Petroleum Remediation Program
Minnesota Pollution Control Agency
http://www.pca.state.mn.us/cleanup/pubs/lustpubs.html

APPLICATION TO LAND TREAT PETROLEUM CONTAMINATED SOIL AT AN APPROVED SITE (FORM B)

Guidance Document 3-05

This form is to be submitted to the Minnesota Pollution Control Agency (MPCA) after specific soil contamination information is known and a land treatment site has been selected. This form may be submitted at the same time as land treatment Form A. **Please refer to Minn. R. ch. 7037 for specific information on application requirements for land treatment sites.** Petroleum contaminated soil may be spread upon approval of a Form B application which is contingent on proper local notification.

I. Background

A. Land Treatment Site Owner
PREAPPROVAL NUMBER: PREO
Name: **Riley Brothers Construction, Inc., Joe Riley**
Address: **46369 208th Street**
City, Zip: **Morris, 56267**
Telephone: **(320) 580-2500**

B. Site where contaminated soil was generated:
MPCA Site ID#: LEAK00015656 LMK
Name: **Alex Exhaust**
Address: **905 3rd Avenue East**
City, Zip: **Alexandria, 56308**
County: **Douglas**
Note: The soil was generated within MnDot right of way during road construction (see RP below).

C. Land Treatment Operator
Name: **Riley Brothers Construction, Inc., Joe Riley**
Address: **46369 208th Street**
City, Zip: **Morris, 56267**
Telephone: **(320) 589-2500**

D. Person completing this application:
Name: **April Pilarski**
West Central Environmental Consultants, Inc.
Address: **14 Green River Rd. PO Box 594**
City, Zip: **Morris, 56267**
Telephone: **(320) 589-2039**

E. Responsible Person Name/Address:
Minnesota Department of Transportation (MnDot)
Thomas Lundberg, Project Manager
1000 Highway 10 West
Detroit Lakes, MN 56501
(218) 847-1537

F. Legal description of Land Treatment Site: **SW** 1/4 of **NE** 1/4 of Section **12**,Township **124**N, Range **38**W, Township Name **Barsness**, County **Pope**.
Latitude/Longitude **45.56440431/-95.38670578** Collection Date **8/25/04**.

G. Provide the following for contaminated soil that has been spread or has already been approved for spreading at this land treatment site: (attach sheet for additional information, if necessary)

Leaksite Number	Leaksite (name,city)	Soil Volume (cu.yds)	Date spread

no other soil has been spread at this site

Total soil volume already spread or already approved for spreading (cu. yds.): **0**

H. Soil volume of proposed batch to be spread (cu. yds.): **1500 cu. yds.**

I. Projected date of soil spreading: **prior to November 1, 2005**

II. Soil Storage Information

Complete the following. Refer to Guidance Document 3-03 *Land Treatment of Petroleum Contaminated Soil* for storage and run-off control options and storage time limits.

A. Location of proposed batch (circle): leaksite property, land treatment site, not yet excavated, other (specify)
Soil is stockpiled at a construction staging area off of Highway 27 in the east end of Alexandria, MN.

B. Date soil excavated (stockpiled):
Soil was excavated during road construction near Alex Exhaust between May 18 to June 1, 2005.

C. Type of run-off controls
Soil is stockpiled on and covered with reinforced plastic.

III. Petroleum Contaminated Soil Sampling Results

Type(s) of petroleum contamination (circle): **unleaded gas, regular gas, diesel fuel**, No. 1,2,3,4,5 or 6 fuel oil, used oil, other (specify)
Contamination from Alex Exhaust is believed to be from an old gas station. WCEC is assuming the above petroleum sources could have been present.

Results of organic matter percent in native topsoil as required in Form A: **3.7%**

Refer to Minn. R. ch.7037.0500 "Sampling and Analysis of Petroleum Contaminated Soil." Please report all parameters as averages. Please analyze lead as a grab sample. Also, if additional analyses are required attach a separate table, listing the appropriate analytical parameters and results. (Please ensure that the proper number of soil samples are collected and the appropriate analyses are conducted.)

Sample Code	GRO (mg/kg)	DRO (mg/kg)	Benzene (mg/kg)	Ethylbenzene (mg/kg)	Toluene (mg/kg)	Xylene (mg/kg)	MTBE (mg/kg)	Lead (mg/kg)
SP1	**<4**	**<10**	**<0.1**	**<0.07**	**<0.1**	**<0.2**	**<0.12**	**<11.5**
SP2	**<4**	**<10**	**<0.1**	**<0.07**	**<0.1**	**<0.2**	**<0.12**	**12.4**
SP3	**<4**	**<10**	**<0.1**	**<0.07**	**<0.1**	**<0.2**	**<0.12**	**<11.5**
SP4	**250**	**54**	**0.6**	**1.9**	**0.26**	**4.5**	**<0.12**	**11.7**
Average	**65.5**	**21**	**0.23**	**0.53**	**0.14**	**1.3**	**<0.12**	**11.8***

***Lead is less than 20 times the toxicity level (20 x 5 mg/kg = 100 mg/kg), therefore TCLP analysis was not completed.**

IV. Soil Spreading Information and Soil Nutrient Information

Refer to Minn. R. ch. 7037.1800 "Petroleum Loading Limitations" and 7037.2200 "Fertilizer Application" that explain acceptable spreading thickness of petroleum contaminated soil based on contaminant levels, site characteristics of the land treatment area, and nutrient availability. Consult with your local Soil Conservation Service, environmental consulting firms, or a professional soil scientist, in order to determine proper spreading thickness and soil nutrient information. For additional information on how to calculate the above, refer to Guidance Document 3-03 *Land Treatment of Petroleum Contaminated Soil.*

The average GRO and DRO concentrations are less than 2,000 mg/kg, therefore soil nutrient information was not evaluated.

A. Proposed spreading thickness (inches): **4 inches**

B. Area of land to be used (acres): **2.79 acres (2.98 available)**

V. Site Map and Supporting Information

Attach the following to this form. CLEARLY MARK exact location of the land treatment site borders (indicate dimensions of each side in feet).

A. Site Map– which delineates proposed plot for this batch of soil (label dimensions in feet)
   – delineate all other plots previously used for land treatment (indicate leak number)
   – north arrow

B. Copies of laboratory reports and chain of custody forms for contaminated soil

C. Native soil nutrient test results for phosphorus, if conducted. **NA.**

VI. Local Government Notification Information

Attach copies of notifications and approvals that were secured for Form A unless local government has advised the MPCA in writing that they wish to review and approve each form B application. In this event the applicant will need to supply with this form B application written evidence that the county or township has been notified of the batch and county or township has approved of this specific batch of soil. Refer to Form A for an explanation of local government notification information.

VII. Applicant Signature

By signing below you take responsibility for complying with all requirements of Minn. R. ch. 7037 "Petroleum Contaminated Soil Management" and will be subject to the contents and practices herein The MPCA reserves the right to inspect your land treatment plot at any time and enforce through available means if it has been determined that the site was not suitable for land treatment of petroleum contaminated soil and/or if proper land application procedures have not been followed.

Land Owner Signature _____ Date 9-19-05
Riley Brothers Construction, Inc., Joe Riley

Site Operator Signature _____ Date 9-19-05
Riley Brothers Construction, Inc., Joe Riley

Generator Signature _____ Date 9/16/05
MnDot Project Engineer, Jesse Miller

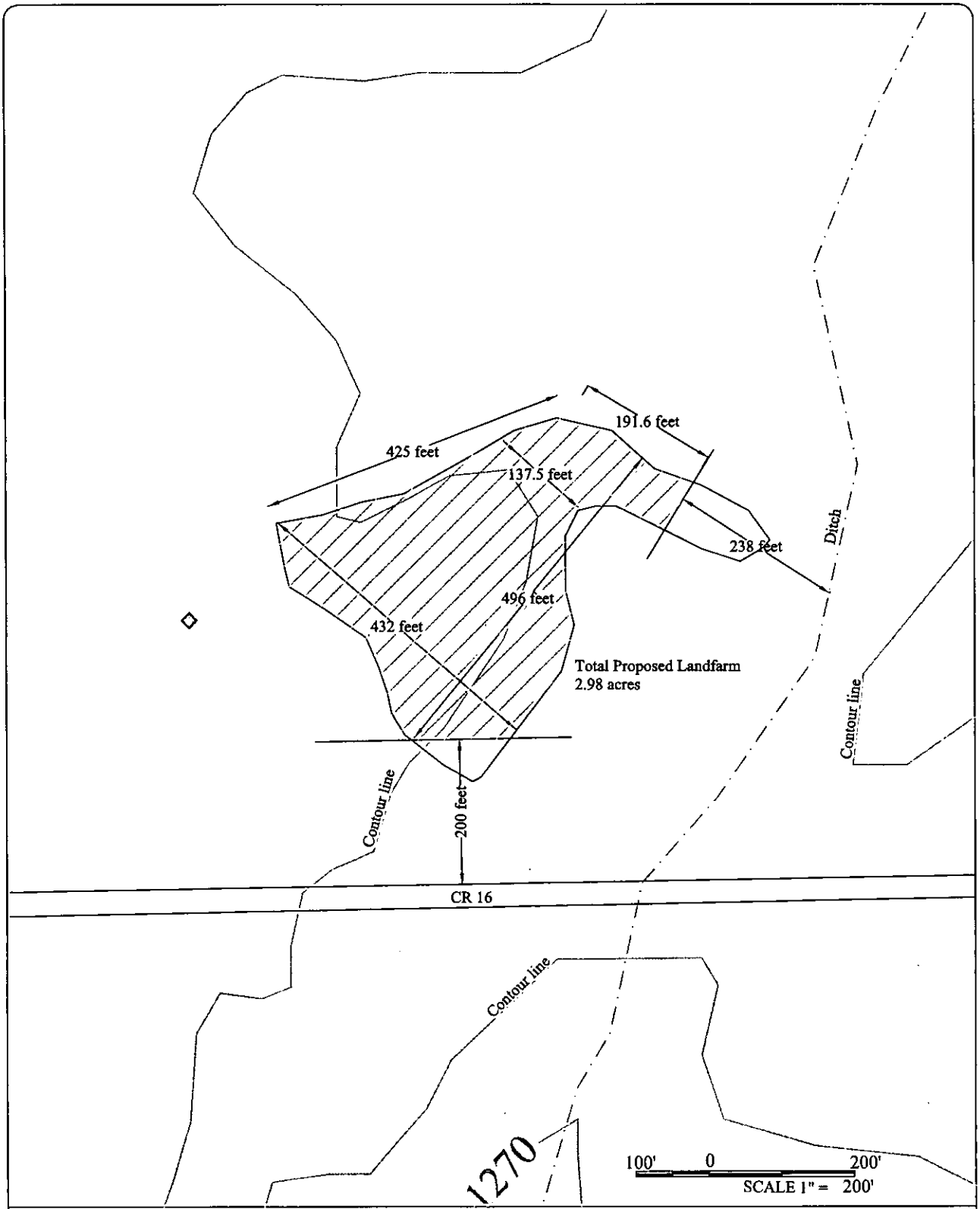
VIII. Local Officials Mailing Addresses

County Official: **Steve Lawrence**
Title: **Pope County Environmental Services Director**
Street/Box: **130 East Minnesota Ave**
City, Zip: **Glenwood, 56334**
Telephone: **(320) 634-5715**

Township Official: **Paul Anderson**
Title: **Barsness Township Clerk**
Street/Box: **22935 270th Ave**
City, Zip: **Starbuck, 56381**
Telephone: **(320) 239-2726**

Web Pages and Phone Numbers

MPCA Staff:	http://data.pca.state.mn.us/pca/cmplsearch.html
MPCA Toll Free:	**(800) 657-3864**
Petroleum Remediation Program Web Page:	http://www.pca.state.mn.us/programs/list_p.html
MPCA Information Request:	http://www.pca.state.mn.us/about/inforequest.html
MPCA Petroleum Brownfields Program:	http://www.pca.state.mn.us/programs/vpic_p.html
PetroFund Web Page:	http://www.commerce.state.mn.us/mainpf.htm
PetroFund Phone:	**(651) 297-1119**, or **(800) 638-0418**
State Duty Officer:	**(651) 649-5451** or **(800) 422-0798**



WCEC
ENVIRONMENTAL CONSULTANTS

PROJECT No. : 04-4570-30 Land Farm, Riley Brothers Construction

FIGURE 2: Detailed Map of Landfarm Site

JLK

"Solutions for Technical Concerns"

MDH Laboratory # 027-137-157

Sample ID:	S051580806	Project #:	5527	Sampler: Client	Type: Grab
Client:	WCEC-Morris			Status: Normal	Matrix: Solid
Study:	Consultant			NTS COC No: 49516	
Descript:	WCEC, Morris #4570			Sampled: 6/2/2005	
Location:	SP1-4570			Completed: 06/14/2005	

Notes:

TPH as Diesel extraction date: 6/8/05

Analyte	Analysis Date	Result	Units	RL	Method
TPH as Diesel, Soil	6/9/2005	< 10	mg/Kg	10	WI DRO, Mod
TPH as Gasoline, Soil	6/8/2005	< 4	mg/Kg	4	WI GRO, Mod
Benzene, Soil	6/8/2005	< 100	ug/Kg	100	8021B
Ethyl Benzene, Soil	6/8/2005	< 70	ug/Kg	70	8021B
Lead, Solid	6/14/2005	< 11.5	mg/Kg	11.5	6010B
Methyl tert-butyl ether	6/8/2005	< 120	ug/Kg	120	8021B
Percent Total Solids	6/9/2005	87.1	%	0.01	SM 2540G
Toluene, Soil	6/8/2005	< 100	ug/Kg	100	8021B
Total Xylenes, Soil	6/8/2005	< 200	ug/Kg	200	8021B

Approved By:

Project Manager:

Analyses were performed by methods approved by the U.S. Environmental Protection Agency and the Minnesota Department of Health.

Northeast Technical Services, Inc. makes no warranty except that the analysis has been made upon the samples received in accordance with generally accepted testing laboratory principles and practices. The results of the analysis may not be characteristic of the whole from which the sample was taken. This warranty is in lieu of all other warranties either expressed or implied.

"Solutions for Technical Concerns"

MDH Laboratory # 027-137-157

Sample ID:	S051580816	Project #:	5527	Sampler: Client	Type: Grab
Client:	WCEC-Morris			Status: Normal	Matrix: Solid
Study:	Consultant			NTS COC No: 49516	
Descript:	WCEC, Morris #4570			Sampled: 6/2/2005	
Location:	SP2-4570			Completed: 06/14/2005	

Notes:

TPH as Diesel extraction date: 6/8/05

Analyte	Analysis Date	Result	Units	RL	Method
TPH as Diesel, Soil	6/9/2005	<10	mg/Kg	10	WI DRO, Mod
TPH as Gasoline, Soil	6/8/2005	<4	mg/Kg	4	WI GRO, Mod
Benzene, Soil	6/8/2005	<100	ug/Kg	100	8021B
Ethyl Benzene, Soil	6/8/2005	<70	ug/Kg	70	8021B
Lead, Solid	6/14/2005	12.4	mg/Kg	11	6010B
Methyl tert-butyl ether	6/8/2005	<120	ug/Kg	120	8021B
Percent Total Solids	6/9/2005	90.5	%	0.01	SM 2540G
Toluene, Soil	6/8/2005	<100	ug/Kg	100	8021B
Total Xylenes, Soil	6/8/2005	<200	ug/Kg	200	8021B

Approved By:

Project Manager:

Analyses were performed by methods approved by the U.S. Environmental Protection Agency and the Minnesota Department of Health.

Northeast Technical Services, Inc. makes no warranty except that the analysis has been made upon the samples received in accordance with generally accepted testing laboratory principles and practices. The results of the analysis may not be characteristic of the whole from which the sample was taken. This warranty is in lieu of all other warranties either expressed or implied.

"Solutions for Technical Concerns"

MDH Laboratory # 027-137-157

Sample ID: S05158081A	Project #: 5527	Sampler: Client	Type: Grab
Client: WCEC-Morris		Status: Normal	Matrix: Solid
Study: Consultant		NTS COC No: 49516	
Descript: WCEC, Morris #4570		Sampled: 6/2/2005	
Location: SP3-4570		Completed: 06/14/2005	

Notes:

TPH as Diesel extraction date: 6/8/05

Analyte	Analysis Date	Result	Units	RL	Method
TPH as Diesel, Soil	6/9/2005	<10	mg/Kg	10	WI DRO, Mod
TPH as Gasoline, Soil	6/8/2005	<4	mg/Kg	4	WI GRO, Mod
Benzene, Soil	6/8/2005	<100	ug/Kg	100	8021B
Ethyl Benzene, Soil	6/8/2005	<70	ug/Kg	70	8021B
Lead, Solid	6/14/2005	<11.5	mg/Kg	11.5	6010B
Methyl tert-butyl ether	6/8/2005.	<120	ug/Kg	120	8021B
Percent Total Solids	6/9/2005	89.6	%	0.01	SM 2540G
Toluene, Soil	6/8/2005	<100	ug/Kg	100	8021B
Total Xylenes, Soil	6/8/2005	<200	ug/Kg	200	8021B

Approved By:

Project Manager:

Analyses were performed by methods approved by the U.S. Environmental Protection Agency and the Minnesota Department of Health.

Northeast Technical Services, Inc. makes no warranty except that the analysis has been made upon the samples received in accordance with generally accepted testing laboratory principles and practices. The results of the analysis may not be characteristic of the whole from which the sample was taken. This warranty is in lieu of all other warranties either expressed or implied.

"Solutions for Technical Concerns"

MDH Laboratory # 027-137-157

Sample ID: S05158081B | Project #: 5527
Client: WCEC-Morris
Study: Consultant
Descript: WCEC, Morris #4570
Location: SP4-4570

Sampler: Client
Status: Normal
NTS COC No: 49516
Sampled: 6/2/2005
Completed: 06/14/2005

Type: Grab
Matrix: Solid

Notes:

TPH as Diesel extraction date: 6/8/05

Analyte	Analysis Date	Result	Units	RL	Method
TPH as Diesel, Soil	6/9/2005	54	mg/Kg	10	WI DRO, Mod
TPH as Gasoline, Soil	6/8/2005	250	mg/Kg	40	WI GRO, Mod
Benzene, Soil	6/8/2005	600	ug/Kg	100	8021B
Ethyl Benzene, Soil	6/8/2005	1900	ug/Kg	70	8021B
Lead, Solid	6/14/2005	11.7	mg/Kg	11	6010B
Methyl tert-butyl ether	6/8/2005	<120	ug/Kg	120	8021B
Percent Total Solids	6/9/2005	92.6	%	0.01	SM 2540G
Toluene, Soil	6/8/2005	260	ug/Kg	100	8021B
Total Xylenes, Soil	6/8/2005	4500	ug/Kg	200	8021B

Approved By:

Project Manager:

Analyses were performed by methods approved by the U.S. Environmental Protection Agency and the Minnesota Department of Health.

RECEIVED JUN 1 2005

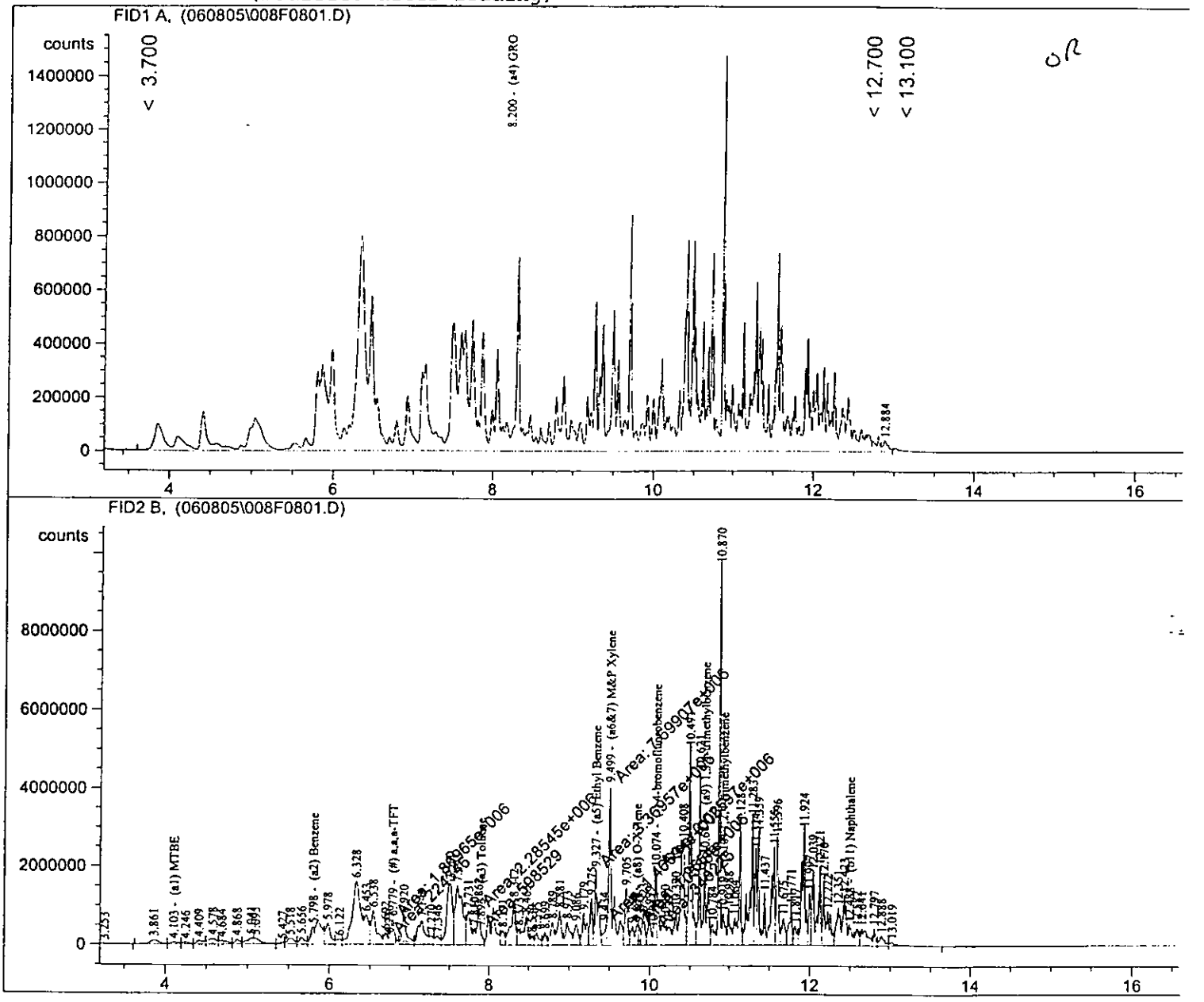
Injection Date : 6/8/05 12:34:09 PM
Sample Name : s05158081b
Acq. Operator : csd

Seq. Line : 8
Vial : 8
Inj : 1
Inj Volume : Manually

Acq. Method : D:\HPCHEM\4\METHODS\!GC4GRO5.M
Last changed : 2/18/05 12:58:50 PM by csd
Analysis Method : D:\HPCHEM\4\METHODS\052605SL.M
Last changed : 6/8/05 12:55:38 PM by csd
(modified after loading)

Stock

OR



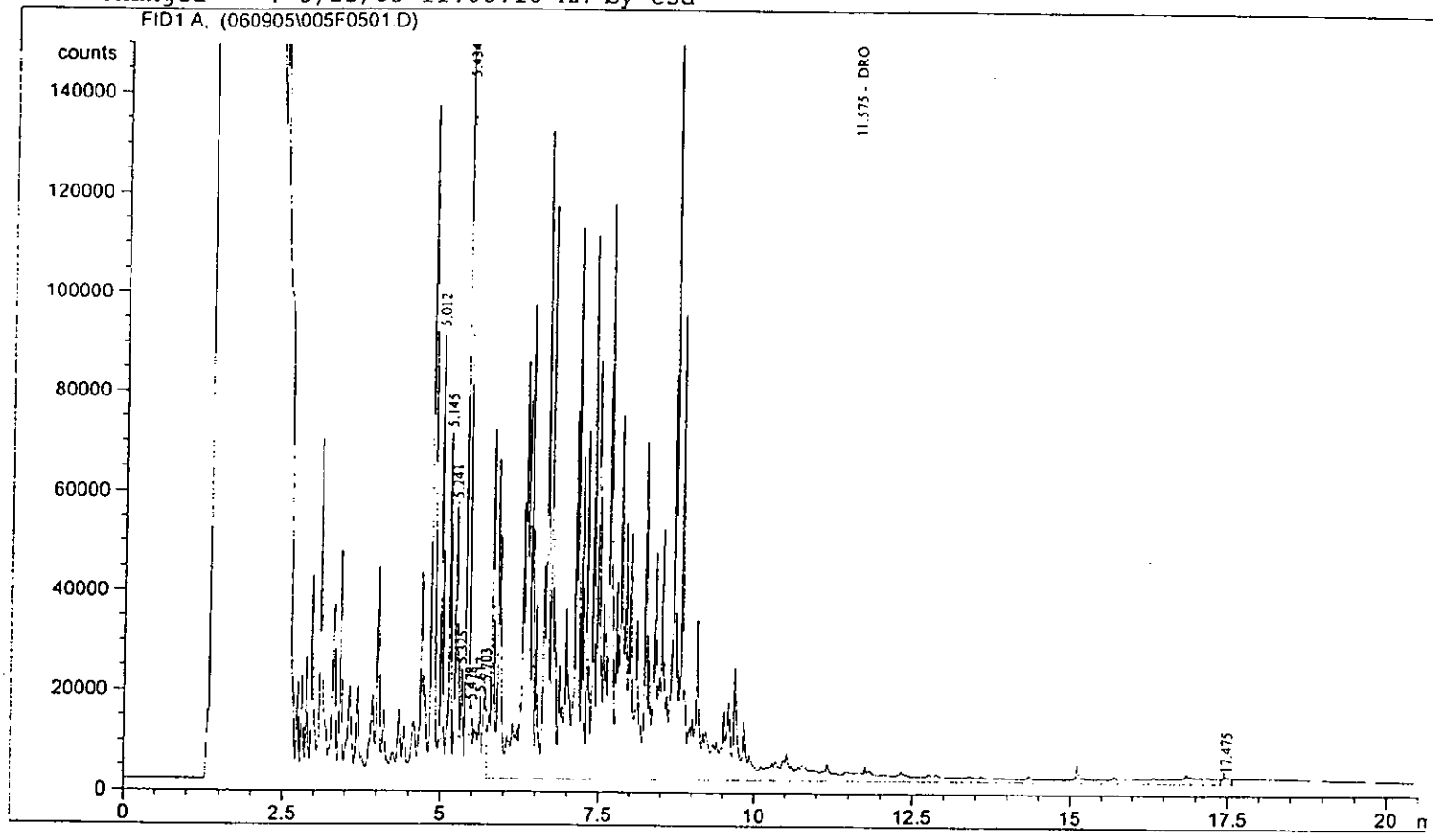
External Standard Report

Sorted By : Signal
Calib. Data Modified : 5/31/05 9:41:25 AM
Multiplier : 1.0000
Dilution : 1.0000
Sample Amount : 24.30000 [ppb] (not used in calc.)

Injection Date : 6/9/05 2:02:05 PM
Sample Name : s05158081b
Acq. Operator : csd

Seq. Line : 5
Vial : 5
Inj : 1
Inj Volume : 2 µl

Acq. Method : D:\HPCHEM\7\METHODS\!GC7ACQ1.M
Last changed : 3/23/05 6:10:16 PM by csd
Analysis Method : D:\HPCHEM\7\METHODS\D032405L.M
Last changed : 3/25/05 11:06:16 AM by csd



External Standard Report

Sorted By : Signal
Calib. Data Modified : 03/25/2005 11:05:47 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ppm]	Grp	Name
11.575	HHA+	6.72409e6	2.02611e-7	1.36237		DRO

Totals : 1.36237

Results obtained with enhanced integrator!

*** End of Report ***

Northeast Technical Services, Inc.
315 Chestnut Street
P.O. Box 1142
Virginia, Minnesota 55792
Phone: 218-741-4290
Fax: 218-742-1010

COC# 49516

Page ____ of 1
Date Due: 6-7

14

CHAIN OF CUSTODY RECORD

Client Information	Report to:
Client:: LOLEC	Jason Kirwin
Contact Person: Jason Kirwin	Address: WLEC Morris
Address: WLEC-Morris	Invoice to: Sheldon Giese
Phone: 320 589-2039	Address: WLEC-Morris
Fax: 320 589-2014	
Project Information: 4570	

Lab Use Only Laboratory ID	Sample Description	Collection Date	Collection Time	Matrix Liquid	Matrix Solid	Matrix Other	Type Grab	Type Comp	Filtered	Analysis Required: TPH as gas	TPH as fuel oil	BTEX MTBE	Lead	Comments
505158 0806	SP1-4570	6/2/05			X		X		N	X	X	X	X	
0816	SP2-4570	↓			↓		↓		↓	X	X	X	X	
081A	SP3-4570									X	X	X	X	
081B	SP4-4570	↓			↓		↓		↓	X	X	X	X	

Sampled By:	Date: 6-2-05 Time: 1300	Received By:	Date: 6/6/05 Time: 3:30	Received for Laboratory By:	Date: 6/7/05 Time: 3pm	NTS Project #
Relinquished By:	Date: 6/6/05 Time: 4:00	Received By:	Date: Time:	Temperature on Arrival: On Ice X ____ Degrees Celsius		Misc. Lab Information

No Temp Blank

BATCH SCANNING SHEET

updated 3/23/2012

10/23

Scan Queue* (circle one):

AST/UST Scan	Hazardous Waste
Air Quality**	Major AST
C&E – CR-APT – Scan	Major AST Permit Application
C&E – ER Scan Queue	Permitting – Scan
CSW/ISW/MS4 Scan	Remediation/Leak Sites
Generic	Rulemaking

*No batch sheet needed for: Bar Code Scanning, DMRs, or Grants

** Air Quality - Only Criteria & Mercury Emissions Inventories

Status:

Prepped by: Joe Sanders Date: 10/17/13

Prep QC'd by: _____ Date: _____

Scanned by: Tim Sorensen Date: 12/19/13

Scan QC'd by: _____ Date: _____

Batch Number: Leak #'s 6853, 16030, 15656, ~~6129~~ 6129

File Type (for archiving): _____

Comments: _____