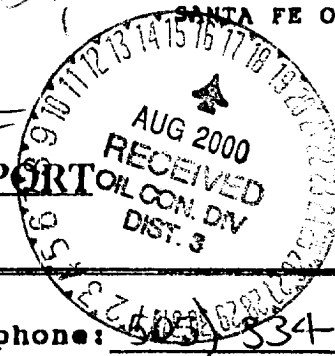


100 Rio Brazos Rd, Aztec, NM 87410

Santa Fe, New Mexico 87504-2088

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

PIT REMEDIATION AND CLOSURE REPORT



RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 6/3/97 Date Completed: 8/28/97

Remediation Method: Excavation ☒ Approx. cubic yards 240
(Check all appropriate sections) Landfarmed ☒ Insitu Bioremediation ☐

Other ☐

Remediation Location: Onsite ☒ Offsite ☐
(ie. landfarmed onsite, name and location of offsite facility)

General Description Of Remedial Action: The contaminated soil was excavated from the pit to seventeen feet below the surface, the reach of the equipment. This soil was set up in a soil farm on-site. The pit was backfilled with clean soil and two auger holes were bored to determine the extent of contamination.

Ground Water Encountered: No ☒ Yes ☐ Depth

Final Pit: Sample location east bank (17')

Closure Sampling: if multiple samples, attach sample results and diagram of sample locations and depths)
Sample depth 17'
Sample date 6/3/97 Sample time 11:00

Sample Results

Benzene(ppm) 0.13
Total BTEX(ppm) 11.8
Field headspace(ppm) 742
TPH 485

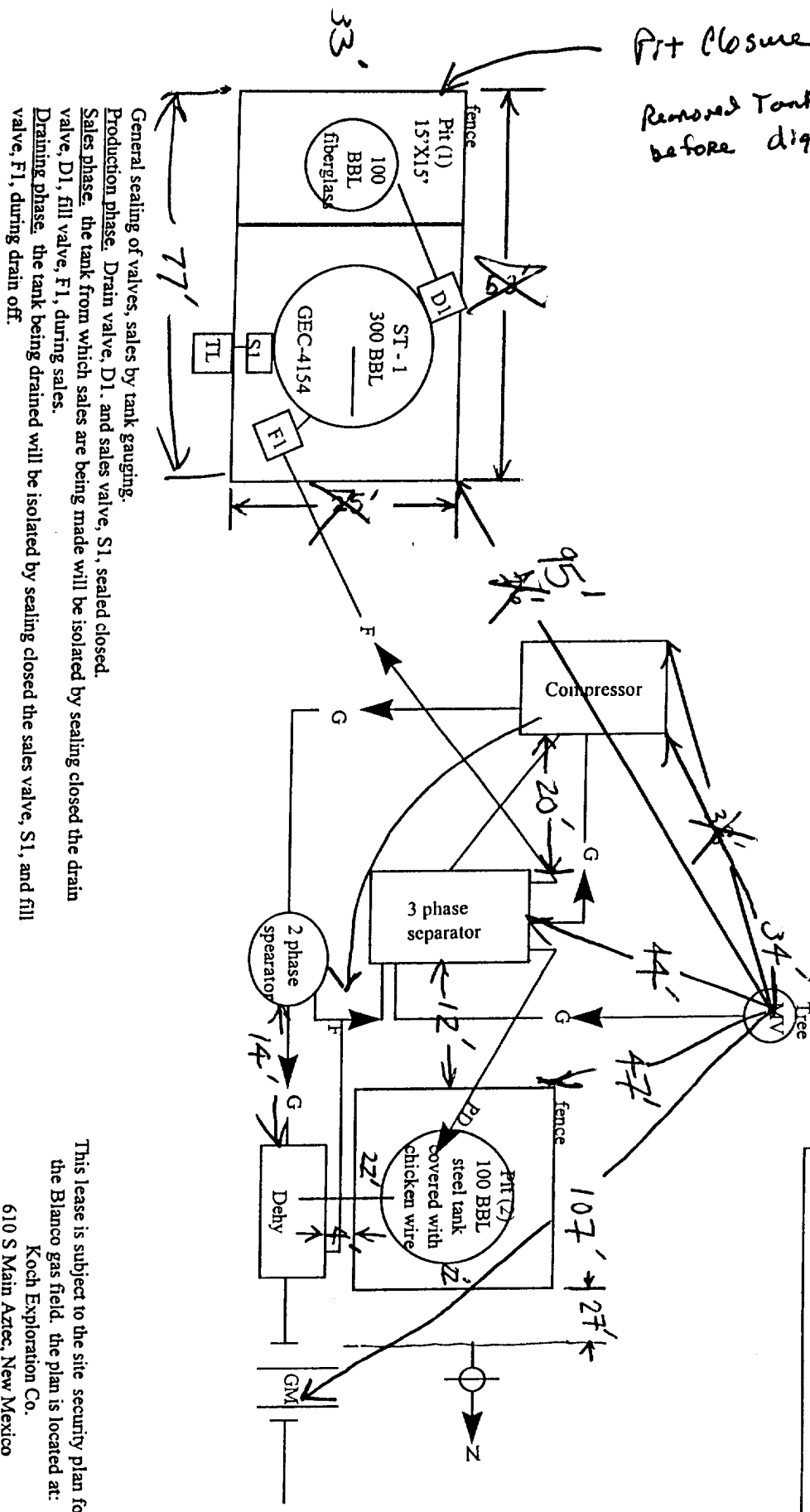
Ground Water Sample: Yes ☐ No ☒ (If yes, attach sample results)

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

DATE 8/10/00
SIGNATURE Donald L. Johnson

PRINTED NAME AND TITLE Donald L. Johnson
Operations Manager

Prt Closure
 Removed Tank (100 BBL)
 before digging



Koch Exploration Co.
 Lamb 1 - SW 1/4 - SW 1/4
 Sec. 21 - T31N - R-10W
 San Juan County NM
 Lease NO. NM-03187
 Revised 4/17/97

General sealing of valves, sales by tank gauging.
 Production phase. Drain valve, D1, and sales valve, S1, sealed closed.
 Sales phase, the tank from which sales are being made will be isolated by sealing closed the drain valve, D1, fill valve, F1, during sales.
 Draining phase, the tank being drained will be isolated by sealing closed the sales valve, S1, and fill valve, F1, during drain off.

This lease is subject to the site security plan for
 the Blanco gas field. the plan is located at:
 Koch Exploration Co.
 610 S Main Aztec, New Mexico

CES Summary of KOCH Earthen Pit Remediation Project for 6/3/97

Sample Number	Location	PID (ppm)	Remarks
Lower pit			
1	mid-pit 10' below surface	5.0	lab number - Lamb3-100
PID Readings			
in pit	mid-pit bottom	0.0	all 7' below surface
in pit	West bank bottom	0.0	
in pit	East bank bottom	0.0	
in pit	North bank bottom	0.0	
in pit	South bank bottom	0.0	
Lambe 2A			
1	mid-pit @ 10' deep	814	
2	mid-pit @ 14' deep	552	
3	mid-pit @ 17' deep	491	
4	West bank @ 17'	302	
5	North bank @ 17'	620	
6	East bank @ 17'	742	
Lambe 2A			
1	mid-pit 6' deep	17	lab number - Lamb2A-102
PID Readings			
in pit	mid pit 6' deep	0	the rest at 4' deep
in pit	West bank bottom	0	
in pit	East bank bottom	0	
in pit	North bank bottom	0	
in pit	South bank bottom	0	

KOCH

Lambe 1

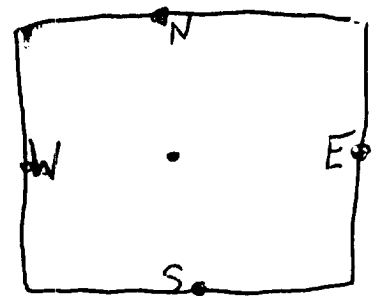
6/3/97

Pit is dry w/ no staining; used as a secondary barrier for a fiberglass tank. Upon excavation noted a petroleum smell w/ dark discoloration of sub-pit bottom soil. Soil is sandy. GW @ 145'. Excavation is necessary.

PID Readings in Pit

<u>Location</u>	<u>Conc (ppm)</u>	<u>Remarks</u>
mid-pit 10' deep	570	Sand

300 BBL
STL TNK



Head Space Analysis

<u>Sample No.</u>	<u>Location</u>	<u>Conc (ppm)</u>	<u>Remarks</u>
1	mid-pit @ 10' deep	814	sand
2	mid-pit @ 14' deep	552	sand
3	" " @ 17' deep	491	sand
4	W bank " " "	302	"
5	N " " " "	620	"
6	S " " " "	399	"
7	E " " " "	742	"
8	mid-pit @ 17' deep		"

Lab Sample No.
Lambe 1-101 →

The land farm is set-up West of the well-head and south-west of the tank/pit area.

Since the soil is sandy it should clean up rather quickly.

Land farm is $85' \times 50' \times \approx 18''$

" " $\approx 6400 \text{ ft}^3$

No surface water w/i 1000'.

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn: *Shawn Adams*
Company: *Contract Environmental Services, Inc.*
Address: *P.O. Box 3376*
City, State: *Farmington, NM 87499*

Date: *10-Jun-97*
COC No.: *6391*
Sample No.: *14814*
Job No.: *2-1000*

Project Name: *Koch Exploration - Lambe 1*
Project Location: *LAMB1-101; East Bank 17' deep*
Sampled by: *DGM* Date: *3-Jun-97* Time: *11:00*
Analyzed by: *HR* Date: *6-Jun-97*
Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Results as Received	Limit of Quantitation	Unit of Measure	Method
Total Petroleum Hydrocarbons, <i>TPH</i>	<i>485</i>	<i>25</i>	<i>mg/kg</i>	<i>EPA Method 418.1</i>

ND - Not Detected at Limit of Quantitation

Quality Assurance Report

Laboratory Fortified Blank/Spike Soil

Laboratory Identification	Analyzed Value	Acceptable Range	Unit of Measure
Laboratory Fortified Blank Soil - <i>QCBS2</i>	<i>< 25</i>	<i>< 25</i>	<i>mg/kg</i>
Laboratory Fortified Spike Soil - <i>QCSSI</i>	<i>870</i>	<i>828 - 1024</i>	<i>mg/kg</i>

Duplication

Laboratory Identification	% RSD	Limit % RSD
<i>14813-6391</i>	<i>< LOQ</i>	<i>15.0</i>

Approved by: *[Signature]*
Date: *6/10/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

CHAIN OF CUSTODY RECORD

1966

Page

Date:

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

[illegible]

tribution: White – On Site Yellow – LAB Pink – Sampler Goldenrod – Client

Koch
6-20-97
Lauke
Soil Auger 5
PID (PPM)

Auger 1

Depth

PID (PPM)

Auger 2

PID (PPM)

2
4
6
8
10
12
14
16 17' last excavation A

18
20-22' Sandstone @ 21' weathered 609 1st Sample

22
24
25-27' Sandstone Still @ 26' Auger Refusal 686 2nd Sample

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99
100

15-16' 0.0 1st Sample

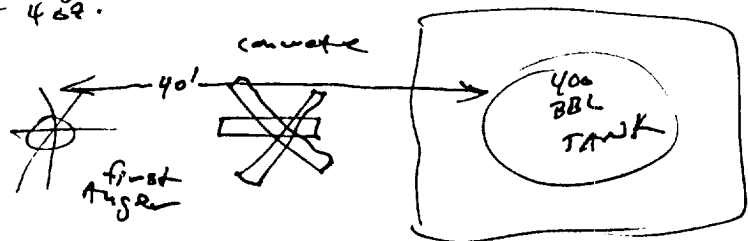
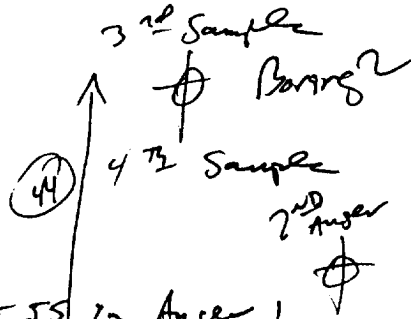
20-22' 1.0 2nd

25-27' 0.0 3rd

30-32' 0.0 4th

35-37' 0.0 5th

NOTE: SAMPLE JUST ABOVE SS in Auger 1
sent to lab for EPA 418.1 Test 462.
glass jar.



Auger 2 - Last 2 Samples were combined to give us
enough for a 462. sample jar for
EPA 418.1

Koch

* ~~LAMBE 1~~ 6/20/97

~~Auger 1 East~~

Depth	PID (PPM)
-------	-----------

20-22'	609
--------	-----

25-27'	686
--------	-----

~~SANDSTONE ENCOUNTERED 27'~~

~~Auger 2 West~~

DEPTH	PID (PPM)
-------	-----------

15-16'	0.0
--------	-----

20-22'	1.0
--------	-----

~~SANDSTONE ENCOUNTERED 22'~~

* ~~WALKER 2~~ 6/20/97

~~Auger (center)~~

Depth	PID (PPM)
-------	-----------

20-22'	4.0
--------	-----

25-27'	3.0
--------	-----

~~BEOROCK / REFUSAL ENCOUNTERED 27'~~

* ~~LAMBE 1A~~ 6/20/97

~~Auger 1 East~~

DEPTH	PID (PPM)
-------	-----------

10-12'	31.0
--------	------

15-17'	13.0
--------	------

20-22'	30.0
--------	------

25-27'	8.0
--------	-----

30-32'	10.0
--------	------

35-37'	9.0
--------	-----

~~STOPPED @ 37'~~

~~Auger 2 West~~

DEPTH	PID (PPM)
-------	-----------

20-22'	7.0
--------	-----

25-27'	3.0
--------	-----

30-32'	3.0
--------	-----

35-37'	8.0
--------	-----

~~STOPPED @ 37'~~

Koch

						RESULTS			
LAMB-202	Lambe 1A	Boring 1	35-37'	EPA 41B.1		ND	WEST	6/20/97	
LAMB-201	" "	Boring 2	30-32'	" "		ND	EAST	6/20/97	
LAMB-205	Lambe 1	Auger 1	25-27'	" "		2010	EAST	6/20/97	BOIS ORDERED Encountered SS
LAMB-206	" "	Auger 2	35-37' 15-22'	" "		ND	WEST	6/20/97	27'
WALK-200	Walker 2	Auger	20-27'	" "		S2	Center	6/20/97	
CAIN-203	Caine 1A	Auger 1	30-32'	" "		ND	East	6/20/97	
CAIN-204	" "	Auger 2	15-22'	" "		ND	WEST	6/20/97	

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn: *Shawn Adams*
Company: *Contract Environmental Services, Inc.*
Address: *P.O. Box 3376*
City, State: *Farmington, NM 87499*

Date: *23-Jun-97*
COC No.: *4316*
Sample No.: *15059*
Job No.: *2-1000*

Project Name: *Koch Exploration - Lamb 1*
Project Location: *LAMB-206, West Auger, 15-22' deep*
Sampled by: *SA* Date: *20-Jun-97* Time: *18:07*
Analyzed by: *HR* Date: *23-Jun-97*
Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Results as Received	Limit of Quantitation	Unit of Measure	Method
<i>Total Petroleum Hydrocarbons, TPH</i>	<i>ND</i>	<i>25</i>	<i>mg/kg</i>	<i>EPA Method 418.1</i>

ND - Not Detected at Limit of Quantitation

Quality Assurance Report

Laboratory Fortified Blank/Spike Soil

Laboratory Identification	Analyzed Value	Acceptable Range	Unit of Measure
<i>Laboratory Fortified Blank Soil - QCBS2</i>	<i>ND</i>	<i>ND</i>	<i>mg/kg</i>
<i>Laboratory Fortified Spike Soil - QCSS1</i>	<i>878</i>	<i>828 - 1024</i>	<i>mg/kg</i>

Duplication

Laboratory Identification	RPD	Limit RPD
<i>15053-4316</i>	<i>3.8</i>	<i>15.0</i>

Approved by: *[Signature]*

Date: *6/23/97*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn: *Shawn Adams*
Company: *Contract Environmental Services, Inc.*
Address: *P.O. Box 3376*
City, State: *Farmington, NM 87499*

Date: *23-Jun-97*
COC No.: *4316*
Sample No.: *15058*
Job No.: *2-1000*

Project Name: *Koch Exploration - Lamb 1*
Project Location: *LAMB-205, East Boring, 20-27' deep*
Sampled by: *SA* Date: *20-Jun-97* Time: *17:22*
Analyzed by: *HR* Date: *23-Jun-97*
Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Results as Received	Limit of Quantitation	Unit of Measure	Method
<i>Total Petroleum Hydrocarbons, TPH</i>	<i>2010</i>	<i>25</i>	<i>mg/kg</i>	<i>EPA Method 418.1</i>

ND - Not Detected at Limit of Quantitation

Quality Assurance Report

Laboratory Fortified Blank/Spike Soil

Laboratory Identification	Analyzed Value	Acceptable Range	Unit of Measure
<i>Laboratory Fortified Blank Soil - QCBS2</i>	<i>ND</i>	<i>ND</i>	<i>mg/kg</i>
<i>Laboratory Fortified Spike Soil - QCSS1</i>	<i>878</i>	<i>828 - 1024</i>	<i>mg/kg</i>

Duplication

Laboratory Identification	RPD	Limit RPD
<i>15053-4316</i>	<i>3.8</i>	<i>15.0</i>

Approved by: *[Signature]*
Date: *6/23/97*

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TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn: *Shawn Adams*
 Company: *Contract Environmental Services, Inc.*
 Address: *P.O. Box 3376*
 City, State: *Farmington, NM 87499*

Date: *8-Jul-97*
 COC No.: *4316*
 Sample No.: *15058*
 Job No.: *2-1000*

Project Name: *Koch Exploration - Lamb 1*
 Project Location: *LAMB-205 East Boring*
 Sampled by: *SA*
 Analyzed by: *DC/HR*
 Sample Matrix: *Soil*

Date: *20-Jun-97* Time: *17:22*
 GRO Date: *27-Jun-97*
 DRO Date: *7-Jul-97*

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Gasoline Range Organics (C5 - C9)	541	mg/kg	25	mg/kg
Diesel Range Organics (C10 - C28)	133	mg/kg	5	mg/kg

ND - Not Detected at Limit of Quantitation

Quality Assurance Report

GRO QC No.: 0537-STD
 DRO QC No.: 0548-STD

Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
<i>Gasoline Range (C5 - C9)</i>	<i>ND</i>	<i>ppb</i>	<i>1,351</i>	<i>1,241</i>	<i>8.5</i>	<i>15%</i>
<i>Diesel Range (C10 - C28)</i>	<i>ND</i>	<i>ppm</i>	<i>200</i>	<i>190</i>	<i>5.1</i>	<i>15%</i>

Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Gasoline Range (C5-C9)</i>	<i>98</i>	<i>97</i>	<i>(80-120)</i>	<i>2</i>	<i>20%</i>
<i>Diesel Range (C10-C28)</i>	<i>84</i>	<i>89</i>	<i>(84-118)</i>	<i>5</i>	<i>20%</i>

Method: SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by: *[Signature]*
 Date: *7/8/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn: **Shawn Adams**
 Company: **Contract Environmental Services, Inc.**
 Address: **P.O. Box 3376**
 City, State: **Farmington, NM 87499**

Date: **2-Sep-97**
 COC No.: **4353**
 Sample No.: **15938**
 Job No.: **2-1000**

Project Name: **Koch Exploration - Lamb 1**
 Project Location: **LAMB-610; Soil Farm, Comp. N, S, Center**
 Sampled by: **SAA/PRC** Date: **26-Aug-97** Time: **17:50**
 Analyzed by: **DC/HR** GRO Date: **28-Aug-97**
 Sample Matrix: **Soil** DRO Date: **29-Aug-97**

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Gasoline Range Organics (C5 - C9)	ND	mg/kg	0.5	mg/kg
Diesel Range Organics (C10 - C28)	5	mg/kg	5	mg/kg

ND - Not Detected at Limit of Quantitation

Quality Assurance Report

GRO QC No.: 0537-STD
 DRO QC No.: 0548-STD

Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
Gasoline Range (C5 - C9)	ND	ppb	1,801	1,752	2.8	15%
Diesel Range (C10 - C28)	ND	ppm	200	197	1.5	15%

Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
Gasoline Range (C5-C9)	91	101	(80-120)	10	20%
Diesel Range (C10-C28)	80	81	(75-125)	1	20%

Method: SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by: *[Signature]*
 Date: *9/2/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



Date: 8/27/97

Page 2 of 2

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

Purchase Order No.:		Job No.	
Name: DON JOHNSON		Title:	
Company: KOCU EXPLOSION		Company: CONTRACT ENVIRONMENTAL SERVICES, INC.	
Address: PO Box 489		Mailing Address: PO Box 3376	
City, State, Zip: AZTEC NM 87410		City, State, Zip: FARMINGTON NM 87499	
Telephone No.:		Telefax No.:	

Sampling Location: LAMBE 1A, LAMBE 2, CAINE 1A LAUREL

Sampler: SAA/PRC

SAMPLE IDENTIFICATION				SAMPLE		MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED	LAB ID
SEND INVOICE TO	NAME	COMPANY	ADDRESS	DATE	TIME					
LAMB-605	LAMBE 1A	COMP. 1,2,3	FAIR	8/26/97	4:00	SOIL	N/A	1	X	159733-4353
LAMB-606	LAMBE 1A	COMP. 4,5,6			4:00	"	"	1	X	159734
LAMB-607	LAMBE 2	COMP. 1,2,3			4:30	"	"	1	X	159735
LAMB-608	LAMBE 2	COMP. 4,5,6			4:30	"	"	1	X	159736
CAINE-609	CAINE 1A	COMP. 1,2,3			5:00	"	"	1	X	159737
LAMB-610	LAMBE 1	COMP. 1,2,3			5:50	"	"	1	X	159738

Relinquished by:	Date/Time: 8/27/97 9:00	Received by:	Date/Time: 8/27/97 6:50
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:
Method of Shipment:		Rush	24-48 Hours
Authorized by:	Date: 8/27/97	10 Working Days	Special Instructions: