

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
OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

SUBMIT 1 COPY TO
~~APPROPRIATE~~
DISTRICT OFFICE
DEPUTY OIL & GAS INSPECTOR
SANTA FE OFFICE
AUG 27 1996
(Revised 3/9/94)

Approved
PIT REMEDIATION AND CLOSURE REPORT

Operator: Unocal North American Telephone: (505) 632-1811

Address: P.O. Box 850, Bloomfield, NM 87413

Facility Or: Rincon 99A

Well Name

Location: Unit or Qtr/Qtr Sec E Sec 27 T 27N R 6W County Rio Arriba

Pit Type: Separator Dehydrator Other Separator / Dehydrator

Land Type: BLM X , State , Fee , Other

Pit Location: Pit dimensions: length 27' , width 20' , depth 5
(Attach diagram)

Reference: wellhead , other

Footage from reference:

Direction from reference: Degrees 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> 0</u>
high water elevation of		
ground water)		

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

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DIST. 3

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> 0</u>
irrigation canals and ditches)		

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 09/27/94 Date Completed: 09/30/94

Remediation Method: Excavation [X] Approx. cubic yards 270
(Landfarmed [X] Insitu Bioremediation)
Other

Remediation Location: onsite [X] Offsite
(ie. landfarmed onsite, name and location of offsite facility)

General Description Of Remedial Action: Dug pit to eleven feet with a 580 D extendahoe backhoe. Size of pit kept the backhoe from digging deeper.

Sampled pit using a shovel to 12 feet. Pit will need to be sampled at P&A of well.

Ground Water Encountered: No [X] Yes Depth

Final Pit: Sample location Center of pit at 12 feet

Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)
Sample depth 12'
Sample date 09/30/94 Sample time

Sample Results

Benzene (ppm) 0.3
Total BTEX (ppm) 8.3
Field headspace (ppm) 918
TPH 12,050 ppm

Ground Water Sample: Yes No [X] (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 11-2-94

SIGNATURE Mike Tabet

PRINTED NAME AND TITLE Mike Tabet HES Coordinator

OFF: (505) 325-8786



LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn: *Jon Little*
 Company: *On Site Technologies, Ltd.*
 Address: *657 W. Maple*
 City, State: *Farmington, NM 87401*

Date: *10/3/94*
 Lab ID: *2151*
 Sample No. *3365*
 Job No. *4-1122*

Project Name: *Unocal Corporation / Pit Remediations Phase II*
 Project Location: *Rincon 99A Pit Center @12'*
 Sampled by: *JL* Date: *9/30/94* Time: *13:41*
 Analyzed by: *DC* Date: *10/3/94*
 Type of Sample: *Soil*

Laboratory Analysis

Laboratory Identification	Sample Identification	Total Petroleum Hydrocarbons
<i>3365-2151</i>	<i>Unocal Corporation / Pit Remediations Phase II Rincon 99A Pit Center @12'</i>	<i>12,050 mg/kg</i>

Method - EPA Method 418.1 Total Petroleum Hydrocarbons

Approved by: *[Signature]*
 Date: *10/3/94*

P. O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



OFF: (505) 325-8786

LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *Jon Little*
Company: *On Site Technologies, Ltd.*
Address: *657 W. Maple*
City, State: *Farmington, NM 87401*

Date: *10/1/94*
Lab ID: *2151*
Sample ID: *3365*
Job No. *4-1122*

Project Name: *Unocal Corporation / Pit Remediations Phase II*
Project Location: *Rincon 99A Pit Center @ 12'*
Sampled by: *JL* Date: *9/30/94* Time: *13:41*
Analyzed by: *DLA* Date: *10/1/94*
Sample Matrix: *Soil*

Aromatic Volatile Organics

Component	Measured Concentration ug/kg	Detection Limit Concentration ug/kg
<i>Benzene</i>	<i>318</i>	<i>0.2</i>
<i>Toluene</i>	<i>288</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>964</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>6,340</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>387</i>	<i>0.2</i>
	<i>TOTAL 8,297 ug/kg</i>	

ND - Not Detectable

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

Approved by: *[Signature]*
Date: *10/3/94*

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-8786



LAB: (505) 325-5667

QUALITY ASSURANCE REPORT
for EPA Method 8020

Date Analyzed: 10/1/94

Internal QC No.: 0222-STD
Surrogate QC No.: 0223-STD
Reference Standard QC No.: 0355-STD

Method Blank

Analytes in Blank	Amount
Average Amount of All Analytes In Blank	<0.1 ppb

Calibration Check

Calibration Standards	Units of Measure	*True Value	Analyzed Value	% Diff	Limit
Benzene	ppb	20	20	1	15%
Toluene	ppb	20	20	0	15%
Ethylbenzene	ppb	20	19	6	15%
m,p-Xylene	ppb	40	38	5	15%
o-Xylene	ppb	20	19	4	15%

Spike Results

Analyte	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Benzene	37	38	(39-150)	2	20%
Toluene	36	36	(46-148)	0	20%
Ethylbenzene	37	37	(32-160)	0	20%
m,p-Xylene	38	38	(35-145)	1	20%
o-Xylene	37	38	(35-145)	2	20%

Surrogate Recoveries

Laboratory Identification	S1	S2	S3
	Percent Recovered	Percent Recovered	Percent Recovered
Limits	(70-130)		
3365-2151	102		

S1: Fluorobenzene

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



TOTAL PETROLEUM HYDROCARBONS

Attn: *Mike Tabet*
Company: *Unocal Corporation*
Address: *P.O. Box 760*
City, State: *Moab, UT 84532*

Date: *7/21/94*
Lab ID: *1668*
Sample No. *2032*
Job No. *4-1107*

Project Name: *Unocal Corporation Pit Assessments*
Project Location: *Rincon 99A; 3ft. Composite*
Sampled by: *JL/ML* Date: *7/19/94* Time: *NR*
Analyzed by: *DC* Date: *7/20/94*
Type of Sample: *Soil*

Laboratory Analysis

Laboratory Identification	Sample Identification	Total Petroleum Hydrocarbons
<i>2032-1668</i>	<i>Unocal Corporation Pit Assessments Rincon 99A; 3ft. Composite</i>	<i>81,125 mg/kg</i>

Method - EPA Method 418.1 Total Petroleum Hydrocarbons

Approved by: *[Signature]*
Date: *7/21/95*



ON SITE TECHNOLOGIES, LTD.

TOTAL PETROLEUM HYDROCARBONS

Attn: *Jon Little*
Company: *On Site Technologies, Ltd.*
Address: *657 W. Maple*
City, State: *Farmington, NM 87401*

Date: *9/28/94*
Lab ID: *2137*
Sample No. *3270*
Job No. *4-1122*

Project Name: *Unocal*
Project Location: *Rincon 99A 6'6 1/2' depth Center of Pit*
Sampled by: *JL* Date: *9/27/94* Time:
Analyzed by: *DA* Date: *9/28/94*
Type of Sample: *Soil*

Laboratory Analysis

<i>Laboratory Identification</i>	<i>Sample Identification</i>	<i>Total Petroleum Hydrocarbons</i>
<i>3270-2137</i>	<i>Unocal Rincon 99A 6'6 1/2' depth Center of Pit</i>	<i>52,551 mg/kg</i>

Method - EPA Method 418.1 Total Petroleum Hydrocarbons

Approved by: *[Signature]*
Date: *9/29/94*



**ON SITE
TECHNOLOGIES, LTD.**

AROMATIC VOLATILE ORGANICS

Attn: *Jon Little*
 Company: *On Site Technologies, Ltd.*
 Address: *657 W. Maple*
 City, State: *Farmington, NM 87401*

Date: *9/29/94*
 Lab ID: *2137*
 Sample ID: *3270*
 Job No. *4-1122*

Project Name: *Unocal*
 Project Location: *Rincon 99A 6-6 1/2' depth Center of Pit*
 Sampled by: *JL* Date: *9/27/94* Time:
 Analyzed by: *DLA* Date: *9/28/94*
 Sample Matrix: *Soil*

Aromatic Volatile Organics

Component	Measured Concentration ug/kg	Detection Limit Concentration ug/kg
<i>Benzene</i>	<i>3,051</i>	<i>0.2</i>
<i>Toluene</i>	<i>5,772</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>595</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>3,466</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>799</i>	<i>0.2</i>
	<i>TOTAL 13,683 ug/kg</i>	

ND - Not Detectable

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

Approved by: *[Signature]*
 Date: *9/29/94*



QUALITY ASSURANCE REPORT
for EPA Method 8020

Date Analyzed: 9/28/94

Internal QC No.: 0222-STD
Surrogate QC No.: 0223-STD
Reference Standard QC No.: 0355-STD

Method Blank

Analytes in Blank	Amount
Average Amount of All Analytes In Blank	<0.1 ppb

Calibration Check

Calibration Standards	Units of Measure	*True Value	Analyzed Value	% Diff	Limit
Benzene	ppb	20	19	3	15%
Toluene	ppb	20	19	4	15%
Ethylbenzene	ppb	20	19	4	15%
m,p-Xylene	ppb	40	39	3	15%
o-Xylene	ppb	20	19	5	15%

Spike Results

Analyte	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Benzene	102	99	(39-150)	2	20%
Toluene	98	97	(46-148)	1	20%
Ethylbenzene	95	95	(32-160)	0	20%
m,p-Xylene	99	98	(35-145)	1	20%
o-Xylene	94	94	(35-145)	0	20%

Surrogate Recoveries

Laboratory Identification	S1	S2	S3
	Percent Recovered	Percent Recovered	Percent Recovered
Limits	(70-130)		
3270-2137	98		

S1: Fluorobenzene

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JUN 10 1996

OIL CON. DIV.
DIST. 3

UNOCAL 76

June 3, 1996

State of New Mexico
Oil Conservation Division
Attn: Bill Olson
2040 South Pacheco
Santa Fe, New Mexico 87505

RE: Vertical extent determination of Rincon Unit 81 MV dehydrator pit and Rincon 99A MV separator pit

The New Mexico Oil Conservation Division requested that Unocal determine vertical extent on two unlined pits located in the expanded vulnerable area of Unocal operated properties. The following is a report of the completion of that project, the results of the project and a risk assessment to close both unlined pits.

On May 7, 1996, Unocal determined vertical extent on the Rincon Unit 81 MV dehydrator pit and Rincon Unit 99A MV separator pit. The following report is submitted per NMOCD and BLM's request:

Rincon Unit 81 MV Dehydrator pit

1. Unocal initially attempted to excavate and remediate soil in landfarm on 09/01/94. Soil was extremely sandy and pit was located next to a deep dry wash. Risk was to great to road and equipment. Pit was only excavated to approximately 4' deep. A double walled steel tank with leak detection was installed.
2. An effort was made to determine vertical extent at this time - See Attachment 1: Power Augered to 33' depth and checked with PID. PID reading 2500 ppm.
3. An effort was made to determine plumbing - See Attachment 2: Power Augered three test holes. One test hole to a depth of 18', adjacent to existing pit, another test hole to a depth of 12' approximately 20' from existing pit and another test hole to a depth of 6' in the wash. PID indicated that plumbing was not an issue. No ground water was encountered in any of these tests.
4. On May 7, 1996, Unocal drilled a test hole, using direct punch technology, in the same location where the unlined pit was located - See Attachment 3 - Sandstone rock was encountered at 50' depth. No ground water was encountered. PID readings varied at different depths. The lab analysis for TPH at 50' deep was 1405.5 mg/kg and BTEX was 219 ppm. It is estimated that groundwater depth at this location is 80' to 150' below the surface. This determination is made from a drilling log on a Meridian well S.J. 28-6 #53 drilling log for a cathodic protection anode - See Attachment 4. This well is located approximately 1 mile from the Rincon Unit 81 along the same dry wash - See Attachment 5. The ground water depth is estimated to be 100' to 150' deep at the Rincon Unit 81 because the Rincon Unit 81 well site is 100 to 200 feet higher in elevation than the Meridian well location.

Rincon Unit 99A MV Separator pit

1. On 09/30/94 Unocal made their initial attempt to excavate and remediate contaminated soil from the Rincon Unit 99A separator/tank pit. Unocal excavated to a depth of 12' deep before the risk to the existing tank and separator forced them to cease excavation. A double walled steel tank with leak detection was installed.

2. On May 7, 1996 Unocal drilled a test hole, using direct punch technology, in the same location where the pit was located. See Attachment 6 - Rock or hard shale was encountered at 20 ' deep. No ground water was encountered. From 15' to 20' PID readings were minute. Actual lab tested TPH at 20' deep was 103.3 mg/kg. BTEX was not analyzed because of low PID readings.
3. No effort was made to determine pluming because of the extent of the depth, width and length of the original excavation. No pluming was evident at a 12' depth during initial excavation.

RISK ASSESSMENT

The same Risk Assessment methodology will be used as was used for all Rincon Unit pits that have received closure approvals. The criteria is as follows:

1. Actual impact to groundwater
2. Actual impact to surface water
3. TPH and BTEX of soil left un-excavated
4. Probability of contamination from un-excavated contaminated soil
5. Actual impact to groundwater expected from pluming of un-excavated contaminated soil
6. Further excavation causing more damage to surrounding environment and oil field equipment than contamination is causing.

Rincon Unit 99A MV Separator Pit

Groundwater depth > 100' - See Attachment 7
@ 11' depth TPH = 12,050 mg/kg BTEX = 8.3 ppm
@ 15' depth PID = 60 ppm
Rock or hard shale encountered at 20' depth
No indication of pluming

PID readings are below regulation standard at the 15' depth. It is apparent that the majority of the contamination has been removed from this pit during the initial excavation. Coupled with the fact that groundwater is greater than 100 ' deep and separated from the remaining contamination by an impervious rock or shale layer, Unocal sees no impact to groundwater at this location and requests a pit closure approval from NMOCD and BLM for the Rincon Unit 99A MV separator pit.

Rincon Unit 81 MV Dehydrator Pit

Groundwater depths - ? Drilling report on cathodic protection well on Meridian well approximately 1 mile from Rincon 81 indicates groundwater depth of 80'.
Unocal sampled at 33' and 50' depth
@ Excavation depth of 50', TPH = 1405.5 BTEX = 3.4 ppm
PID indicated diminishing value of units of organics as depths increased
Pluming was indicated but PID readings were below standard indicating no impact
@ 50' depth an impervious sandstone rock layer was encountered.
To excavate to a depth of 50' will require a very large hole in the ground

Because of the extremely sandy soil and low PID readings during the pluming test, it appears that the contamination went straight down. Ground water was not impacted due to the impervious layer of sandstone rock at 50' deep. Digging this pit at P&A will take careful consideration. Because of the extreme sandy conditions and the depth of the contamination, more damage could result from excavation

than what already exists. At this time Unocal sees no impact to groundwater at this location and requests a pit closure from NMOCD and BLM for the Rincon Unit 81 MV Dehydrator pit.

Should you require more information concerning either of these pits, please call me at 801-686-7604 or contact me at letterhead address.

Thank you.

Sincerely,

A handwritten signature in cursive script that reads "Mike Tabet".

Union Oil Company of California, dba Unocal
Mike Tabet
Staff HES Coordinator

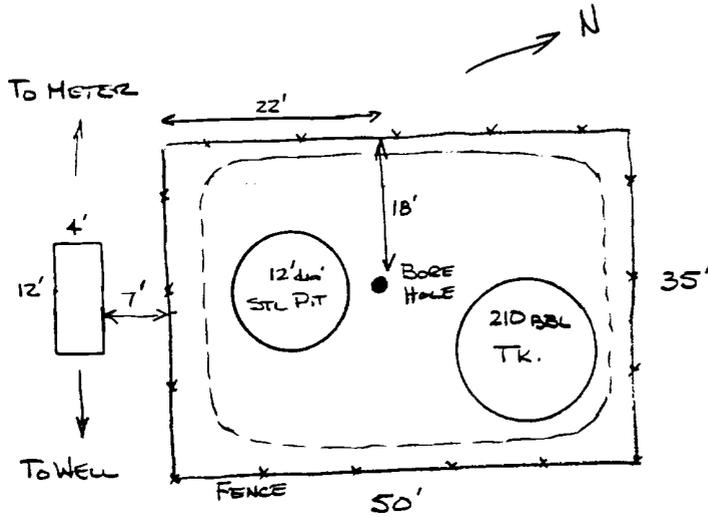
cc: Denny Foust
vertex.doc

ATTACHMENT # 6



DATE 5/7/96
BY MIKE LAWE

SUBJECT Follow up Fit Assessment: RINCON 99A, E-S27-T27N-R6W, N.M.P.M.
RIO ARBREA Co, NM, SEP/TANK PIT



SEE TEST HOLE LOG &
LAB ANALYSIS FOR
SAMPLE @ 20'

ON SITE TECHNOLOGIES, LTD.
P.O. BOX 2606, FARMINGTON, NM 87499
(505) 325-5667

PROJECT: Follow-up Pit Assessment

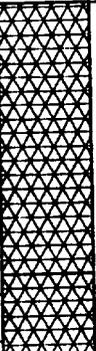
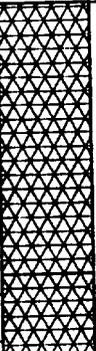
CLIENT: UNOCAL

SITE LOCATION: Rincon Unit 99A MW, Sep/Tank Pit
E-S27-T27N-R6W, NMPM
Rio Arriba County, NM

CONTRACTOR: ON SITE EQUIPMENT: GEOPROBE w/2" Flight Auger

TEST HOLE LOG

TEST HOLE: #1	LOGGER: MKL
JOB #: 4-1284	PAGE #: 1
START: 5/07/96	FINISH: 05/07/96

DEPTH (ft)	SOIL TYPE	LITHOLOGY	FIELD SCREEN PID: (units)	LAB ANALYSES (ppm)	FIELD CLASSIFICATION & REMARKS
SURFACE	ML/CL				REDDISH BROWN SILTY CLAY TO CLAYEY SILT, SL. PLASTIC, MOIST, SOFT TO SL. STIFF. NO ODOR OR DISCOLORATION.
10'	ML/CL		60		SAME AS ABOVE (SAA) EXCEPT MEDIUM GRAY, STRONG PETROLEUM ODOR, STIFF.
20'	SHALE		18	TPH: 103.3	MOTTLED BLACK AND DARK GRAY SHALE, MOIST, VERY STIFF. DRILLING REFUSAL. TOTAL DEPTH: 20'(bgs)
30'					
40'					
50'					

Soil sample taken from cuttings on auger flights.

BY: MKL
DATE: 05/15/96
FILE: 4-1284\F011.CAD



OFF: (505) 325-8786

LAB: (505) 325-5667

TPH - Gasoline / Diesel Range Organics

Attn: *Michael K. Lane*
 Company: *On Site Technologies, Ltd.*
 Address: *612 E. Murray Drive*
 City, State: *Farmington, NM 87401*

Date: *9-May-96*
 COC No.: *4079*
 Sample No. *10824*
 Job No. *4-1000*

Project Name: *Unocal - Rincon 99A*
 Project Location: *Tank/Sep Pit; Borehole #1 @ 20'*
 Sampled by: *ML* Date: *7-May-96* Time: *13:55*
 Analyzed by: *DC* Date: *9-May-96*
 Sample Matrix: *Soil*

Laboratory Analysis

Analyte	Result	Unit of Measure	Detection Limit	Unit of Measure
Gasoline Range Organics (C5 - C9)	9.0	mg/kg	5.0	mg/kg
Diesel Range Organics (C10 - C28)	94.2	mg/kg	5.0	mg/kg
	TOTAL	103.3		mg/kg

Quality Assurance Report

GRO QC No.: *0461-STD*
 DRO QC No.: *0475-STD*

Calibration Check

Analyte	Method Blank	Unit of Measure	True Value	Analyzed Value	% Diff	Limit
Gasoline Range (C5 - C9)	<50	ppb	900	855	5.0	15%
Diesel Range (C10 - C28)	<5.0	ppm	2,000	1,881	5.9	15%

Matrix Spike

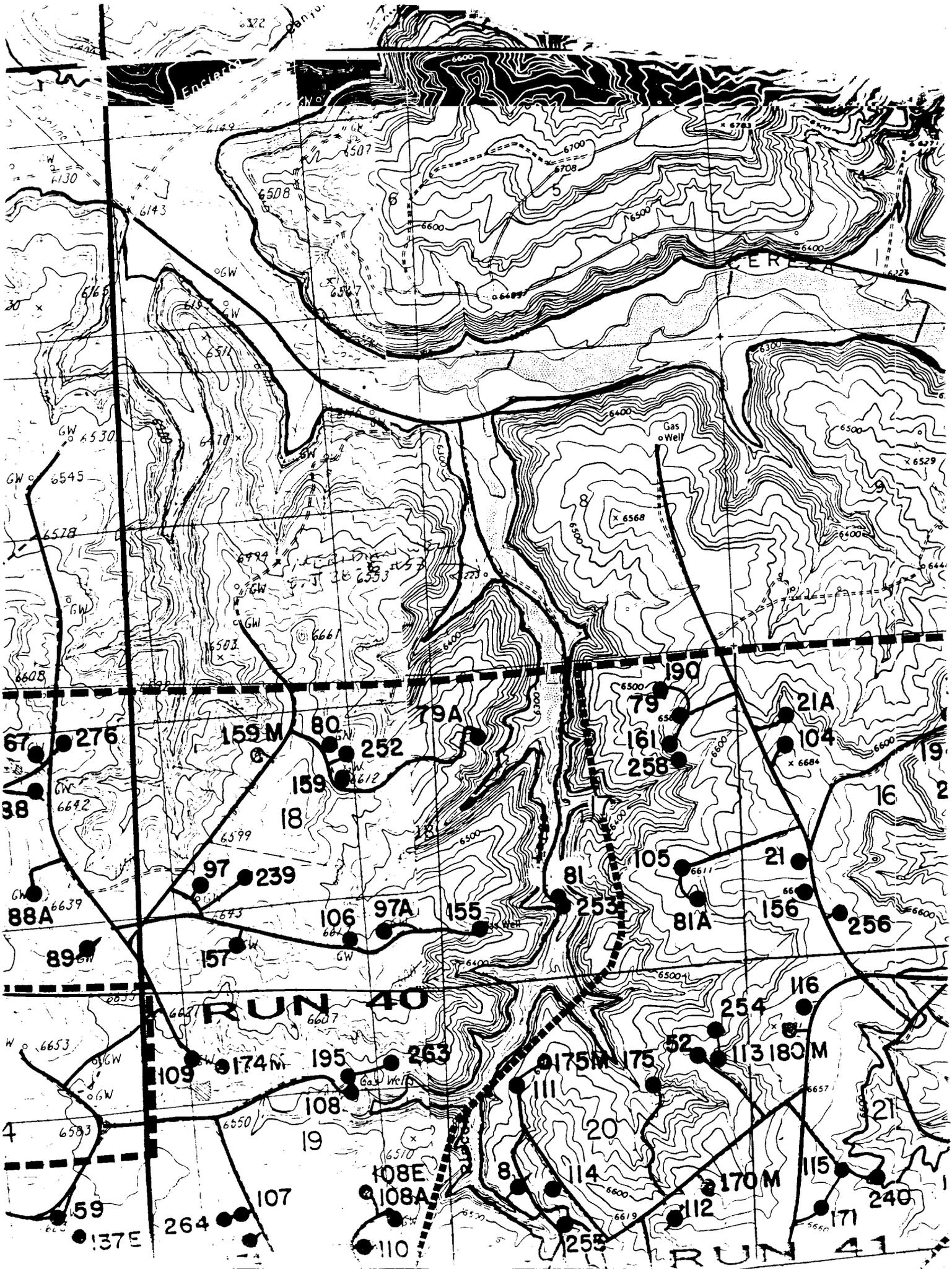
Analyte	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Gasoline Range (C5-C9)	79	78	(70-130)	2	20%
Diesel Range (C10-C28)	96	98	(70-130)	2	20%

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

Approved by: *Ja F*
 Date: *5/9/96*

P. O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



RUN 40

RUN 41

PERILLA

Encl...

Gas Well

6553

6503

159M

80

159

79A

252

190

79

161

258

21A

104

67

276

38

18

97

239

88A

157

106

97A

155

253

81

105

21

156

256

89

RUN 40

109

174M

195

253

175M

175

52

113

180M

108

111

20

114

112

170M

115

4

159

137E

264

107

108E

108A

8

110

255

112

171

240

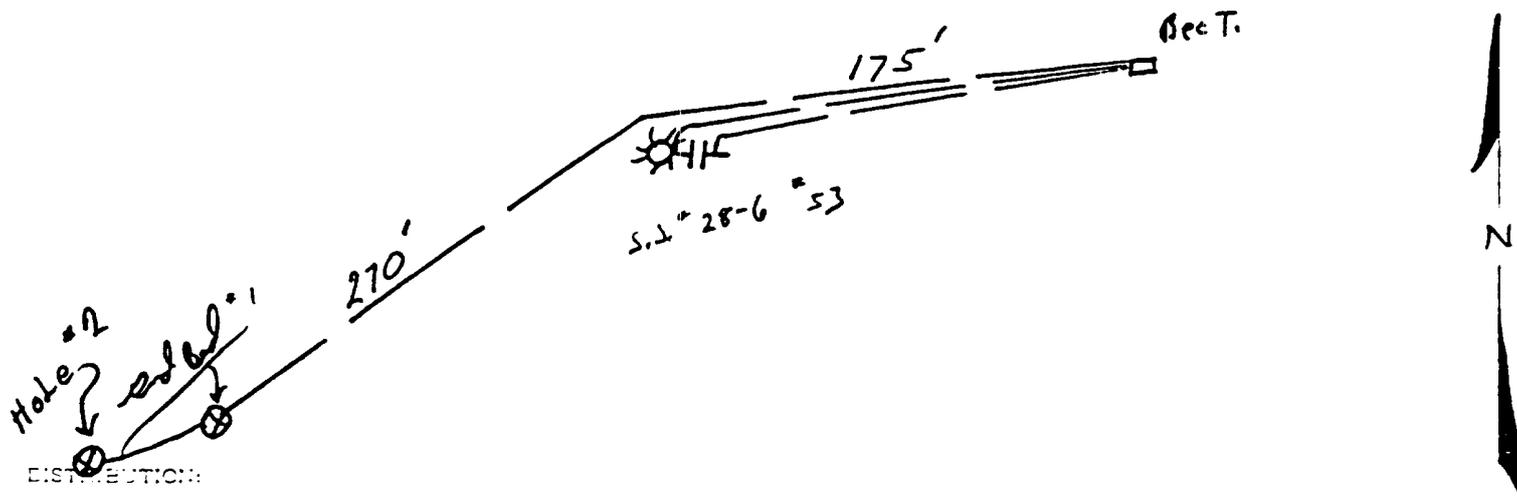
Drilling Log (Attach Hereto)

Completion Date 9/7/78

Well Name <u>S.J. 28-6 #53</u>		Location <u>SW 8-27-6</u>		CPS No. <u>1289 W</u>	
Type & Size Bit Used <u>6 7/4"</u>				Work Order No. <u>52955-19</u>	
Anode Hole Depth <u>320 T.D-313</u>	Total Drilling Rig Time	Total Lbs. Coke Used	No. Sacks Mud Used		
		<u>Hole #1 = 61 SACKS</u>	<u>Hole #2 = 25 SACKS</u>		
Anode Depth					
1 290	2 280	3 270	4 260	5 195	6 185
7 175	8 130	9 95	10 85		
Anode Output (Amps)					
1 1.3	2 1.5	3 3.9	4 Pulled	5 2.03	6 2.8
7 2.6	8 1.9	9 1.5	10 2.7		
Anode Depth					
<u>11 120'</u>	<u>12 90'</u>	<u>13 0'</u>	<u>14 80'</u>	<u>15</u>	<u>16</u>
<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>		
Anode Output (Amps)					
<u>11 2.0</u>	<u>12 1.8</u>	<u>13</u>	<u>14 1.8</u>	<u>15</u>	<u>16</u>
<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>		
Total Circuit Resistance	No. 6 C.P. Cable Used		No. 2 C.P. Cable Used		
Volts <u>12.1 V</u>	Amps <u>10.7 A</u>	Ohms <u>1.13</u>			

Remarks: STATIC 600' W. = .91 V. Driller said WATER AT 80', APPROX. 12 GAL/MIN. TOOK WATER SAMPLE. DRILLED TO 280', NOT ENOUGH HOLE DRILLED TO 320'. LOGGED 313'. HOLE CAVED, RETRIEVED #4 ANODE #1 + #2 DID NOT GET COKE AROUND THEM. INSTALLED 300' OF 1" P.V.C. VENT PIPE PERFORATED 260'. ANODES #11, #12, + #13 ARE IN #2 HOLE, 20' FROM #1 HOLE. 155' OF 1" P.V.C. VENT PERFORATED 120'. DITCH & 1 CABLE = 445' ALL WIRES IN ONE JCT. BOX EXTRA CABLE = 350' All Construction Completed STUB POLE + 40V 16A RECT. (Signature) Hole depth - 187'

GROUND BED LAYOUT SKETCH



DISTRIBUTION:

- WHITE - Division Corrosion Office
- YELLOW - Area Corrosion Office
- PINK - Division File

WELL CASING
CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

ATTACHMENT #7

Drilling Log (Attach Hereto)

2 X 60 ANODES

Completion Date 6-12-80

Well Name Rincon Unit #99A		Location NW 27-27-6		CPS No. 1535 W	
Type & Size Bit Used 6 3/4				Work Order No. 57538-21	
Anode Hole Depth 660' logged 655'	Total Drilling Rig Time	Total Lbs. Coke Used 71 sacks	Last Circulation Mat'l Used	No. Sacks Mud Used	
Anode Depth					
# 1 620	# 2 610	# 3 600	# 4 590	# 5 580	# 6 570
# 7 560	# 8 550	# 9 540	# 10 530		
Anode Output (Amps)					
# 1 2.0	# 2 2.0	# 3 2.1	# 4 2.9	# 5 2.5	# 6 2.7
# 7 2.8	# 8 2.5	# 9 3.1	# 10 3.1		
Anode Depth					
# 11	# 12	# 13	# 14	# 15	# 16
# 17	# 18	# 19	# 20		
Anode Output (Amps)					
# 11	# 12	# 13	# 14	# 15	# 16
# 17	# 18	# 19	# 20		
Total Circuit Resistance			No. 8 C.P. Cable Used		No. 2 C.P. Cable Used
Volts 12.0	Amps 11.6	Ohms 1.0			

Remarks: STATIC 600' S = .89, INSULATED UNION - OK. DRILLER
Said hit water at 200' waited 15 min. Blew water. INSTALLED
640' of 1" vent pipe, Perforated 520' of vent pipe.
Ran 28' of 8" Plastic casing.

NOTHING INSTALLED

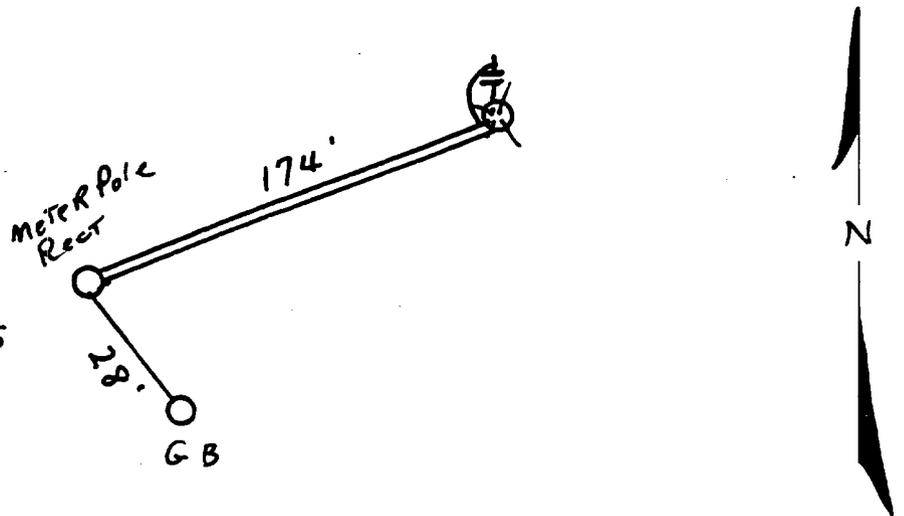
All Construction Completed

Willis Loughton Jr
(Signature)

GROUND BED LAYOUT SKETCH

- 1 20' meter Pole
- 1 40V 16A Rect
- 1 Jct. Box
- Ditch + 1 cable - 202'
- EXTRA cable - 194'
- Hole - + 155'
- Time - 6-10 - 9 hrs.
- 6-11 - 10 "
- 6-12 - 10 "

Casing Time for Rig - 2 hrs
28' of 8" Plastic casing



DISTRIBUTION:

- WHITE - Division Corrosion Office
- YELLOW - Area Corrosion Office
- PINK - Originator File