

District I

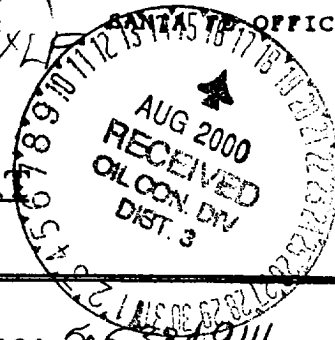
P.O. Box 1980, Hobbs, NM

District II

P.O. Drawer DD, Artesia, NM 88211

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 87504-2088SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE**PIT REMEDIATION AND CLOSURE REPORT**Operator: Koch Exploration Company Telephone: 505-554-9111Address: PO Box 489 Aztec, NM 87410Facility Or: Walker IR
Well NameLocation: Unit or Qtr/Qtr Sec A Sec 13 T 3N R 10W County San JuanPit Type: Separator ☒ Dehydrator ☐ Other (Upper Pit)Land Type: BLM ☒, State ☐, Fee ☐, Other ☐Pit Location: Pit dimensions: length 25', width 25', depth 12'
(Attach diagram)Reference: wellhead ☒, other ☐Footage from reference: 100Direction from reference: 85 Degrees ☒ East North
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) 0RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 6/2/97 Dated Completed: 5/2/00

Remediation Method: Excavation ☒ Approx. cubic yards 280
(Check all appropriate sections) Landfarmed ☒ Insitu Bioremediation ☐
Other Exploration Pits

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

General Description Of Remedial Action: The contaminated soil was excavated from this pit and placed in an onsite landfarm. At twelve feet depth a sandstone ledge was encountered. To determine any horizontal travel of the plume four exploratory pits were excavated. All of these pits were clear.

Ground Water Encountered: No ☒ Yes ☐ Depth

Final Pit:
Closure Sampling:
(if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location mid-pit, upper pit

Sample depth 12'

Sample date 6/2/97 Sample time 1130

Sample Results

Benzene(ppm) ND

Total BTEX(ppm) 6.0

Field headspace(ppm) 886

TPH 2049

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 8/10/00

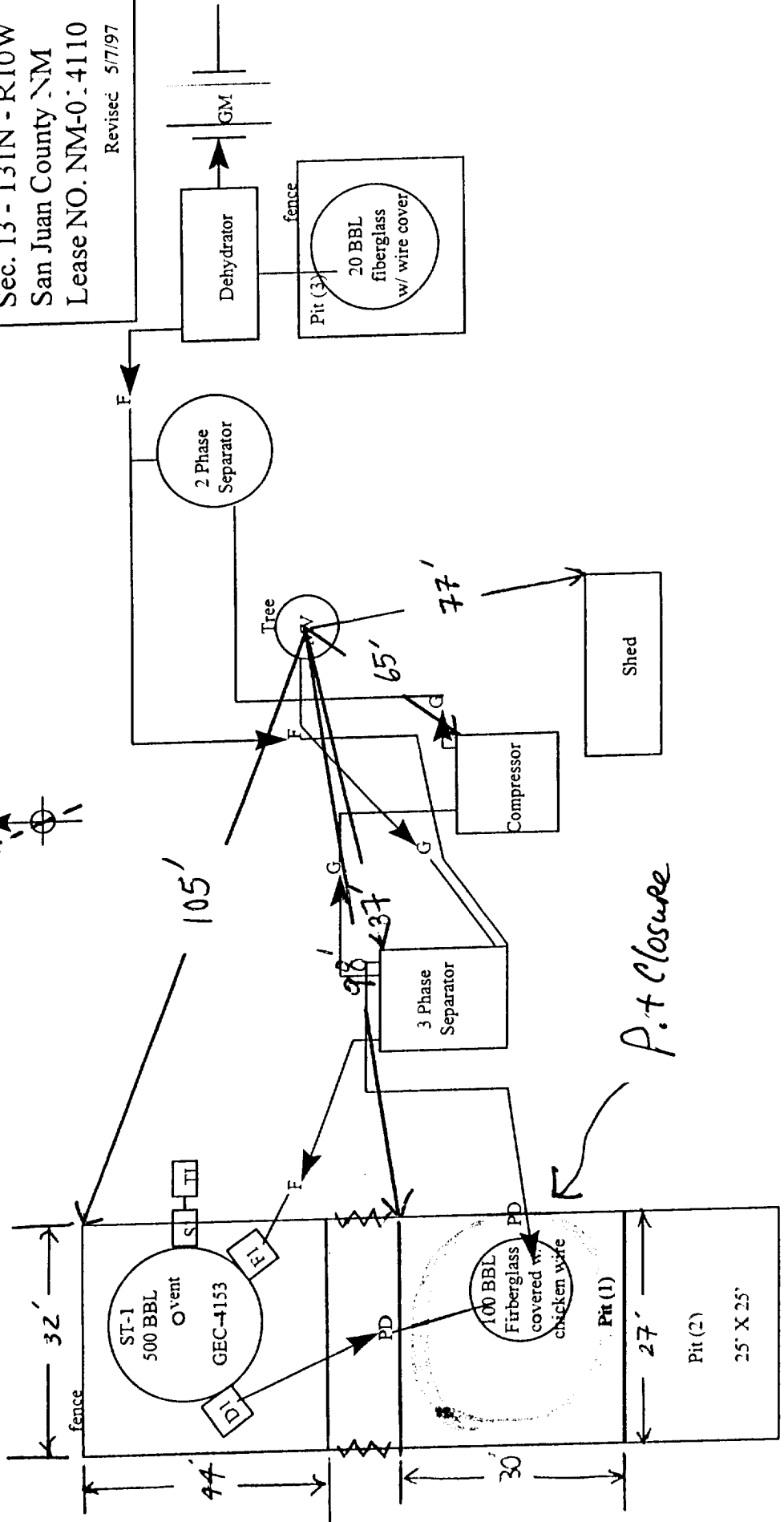
SIGNATURE

Donald L. Johnson

PRINTED NAME
AND TITLE

Donald L. Johnson
Operations Manager

Koch Exploration Co.
~~Walker~~ NE 1/4 - NE 1/4
 Sec. 13 - T31N - R10W
 San Juan County NM
 Lease NO. NM-0:4110
 Revised 5/7/97



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 vales, 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 selaing closed the drain valve, D1, fill valve, F1, during sales.
Draining phase. The tank being drained will be isolated by selaing closed the sales valve, S1, and fill valve, F1, during drain off.

CES Summary of KOCH Earthen Pit Remediation Project for 6/2/97

Sample Number	Location	PID (ppm)	Remarks
Walker 1R			
Lower pit			
1	mid-pit 1' below surface	3.0	lab number - Walk1R-100
PID Readings			
in pit	mid pit bottom	0.0	
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	
Upper pit			
	mid-pit just below surface	665	
	mid-pit 8' deep	809	
	mid-pit 12' deep	1057	
	North bank @ 12'	318	
	West bank @ 12'	838	
	South bank @ 12'	884	
	mid-pit 12' below surface	5.0	lab number - Walk1R-101
PID Readings			
in pit	mid pit bottom	211	all at 12'
in pit	West bank bottom	173	hit sandstone at 12'
in pit	East bank bottom	230	
in pit	North bank bottom	19	
in pit	South bank bottom	328	

KOCH

Walker IR

6/2/77

~~Two~~ pits, one lower, one upper:

The upper pit was used as a catch for the well since the 1950's. The lower was used as a water hole for cattle in the area as reported by Don Johnson of KOCH.

Upper pit is dry and no longer in use. Lower pit is wet with standing water removed two days ago by a KOCH employee.

Upper pit measures 25' x 25' as shown on drawing.
Lower " " 45' x 35'

~~Zeroed & Calibrated~~ PID meter (105 ppm)

Lower Pit PID Readings

mid-pit	0 ppm
N bank	0 ppm
S "	0 ppm
E "	0 ppm
W "	0 ppm

Walker IR-100 → Sample of Lower Pit (mid-pit surface) → PID hd spec 3.0 ppm
↑
Sample 1 Lower pit is very clay soil type ↑ sent to Lab

Upper Pit - had to knock down east berm to excavate.

~~Once~~ Once surface was ~~broken~~ broken soil was very black.

0900 - operator stops dig to grease hoe
5 gallon bucket in pit @ $\approx 8'$ looked like a grease container with some grease still in it.
Hit a sandstone ledge at $\approx 12'$

KOCH

6/2/94

Samples on Upper Pit

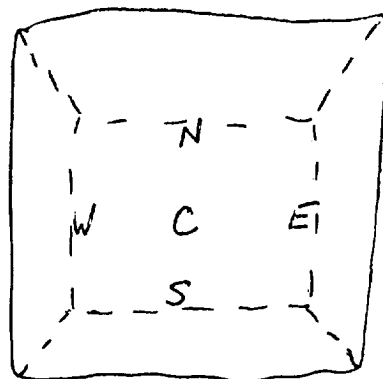
No.	Location	PID (ppm)	Remarks
2	mid-pit just under surface	665	(black) clay/wet
3	mid-pit 8' deep	809	grey clay/dry
4	" " 12' deep	1057	grey clay dry
5	North bank 12'	318	clay/shale
6	West " "	838	clay (soft)
7	South " "	884	clay (hard)

6 # 8
WK1R-101

9 Center Pit 12' 886

sand/clay (hard)
↑↑

PID in pit	ppm
center (c)	211
N	19
W	173
E	230
S	328



At 12' in the North bank of the pit there is a sandstone step. The bottom of the excavated pit at 12' is sandstone.

Noted earthen/rock dam x 600' from earthen pit. The elevation is higher than the pit and of the dam and impoundment.

a draw separates the two. The dam impounds surface runoff for cattle watering. At the time of excavation no water was present! A BLM survey marker was noted on the NE corner

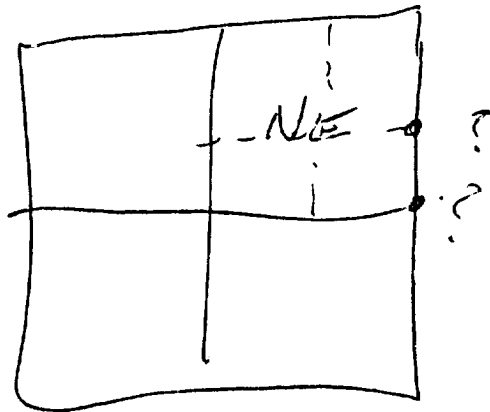
of the dam; it had markings as follows:

$SE \frac{1}{4} NE \frac{1}{4}$

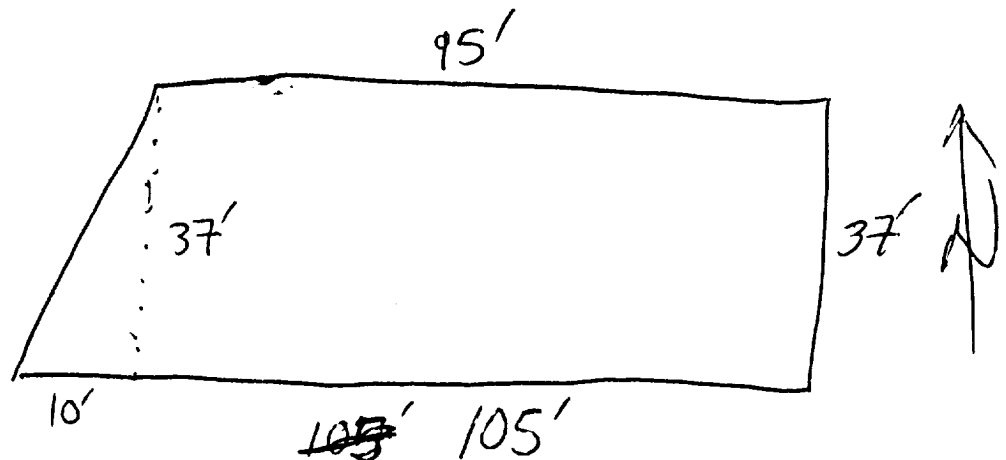
T31NR10W

Project No. 101-46

Blancett Community Res.



~~Farm~~ is 105' x 37'



- No water w/i 1000' of pit except as noted above.

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.: *6390*
Sample No.: *14812*
Job No.: *2-1000*

Project Name: *Koch Exploration - Walker 1R*
Project Location: *WALK1R-101; Upper Pit - Mid Pit 12'*
Sampled by: *DGM* Date: *2-Jun-97* Time: *11:30*
Analyzed by: *HR* Date: *3-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>3049</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>< 25</i>	<i>< 25</i>	<i>mg/kg</i>
<i>Laboratory Fortified Spike Soil - QCSS1</i>	<i>845</i>	<i>828 - 1024</i>	<i>mg/kg</i>

Duplication

Laboratory Identification	% RSD	Limit % RSD
<i>14812-6390</i>	<i>1.8</i>	<i>15.0</i>

Approved by: *[Signature]*
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.: *6390*
Sample No.: *14812*
Job No.: *2-1000*

Project Name: *Koch Exploration - Walker 1R*
Project Location: **WALK1R-101; Upper Pit, Mid pit 12'*
Sampled by: *DGM* Date: *2-Jun-97* Time: *11:30*
Analyzed by: *HR* Date: *5-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>50</i>	<i>ug/kg</i>
<i>Toluene</i>	<i>303</i>	<i>ug/kg</i>	<i>50</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>.823</i>	<i>ug/kg</i>	<i>50</i>	<i>ug/kg</i>
<i>m,p-Xylene</i>	<i>4539</i>	<i>ug/kg</i>	<i>50</i>	<i>ug/kg</i>
<i>o-Xylene</i>	<i>321</i>	<i>ug/kg</i>	<i>50</i>	<i>ug/kg</i>
	<i>TOTAL</i>	<i>5986</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*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



CHAIN OF CUSTODY RECORD

639

Date: 6/2/97

Page 1 of 1

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

Purchase Order No.:		Job No.	
Name: <u>Don Johnson</u>		Name: <u>Shawn Adams</u>	
Company: <u>KOCH Exploration Co.</u>		Company: <u>Contract Environmental Services, Inc.</u>	
Address: <u>P.O. Box 489</u>		Mailing Address: <u>PO Box 3376</u>	
City, State, Zip: <u>Albuquerque, NM 87410</u>		City, State, Zip: <u>Farmington, NM 87499</u>	
Sampling Location: <u>Walker 1R</u>		Telephone No.: <u>325-1198</u>	
Telefax No.:		Telefax No.:	
REPORT TO		RESULTS TO	
Name: <u>Don Johnson</u>		Name: <u>Shawn Adams</u>	
Company: <u>KOCH Exploration Co.</u>		Company: <u>Contract Environmental Services, Inc.</u>	
Address: <u>P.O. Box 489</u>		Mailing Address: <u>PO Box 3376</u>	
City, State, Zip: <u>Albuquerque, NM 87410</u>		City, State, Zip: <u>Farmington, NM 87499</u>	
Telephone No.: <u>325-1198</u>		Telephone No.: <u>325-1198</u>	
Telefax No.:		Telefax No.:	
ANALYSIS REQUESTED		ANALYSIS REQUESTED	
Number of Containers		Number of Containers	
1		1	
PRES.		PRES.	
no		no	
soil		soil	
DATE		DATE	
6/2/97		6/2/97	
TIME		TIME	
0815		1130	
lower pit - mid-pit		upper pit - mid-pit	
Walker 1R - 100		Walker 1R - 101	
DGM		DGM	
SAMPLE IDENTIFICATION		SAMPLE IDENTIFICATION	
DATE		DATE	
6/2/97		6/2/97	
TIME		TIME	
0815		1130	
lower pit - mid-pit		upper pit - mid-pit	
Walker 1R - 100		Walker 1R - 101	
DGM		DGM	
RELINQUISHED BY:		RELINQUISHED BY:	
Date/Time: <u>6/2/97/1620</u>		Date/Time: <u>6/2/97/1620</u>	
RELINQUISHED BY:		RELINQUISHED BY:	
Date/Time:		Date/Time:	
RELINQUISHED BY:		RELINQUISHED BY:	
Date/Time:		Date/Time:	
Method of Shipment:		Method of Shipment:	
Authorized by: <u>[Signature]</u>		Authorized by: <u>[Signature]</u>	
(Client Signature Mus' Accompany Request)		(Client Signature Mus' Accompany Request)	
Rush: <u>2.4 hr</u>		Rush: <u>2.4 hr</u>	
TAT: <u>as promised</u>		TAT: <u>as promised</u>	
Date: <u>6/2/97</u>		Date: <u>6/2/97</u>	
10 Working Days		10 Working Days	
Special Instructions:		Special Instructions:	

CES Summary of KOCH Earthen Pit Remediation Project for 6/4/97 .

~~Walker 1R-100 Plume Determination Pits~~

~~South Pit - a 3'x6' excavation apporox. 3' deep (hit bedrock)~~

Sample Number	Location	PID	Remarks
		(ppm)	
	mid-pit 3' below surface	6.0	lab number - Walk1R-100

~~PID Readings~~

in pit	mid-pit bottom	< 2.0
in pit	West bank	< 2.0
in pit	East bank	< 2.0
in pit	North bank	< 2.0
in pit	South bank	< 2.0

West Pit - a 3'x12' excavation apporox. 10' deep (hit bedrock)

Sample Number	Location	PID	Remarks
		(ppm)	

2 mid-pit 10' below surface 5.0

PID Readings

No in pit PID readings were obtained because of OSHA regulations.

Southeast Pit - a 3'x6' excavation apporox. 6' deep (hit bedrock)

Sample Number	Location	PID	Remarks
		(ppm)	

3 mid-pit 6' below surface 5.0

PID Readings

in pit	mid-pit bottom	< 2.0
in pit	West bank	< 2.0
in pit	East bank	< 2.0
in pit	North bank	< 2.0
in pit	South bank	< 2.0

East Pit - a 3'x12' excavation apporox. 10' deep (hit bedrock)

Sample Number	Location	PID	Remarks
		(ppm)	

4 mid-pit 10' below surface 4.0

PID Readings

in pit	mid-pit bottom	< 2.0
in pit	West bank	< 2.0
in pit	East bank	< 2.0
in pit	North bank	< 2.0
in pit	South bank	< 2.0

~~Used south pits sample for laboratory analysis because it was the highest on the PID ;
headsapce test done in the field.~~

South Pit excavated a 3' x 6' area $\approx$ 3' deep to bedrock.

Sample (Headspace)

No.	Loc.	Conc. (ppm)	Remarks
1	3' deep at sandstone bedrock	6.0	Lab no. WalkIR-100

PID in Pit

Loc.	Conc. (ppm)	Remarks
N bank	< 2	
S bank	< 2	
E bank	< 2	
W bank	< 2	
mid pit	< 2	

West Pit excavated a 3' x 12' area $\approx$ 10' deep to bedrock

Sample

No.	Loc.	Conc. (ppm)	Remarks
2	mid pit 10' deep @ bedrock	5.0	

No in pit PID readings. [CSHA regs]

South East Pit - excavated a 3' x 6' area $\approx$ 4' deep to bedrock

No.	Sample Loc.	Conc. (ppm)	Remarks
3	mid-pit 6' deep @ bedrock		

PID in Pit

mid @ 6'		
W banks @ 6'		
S "	"	"
E "	"	"
N "	"	"

Conc. (ppm)
 < 2
 ↑
 ↓

East Pit excavated a 3'x12' area 10' deep to bedrock

<u>No</u>	<u>Sample Loc</u>	<u>Conc (PPM)</u>	<u>Remarks</u>
4	10' deep mid-pit hit bedrock		

PID in Pit

<u>Loc.</u>	<u>Conc. (ppm)</u>
W bank @ 1' deep	< 2
E " " " "	< 2
S " " " "	< 2
N " " " "	< 2

~~Used~~ South Pit Sample for Lab Analysis because it had the highest PID.

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.: *6392*
Sample No.: *14820*
Job No.: *2-1000*

Project Name: *Koch Exploration - Walker 1R Exploratory Pit*
Project Location: *WALK 1R-100; (grab)*
Sampled by: *DGM* Date: *4-Jun-97* Time: *9:00*
Analyzed by: *HR* Date: *6-Jun-97*
Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Results as Received	Limit of Quantitation	Unit of Measure	Method
<i>Total Petroleum Hydrocarbons, TPH</i>	ND	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
<i>Laboratory Fortified Blank Soil - QCBS2</i>	< 25	< 25	mg/kg
<i>Laboratory Fortified Spike Soil - QCSS1</i>	870	828 - 1024	mg/kg

Duplication

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

Approved by:

Date:

[Signature]
6/10/97

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.: *6392*
Sample No.: *14820*
Job No.: *2-1000*

Project Name: *Kpoch Exploration - Walker 1R Exploratory Pit*
Project Location: *WALK1R-100, (grab)*
Sampled by: *DGM* Date: *4-Jun-97* Time: *9:00*
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>1</i>	<i>ug/kg</i>
<i>Toluene</i>	<i>1</i>	<i>ug/kg</i>	<i>1</i>	<i>ug/kg</i>
<i>Ethylbenzene</i>	<i>1</i>	<i>ug/kg</i>	<i>1</i>	<i>ug/kg</i>
<i>m,p-xylene</i>	<i>7</i>	<i>ug/kg</i>	<i>1</i>	<i>ug/kg</i>
<i>o-xylene</i>	<i>2</i>	<i>ug/kg</i>	<i>1</i>	<i>ug/kg</i>
<i>TOTAL</i>	<i>12</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*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

CHAIN OF CUSTODY RECORD

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: KOCHEX		Company:	
Address: P.O. Box 431		Mailing Address: P.O. Box 337	
City, State, Zip: Acton MA 01710		City, State, Zip: Farmington, NH 03747	
Telephone No.:		Telephone No.:	
Sampling Location: 6000 15th Water IR		ANALYSIS REQUESTED	
Sampler: Don Johnson		Number of Containers	
SAMPLE IDENTIFICATION		LAB ID	
WAK-IR-100 (1000)		TPH = ND BTEX =	
WAK-IR-101 (1000)		TPH = ND BTEX =	
WAK-IR-102 (1000)		TPH = ND BTEX =	
WAK-IR-103 (1000)		TPH = ND BTEX =	
WAK-IR-104 (1000)		TPH = ND BTEX =	
WAK-IR-105 (1000)		TPH = ND BTEX =	
WAK-IR-106 (1000)		TPH = ND BTEX =	
WAK-IR-107 (1000)		TPH = ND BTEX =	
WAK-IR-108 (1000)		TPH = ND BTEX =	
WAK-IR-109 (1000)		TPH = ND BTEX =	
WAK-IR-110 (1000)		TPH = ND BTEX =	
WAK-IR-111 (1000)		TPH = ND BTEX =	
WAK-IR-112 (1000)		TPH = ND BTEX =	
WAK-IR-113 (1000)		TPH = ND BTEX =	
WAK-IR-114 (1000)		TPH = ND BTEX =	
WAK-IR-115 (1000)		TPH = ND BTEX =	
WAK-IR-116 (1000)		TPH = ND BTEX =	
WAK-IR-117 (1000)		TPH = ND BTEX =	
WAK-IR-118 (1000)		TPH = ND BTEX =	
WAK-IR-119 (1000)		TPH = ND BTEX =	
WAK-IR-120 (1000)		TPH = ND BTEX =	
WAK-IR-121 (1000)		TPH = ND BTEX =	
WAK-IR-122 (1000)		TPH = ND BTEX =	
WAK-IR-123 (1000)		TPH = ND BTEX =	
WAK-IR-124 (1000)		TPH = ND BTEX =	
WAK-IR-125 (1000)		TPH = ND BTEX =	
WAK-IR-126 (1000)		TPH = ND BTEX =	
WAK-IR-127 (1000)		TPH = ND BTEX =	
WAK-IR-128 (1000)		TPH = ND BTEX =	
WAK-IR-129 (1000)		TPH = ND BTEX =	
WAK-IR-130 (1000)		TPH = ND BTEX =	
WAK-IR-131 (1000)		TPH = ND BTEX =	
WAK-IR-132 (1000)		TPH = ND BTEX =	
WAK-IR-133 (1000)		TPH = ND BTEX =	
WAK-IR-134 (1000)		TPH = ND BTEX =	
WAK-IR-135 (1000)		TPH = ND BTEX =	
WAK-IR-136 (1000)		TPH = ND BTEX =	
WAK-IR-137 (1000)		TPH = ND BTEX =	
WAK-IR-138 (1000)		TPH = ND BTEX =	
WAK-IR-139 (1000)		TPH = ND BTEX =	
WAK-IR-140 (1000)		TPH = ND BTEX =	
WAK-IR-141 (1000)		TPH = ND BTEX =	
WAK-IR-142 (1000)		TPH = ND BTEX =	
WAK-IR-143 (1000)		TPH = ND BTEX =	
WAK-IR-144 (1000)		TPH = ND BTEX =	
WAK-IR-145 (1000)		TPH = ND BTEX =	
WAK-IR-146 (1000)		TPH = ND BTEX =	
WAK-IR-147 (1000)		TPH = ND BTEX =	
WAK-IR-148 (1000)		TPH = ND BTEX =	
WAK-IR-149 (1000)		TPH = ND BTEX =	
WAK-IR-150 (1000)		TPH = ND BTEX =	
WAK-IR-151 (1000)		TPH = ND BTEX =	
WAK-IR-152 (1000)		TPH = ND BTEX =	
WAK-IR-153 (1000)		TPH = ND BTEX =	
WAK-IR-154 (1000)		TPH = ND BTEX =	
WAK-IR-155 (1000)		TPH = ND BTEX =	
WAK-IR-156 (1000)		TPH = ND BTEX =	
WAK-IR-157 (1000)		TPH = ND BTEX =	
WAK-IR-158 (1000)		TPH = ND BTEX =	
WAK-IR-159 (1000)		TPH = ND BTEX =	
WAK-IR-160 (1000)		TPH = ND BTEX =	
WAK-IR-161 (1000)		TPH = ND BTEX =	
WAK-IR-162 (1000)		TPH = ND BTEX =	
WAK-IR-163 (1000)		TPH = ND BTEX =	
WAK-IR-164 (1000)		TPH = ND BTEX =	
WAK-IR-165 (1000)		TPH = ND BTEX =	
WAK-IR-166 (1000)		TPH = ND BTEX =	
WAK-IR-167 (1000)		TPH = ND BTEX =	
WAK-IR-168 (1000)		TPH = ND BTEX =	
WAK-IR-169 (1000)		TPH = ND BTEX =	
WAK-IR-170 (1000)		TPH = ND BTEX =	
WAK-IR-171 (1000)		TPH = ND BTEX =	
WAK-IR-172 (1000)		TPH = ND BTEX =	
WAK-IR-173 (1000)		TPH = ND BTEX =	
WAK-IR-174 (1000)		TPH = ND BTEX =	
WAK-IR-175 (1000)		TPH = ND BTEX =	
WAK-IR-176 (1000)		TPH = ND BTEX =	
WAK-IR-177 (1000)		TPH = ND BTEX =	
WAK-IR-178 (1000)		TPH = ND BTEX =	
WAK-IR-179 (1000)		TPH = ND BTEX =	
WAK-IR-180 (1000)		TPH = ND BTEX =	
WAK-IR-181 (1000)		TPH = ND BTEX =	
WAK-IR-182 (1000)		TPH = ND BTEX =	
WAK-IR-183 (1000)		TPH = ND BTEX =	
WAK-IR-184 (1000)		TPH = ND BTEX =	
WAK-IR-185 (1000)		TPH = ND BTEX =	
WAK-IR-186 (1000)		TPH = ND BTEX =	
WAK-IR-187 (1000)		TPH = ND BTEX =	
WAK-IR-188 (1000)		TPH = ND BTEX =	
WAK-IR-189 (1000)		TPH = ND BTEX =	
WAK-IR-190 (1000)		TPH = ND BTEX =	
WAK-IR-191 (1000)		TPH = ND BTEX =	
WAK-IR-192 (1000)		TPH = ND BTEX =	
WAK-IR-193 (1000)		TPH = ND BTEX =	
WAK-IR-194 (1000)		TPH = ND BTEX =	

KOCH Exploration Company

Risk Analysis

Prepared by:
Contract Environmental Services, Inc.

Prepared for:
Oil Conservation Division - District III

Date: 7/31/97

Location: Walker 1R-Separator Pit Unit-A, Sec13, T31N, R10W

Lease Number: NM-013688-A

Resources

Ground Water: 160 feet (cathodic protection data)

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

Water Sources: An earthen and rock dam was noted at a distance of approximately 600 feet from the earthen pit. This dam, most likely built by the Civilian Conservation Corps, collects surface water runoff for the apparent use of livestock watering. No water was at the time of inspection, 6/2/97. The dam and the well site are separated by a small dry streambed, approximately 10 feet in width.

Risk Management

Natural Barriers: A sandstone ledge was encountered at a depth of 12 feet. This ledge will restrict the migration of any contaminants into the ground water.

A higher elevation and the geologic feature protect the surface water dam, mentioned above.

Additional Investigation: Four exploratory test pits were dug using a rubber tired backhoe. All four test pits reached the sandstone ledge. Field-testing and laboratory analysis was conducted on these test pits. The results of this analysis and testing are shown in Table 1 on the following page.

Risk Analysis

Contract Environmental Services, Inc.
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Farmington, New Mexico 87499

Additional
Investigation: (continued)

Table 1. Exploratory pit field and laboratory results summary.

Pit	Sample					
	Location	Depth	PID Results	Field Headspace Results	Laboratory Results	Remarks
		(feet)	(PPM)	(PPM)	(PPM)	
South	N Bank	3	< 2			
	S Bank	3	< 2			
	E Bank	3	< 2			
	W Bank	3	< 2			
	mid-pit	3	< 2	6.0	TPH-ND BTEX-0.012	
South-East	N Bank	6	< 2			
	S Bank	6	< 2			
	E Bank	6	< 2			
	W Bank	6	< 2			
	mid-pit	6	< 2	5.0		
West	mid-pit	10	*	5.0		
East	N Bank	1	< 2			
	S Bank	1	< 2			
	E Bank	1	< 2			
	W Bank	1	< 2			
	mid-pit	10	*	3.0		

* No in-pit PID readings could be obtained because of soil cave-in potential.

Risk

The following table and conclusions summarize the risk this contamination sources poses to the resources discussed.

Table 2. Total risk table.

RISK	CHOICE
Extremely Low	X
Low	
Moderate	
High	

The ground water and the surface water dam are both at minimal danger of being impacted by this site. Based on the low laboratory and field-test results for the exploratory test pits and the restrictive geologic barriers it is concluded that the **risk of ground water resource contamination is extremely low.**

Risk Analysis

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ANALYTICAL REPORT

Date: 11-May-00

Client:	Contract Environmental Services, Inc	Client Sample Info:	Walker 1R Soil Farm
Work Order:	0004059	Client Sample ID:	Koch-400
Lab ID:	0004059-01A	Matrix:	SOIL
Project:	Walker #1R Soil Farm	Collection Date:	4/26/2000 9:17:00 AM
		COC Record:	6996

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015B				Analyst: DM
T/R Hydrocarbons: C10-C28	580	25		mg/Kg	1	5/2/2000

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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CHAIN OF CUSTODY RECORD

5995

Date: 4/22/00

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