

3R - 272

**GENERAL
CORRESPONDENCE**

YEAR(S):

2000 - 1995

 Louis Dreyfus Natural Gas

July 24, 2000

New Mexico Oil Conservation Division
Mr. Bill Olson
2400 Pacheco Street
Sante Fe, NM 85730

Re:MKL #2-R
Section 5, T26N, R07W,
Rio Arriba County, New Mexico

Please consider the enclosed data for "Final Closure" of pit and monitor well at this location.

Data has been gathered on this location from work done by either Louis Dreyfus Natural Gas personnel or by Contract Environmental Services, Inc., working under directions of LDNG personnel. This data includes a sundry notice, pit remediation and closure report, site diagram, and enclosures 1, 2, and 3 discussed below.

Excavation was not complete, however a report (See Enclosure #1) from Contract Environmental Services shows that excavation was completed as far as possible without disturbing permanent equipment. Verbal approval was received from OCD and BLM to hold excavation at this point.

Our attention was then directed to the soil farms for remediation. Soil samples taken in September of 1996 show one of these soil farms is within limits of guidelines (See Enclosure #3). The other soil farm was turned and fertilized and resampled on 6 Dec. 99. These test show this farm also within limits.

Soil from soil farms will be used to contour location in standards for surrounding area and revegitate to BLM standards for the Largo Canyon area.

Soil samples tested below required 100 ppm in Gasoline and Diesel Ranges for both soil farms.

Supporting data for all lab analysis are enclosed and are true and accurate to the best of knowledge. If further information is required, please contact me at (915)387-5355.

Thank you,



Tommy H. Arnwine
Environmental & Safety Director

cc: Gene Simer
OCD- Aztec-Denny Faust
BLM- Farmington- Bill Liese

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well Gas Well Other

2. Name of Operator

Louis Dreyfus Natural Gas

3. Address and Telephone No.

P.O. Box 525, Sonora, TX 76950 (915) 387-5355

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 5, T26N, R07W

5. Lease Designation and Serial No.

03353A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

MKL 2-R

9. API Well No.

3003924611

10. Field and Pool, or Exploratory Area

GCNM

11. County or Parish, State

Rio Arriba, New Mexico

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other Final Pit Closure
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

All laboratory analysis for soil farms have proven within limits of guidelines. LDNG proposes the following leading to "final closure" of pit:

- 1) Contour soil farm t suit location drainage.
- 2) Reseed to BLM area requirements.

14. I hereby certify that the foregoing is true and correct

Signed

[Signature]

Title **Environmental & Safety Director**

Date **7-24-2000**

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special in-

structions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

SPECIFIC INSTRUCTIONS

Item 4—If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 13—Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive

zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et. seq., 351 et. seq., 25 U.S.C. et. seq.; 43 CFR 3160.

PRINCIPAL PURPOSE — The information is to be used to evaluate, when appropriate, approve applications, and report completion of secondary well operations, on a Federal or Indian lease.

ROUTINE USES:

- (1) Evaluate the equipment and procedures used during the proposed or completed subsequent well operations.
- (2) Request and grant approval to perform those actions covered by 43 CFR 3162.3-2(2).
- (3) Analyze future applications to drill or modify operations in light of data obtained and methods used.
- (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION — Filing of this notice and report and disclosure of the information is mandatory once an oil or gas well is drilled.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501, et. seq.) requires us to inform you that:

This information is being collected in order to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

This information will be used to report subsequent operations once work is completed and when requested, to obtain approval for subsequent operations not previously authorized.

Response to this request is mandatory for the specific types of activities specified in 43 CFR Part 3160.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 18 and C Streets, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0135), Washington, D.C. 20503.

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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5. Lease Designation and Serial No.
03353A

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7. If Unit or CA, Agreement Designation

8. Well Name and No.
MKL 2-R

9. API Well No.
3003924611

10. Field and Pool, or Exploratory Area
GCNM

11. County or Parish, State
Rio Arriba, New Mexico

SUBMIT IN TRIPLICATE

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
Louis Dreyfus Natural Gas

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P.O. Box 525, Sonora, TX 76950 (915) 387-5355

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Signed *Sunny G. Amis* Title Environmental & Safety Director Date 7-24-2000

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

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14. I hereby certify that the foregoing is true and correct

Signed

Sammy G. Quispe

Title

Environmental & Safety Director

Date

7-24-2000

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

District I

P.O. Box 1920, Hobbs, NM

District II

P.O. Drawer DD,

District III

1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTE FE OFFICE

PIT REMEDIATION AND CLOSURE REPORT

Operator: Louis Dreyfus Natural Gas Telephone: (915) 387-5355

Address: P.O. Box 525, Sonora, TX 76950

Facility Or: MKL #2-R
Well Name

Location Unit or Qtr/Qtr Sec Sec 5 T 26N R07W County

Pit Type: Separator Dehydrator Other

Land Type: BLM ,State ,Fee , Other

Pit Location: Pit dimensions: length 12 , width 12 , depth 12
(Attach diagram)

Reference: wellhead , Other

Footage from reference: 30ft.

Direction from reference: Degrees 300° East North
of West South

Depth To Ground Water:	Less than 50 feet	(20 points)	
(Vertical distance from	50 feet to 99 feet	(10 points)	
contaminants to seasonal	Greater than 100 feet	(0 points)	<u>20</u>
high water elevation of			
ground water)			

Wellhead Protection Area:	Yes	(20 points)	
(Less than 200 feet from a private	No	(0 points)	<u>0</u>
domestic water source, or; less than			
1000 feet from all other water sources			

Distance To Surface Water:	Less than 200 feet	(20 points)	
(Horizontal distance to perennial	200 feet to 1000 feet	(10 points)	
lakes, ponds, rivers, streams, creeks,	Greater than 1000 feet	(0 points)	<u>20</u>
irrigation canals and ditches)			

RANKING SCORE (TOTAL POINTS):

Date Remediation Started:

9-27-95

Date completed

11-12-99

Remediation Method:
(Check all appropriate sections)

Excavation

Approx. cubic yards

64

Landfarmed

In situ Bioremediation

Other

Remediation Location:
(i.e. landfarmed onsite,
name and location of
offsite facility)

Onsite

Offsite

General Description of Remedial Action:

Placed excavated soil into two soil farms areas. Turn soil and fertilize periodically.

Ground Water Encountered:

No

Yes

Depth

Final Pit:

Sample location

Closure Sampling:

(if multiple samples,
attach sample results
and diagram of sample
locations and depths)

Sample depth

Sample date

Sample time

Sample Results

Benzene (ppm)

Total BTEX (ppm)

Field headspace (ppm)

TPH

Ground Water Sample:

Yes

No

(If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 7-24-00

SIGNATURE

PRINTED NAME Tommy H. Arnwine

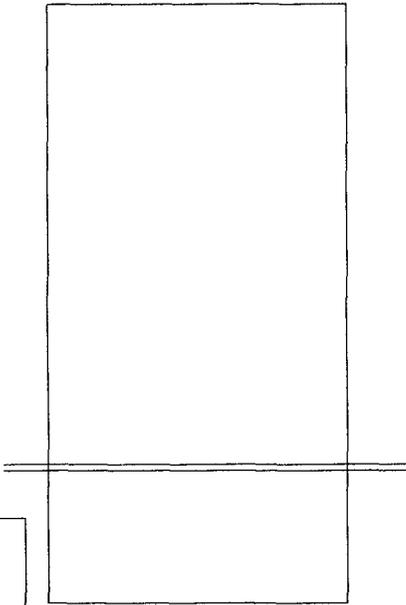
AND TITLE Environmental & Safety Director

LOUIS DREYFUS NATURAL GAS
MKL # 2-R
Sec 5 T26N R07W
Rio Arriba County, New Mexico

DEHY



PIT
AREA

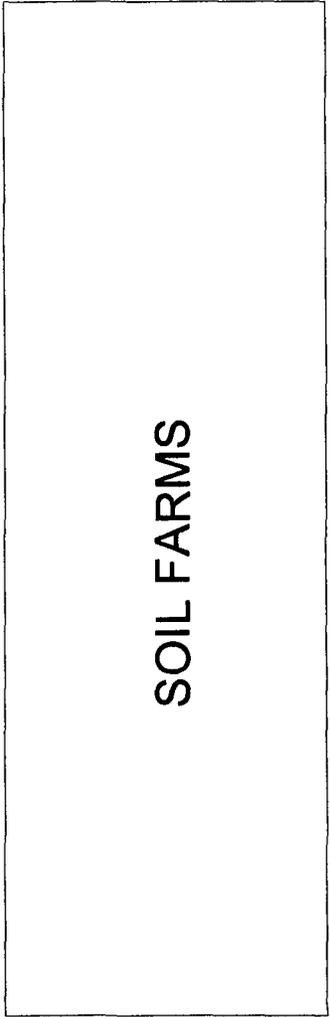


UNDERGROUND
LINE CROSSING PIT

N
↓



WELL



SOIL FARMS

● ●

ENCLOSURE 1

MKL #2-R

Louis Dreyfus Natural Gas

re: MKL #2R

Sec. 5 T26N R07W

Rationale for Risk Based Closure

As per the report from "Contract Environmental Services, Inc., (enclosed) the contaminated soil was removed to depth in center of pit and the remainder of the pit was cleaned to this same depth.

"It is anticipated that not all contamination was removed from the walls of the excavation. On the north side of the excavation a subsurface flowline prevents removing all contaminated material. On the east side of the excavation the separator is located. These features eliminate further excavation in at least two directions. Leaving the excavation open for an extended period of time will enable the contaminated soils in the walls to remediate as well".

On Site Technologies, LTD.

Date: 06-Dec-99

CLIENT: Louis Dreyfus Natural Gas
 Work Order: 9911023
 Project: Landfarms

QCC SUMMARY REPORT
 Sample Matrix Spike

Sample ID: 9911022-01AMMSD Batch ID: 80156GRO_S- Test Code: SW8015B Units: mg/Kg Analysis Date 11/16/99 Prep Date:
 Client ID: 9911023 Run ID: GC-1_991116A SeqNo: 21343

Analyte T/R Hydrocarbons: C6-C10 Result 1.537 PQL 0.18 SPK value 1.802 SPK Ref Val 0 %REC 85.3% LowLimit 46 HighLimit 118 RPD Ref Val 1.537 %RPD 2.7% RPDLimit 12 Qual

Sample ID: 9911022-01AMMSD Batch ID: 80156GRO_S- Test Code: SW8015B Units: mg/Kg Analysis Date 11/16/99 Prep Date:
 Client ID: 9911023 Run ID: GC-1_991116A SeqNo: 21344

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

On Site Technologies, LTD.

Date: 06-Dec-99

CLIENT: Louis Dreyfus Natural Gas
Work Order: 9911023

QC SUMMARY REPORT

Project: Landfarms

Method Blank

Sample ID: MBlank Batch ID: 8015GRO_S- Test Code: SW8015B Units: mg/Kg Analysis Date: 11/16/99 Prep Date:

Client ID: 9911023 Run ID: GC-1_991116A SeqNo: 21331

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

T/R Hydrocarbons: C6-C10 ND 0.18

Qualifiers:

NID - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 06-Dec-99

CLIENT: Louis Dreyfus Natural Gas
 Work Order: 9911023
 Project: Landfarms

QCC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV1 GRO_99092 Batch ID: 80156GRO_S- Test Code: SW8015B Units: mg/Kg Analysis Date 11/16/99 Prep Date:

Client ID: 9911023 Run ID: GC-1_991116A SeqNo: 21332

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDlimit Qual

T/R Hydrocarbons: C6-C10 1.718 0.18 1.812 0 94.8% 85 115

Trifluorotoluene .0769 0 0.08 0 96.1% 77 134

Sample ID: CCV2 GRO_99092 Batch ID: 80156GRO_S- Test Code: SW8015B Units: mg/Kg Analysis Date 11/16/99 Prep Date:

Client ID: 9911023 Run ID: GC-1_991116A SeqNo: 21345

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDlimit Qual

T/R Hydrocarbons: C6-C10 1.719 0.18 1.812 0 94.9% 85 115

Trifluorotoluene .0756 0 0.08 0 94.5% 77 134

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

On Site Technologies, LTD.

Date: 06-Dec-99

CLIENT: Louis Dreyfus Natural Gas
Work Order: 9911023
Project: Landfarms

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: LCS Soil Batch ID: 8015GRO_S- Test Code: SW8015B Units: mg/Kg Analysis Date 11/16/99 Prep Date:
Client ID: 9911023 Run ID: GC-1_991116A SeqNo: 21333
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
T/R Hydrocarbons: C6-C10 1.647 0.18 1.802 0 91.4% 65.9 118

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

On Site Technologies, LTD.

Date: 06-Dec-99

CLIENT: Louis Dreyfus Natural Gas
 Work Order: 9911023
 Project: Landfarms

QC SUMMARY REPORT
 Method Blank

Sample ID: MBlank Batch ID: GRO_S-12/2/ Test Code: SW8015B Units: µg/Kg Analysis Date 11/16/99 Prep Date:

Client ID: 9911023 Run ID: GC-1_991116B SeqNo: 21625

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	10									
Ethylbenzene	ND	10									
m,p-Xylene	ND	20									
o-Xylene	ND	20									
Toluene	ND	30									

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
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On Site Technologies, LTD.

Date: 06-Dec-99

CLIENT: Louis Dreyfus Natural Gas
 Work Order: 9911023
 Project: Landfarms

QC SUMMARY REPORT
 Sample Matrix Spike

Sample ID: 9911022-01AMSD Batch ID: GRO_S-12/2/ Test Code: SW8015B Units: µg/Kg Analysis Date 11/16/99 Prep Date:

Client ID: 9911023 Run ID: GC-1_991116B SeqNo: 21635

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	88.77	10	100	0	88.8%	80	120	88.77	1.7%	20	
Ethylbenzene	93.14	10	100	0	93.1%	80	120	93.14	2.0%	20	
m,p-Xylene	187.4	20	200	0	93.7%	80	120	187.4	1.9%	20	
o-Xylene	188.6	20	200	0	94.3%	80	120	188.6	1.2%	20	
Toluene	276.5	30	300	0	92.2%	80	120	276.5	1.8%	20	

Sample ID: 9911022-01AMSD Batch ID: GRO_S-12/2/ Test Code: SW8015B Units: µg/Kg Analysis Date 11/16/99 Prep Date:

Client ID: 9911023 Run ID: GC-1_991116B SeqNo: 21636

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	87.3	10	100	0	87.3%	80	120	88.77	1.7%	20	
Ethylbenzene	91.27	10	100	0	91.3%	80	120	93.14	2.0%	20	
m,p-Xylene	184	20	200	0	92.0%	80	120	187.4	1.9%	20	
o-Xylene	186.3	20	200	0	93.1%	80	120	188.6	1.2%	20	
Toluene	271.7	30	300	0	90.6%	80	120	276.5	1.8%	20	

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CLIENT: Louis Dreyfus Natural Gas
 Work Order: 9911023
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QC SUMMARY REPORT
 Laboratory Control Spike - generic

Sample ID: LCS Soil	Batch ID: GRO_S-12/2/	Test Code: SW8015B	Units: µg/Kg	Analysis Date: 11/16/99	Prep Date:						
Client ID: 9911023	Run ID: GC-1_991116B	SeqNo: 21627									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	93.68	10	100	0	93.7%	80	120				
Ethylbenzene	98.82	10	100	0	98.8%	80	120				
m,p-Xylene	201	20	200	0	100.5%	80	120				
o-Xylene	198.6	20	200	0	99.3%	80	120				
Toluene	292.8	30	300	0	97.6%	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 06-Dec-99

CLIENT: Louis Dreyfus Natural Gas
 Work Order: 9911023
 Project: Landfarms

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV1 GRO_99092 Batch ID: GRO_S-12/2/ Test Code: SW8015B Units: µg/Kg

Analysis Date 11/16/99

Prep Date:

Client ID: 9911023 Run ID: GC-1_991116B

SeqNo: 21626

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	96.51	10	100	0	96.5%	85	115				
Ethylbenzene	101.4	10	100	0	101.4%	85	115				
m,p-Xylene	203.7	20	200	0	101.9%	85	115				
o-Xylene	204.1	20	200	0	102.1%	85	115				
Toluene	300.5	30	300	0	100.2%	85	115				
Trifluorotoluene	76.95	0	80	0	96.2%	70	130				

Sample ID: CCV2 GRO_99092 Batch ID: GRO_S-12/2/ Test Code: SW8015B Units: µg/Kg

Analysis Date 11/16/99

Prep Date:

Client ID: 9911023 Run ID: GC-1_991116B

SeqNo: 21637

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	97.33	10	100	0	97.3%	85	115				
Ethylbenzene	101.5	10	100	0	101.5%	85	115				
m,p-Xylene	203.5	20	200	0	101.8%	85	115				
o-Xylene	205.2	20	200	0	102.6%	85	115				
Toluene	302.8	30	300	0	100.9%	85	115				
Trifluorotoluene	75.61	0	80	0	94.5%	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 06-Dec-99

CLIENT: Louis Dreyfus Natural Gas
Work Order: 9911023
Project: Landfarms

QC SUMMARY REPORT
Method Blank

Sample ID: MB1 Batch ID: GC-2_991123 Test Code: SW8015B Units: mg/Kg Analysis Date: 11/23/99 Prep Date: 11/16/99
Client ID: 9911023 Run ID: GC-2_991123A SeqNo: 21551
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
T/R Hydrocarbons: C10-C28 10.53 25 J

Qualifiers: NID - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

ON SITE

CHAIN OF CUSTODY RECORD

4359

TECHNOLOGIES, LTD.

657 W. Maple • P. O. Box 2606 • Farmington NM 87499
 LAB: (505) 325-5667 • FAX: (505) 325-6256

Date: 9/27/94

Page 1 of 1

Purchase Order No.:		Job No.:	
Name: Mike Rainwater-		Title:	
Company: Louis Dreyfus Natural Gas		Company: Contract ENV. Services	
Address:		Mailing Address: PO Box 505	
City, State, Zip: Farmington NM		City, State, Zip: Kirtland NM 87417	
Dept.:		Telephone No. 325-1199	
		Telefax No.:	

Sampling Location: Louis Dreyfus Soil Farms - Largo

Sampler: Jayson Blandford

SAMPLE IDENTIFICATION	SAMPLE		MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED				LAB ID
	DATE	TIME				Tea. 4102 g. loss.	TPH by 481			
MKL-500	9/27/94	12:30pm	Soil	None	1	X	X	X	X	17360-4359
MKL-501	"	"	"	"	1	X	X	X	X	7261
MKL-502	"	"	"	"	1	X	X	X	X	12362
MKL-503	"	"	"	"	1	X	X	X	X	12363
Fed-600	"	1:00pm	"	"	1	X	X	X	X	17364
Fed-601	"	"	"	"	1	X	X	X	X	12365
Fed-602	"	"	"	"	1	X	X	X	X	17366
MKL-200	"	1:30pm	"	"	1	X	X	X	X	17367
MKL-201	"	"	"	"	1	X	X	X	X	12368
Miles-100	"	2:00pm	"	"	1	X	X	X	X	12369
Miles-101	"	"	"	"	1	X	X	X	X	12370
Miles-102	"	"	"	"	1	X	X	X	X	17371

Relinquished by:	Date/Time: 9/27/94 4:00pm	Received by:	Date/Time: 9/27/94 4:15pm
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

Method of Shipment:	Flush	24-48 Hours	10 Working Days	Special Instructions:
Authorized by:	Date: 9/27/94			
Client Signature (Must Accompany Request)				

Distribution: Wf - Lab Pink - Sampler Goldenrod - Client

On Site Technologies, LTD.

Date: 06-Dec-99

CLIENT: Louis Dreyfus Natural Gas
Work Order: 9911023
Project: Landfarms

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: LCS Soil	Batch ID: GC-2_991123	Test Code: SW8015B	Units: mg/Kg	Analysis Date: 11/23/99	Prep Date: 11/16/99						
Client ID: 9911023	Run ID: GC-2_991123A	SeqNo: 21553									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28	529.3	25	501.9	10.53	103.4%	59	126				

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

On Site Technologies, LTD.

Date: 06-Dec-99

CLIENT: Louis Dreyfus Natural Gas
Work Order: 9911023
Project: Landfarms

QC SUMMARY REPORT
Method Blank

Sample ID: MB1	Batch ID: GC-2_991123	Test Code: SW8015B	Units: mg/Kg	Analysis Date: 11/23/99	Prep Date: 11/16/99
Client ID:	9911023	Run ID: GC-2_991123A		SeqNo: 21551	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val
T/R Hydrocarbons: C10-C28	10.53				%RPD RPDLimit Qual
					J

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

CLIENT: Louis Dreyfus Natural Gas
 Work Order: 9911023
 Project: Landfarms

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV6 DRO_99100 Batch ID: GC-2_991123 Test Code: SW8015B Units: mg/Kg Analysis Date 11/29/99 Prep Date:

Client ID: 9911023 Run ID: GC-2_991123A SeqNo: 21578

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28	470.4	25	501.9	0	93.7%	85	115				

Sample ID: CCV7 DRO_99100 Batch ID: GC-2_991123 Test Code: SW8015B Units: mg/Kg Analysis Date 11/30/99 Prep Date:

Client ID: 9911023 Run ID: GC-2_991123A SeqNo: 21579

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28	526.6	25	501.9	0	104.9%	85	115				

Sample ID: CCV8 DRO_99100 Batch ID: GC-2_991123 Test Code: SW8015B Units: mg/Kg Analysis Date 11/30/99 Prep Date:

Client ID: 9911023 Run ID: GC-2_991123A SeqNo: 21580

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C28	528.5	25	501.9	0	105.3%	85	115				

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

On Site Technologies, LTD.

Date: 06-Dec-99

CLIENT: Louis Dreyfus Natural Gas
 Work Order: 9911023
 Project: Landfarms

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID	Batch ID	Test Code	SW#	Units	mg/Kg	Analysis Date	SeqNo	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Client ID:	9911023	Run ID:	GC-2_991123A				21552						
Analyste	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
T/R Hydrocarbons: C10-C28	435.6	25	501.9	0	86.8%	85	115						
Sample ID: CCV2 DRO_99100	Batch ID: GC-2_991123	Test Code: SW#8015B	Units: mg/Kg	Analysis Date	11/23/99	SeqNo:	21574	Prep Date:					
Client ID:	9911023	Run ID:	GC-2_991123A										
Analyste	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
T/R Hydrocarbons: C10-C28	464.4	25	501.9	0	92.5%	85	115						
Sample ID: CCV3 DRO_99100	Batch ID: GC-2_991123	Test Code: SW#8015B	Units: mg/Kg	Analysis Date	11/24/99	SeqNo:	21575	Prep Date:					
Client ID:	9911023	Run ID:	GC-2_991123A										
Analyste	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
T/R Hydrocarbons: C10-C28	455.3	25	501.9	0	90.7%	85	115						
Sample ID: CCV4 DRO_99100	Batch ID: GC-2_991123	Test Code: SW#8015B	Units: mg/Kg	Analysis Date	11/24/99	SeqNo:	21576	Prep Date:					
Client ID:	9911023	Run ID:	GC-2_991123A										
Analyste	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
T/R Hydrocarbons: C10-C28	438.5	25	501.9	0	87.4%	85	115						
Sample ID: CCV5 DRO_99100	Batch ID: GC-2_991123	Test Code: SW#8015B	Units: mg/Kg	Analysis Date	11/29/99	SeqNo:	21577	Prep Date:					
Client ID:	9911023	Run ID:	GC-2_991123A										
Analyste	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
T/R Hydrocarbons: C10-C28	492.2	25	501.9	0	98.1%	85	115						

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

OFF: (505) 325-5667



LAB: (505) 325-1556

TOTAL PETROLEUM HYDROCARBONS

Attn: *Shawn Adams*
 Company: *Contract Environmental Services, Inc.*
 Address: *P.O. Box 505*
 City, State: *Kirtland, NM 87417*

Date: *1-Oct-96*
 COC No.: *4359*
 Sample No. *12367*
 Job No. *2-1000*

Project Name: *Loius Dreyfus Natural Gas - MKL-2R Soil Farm*
 Project Location: *MKL-200*
 Sampled by: *JB* Date: *27-Sep-96* Time: *13:30*
 Analyzed by: *DC/BV* Date: *30-Sep-96*
 Sample Matrix: *Soil*

Laboratory Analysis

<i>Parameter</i>	<i>Result</i>	<i>Detection Limit</i>	<i>Unit of Measure</i>	<i>Method</i>
<i>Total Petroleum Hydrocarbons, TPH</i>	<i>46</i>	<i>25</i>	<i>mg/kg</i>	<i>EPA Method 418.1</i>

Quality Assurance Report

Laboratory Fortified Blank/Spike Soil

<i>Laboratory Identification</i>	<i>Analyzed Value</i>	<i>Acceptable Range</i>	<i>Unit of Measure</i>
<i>Laboratory Fortified Blank Soil - QCBS2</i>	<i>< 25</i>	<i>< 25</i>	<i>mg/kg</i>
<i>Laboratory Fortified Spike Soil - QCSS1</i>	<i>850</i>	<i>828 - 1024</i>	<i>mg/kg</i>

Duplication

<i>Laboratory Identification</i>	<i>(% RSD)</i>	<i>Limit (% RSD)</i>
<i>12328-3974</i>	<i>0.8</i>	<i>15.0</i>

Approved by: *[Signature]*
 Date: *10/1/96*

OFF: (505) 325-5667



LAB: (505) 325-1556

TOTAL PETROLEUM HYDROCARBONS

Attn: *Shawn Adams*
 Company: *Contract Environmental Services, Inc.*
 Address: *P.O. Box 505*
 City, State: *Kirtland, NM 87417*

Date: *1-Oct-96*
 COC No.: *4359*
 Sample No. *12368*
 Job No. *2-1000*

Project Name: *Loius Dreyfus Natural Gas - MKL-2R Soil Farm*
 Project Location: *MKL-201*
 Sampled by: *JB* Date: *27-Sep-96* Time: *13:30*
 Analyzed by: *DC/BV* Date: *30-Sep-96*
 Sample Matrix: *Soil*

Laboratory Analysis

<i>Parameter</i>	<i>Result</i>	<i>Detection Limit</i>	<i>Unit of Measure</i>	<i>Method</i>
<i>Total Petroleum Hydrocarbons, TPH</i>	<i>505</i>	<i>25</i>	<i>mg/kg</i>	<i>EPA Method 418.1</i>

Quality Assurance Report

Laboratory Fortified Blank/Spike Soil

<i>Laboratory Identification</i>	<i>Analyzed Value</i>	<i>Acceptable Range</i>	<i>Unit of Measure</i>
<i>Laboratory Fortified Blank Soil - QCBS2</i>	<i><25</i>	<i><25</i>	<i>mg/kg</i>
<i>Laboratory Fortified Spike Soil - QCSS1</i>	<i>850</i>	<i>828 - 1024</i>	<i>mg/kg</i>

Duplication

<i>Laboratory Identification</i>	<i>(% RSD)</i>	<i>Limit (% RSD)</i>
<i>12368-4359</i>	<i>9.5</i>	<i>15.0</i>

Approved by: *[Signature]*
 Date: *10/1/96*

● ●

ENCLOSURE 2

MKL #2-R



QUALITY ASSURANCE REPORT
for EPA Method 8020

Date Analyzed: 30-Sep-96

Internal QC No.: 0486-QC
Surrogate QC No.: 0488-QC
Reference Standard QC No.: 0417-QC

Method Blank

Analyte	Result	Units of Measure
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Analyte	Units of Measure	True Value	Analyzed Value	% Diff	Limit
Benzene	ppb	20.0	19.9	1	15%
Toluene	ppb	20.0	19.6	2	15%
Ethylbenzene	ppb	20.0	19.7	1	15%
m,p-Xylene	ppb	40.0	37.9	5	15%
o-Xylene	ppb	20.0	18.7	7	15%

Matrix Spike

Analyte	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Benzene	109	111	(39-150)	1	20%
Toluene	80	83	(46-148)	1	20%
Ethylbenzene	102	104	(32-160)	1	20%
m,p-Xylene	88	90	(35-145)	1	20%
o-Xylene	92	94	(35-145)	1	20%

Surrogate Recoveries

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered	Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered
Limit Percent Recovery	(70-130)		Limit Percent Recovery	(70-130)	
S1: Fluorobenzene			S1: Fluorobenzene		
12357-4307	93				
12358-4307	93				

● ●

ENCLOSURE 3

MKL #2-R

OFF: (505) 325-5667



LAB: (505) 325-1556

December 06, 1999

Tommy H. Arnwine
Louis Dreyfus Natural Gas
P.O. Box 220
Flora Vista, NM 87415
TEL: (915) 387-5355
FAX (915) 387-3744

RE: Landfarms

Order No.: 9911023

Dear Tommy H. Arnwine,

On Site Technologies, LTD. received 7 samples on 11/12/99 for the analyses presented in the following report.

The Samples were analyzed for the following tests:

Diesel Range Organics (SW8015B)
Gasoline Range Organics (SW8015B)

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

A handwritten signature in black ink, appearing to read "David Cox", is written over a light blue horizontal line.

David Cox

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 06-Dec-99

CLIENT: Louis Dreyfus Natural Gas
Project: Landfarms
Lab Order: 9911023

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.



612 E. Murray Dr. • P.O. Box 2606 • Farmington, NM 87499
 LAB: (505) 325-5667 • FAX: (505) 327-1496

CHAIN OF CUSTODY RECORD

Date: _____
 Page: _____ of _____

10421

Purchase Order No.:		Project No.:					
SEND INVOICE TO							
Name: <i>Lovine Dreyfus Natural Gas</i>		Dept.:					
Company:		Address:					
City, State, Zip:		Telephone No.:					
PROJECT LOCATION:		Telefax No.:					
SAMPLER'S SIGNATURE:							
SAMPLE IDENTIFICATION							
	DATE	SAMPLE TIME	MATRIX	PRES.	LAB ID		
<i>Hand 7 am</i>					<i>9911023-01A</i>		
<i>MKL 5-A #1</i>							
<i>MKL 5-A #3</i>							
<i>Fed-6-32 #17</i>					<i>9911023-02A</i>		
<i>" #3</i>							
<i>" #3</i>							
<i>Miles 1-E #17</i>					<i>9911023-03A</i>		
<i>#2</i>							
<i>#3</i>							
<i>MKL 2-R #1</i>					<i>9911023-04A</i>		
Relinquished by:		Date/Time		Received by: <i>Therese Rous</i>		Date/Time	
Relinquished by:		Date/Time		Received by:		Date/Time	
Relinquished by:		Date/Time		Received by:		Date/Time	
Method of Shipment:		Rush		24-48 Hours		10 Working Days	
Authorized by: <i>Michelle Rous</i>		Date: <i>11/12/99</i>		By Date:		Special Instructions / Remarks:	
(Client Signature Must Accompany Request)		<i>2:15 PM</i>				<i>RUN BTEX ONLY IF 8015 MOD PASSES</i>	

Distribution: White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 06-Dec-99

Client: Louis Dreyfus Natural Gas	Client Sample Info: Landfarm
Work Order: 9911023	Client Sample ID: MKL 2-R #1
Lab ID: 9911023-04A Matrix: SOIL	Collection Date: 11/12/99
Project: Landfarms	COC Record: 10421-10422

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DM
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	11/24/99
GASOLINE RANGE ORGANICS		SW8015B				Analyst: DC
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	11/16/99
GASOLINE RANGE ORGANICS		SW8015B				Analyst: DM
Benzene	ND	10		µg/Kg	1	11/16/99
Ethylbenzene	ND	10		µg/Kg	1	11/16/99
m,p-Xylene	ND	20		µg/Kg	1	11/16/99
o-Xylene	ND	20		µg/Kg	1	11/16/99
Toluene	ND	30		µg/Kg	1	11/16/99

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr: - Surrogate

On Site Technologies, LTD.

Date: 06-Dec-99

CLIENT: Louis Dreyfus Natural Gas
Work Order: 9911023
Project: Landfarms

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: 9911023-04AMS Batch ID: GC-2_991123 Test Code: SW8015B Units: mg/Kg Analysis Date: 11/30/99 Prep Date: 11/30/99
Client ID: MKL 2-R #1 9911023 Run ID: GC-2_991123A SeqNo: 21572
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
T/R Hydrocarbons: C10-C28 449 25 501.9 0 89.5% 63 126

Qualifiers: NID - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

Contract Environmental Services, Inc.
Post Office Box 505
Kirtland, New Mexico 87417-0505
Phone (505) 325-1198

October 19, 1995

New Mexico Oil Conservation Division
Mr. Bill Olson
2400 Pacheco Street
Santa Fe, New Mexico 85730

RE: Louis Dreyfus Natural Gas Corporation, MKL #2R, Sec 5, T26N, R07W SE/SW, Rio Arriba
County, New Mexico

Dear Mr. Olson,

Contract Environmental Services, Inc. (CES) is pleased to present this "Closure Report" for the MKL #2R well location on behalf of Louis Dreyfus Natural Gas Corporation (LDNG). This report contains background information, current site assessment data, a site plan, conclusions and recommendations.

Background Information

On September 27, 1995 CES began excavating the soil immediately below the earthen pit. As soils were removed from the excavation, periodic samples were gathered to be analyzed using a Photo-Ionization Detector (PID) meter. Soils removed were transferred to another portion of the wellpad to establish a soil farm for continued remediation. These soils were spread on the wellpad some 6" to 12" in depth to allow for aeration and the release of volatile aromatic hydrocarbons.

Approximately 45 cubic yards of contaminated soil was removed from the pit area during the excavation process. At a depth of 12-13' a field PID soil sample indicated that the contaminated soil had been removed. A confirmation laboratory soil sample was gathered to be processed for Total Petroleum Hydrocarbons (TPH) using EPA Method 8015 Modified. This laboratory soil analysis confirmed that uncontaminated soil had been reached. The remainder of the pit area was "Cleaned Out" to this same depth. It is anticipated that not all contamination was removed from the walls of the excavation. On the north side of the excavation a subsurface flow line prevents removing all contaminated material. On the east side of the excavation the separator is located. These features eliminate further excavation in at least two directions. Leaving the excavation open for an extended period of time will enable the contaminated soils in the wall to remediate as well.

The following is field PID data collected during the removal process.

Center Of Earthen Pit

PID Field Data Collected

<u>Depth</u>	<u>Sample No.</u>	<u>PID(PPM)</u>	<u>Location</u>
4'	#1	2000+	Center of Pit
6'	#2	500	Center of Pit
10'	#3	55	Center of Pit
13'	#4	7.0	Center of Pit

Laboratory Data Collected

<u>Depth</u>	<u>Sample No.</u>	<u>8015(PPM)</u>		<u>Location</u>
		<u>Gas</u>	<u>Diesel</u>	
12'	MKL2A-100	89.3	17.9	Northeast Corner

The field PID data and the recently received laboratory data indicate that significant clean soil was reached in the excavation prior to contact with groundwater.

Conclusions

Soil contamination discontinued in the center of the excavation prior to contacting groundwater. The core of the contamination has been removed and is currently remediating on the well pad. Remaining wall contamination will remediate while the excavation remains open during the soil farm remediation process. CES believes that LDNG has adequately removed contaminated soil and sufficiently defined the vertical extent. CES ranks this site at 100 PPM cleanup score with a maximum benzene level of 10 PPM.

Recommendations

Remediate the soils contained in the soil farm to below 100 PPM laboratory TPH by EPA Method 418.1 or 8015 Modified for gas and diesel. Return the remediated soils to the pit area as backfill and slightly dome the area to prevent water ponding. A report on the findings should be presented to NMOCD for their records.

Contract Environmental Services, Inc. appreciates this opportunity to present this "Closure Report" on behalf of Louis Dreyfus Natural Gas Corporation. If you have questions or require additional information, please don't hesitate to contact our offices at (505) 325-1198 or stop by at 4200 Hawkins Road, Farmington.

Sincerely,

Shawn A. Adams
Contract Environmental Services, Inc.

cc: Mr. Denny Foust, NMOCD Farmington
Mr. Bill Liese, BLM Farmington