	4:45	21'	None	19'		15.5'
BORING COMPLETED: 12/18/98								
CC: TM	CA: MB	Rig: 24						



AMERICAN  
ENGINEERING  
TESTING, INC.

# BORING LOG

AET JOB NO: **08-00831** LOG OF BORING NO. **6 (p. 1 of 1)**

PROJECT: **Tim's Sinclair; Trimont, Minnesota**

DEPTH IN FEET	SURFACE ELEVATION: MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC In	FIELD & LABORATORY TESTS						
							WC	DEN	LL	PL	Pq		
1	FILL, Clayey Sand w/gravel, black	Fill	8	M	SS	ND							
2													
3		FILL, Clayey Sand, green	Fill	11	M	SS	ND						
4													
5													
6													
7													
8													
9	Sandy Lean Clay w/a little gravel, light brown mottled, stiff (CL)	Till	12	M	SS	60							
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													

END OF BORING

DEPTH:	DRILLING METHOD	WATER LEVEL MEASUREMENTS				NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG		
		DATE	TIME	SAMPLED DEPTH	CASING DEPTH		CAVE-IN DEPTH	DRILLING FLUID LEVEL
0-19 1/2'	3 1/4" HSA	12/18/98	3:00	21'	19.5'	19'		None
		12/18/98	4:15	21'	None	19'		16'
BORING COMPLETED: 12/18/98								
CC: TM	CA: MB	Rlg: 24						



# Minnesota Pollution Control Agency

August 25, 1999

Mr. Wayne Harbitz  
Route 1 Box 121  
St. James, Minnesota 56081

Mr. Tim Pearson  
180 North Broadway  
Trimont, Minnesota 56176

RE: Completion of Land Treatment Soil Monitoring Requirements  
Leak Site: Tim's Sinclair, 180 North Broadway, Trimont  
Site ID#: LEAK00011740  
Preapproval ID: LTF0325

Dear Mr. Harbitz and Mr. Pearson:

On October 27, 1998, the Minnesota Pollution Control Agency (MPCA) issued a letter of approval for land treatment of petroleum contaminated soil excavated from the site referenced above. The approval letter specified that additional follow-up monitoring of the land treated soil is required at the land treatment site.

The MPCA staff has received and reviewed the monitoring results for soil samples collected at the land treatment site. The results indicate that the soil has been adequately treated. Therefore, no further follow-up soil monitoring and tillage are required for this soil.

Please contact me at (507)280-2995, if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Denise Oakes".

Denise A. Oakes, P.G.  
Project Manager  
Site Remediation Unit  
South District, Rochester Office

DAO:ml

c: Norma Gates, City Clerk, Trimont  
Rob Sip - Martin County Water Plan Coordinator, Fairmont  
Petrofund Staff - Minnesota Department of Commerce, St. Paul  
Steve Bruggeman - MPCA, Rochester



## SOIL MONITORING RESULTS FOR LAND TREATED PETROLEUM CONTAMINATED SOIL

(FORM D)

Fact Sheet #3.12

April 1996

RECEIVED

AUG 20 1990

MPCA

This form must be used for reporting the results of follow-up soil sampling where petroleum contaminated soil has been spread at a land treatment site for a specific batch of soil. Refer to Minn. R. ch. 7037 for specific information on monitoring and reporting.

### I. BACKGROUND

A. Generator (and mailing address):

Name: Tim Pearson  
Business name: Tim's Sinclair  
Street/Box: 180 N. Broadway  
City, Zip: Trimont, Minnesota 56176  
Telephone: 507-639-6081

B. Site from which contaminated soil was generated:

MPCA Site ID#: LEAK0000 11740  
Business name: Tim's Sinclair  
Street/Box: 180 N Broadway  
City, Zip: Trimont, Minnesota 56176  
County: Watonwan

C. Land Treatment Site Owner  
(and mailing address):

Name: Wayne Harbitz  
Street/Box: Rt 2 Box 121  
City, Zip: St. James, Minnesota 56081  
Telephone: 507-375-3303

D. Land Treatment Site Operator  
(and mailing address):

Name: Wayne Harbitz  
Street/Box: Rt 2 Box 121  
City, Zip: St. James, Mn 56081  
Telephone: 507-375-3303

E. Person(s) who completed this form:

Name: Wayne Harbitz  
Business name:  
Street/Box: Rt 2 Box 121  
City, Zip: St. James, Mn 56081  
Telephone: 507-375-3303

Name:  
Business name:  
Street/Box:  
City, Zip:  
Telephone:

F. Legal Description of Land Treatment Site:

W 1/2 NE 1/4 of Section 14, Township 106N, Range 31W,  
Township Name Rosendale, County Watonwan



## II. LAND TREATMENT INFORMATION

- A. Actual date soil was spread: October 19<sup>th</sup>, 1999
- B. Dates soil was tilled (since spreading or the most recent monitoring report):  
Oct 1998, May 1<sup>st</sup> 1999, June 1<sup>st</sup>, July 1<sup>st</sup> Aug 1<sup>st</sup> 1999

C. If land treatment plot was cropped indicate type of crop and seeding date:

D. Soil monitoring sampling date: June 29<sup>th</sup>, 1999

E. List the soil sample analytical results (total petroleum hydrocarbons, TPH) from the land treatment site. If additional petroleum constituents were required to be reported, list results on a separate attached table.

Sample Number	TPH as Gas or Fuel Oil (circle one) ppm	Sample Number	TPH as Gas or Fuel Oil (circle one) ppm
11740	< 3.0 ppm Gro	11740	< 3.5 ppm Dro

Note: Copies of laboratory results and chain of custody forms must be attached.

## III. LOCAL GOVERNMENT NOTIFICATION INFORMATION

A copy of this form must be sent to the appropriate local government officials before or at the same time that it is submitted to the MPCA. Provide the following for the local government officials to whom copies of this form have been sent:

County official:

Township, City, or Rosendale Township

Tribal official: Albert Haler

Title: Watonwan County Solid Waste Officer <sup>Chairman</sup>

Street/Box: Box 467

Street/Box: Rt 2 Box 156

City, Zip: St. James, Minnesota 56081

City, Zip: St. James, Mn 56081

Telephone: 507-375-3383

Telephone: 507-375-4877

\*\*\*\*\*

Project Manager  
Minnesota Pollution Control Agency  
Tanks and Emergency Response Section  
520 Lafayette Road North  
St. Paul, Minnesota 55155-4194

-OR-

appropriate MPCA Regional Office land  
treatment site approval letter was issued by  
MPCA Regional Office Staff.



# LABORATORIES, Inc.

P.O. BOX 249, 1126 N. FRONT STREET  
NEW ULM, MN 56073-0249  
PHONE (507) 354-8517 WATS (800) 782-3557 FAX (507) 359-2890



**WE ARE AN EQUAL OPPORTUNITY EMPLOYER**

Report Date: 21 Jul 1999

WAYNE HARBITZ  
WAYNE HARBITZ  
RT 2 BOX 121  
ST JAMES MN 56081-9639

Lab Number: 99-S2367  
Work Order #: 22-245  
Account #: 019387

Date Received: 30 Jun 1999  
Date Sampled: 29 Jun 1999  
Temperature at Receipt: ON ICE  
GRO Analysis Date: 13 Jul 1999  
DRO Dilution Factor: 1  
DRO Extraction Date: 7/ 2/99  
DRO Analysis Date: 15 Jul 1999  
DRO Dilution Factor: 1

GRO - WI DNR LUST, JULY 1993 MANUAL  
DRO - WI DNR LUST, JULY 1993 MANUAL

Sample Description: 11740

ANALYTE

=====  
Sample Concentration For GRO  
Sample Concentration For DRO

Result Units RL Analyst  
=====  
< 3.0 ppm 3.0 KE  
< 3.5 ppm 3.5 LMG  
=====

AAA-TFT (SURROGATE) RECOVERY: 97 %

RL = Reporting Limits

All data for this report has been approved by MVTL Laboratory Management.