

P.O. Box 1980, Hobbs, NM

District II

P.O. Drawer DD, Artesia, NM 88211

District III

500 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

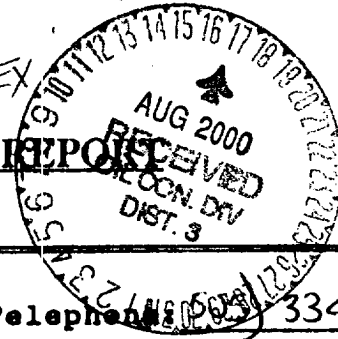
OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

NOV 26 1974
SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

PIT REMEDIATION AND CLOSURE RPPG



Operator: KOCH Exploration Co. Telephone: (803) 334-9111

Address: P.O. Box 489 Aztec, NM 87410

Facility or: Walker 2
Wall Name _____

Location: Unit or Qtr/Qtr Sec M Sec 10 T 31N R 10W County San Juan

Pit Type: Separator ✓ Dehydrator other Tank

Land Type: BLM ☒, State ☐, Fee ☐, Other ☐

Pit Location: Pit dimensions: length 25', width 25', depth 20'
(Attach diagram)

Reference: wellhead ☒, other _____

Footage from reference: 200

Direction from reference: 100 Degrees ✓ East North 7
of
West South ✓

Depth To Ground Water:

(Vertical distance from
contaminants to seasonal
high water elevation of
ground water)

Less than 50 feet (20 points)
50 feet to 99 feet (10 points)
Greater than 100 feet (0 Points) 0

Wellhead Protection Area:

(Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources)

Yes (20 points)
No (0 points) 0

Distance To Surface Water:

(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)

Less than 200 feet (20 points)
200 feet to 1000 feet (10 points)
Greater than 1000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 5/30/97 Date Completed: 4/28/98
Remediation Method: Excavation ☒ Approx. cubic yards 460
(Check all appropriate sections) Landfarmed ☒ Insitu Bioremediation ☐
Other _____

Remediation Location: Onsite ☒ Offsite _____
(If landfarmed onsite, name and location of site facility)

General Description Of Remedial Action: Contaminated Soil was removed and placed in landform on site

Ground Water Encountered: No ☒ Yes ☐ Depth _____

Final Pit: Sample location mid-pit west
Closure Sampling: _____
(If multiple samples, attach sample results and diagram of sample locations and depths)
Sample depth 18'
Sample date 5/30/97 Sample time 1030
Sample Results

Benzene(ppm) ND
Total BTEX(ppm) 22.0
Field headspace(ppm) 837
TPH 9337

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

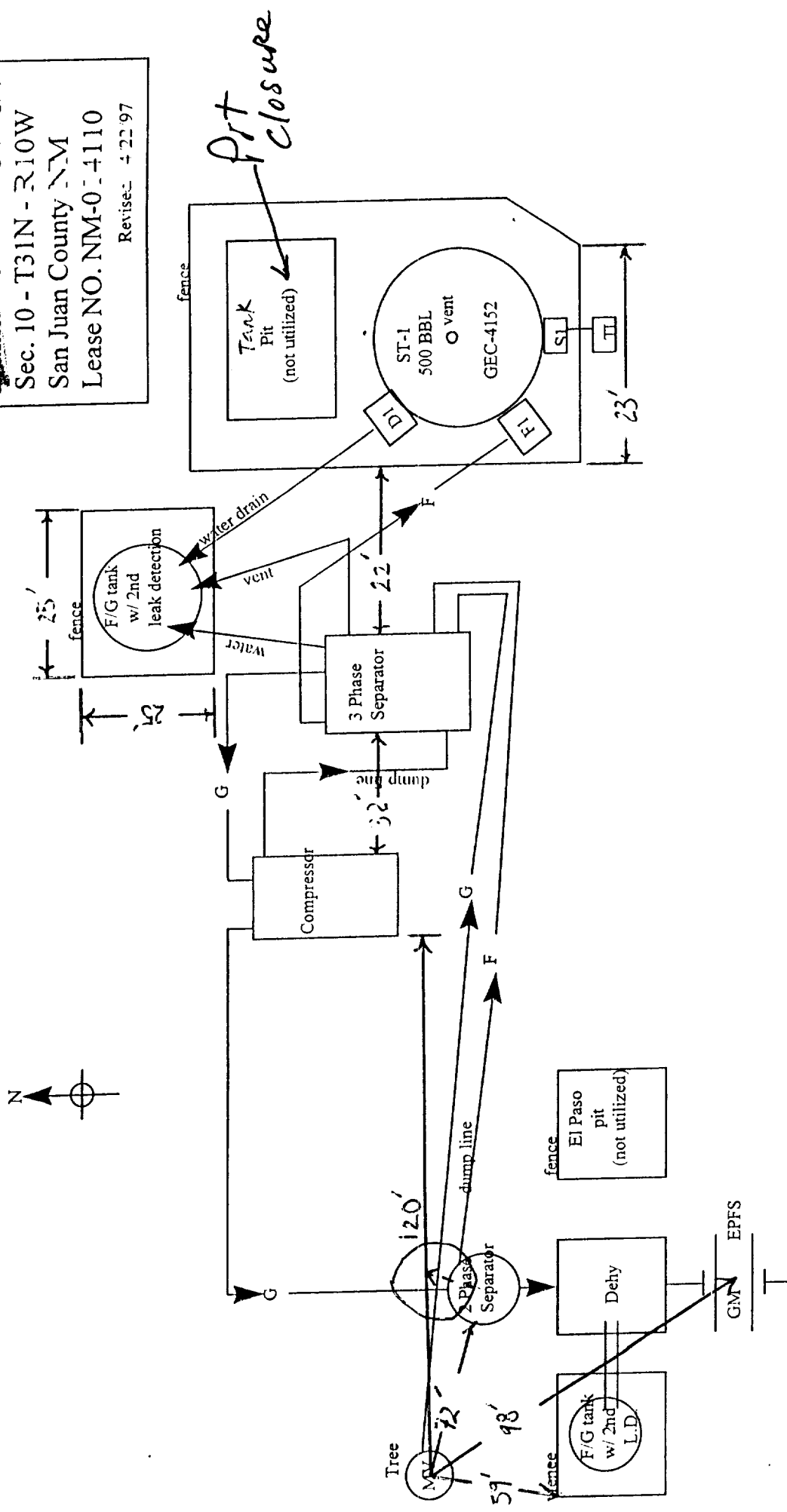
SIGNATURE

Donald L. Johnson

PRINTED NAME
AND TITLE

Donald L. Johnson
Operations Manager

Koch Exploration Co.
~~White~~ SW1/4 - SW 1/4
 Sec. 10 - T31N - R10W
 San Juan County NM
 Lease NO. NM-014110
 Revised 4/22/97



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

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.

CES Summary of KOCH Earthen Pit Remediation Project for 5/30/97

Sample Number	Location	PID (ppm)	Remarks
Walker 2			
1	top of pit (west) after mixing	468	clay
2	mid-pit 6 to 7 feet deep	531	sand/clay
3	top of pit (east) after mixing	458	clay
4	mid-pit 10 feet deep	413	sand/clay
5	pit bottom (west) 16 feet deep	1050	sandy gravel
6	west bank 18 feet deep	58	" "
7	east bank 18 feet deep	660	" "
8	north bank 18 feet deep	889	" "
9	south bank 18 feet deep	53	" "
10	pit bottom (east) 18 feet deep	297	" "
11	pit bottom (west) 18 feet deep	837	lab number - WALK2-100

LOCKIT
Walker 2

5/30/97 0815

On 5/29/97 the fence was removed. The pit had water and oil in it. The sides were stained. Mixing was done at this time. Took first sample out of mixed earth on top of mid pit.

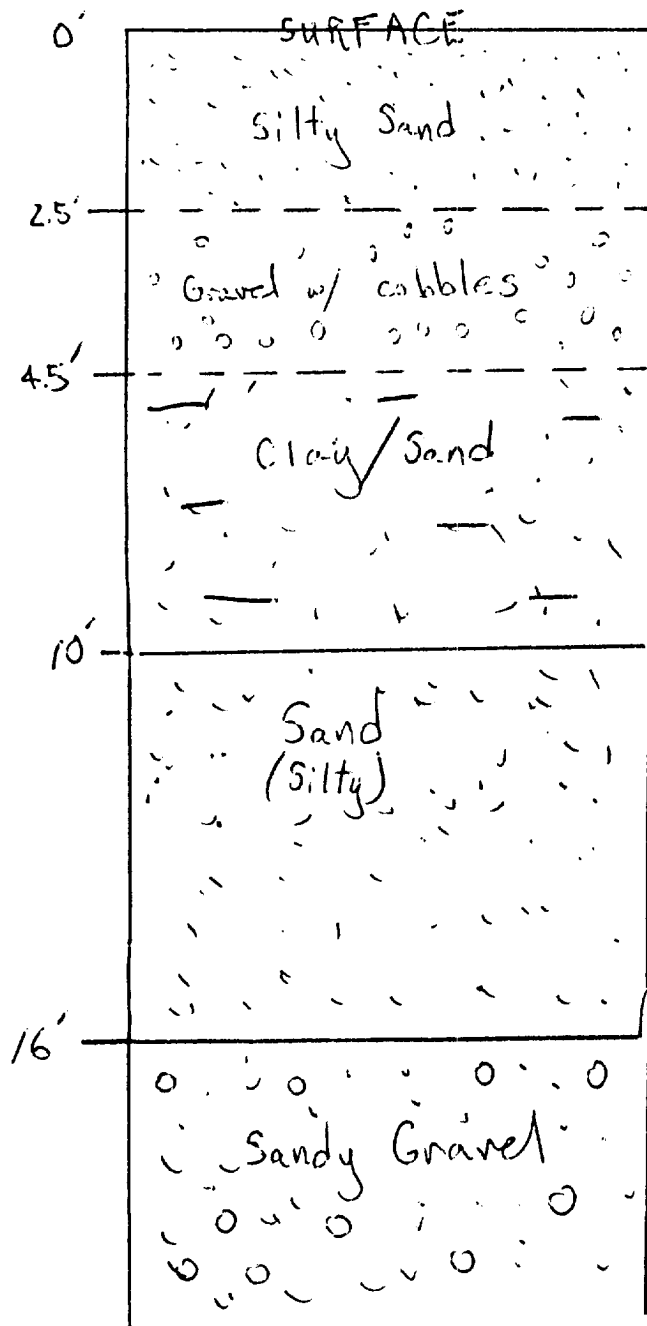
<u>Samples</u> (Hand Space)			
<u>No.</u>	<u>Location</u>	<u>PID (ppm)</u>	<u>Remarks</u>
1	top of mixed pit (west)	468	clay
2	mid-pit 6-7 feet deep	531	sand/clay
3	top mixed (east)	458	clay
4	mid-pit 10' deep	413	sand
5	west pit 16' deep	1050	sandy gravel
6	west bank 18' deep	58	" "
7	east " " "	660	" "
8	north " " "	889	" "
9	south " " "	53	" "
10	bottom of pit east 18'	297	" "
11	" " " west "	837	" "

- Set up soil farm in area east of pit as per Don Johnson's instructions. Cleaned up spill area in road area and put that in soil farm also.
- Completed land farm

KOCH

5/30/97

Walker 2 Soil Profile



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: **3-Jun-97**
COC No.: **6387**
Sample No.: **14802**
Job No.: **2-1000**

Project Name: **Koch Exploration - Walker 2**
Project Location: **WALK2-100; Mid Pit West, 18' deep**
Sampled by: **DGM** Date: **30-May-97** Time: **10:30**
Analyzed by: **HR** Date: **2-Jun-97**
Sample Matrix: **Soil**

Laboratory Analysis

Parameter	Results as Received	Limit of Quantitation	Unit of Measure	Method
Total Petroleum Hydrocarbons; TPH	9337	25	mg/kg	EPA Method 418.1

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 - QCBS2	< 25	< 25	mg/kg
Laboratory Fortified Spike Soil - QCSS1	830	828 - 1024	mg/kg

Duplication

Laboratory Identification	% RSD	Limit % RSD
14686-B1098	< LOQ	15.0

Approved by: 

Date: **6/3/97**

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: *10-Jun-97*
COC No.: *6387*
Sample No.: *14802*
Job No.: *2-1000*

Project Name: *Koch Exploration - Walker 2*
Project Location: *WALK2-100; Midpit West 18' deep*
Sampled by: *DGM* Date: *30-May-97* Time: *10:30*
Analyzed by: *HR* Date: *4-Jun-97*
Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	<i>ND</i>	<i>ug/kg</i>	<i>100</i>	<i>ug/kg</i>
<i>Toluene</i>	<i>530</i>	<i>ug/kg</i>	<i>100</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>2031</i>	<i>ug/kg</i>	<i>100</i>	<i>ug/kg</i>
<i>m,p-Xylene</i>	<i>17491</i>	<i>ug/kg</i>	<i>100</i>	<i>ug/kg</i>
<i>o-Xylene</i>	<i>1991</i>	<i>ug/kg</i>	<i>100</i>	<i>ug/kg</i>
<i>TOTAL</i>	<i>22043</i>	<i>ug/kg</i>		

ND - Not Detected at Limit of Quantitation

Method - *SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography*

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

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6387

Date: 5/30/97

Page

TECHNOLOGIES, LTD.

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 LAB: (505) 325-5667 • FAX: (505) 325-6256

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Koch

					PPM 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	35-37'	" "	2010	EAST	6/20/97	BOIS ORDERED Encountered SS 37'
LAMB-206	" "	Auger 2	15-22'	" "	ND	WEST	6/20/97	
WALK-200	Walker 2	Auger	20-27'	" "	52	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	

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
--------	-----

BEAROCK / 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 Exploration Company Risk Analysis

Prepared by:

Contract Environmental Services, Inc

Prepared for:

Oil Conservation Division -District III

Date: 7/31/97

Location: Walker 2-^{Tank}~~2-2~~ Pit

Unit-M , Sec 10 , T31N, R10W

Lease Number: NM—
014110

Resources

Ground Water:

200 ft+
(Cathodic Protection data)

Closest Surface Water: No down gradient perennial bodies within 1000 feet
(visual inspection of the area)

Water Sources: No private, domestic water source is located within
1000 feet of this site.

Risk Management

Natural Barriers: Soil is one natural barrier that will protect groundwater from site
contamination.

Additional Investigation: One auger hole was drilled on this site. The auger
hole was drilled to a depth of 27 feet. Auger ended on
bedrock, auger refusal

Field-testing and laboratory analysis was done on the
soil from this test hole. The results of
this analysis and testing are shown in Table 1 on the
following page. All data is supported with laboratory
result sheets and field data sheets found in this
closure package.

Risk Analysis

Contract Environmental Services, Inc.
Post Office Box 3376
Farmington, New Mexico 87499

Risk

The following table and conclusion summarize the risk this contamination sources poses to the ground water.

Table 1.

	Depth (ft.)	Field Headspace Result (PPM)	TPH Laboratory Results (PPM)	Remarks
Test Hole 1	0-18'	N/A	N/A	Backfilled Material
	20-22'	4.0	52 PPM	Combined
	25-27'	3.0	52 PPM	Combined

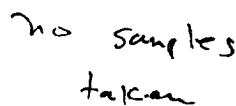
Table 2. Total risk table

RISK	CHOICE
Extremely Low	
Low	X
Moderate	
High	

The ground water under this site is at danger of being impacted by contamination from this site. From the low laboratory and field-test results for the auger hole it is concluded that the **risk of resource contamination is Low.**



10/20/97
Koch
Diller
on site
Artist
Cons.
Philip
1/15



DEPTH <u>SAMPLE</u>	(PPM) <u>PID</u>
20-22	4.0
25-27	3.0
30-32	
35-37	
40-42	

Sample @ 20-22 and 25-27 were combined to send to the lab for EPA 413.1. DRILL CUTTING SAMPLE WAS DISCARDED. WALK-200

SAMPLE from 20-22' pushed rock - not much water
" " 25-27' pushed rock

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

AMENDED REPORT

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

Date: **6-Aug-97**
COC No.: **4316**
Sample No.: **15053**
Job No.: **2-1000**

Project Name: **Koch Exploration - Walker 2**
Project Location: **WALK-200; Center Pit Auger Soil, 23-24' deep**
Sampled by: **SA** Date: **20-Jun-97** Time: **9:45**
Analyzed by: **HR** Date: **23-Jun-97**
Sample Matrix: **Soil**

Laboratory Analysis

Parameter	Results as Received	Limit of Quantitation	Unit of Measure	Method
Total Petroleum Hydrocarbons, TPH	52	25	mg/kg	EPA Method 418.1

ND - Not Detected at Limit of Quantitation

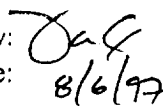
Quality Assurance Report

Laboratory Fortified Blank/Spike Soil

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

Duplication

Laboratory Identification	RPD	Limit RPD
15053-4316	3.8	15.0

Approved by: 

Date: **8/6/97**

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Purchase Order No.: Job No.

Name Don Johnson Title

Company Koch Exploration Company Dept.

Address PO Box 489

City, State, Zip Albuquerque NM 87110

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

Telephone No. 325-1198 Telefax No.

City, State, Zip Farmington, NM 87499

Company Contract Environmental Services, Inc.

Mailing Address PO Box 3376

City, State, Zip Farmington, NM 87499

Telephone No. 325-1198 Telefax No.

ANALYSIS REQUESTED

Sample ID	Sample Description	Date	Time	Matrix	PRES.	Number of Containers	ANALYSIS REQUESTED		LAB ID
							40% 20% 80% TP+0.1	80% 15% 5% TP+0.1	
WALK-200	Walker 2 Center Pit Soil	6/24/97	9:45	Soil	no	1	X	X	23-24' DEEP 15053
LAMBE-201	LAMBE 1A East Boring	"	11:47	"	"	1	X	X	35-37' DEEP 15054
LAMBE-202	" " WEST "	"	1:29	"	"	1	X	X	35-37' DEEP 15055
CAINE-203	CAINE 1A East Boring	"	2:53	"	"	1	X	X	30-32' DEEP 15056
CAINE-204	CAINE 1A WEST Boring	"	4:06	"	"	1	X	X	30-32' DEEP 15057
LAMBE-205	LAMBE 1 East Boring	"	5:22	"	"	1	X	X	20-27' COMBO 15058
LAMBE-206	" " WEST Auger	"	6:07	"	"	1	X	X	15-22' COMBO 15059

Relinquished by: Date/Time 6/23/97 Received by: Date/Time 6/23/97 16

Relinquished by: Date/Time Received by: Date/Time

Relinquished by: Date/Time Received by: Date/Time

Method of Shipment: 10 Working Days

Authorized by: Date 6/23 Special Instructions:

Client Signature:

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 30-Apr-98

Client:	Contract Environmental Services, Inc.	Client Sample Info:	Walker 2
Work Order:	9804035	Client Sample ID:	WALK-108 Soil Farm 3pt Comp
Lab ID:	9804035-07A	Matrix:	SOIL
Project:	Koch Exploration	Collection Date:	4/22/98 3:37:00 PM
		COC Record:	4354

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	3800	25		mg/Kg	1	4/28/98
GASOLINE RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C6-C10	ND	180		µg/Kg	1	4/26/98
Surr: Trifluorotoluene	84.1	70-130		%REC	1	4/26/98

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

1 of 1

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

150

Date: 4/2-100

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