

990

E

30-039-21625

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS  
NORTHWESTERN NEW MEXICO  
(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: Unit NW Sec. 7 Twp 29 Rng 7

Name of Well/Wells or Pipeline Serviced SAN JUAN 29-7 UNIT #89A

cps 1413w

Elevation 6350' Completion Date 8/28/79 Total Depth 570' Land Type\* N/A

Casing, Sizes, Types & Depths N/A

If Casing is cemented, show amounts & types used N/A

If Cement or Bentonite Plugs have been placed, show depths & amounts used  
N/A

Depths & thickness of water zones with description of water when possible:  
Fresh, Clear, Salty, Sulphur, Etc. WATER SAND 105' - 125' SAMPLE TAKEN

Depths gas encountered; N/A

Type & amount of coke breeze used: 61 SACKS

Depths anodes placed: 550', 530', 520', 505', 470', 450', 335', 285', 275', 265'

Depths vent pipes placed: 580'

Vent pipe perforations: 500'

Remarks: gb #1 FIRST HOLE (600') UNABLE TO LOG.

**RECEIVED**  
MAY 31 1991  
OIL CON. DIV.  
DIST. 3

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

\*Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.  
If Federal or Indian, add Lease Number.

WELL CASING  
CATHODIC PROTECTION CONSTRUCTION REPORT  
DAILY LOG

2 Hrs Reg  
8 Hrs Reg  
3 Hrs OT

CONTRACT #2

Drilling Log (Attach Hereto)

2" x 60" DURIRON

Completion Date 8-28-79

Well Name SJ 29-7 #89A		Location NW 7-29-7				CPS No. 1413W													
Type & Size Bit Used 6 3/4"						Work Order No. 57357-21													
Anode Hole Depth 570'		Total Drilling Rig Time		Total Lbs. Coke Used 61 BAGS		Lost Circulation Mat'l Used		No. Sacks Mud Used											
Anode Depth																			
# 1	550	# 2	530	# 3	520	# 4	505	# 5	470	# 6	450	# 7	335	# 8	285	# 9	275	# 10	265
Anode Output (Amps)																			
# 1	2.1	# 2	2.4	# 3	2.5	# 4	2.7	# 5	2.5	# 6	3.2	# 7	1.9	# 8	1.9	# 9	2.7	# 10	2.6
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		Amps		Ohms															
11.6		12.2		.95															

Remarks: Driller advised water sand 105-125 (Sample) 1-2 ga per minute. Water sand 380'-400' 40-50 gal per minute started injecting at 220' stopped at 400' 580' 1" PVC vent pipe 500' perforated.

20' METER POLE

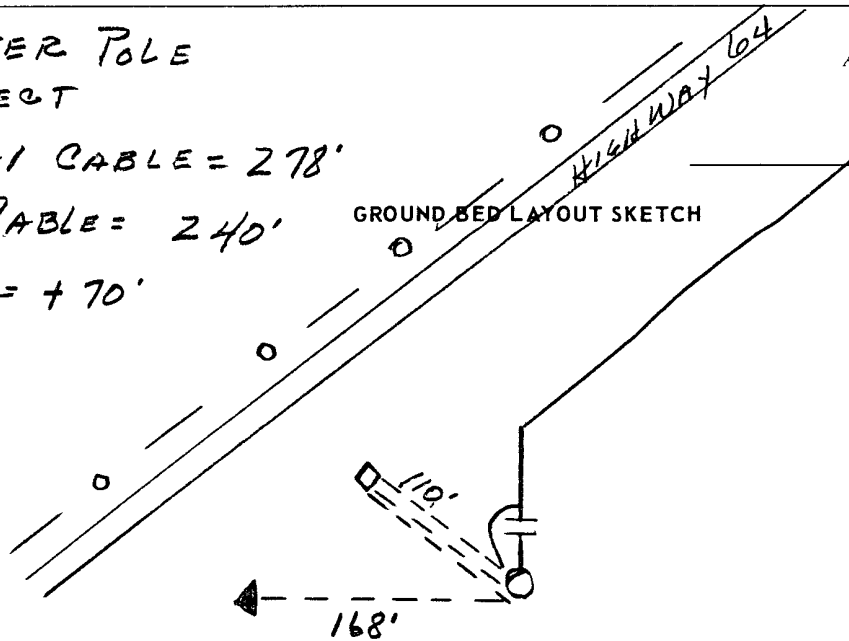
40/16 RECT

DITCH + 1 CABLE = 278'

EXTRA CABLE = 240'

HOLE = + 70'

GROUND BED LAYOUT SKETCH



All Construction Completed

R.T.  
(Signature)

DISTRIBUTION:

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

▲ HOLE #1  
LOST HOLE

6350

WELL CASING  
CATHODIC PROTECTION CONSTRUCTION REPORT  
DAILY LOG

CONTRACT #2

Drilling Log (Attach Hereto)

2" x 600 DURIRON Completion Date: 8- - 7

Well Name SJ 29-7 # 89A		Location NW-7-29-7				CPS No. 1413W				
Type & Size Bit Used 6 3/4"		STATIC = .				Work Order No. 57357-21				
Anode Hole Depth		Total Drilling Rig Time		Total Lbs. Coke Used		Lost Circulation Mat'l Used		No. Sacks Mud Used		
Anode Depth	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10
Anode Output (Amps)	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10
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		Amps		Ohms						

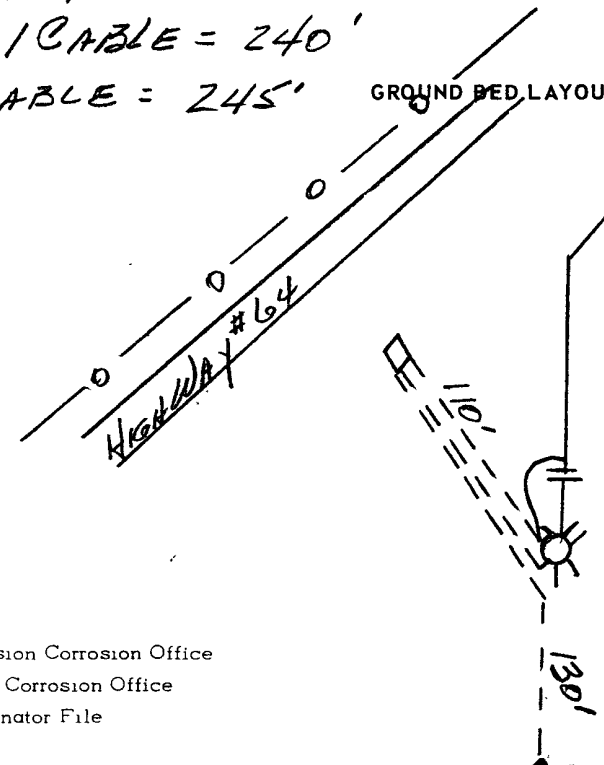
Remarks: Driller advised water sand 135'-140' drilled to 180' set over night. Blow water with AM (Sample Guentimate 2-3 gal per minute. Drilled to 460' No. 1 Drilled to 600' logged to 160' 1" PVC vent pipe 340' perforated unable to log past 400' moved to hole #2

All Construction Completed

B.T.  
(Signature)

20' METER POLE  
40116 RECT  
DITCH + 1 CABLE = 240'  
EXTRA CABLE = 245'  
HOLE =

GROUND BED LAYOUT SKETCH



NOTE

Unable to run static well hoars up w/ plain wire turned in to Blain Field Office.

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

STATIC = 1413 W  
ST 29-7 # 89A NW 7-29-7 57357-2

MW		gals/mol
16.04	C <sub>1</sub>	6.4
30.07	C <sub>2</sub>	10.12
44.10	C <sub>3</sub>	10.42
58.12	iC <sub>4</sub>	12.38
58.12	nC <sub>4</sub>	11.93
72.15	iC <sub>5</sub>	13.85
72.15	nC <sub>5</sub>	13.71
86.18	iC <sub>6</sub>	15.50
86.18	C <sub>6</sub>	15.57
100.21	iC <sub>7</sub>	17.2
100.21	C <sub>7</sub>	17.46
114.23	C <sub>8</sub>	19.39
28.05	C <sub>2</sub>	9.64
42.08	C <sub>3</sub>	9.67

MW		gals/mol
32.00	O <sub>2</sub>	3.37
28.01	CO	4.19
44.01	CO <sub>2</sub>	6.38
64.06	SO <sub>2</sub>	5.50
34.08	H <sub>2</sub> S	5.17
28.01	N <sub>2</sub>	4.16
2.02	H <sub>2</sub>	3.38

Driller advised water sand 135-140 drilled to 180' set saw night Blow water next AM sample sur estimate 2-3 gal per minute. Unable to run static. Well has plain union for insulated union. Turned into flow field office.

Drilled to 600' logged  
1" PVC vent pipe 340 perf.

125							A =	n
30		55	.6	80	.6	5		
35		60	.8	85	.6	10		
x 40	1.5	65	.6	90	.6	15		
45	1.4	70	.6	95	.6	20		
50	1.1	75	.8	100	.6	25		
55	.9	80	1.2	5	.6	30		
60	.6	85	1.5	10	.6	35		
65	.5	90	1.4	15	.6	40		
70	.4	95	1.1	20	.5	45		
75	.4	300	1.0	25	.5	50		
80	.8	5	.892	30	.6	55		
85	.7	10	.57	35	.6	60		
90	.6	15	.3	40	.6	65		
95	.5	20	.3	45	.6	70		
200	.4	25	.3	50	.7	75		
5	.4	30	.4	55	-	80		
10	.4	35	.5	60		85		
15	.4	40	.6	65		90		
20	.4	45	.9	70		95		
25	.2	50	1.2	75		100		
30	.3	55	1.1	80				
35	.3	60	.8	85				
40	.3	65	.7	90				
45	.8	70	.7	95				
50	.7	75	.6	100				

Drilled to 600' unable to log past 380' moved to hole #2

- 1 =
- 2 =
- 3 =
- 4 =
- 5 =
- 6 =
- 7 =
- 8 =
- 9 =
- 10 =

EL PASO NATURAL GAS COMPANY  
 SAN JUAN DIVISION  
 FARMINGTON, NEW MEXICO  
 PRODUCTION DEPARTMENT WATER ANALYSIS

Analysis No. 1-9745 Date 10-24-79

Operator EPNG Well Name San Juan 29-7 # 89 A

Location 7-29-7 County Rio Arriba State N.M.

Field \_\_\_\_\_ Formation \_\_\_\_\_

Sampled From 1413 ~~W~~

Date Sampled \_\_\_\_\_ By \_\_\_\_\_

Tbg. Press. _____	Csg. Press. _____	Surface Csg. Press _____
ppm	epm	ppm epm

Sodium <u>376</u>	<u>16</u>	Chloride <u>44</u>	<u>1</u>
Calcium <u>480</u>	<u>24</u>	Bicarbonate <u>205</u>	<u>3</u>
Magnesium <u>27</u>	<u>2</u>	Sulfate <u>1825</u>	<u>38</u>
Iron <u>Present</u>	_____	Carbonate <u>0</u>	<u>0</u>
H <sub>2</sub> S <u>Absent</u>	_____	Hydroxide <u>0</u>	<u>0</u>

cc: D.C.Adams  
 R.A.Ullrich  
 E.R.Paulek  
 J.W.McCarthy  
 A.M.Smith  
 W.B.Shropshire  
 File  
 C. B. O'Nan

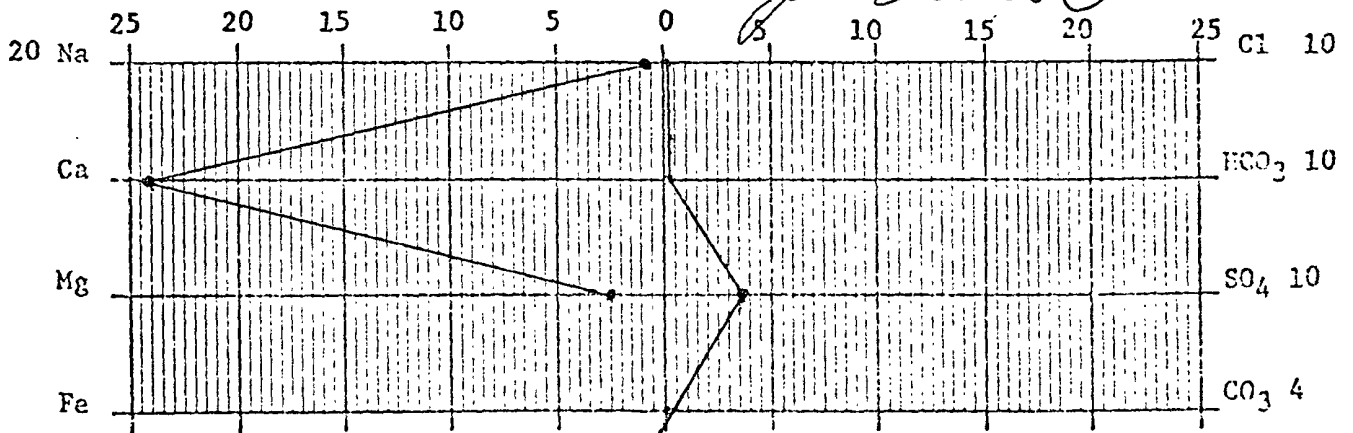
Total Solids Dissolved 3398

pH 7.9

Sp. Gr. 1.0037 at 60°F

Resistivity 250 ohm-cm at 77 °F

*Cynthia K. ...*  
 Chemist *JCS*



Scale: epm

*CP# 1413W*

EL PASO NATURAL GAS COMPANY  
DRILLING DEPARTMENT

DAILY DRILLING REPORT

LEASE \_\_\_\_\_ WELL NO. \_\_\_\_\_ CONTRACTOR *Rosy* RIG NO. \_\_\_\_\_ REPORT NO. \_\_\_\_\_ DATE *8-28* 19 *79*

MORNING					DAYLIGHT					EVENING				
Driller		Total Men In Crew			Driller		Total Men In Crew			Driller		Total Men In Crew		
FROM	TO	FORMATION	WT-BIT	R.P.M.	FROM	TO	FORMATION	WT-BIT	R.P.M.	FROM	TO	FORMATION	WT-BIT	R.P.M.

*Drilled 585  
logged - 570*

BIT NO.	NO. DC	SIZE	LENG.	BIT NO.	NO. DC	SIZE	LENG.	BIT NO.	NO. DC	SIZE	LENG.
<i>6 3/4</i>											
SEAL NO.	STANDS			SERIAL NO.	STANDS			SERIAL NO.	STANDS		
SIZE	SINGLES			SIZE	SINGLES			SIZE	SINGLES		
TYPE	DOWN ON KELLY			TYPE	DOWN ON KELLY			TYPE	DOWN ON KELLY		
MAKE	TOTAL DEPTH			MAKE	TOTAL DEPTH			MAKE	TOTAL DEPTH		

MUD RECORD			MUD, ADDITIVES USED AND RECEIVED			MUD RECORD			MUD, ADDITIVES USED AND RECEIVED			MUD RECORD			MUD, ADDITIVES USED AND RECEIVED			
Time	Wt.	Vis.	Time	Wt.	Vis.	Time	Wt.	Vis.	Time	Wt.	Vis.	Time	Wt.	Vis.	Time	Wt.	Vis.	

FROM	TO	TIME BREAKDOWN	FROM	TO	TIME BREAKDOWN	FROM	TO	TIME BREAKDOWN
<i>0</i>	<i>2</i>	<i>Surface</i>				<i>260</i>	<i>380</i>	<i>Sandy shale</i>
<i>2</i>	<i>30</i>	<i>Sand Stone</i>				<i>380</i>	<i>400</i>	<i>Sand Making water 40-50 min</i>
<i>30</i>	<i>35</i>	<i>Sandy shale</i>				<i>400</i>	<i>410</i>	<i>Shale</i>
<i>35</i>	<i>105</i>	<i>Shale</i>				<i>410</i>	<i>460</i>	<i>Sand</i>
<i>105</i>	<i>125</i>	<i>Sand wet</i>	<i>Making water</i>	<i>1-2 gal min</i>		<i>460</i>	<i>550</i>	<i>Sandy shale</i>
<i>125</i>	<i>140</i>	<i>Shale</i>				<i>550</i>	<i>585</i>	<i>Sand Stone</i>

REMARKS - *140-170 Sand Stone*  
*170-175 Shale*  
*175-185 Sand Stone*  
*185-220 Sand*  
*220-230 Sand Stone*  
*230-260 Shale*

REMARKS -

REMARKS - *Inf. 220*

SIGNED: Toolpusher *Rosy* Company Supervisor \_\_\_\_\_

1413 W

SJ 29-7 #89A NW 7-29-7

57357-21

Drilled advised water sand 105-125 (Sample) 1-2 gal-min  
Water sand 380-400' 40-50 gal. minute  
Started injecting at 220' stopped at 400'

580' vent pipe 500' perforated

Drilled 585' logged 570'

$11.6V / 12.2A = .95 \Omega$

MW		gals/mol
16.04	C1	6.4
30.07	C2	10.12
44.10	C3	10.42
58.12	iC4	12.38
58.12	nC4	11.93
72.15	iC5	13.85
72.15	nC5	13.71
86.18	iC6	15.50
86.18	C6	15.57
100.21	iC7	17.2
100.21	C7	17.46
114.23	C8	19.39
28.05	C2'	9.64
42.08	C3'	9.67

MW		MISC gals/mol
32.00	O2	3.37
28.01	CO	4.19
44.01	CO2	6.38
64.06	SO2	5.50
34.08	H2S	5.17
28.01	N2	4.16
2.02	H2	3.38

125	30	55	.7	80	.84	5	.86
	35	60	1.1	85	.7	10	1.3
	40	65	1.4	90	.6	15	1.2
	45	70	1.3	95	.7	20	1.2
	50	75	1.5	400	.7	25	1.2
	55	80	1.1	5	.6	30	1.1
	60	85	1.0	10	.7	35	1.2
	65	90	1.0	15	.7	40	1.0
	70	95	.7	20	.7	45	.8
	75	300	.5	25	.7	50	.8
	80	5	.4	30	.7	55	1.0
	85	10	.4	35	.7	60	1.0
	90	15	.5	40	.7	65	.92
	95	20	.6	45	.7	70	.88
	200	25	.7	50	.8	75	
	5	30	.7	55	1.3	80	
	10	35	.7	60	1.8	85	
	15	40	1.1	65	1.1	90	
	20	45	1.0	70	1.4	95	
	25	50	.85	75	1.4	600	
	30	55	.7	80	.84		
	35	60	.7	85	.6		
	40	65	.7	90	.6		
	45	70	.6	95	.7		
	50	75	.85	500	.7		
	1 =	550	1.1	2.1			
	2 =	530	1.5	2.4			
	3 =	520	1.4	2.5			
	4 =	505	1.4	2.7			
	5 =	470	1.8	2.5			
	6 =	450	1.9	3.2			
	7 =	335	1.2	1.9			
	8 =	285	1.1	1.9			
	9 =	275	1.6	2.7			
	10 =	265	1.5	2.6			