

1288

E

3E - 30-045-23881  
8 - 30-045-20842  
14 - 30-045-21453

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

Operator MERIDIAN OIL Location: Unit NE Sec. 18 Twp 29 Rng 10

Name of Well/Wells or Pipeline Serviced HUBBELL #3E, #8, #14

cps 156lw

Elevation 5604' Completion Date 9/8/81 Total Depth 400' 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/o

Depths & thickness of water zones with description of water when possible:  
Fresh, Clear, Salty, Sulphur, Etc. 120' - 140' SAMPLE TAKEN

Depths gas encountered: N/A

Type & amount of coke breeze used: N/A

Depths anodes placed: 380', 355', 340', 320', 280', 265', 245', 220', 195', 180'

Depths vent pipes placed: 400'

Vent pipe perforations: 300'

Remarks: gb #1

**RECEIVED**  
MAY 31 1981  
OIL CON. DIV. J  
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

Drilling Log (Attach Hereto)  **HUBBELL #36**

Completion Date **9-8-81**

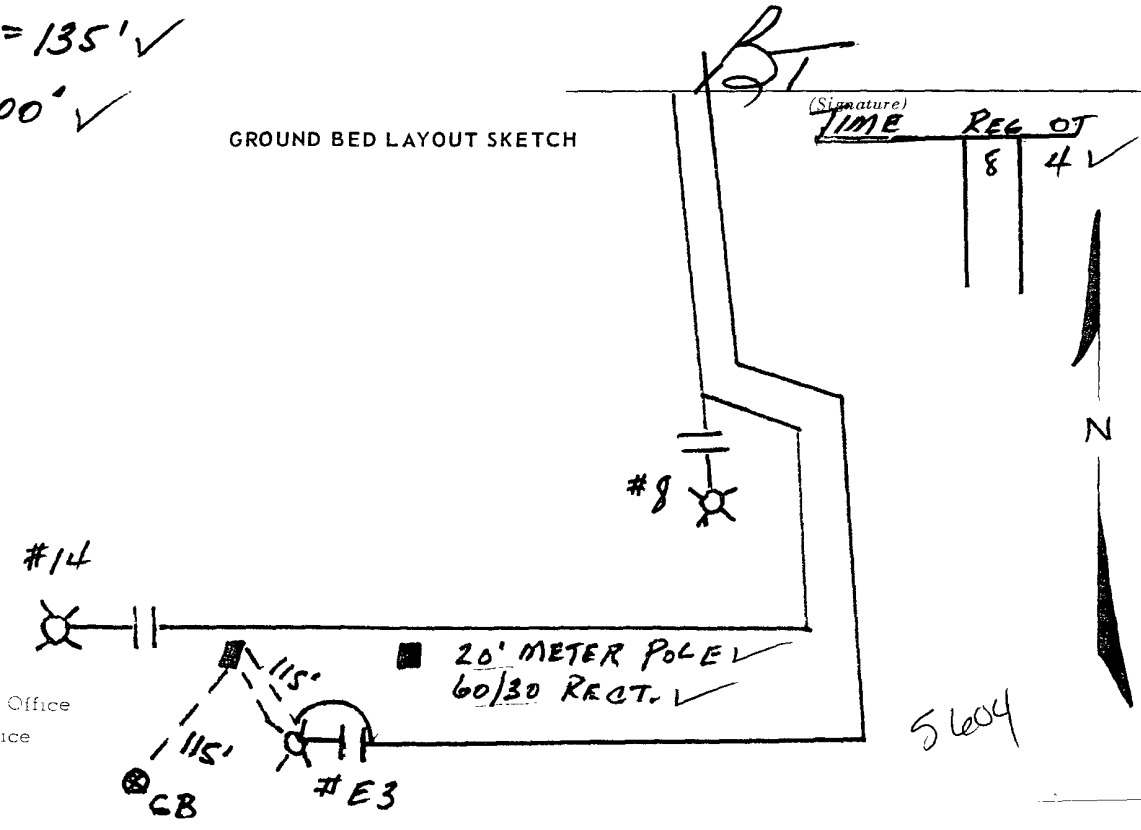
Well Name <b>HUBBELL #8</b>		Location <b>NE 18-29-10</b>		CPS No. <b>1561 W</b>	
Type & Size Bit Used <b>HUBBELL #14</b>		Work Order No. <b>57813-21-50-20</b>		<b>54936-19 ✓ ✓</b>	
Anode Hole Depth <b>400'</b>	Total Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used <b>55729-21-✓ ✓</b>	
Anode Depth	# 1 <b>380</b>	# 2 <b>355</b>	# 3 <b>340</b>	# 4 <b>320</b>	# 5 <b>280</b>
	# 6 <b>265</b>	# 7 <b>245</b>	# 8 <b>220</b>	# 9 <b>195</b>	# 10 <b>180</b>
Anode Output (Amps)	# 1 <b>4.58</b>	# 2 <b>4.23</b>	# 3 <b>5.55</b>	# 4 <b>5.63</b>	# 5 <b>3.70</b>
	# 6 <b>3.88</b>	# 7 <b>3.81</b>	# 8 <b>3.95</b>	# 9 <b>5.52</b>	# 10 <b>5.49</b>
Anode Depth	# 11	# 12	# 13	# 14	# 15
Anode Output (Amps)	# 11	# 12	# 13	# 14	# 15
Total Circuit Resistance	No. 8 C.P. Cable Used		No. 2 C.P. Cable Used		
Volts <b>11.7</b>	Amps <b>23.0</b>	Ohms <b>.50</b>			

Remarks: **NET 120-140' 15 MIN BLOW SAMPLE**  
**STATIC ON HUBBELL "E" # 3=.83' W**  
**100' 1" PLAIN VENT PIPE BALANCE PERFORATED**

**DITCH + 1 CABLE = 230' ✓**  
**XTRA CABLE = 135' ✓**  
**HOLE = -100' ✓**

All Construction Completed

GROUND BED LAYOUT SKETCH



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

5604

HUBBELL E #3 1561 W  
 ✓ #8  
 ✓ #14

57813-21-50-2  
 54936-19-50-2  
 55729-21-50-2

WET 120' - 140' 15 MIN BLOW SAMPLE  
 100' PLAIN VENT PIPE BALANCE PERFORATED

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

DRILLED 400' LOG 400'

40	1.30								
45	1.72								
50	1.87		30	1.02	5	1.32	20	1.85	1
55	1.87		35	.84	10	1.61	25	1.80	
60	1.81		40	.84	15	1.76	30	1.96	
65	1.79		45	1.36	20	1.85	35	1.93	
70	1.64		50	1.34	25	1.90	40	1.84	
75	1.68		55	1.16	30	1.97			
80	1.80	-10	60	.95	35	2.08			
85	1.78		65	1.36	40	2.00	3		
90	1.77		70	1.35	45	2.05			
95	1.73	-9	75	1.35	50	1.91			
200	1.57		80	1.25	55	1.75	2		
5	1.30		85	1.12	60	1.64			
10	1.32		90	.58	65	1.55			
15	1.30	-8	95	1.07	70	1.57			
20	1.43		300	1.25	75	1.85			
25	1.13								

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

1	380'	3.60	4.58
2	355'	3.16	4.23
3	340'	4.30	5.55
4	320'	4.15	5.63
5	280'	2.32	3.70
6	265'	2.50	3.88
7	245'	2.58	3.81
8	220'	2.77	3.95
9	195'	3.90	5.52
10	180'	4.20	5.49

11.7 Volts  
 230 Amps  
 .50 Ω

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

Analysis No. 1-10327 Date 9-21-81

Operator El Paso Natural Gas Well Name Hubbel E #3 CPS 1561-W

Location NE 18-29-10 County San Juan State New Mexico

Field Cedar Hill Formation \_\_\_\_\_

Sampled From 120 - 140'

Date Sampled 9-8-81 By B.T.

Tbg. Press. \_\_\_\_\_ Csg. \_\_\_\_\_ Surface Csg. Press. \_\_\_\_\_

	ppm	epm	ppm	epm
Sodium	<u>1,212</u>	<u>52.7</u>	Chloride	<u>36</u>
				<u>1.0</u>

	ppm	epm	ppm	epm
Calcium	<u>448</u>	<u>22.4</u>	Bicarbonate	<u>117</u>
				<u>1.9</u>

	ppm	epm	ppm	epm
Magnesium	<u>27</u>	<u>2.2</u>	Sulfate	<u>3,575</u>
				<u>74.4</u>

	ppm	epm	ppm	epm
Iron	_____	_____	Carbonate	<u>0</u>
				<u>0</u>

	ppm	epm	ppm	epm
H <sub>2</sub> S	_____	_____	Hydroxide	<u>0</u>
				<u>0</u>

cc: R. A. Ullrich  
 E. R. Paulek  
 J. W. McCarthy  
 J. D. Evans  
 W. B. Shropshire  
 D. C. Adams  
 File

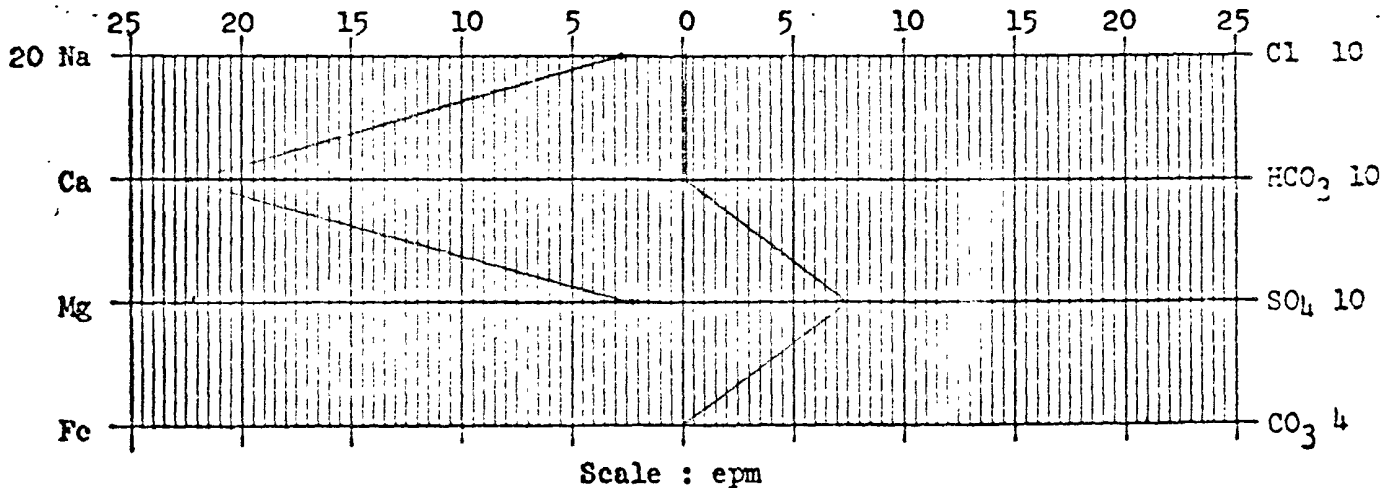
Total Solids Dissolved 5,244

pH 7.6

Sp. Gr. 1.0415 At 60°F

Resistivity 169 ohm-cm at 75°F

Joe P. Barnett & Dennis P. Bird  
 Chemist

Hubbell E #3  
#8  
#14

CPS 156114

LEASE MORNING WELL NO. CONTRACTOR *Henry Drilling* RIG NO. REPORT NO. DATE *Sept 198*

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.	FROM	TO	FORMATION	WT-BIT	R.P.M.	FROM	TO	FORMATION	WT-BIT	R.P.M.	FROM	TO	FORMATION	WT-BIT	R.P.M.

BIT NO.	NO. DC	SIZE	LENG.	BIT NO.	NO. DC	SIZE	LENG.	BIT NO.	NO. DC	SIZE	LENG.	BIT NO.	NO. DC	SIZE	LENG.	BIT NO.	NO. DC	SIZE	LENG.										

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
0	100	sand	370	400	sand			
100	140	sand						
140	200	shale						
200	220	sand						
220	300	shale						
300	370	shale						

REMARKS -  
 Water 140  
 Drilled 400 TD 400

SIGNED: Toolpusher *Henry Henry*

Company Supervisor