

174-30-045-20233

241-30-045-21221

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 13 Twp 26 Rng 10

Name of Well/Wells or Pipeline Serviced HUERFANON UNIT #174, #241

cps 964w

Elevation 6551' Completion Date 9/8/87 Total Depth 420' 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. 160' SAMPLE TAKEN

Depths gas encountered: N/A

Type & amount of coke breeze used: N/A

Depths anodes placed: 355', 345', 335', 325', 275', 265', 255', 245', 235', 215'

Depths vent pipes placed: N/A

Vent pipe perforations: N/A

Remarks: gb #2

RECEIVED
MAY 31 1991

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

*already in
computer*

Drilling Log (Attach Hereto) ☐Completion Date 9-8-81

CPS #		Well Name, Line or Plant:		Work Order #		Static:		Ins Union Check	
964W		Huerfano #174		F 13-26-10		.60		☒ Good ☐ Bad	
		Huerfano #241		C 13-26-10		.74			
Location:		Anode Size		Anode Type		Size Bit			
NW 13-26-10		2" x 60"		Durillon		6 3/4"			
Depth Drilled		Depth Logged		Drilling Rig Time		Total Lbs. Coke Used		Lost Circulation Mat'l Used	
420		392		6 hrs					
Anode Depth		# 1		# 2		# 3		# 4	
355		345		335		325		275	
Anode Output (Amps)		# 1		# 2		# 3		# 4	
4.2		5.0		5.4		4.6		5.0	
Anode Depth		# 11		# 12		# 13		# 14	
Anode Output (Amps)		# 11		# 12		# 13		# 14	
Total Circuit Resistance		Volts		Amps		Ohms		No. 8 C.P. Cable Used	
		11.6		21.8		.53		No. 2 C.P. Cable Used	

Remarks: Driller said water was at 160'. Water sample was taken. Vent pipe is perforated up to

Rectifier Size:	V	A	4300
Add'l Depth			-432 ✓
Depth Credit:	108' ✓		3868
Extra Cable:	10 ✓		2.50 ✓
Ditch & 1 Cable:	98		38.22 ✓
Ditch & 2 Cable:			40.00 ✓
25' Meter Pole:			3948.72
20' Meter Pole:			197.44
10' Stub Pole:			
Junction Box:	4000		4146.16 ✓

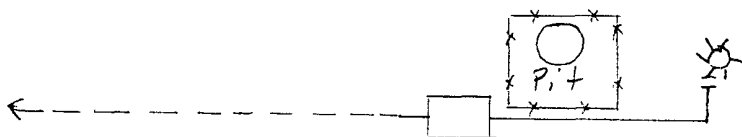
All Construction Completed

Randy Smith
(Signature)

GB#1
△

GB#2
△

N



Date 7-8-87

DEEP WELL GROUNDBED LOG

Company Meridian 0.1 (Burge Corrosion)

Well No. _____ Location Huerfano 174 & 241 Volts Applied 11.6 Amperes 21.

5						230	2.0					455	① 3 5 5	2.6	680	4.2					
10						235	1.9	✓	⑨			460	② 3 4 5	2.9	685	5.0					
15						240	2.0					465	③ 3 3 5	3.2	690	5.4					
20						245	2.1	✓	⑧			470	④ 3 2 5	2.7	695	4.6					
25						250	2.1					475	⑤ 2 7 5	2.6	700	5.0					
30						255	2.1	✓	②			480	⑥ 2 6 5	2.9	705	5.4					
35						260	2.0					485	⑦ 2 5 5	3.1	710	4.2					
40						265	2.0	✓	⑩			490	⑧ 2 4 5	3.0	715	6.0					
45						270	1.9					495	⑨ 2 3 5	2.7	720	5.2					
50						275	2.0	✓	③			500	⑩ 2 2 5	3.0	725	6.2					
55						280	1.9					505			730						
60						285	1.3					510			735						
65						290	1.0					515			740						
70						295	1.1					520			745						
75						300	1.0					525			750						
80						305	.9					530			755						
85						310	.8					535			760						
90						315	1.0					540			765						
95						320	1.7					545			770						
100						325	2.1	✓	④			550			775						
105						330	2.1					555			780						
110						335	2.2	✓	③			560			785						
115						340	2.1					565			790						
120						345	2.1	✓	②			570			795						
125						350	2.1					575			800						
130						355	1.9	✓	①			580			805						
135						360	1.7					585			810						
140						365	1.1					590			815						
145						370	.9					595			820						
150	1.6					375	1.9					600			825						
155	2.0					380	1.9					605			830						
160	2.1					385	1.9					610			835						
165	2.0					390	TD 392					615			840						
170	2.0					395						620			845						
175	2.1					400						625			850						
180	1.8					405						630			855						
185	1.5					410						635			860						
190	1.3					415						640			865						
195	1.5					420						645			870						
200	1.5					425						650			875						
205	1.6					430						655			880						
210	1.6					435						660			885						
215	1.9					440						665			890						
220	1.9					445						670			895						
225	2.0	✓	⑩			450						675			900						

BURGE CORROSION SYSTEMS, INC.

P.O. BOX 1359 - PHONE 334-6141
AZTEC, NEW MEXICO 87410

964
CPS 946-10

COMPANY: ~~Huerfano~~ Meridian DAILY DRILLING REPORT 9-8 1987

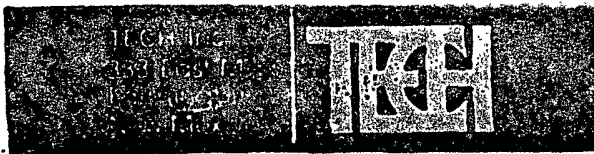
WELL NAME:	WELL NUMBER:	SECTION:	TOWNSHIP:	RANGE:
Huerfano	174	13	26 N	10 W

WATER AT:	FEET:	HOLE MADE:
160 ft		6 3/4 420 ft

DESCRIPTION OF FORMATION			
FROM	TO	FORMATION IS	COLOR
0	30	Sand	tan
30	100	Sandstone	tan-grey
100	130	Shale - Bent	Purple-grey
130	150	Sandstone	Grey
150	160	Water sand	Grey
160	190	Shale	Grey
190	220	Sandstone	Grey
220	280	Shale	Purple
280	340	Sandstone	Grey
340	370	Shale	Grey
370	390	Sandstone	Grey
390	400	Shale	Grey
400	420	Sandstone - water sand	Grey
		T.O. 420 ft.	

REMARKS: Water sample at 160 ft.

Brent Burrill Driller Tool Dresser



CPS 964
946 W

API WATER ANALYSIS REPORT FORM

Company <u>Meridian Oil Co</u>		Sample No. <u>5</u>	Date Sampled <u>9-8-87</u>
Field <u>Ballard</u>	Legal Description	County or Parish <u>San Juan</u>	State <u>NM</u>
Lease or Unit <u>Huerfano</u>	Well <u>174 & 241</u>	Depth <u>160'</u>	Formation
Type of Water (Produced, Supply, etc.)	Sampling Point <u>Ground Bed 160'</u>	Water, B/D	
		Sampled By	

DISSOLVED SOLIDS

CATIONS

	mg/l	me/l
Sodium, Na (calc.)	<u>339</u>	<u>14.7</u>
Calcium, Ca	<u>8</u>	<u>.4</u>
Magnesium, Mg	<u>0</u>	<u>0</u>
Barium, Ba		

ANIONS

Chloride, Cl	<u>248</u>	<u>.7</u>
Sulfate, SO ₄	<u>400</u>	<u>8.3</u>
Carbonate, CO ₃	<u>34.6</u>	<u>.8</u>
Bicarbonate, HCO ₃	<u>32.5</u>	<u>5.3</u>

OTHER PROPERTIES

pH	<u>9.18</u>
Specific Gravity, 60/60 F.	<u>8.2</u>
Resistivity (ohm-meters)	<u>12.5</u> F.
Conductivity	<u>1200 μmho</u>

Total Dissolved Solids (calc.) 1120

Iron, Fe (total) 0
Sulfide, as H₂S 0

REMARKS & RECOMMENDATIONS:

Not enough sample for Sp. gr. determination

