

1299

30-045-26383

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

Operator MERIDIAN OIL INC. Location: Unit E Sec. 26 Twp 28 Rng 8

Name of Well/Wells or Pipeline Serviced HOWELL #2A

cps 1907w

Elevation 5869' Completion Date 11/3/87 Total Depth 320' 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. 60' SAMPLE TAKEN

Depths gas encountered: N/A

Type & amount of coke breeze used: N/A

Depths anodes placed: 265', 255', 245', 235', 225', 215', 205', 115', 105', 95'

Depths vent pipes placed: 318'

Vent pipe perforations: 260'

Remarks: gb #1

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.

CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

Drilling Log (Attach Here to)

Completion Date 11/2/87

CPS #	Well Name: Line or Plant:	Work Order #	State:	Ins. Union Check:
1907W	HOWELL #2A		82 V W	☒ Good ☐ Bad
Location: <u>E</u>	Anode Size: <u>2" X 60"</u>	Anode Type: <u>DURION</u>	Size Bit: <u>6 3/4"</u>	
Depth Drilled: <u>320</u>	Depth Logged: <u>318</u>	Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used
Anode Depth:				
# 1 265	# 2 255	# 3 245	# 4 235	# 5 225
# 6 215	# 7 205	# 8 115	# 9 105	# 10 95
Anode Output (Amps):				
# 1 5.1	# 2 5.2	# 3 6.1	# 4 5.6	# 5 6.0
# 6 4.8	# 7 4.9	# 8 4.3	# 9 4.7	# 10 4.7
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:				
Volts <u>11.59</u>	Amps <u>24.4</u>	Ohms <u>49</u>	No. 3 C.P. Cable Used:	No. 2 C.P. Cable Used:

Remarks: Driller said WATER AT 60', TOOK WATER SAMPLE.
INSTALLED 318' of 1" P.V.C. VENT pipe, PERFORATED 260'.

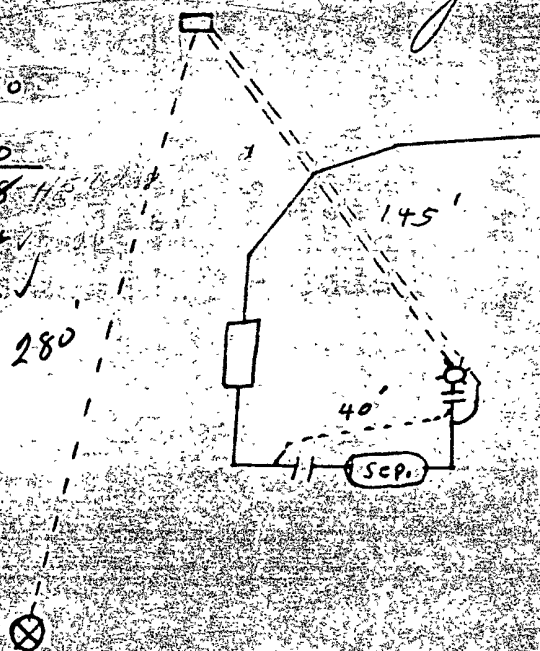
Rectifier Size: 40 V 16 A 799.98
 Addn'l Depth: 5198.88
 Depth Credit: 182' ✓ 728.00 ✓
 Extra Cable: 185' ✓ 145' ✓ 2937.00 ✓ 14470.98
 Ditch & 1 Cable: 465' 320' ✓ 32550' 224.00 ✓
 Ditch & 2 Cable: —
 25' Meter Pole: —
 20' Meter Pole: 1' ✓ 365.00
 10' Stub Pole: —
 Junction Box: 1 269.90

All Construction Completed

(Signature)

net
 5460.38
 2730.2
 733.40

TOTAL 5766.88
 TAX @ 5% 268.34
\$ 5625.22 ✓



MERIDIAN OIL

P. O. BOX 4289-Phone 327-0251
FARMINGTON, NH

Date 11/3/87

DEEP WELL GROUND BED LOG

Company Meridian Oil

Well No. Howell 2A Location NW 26-28-8

Volts Applied 11.89

Ampere 24.4

5					230	2.7				455					680				
10					235	2.6	-	④		460					685				
15					240	2.8				465					690				
20					245	2.7	-	⑤		470					695				
25					250	2.8				475					700				
30					255	2.5	-	②		480					705				
35					260	2.4				485					710				
40					265	2.4	-	①		490					715				
45					270	2.1				495					720				
50					275	1.3				500					725				
55					280	1.2				505					730	1-265-3.3-5.1			
60	1.1			WATER	285	1.0				510					735	2-255-3.5-5.2			
65	1.2				290	1.1				515					740	3-245-4.0-6.1			
70	1.2				295	1.1				520					745	4-235-3.5-5.6			
75	1.1				300	1.2				525					750	5-225-3.5-6.0			
80	1.6				305	1.4				530					755	6-215-3.0-4.8			
85	2.0				310	2.4				535					760	7-205-3.2-4.9			
90	2.2				315	3.18	-	T. D.		540					765	8-115-2.9-4.2			
95	2.5	-	⑩		320			Drilled To		545					770	9-105-2.9-4.7			
100	2.3				325					550					775	10-95-3.3-4.7			
105	2.0	-	⑨		330					555					780				
110	2.2				335					560					785				
115	2.2	-	⑧		340					565					790				
120	2.1				345					570					795				
125	1.8				350					575					800				
130	1.5				355					580					805				
135	1.5				360					585					810				
140	1.5				365					590					815				
145	1.2				370					595					820				
150	1.4				375					600					825				
155	1.9				380					605					830				
160	1.8				385					610					835				
165	1.8				390					615					840				
170	1.8				395					620					845				
175	1.8				400					625					850				
180	1.5				405					630					855				
185	1.2				410					635					860				
190	.7				415					640					865				
195	1.4				420					645					870				
200	2.4				425					650					875				
205	2.5	-	⑦		430					655					880				
210	2.3				435					660					885				
215	2.2	-	⑥		440					665					890				
220	2.6				445					670					895				
225	2.8	-	⑤		450					675					900				

WELL TYPE GROUNDED DATA

DATA SHEET NO. 10E2COMPANY MERIDIAN OIL CO.JOB NO. 13121 DATE 11-3-87WELL HOWELL #2A CPS-1901W

PIPELINE:

LOCATION: SEC 26 TWP 28N RGE 8W CO SAN JUAN STATE NMELEV. _____ FT.: ROTARY 318' FT.: CABLE TOOL 0- FT.: CASING 0-GROUNDED: DEPTH 318' FT. DIA. 6 3/4 IN. GAS _____ LBS. ANODES 10-2" x 60" TYPE D

DEPTH FT.	DRILLER'S LOG	EXPLORING ANODE TO STRUCTURE			NO COKE	WITH COKE	ANODE NO.	DEPTH, TOP OF ANODES
		E	I	R				
60	FIRST WATER AT 60' 10 GPM		1.1					
65	0-53' SAND		1.2					
70	SANDY SHALE		1.2					
75			1.1					
80			1.6					
85			2.0					
90			2.2					
95			2.4		3.3	4.7	10	95
100	SHALE		2.3					
5			2.0		2.9	4.7	9	105
10			2.2					
15			2.2		2.9	4.3	8	115
20			2.1					
25			1.8					
30			1.5					
35			1.5					
40			1.5					
45			1.2					
50	SANDY SHALE		1.4					
55			1.9					
60			1.8					
65			1.8					
70			1.8					
75			1.8					
80			1.5					
85			1.2					
90			0.7					
95			1.5					
200	SHALE - CLAY		2.4					
5			2.5		3.2	4.9	7	205
10			2.3					
15			2.2		3.0	4.8	6	215
20			2.6					
25			2.8		3.5	6.0	8	225
30			2.7					
35			2.6		3.5	5.6	4	235
40			2.8					
45			2.7		4.0	6.1	3	245
50			2.8					
55			2.5		3.5	5.2	2	255
60			2.4					
65			2.4		3.3	5.1	1	265
70			2.1					

GROUNDED RESISTANCE: (1) VOLTS 11.89 - AMPS 24.4 - 0.49 OHMS

(2) VIBROGROUND _____ OHMS

GENERAL CATHODIC PROTECTION SERVICES CO.

LUXENS COMPANY

API WATER ANALYSIS REPORT FORM

CDS 190700

OIL COMPANY		Sample No.	Date Sampled	
Blanco			11/3/87	
Legal Description		County or Parish	State	
		S.T.	NM	
Lease or Unit	Well	Depth	Formation	Water, B/D
	Howell #2A	60'		
Type of Water (Produced, Supply, etc.)	Sampling Point		Sampled By	
	60'		J.L.	

DISSOLVED SOLIDS

CATIONS

Sodium, Na (calc.)
Calcium, Ca
Magnesium, Mg
Barium, Ba

mg/l

me/l

152
497
734

6.6
24.9
6.1

OTHER PROPERTIES

pH
Specific Gravity, 60/60 F.
Resistivity (ohm-meters)
Conductivity

7.25
1.0047
4000 cm
2.6 x 10³ uMHOS

Total Dissolved Solids (calc.)

2540

ANIONS

Chloride, Cl
Sulfate, SO₄
Carbonate, CO₃
Bicarbonate, HCO₃

28.4
1680
102

0.9
35
1.7

Iron, Fe (total)
Sulfide, as H₂S

REMARKS & RECOMMENDATIONS:

