30-045-20560 4295

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS NORTHWESTERN NEW MEXICO

Operator MERIDIAN OIL CO. **Location: Unit** K **Sec.** 24 **Twp** 29 **Rng** 8

Name of Well/Wells or Pipeline Serviced HARDIE A # 2 R

cps 871w

Elevation 6387 **Completion Date** 8/28/90 **Total Depth** 500 **Land Type** N/A

Casing Strings, Sizes, Types & Depths 20 ft. 8" PVC Casing

If Casing Strings are 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: Fresh, Clear Salty, Sulphur, Etc. Wet at 35 ft, 95ft & 210 ft no sample

Depths gas encountered: N/A

Ground bed depth with type & amount of coke breeze used:

7700 lbs of Ashbury petroleum coke

Depths anodes placed: 470, 463, 456, 445, 435, 428, 421, 417, 307, 300

Depths vent pipes placed: 500 ft. 1" vent pipe

Vent pipe perforations: N/A

Remarks: gb #5

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

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

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

TM-U-0238 (Rev. 10-82)

20

WELL CASING

CATHODIC PROTECTION CONSTRUCTION REPORT

DAILY LOG

Drilling Log (Attach Hereto) ☐

Completion Date 8-28-90

CPS #	Well Name, Line or Plant:	Work Order #	Static:	Ins Union Check
871-W	HARDIE A #2R			☑ Good ☐ Bad

Location:	Anode Size:	Anode Type:	Size Bit:
K-24-29-8	2" X 60"	ANOTEC	6 3/4

Depth Drilled	Depth Logged	Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
500'	490'		7700 #		

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Anode Depth	470'	463'	456'	445'	435'	428'	421'	417'	307'	300'
Anode Output (Amps)	2.4	2.6	2.6	2.2	2.0	2.1	2.0	2.2	2.4	2.3

	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20
Anode Depth	240'	215'								
Anode Output (Amps)	1.7	2.0								

Total Circuit Resistance			No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 12.4	Amps 8.8	Ohms 1.4		

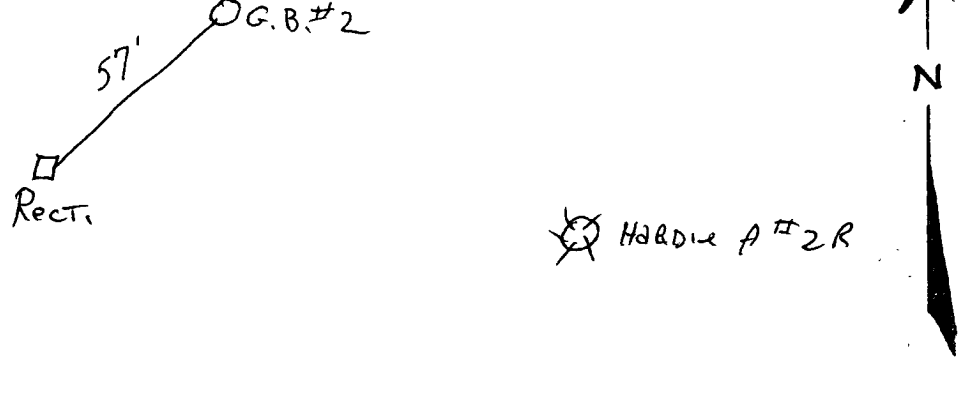
Remarks: Set 20' of 8" PVC casing. Driller said wet at 35', 95', & 210', sat overnight, did not blow water next A.M. Did not get water sample, started injecting at 260'. Ran 500' of 1" vent pipe. Left coke breeze approx 190'. Ran 2 extra anodes to try lower ground bed resistance. Lowered resistance .27 ohm

Rectifier Size: _____ V _____ A
Addn'l Depth _____
Depth Credit: _____
Extra Cable: 10'
Ditch & 1 Cable: 57'
25' Meter Pole: _____
20' Meter Pole: _____
10' Stub Pole: _____
Junction Box: _____

All Construction Completed

Willis Knight Jr
(Signature)

GROUND BED LAYOUT SKETCH



BURGE CORROSION SYSTEMS, INC.

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

COMPANY Meridian O.L DAILY DRILLING REPORT 8-28 1990

WELL NAME:	WELL NUMBER:	SECTION:	TOWNSHIP:	RANGE:
Hardie	A 2-R			

WATER AT: FEET: HOLE MADE: 500'

DESCRIPTION OF FORMATION

FROM	TO	FORMATION IS	COLOR
0	18'	8" PVC CASING -CEMENTED - clay / shale	
18'	35'	SANDSTONE - MOISTURE	
35'	90'	shale	
90'	100'	SAND - MOISTURE - WET	
100'	160'	BENTONITE / SAND MIX	
160'	170'	COAL	
170'	180'	SANDSTONE	
180'	210'	BENTONITE / SAND MIX	
210'	220'	Moisture / SAND	
220'	240'	SAND - BENTONITE MIX	
240'	500'	BENTONITE - SAND - SHALE MIX	

REMARKS: SET 20' 8" PVC CASING - CEMENTED DRILLED to 260' on 27
HAD TO GO TO injection NEXT AM. HAD MOISTURE at 35', 100' & 210-20'

Driller Brian E. Burge Tool Dresser

CONSTRUCTION LOGGING READINGS

Meridan Oil

CPS #: 871-W WELL NAME: Hardie A #2R LOCATION: K24-29-8 DATE: 8-28-90

TOTAL VOLTS: 72.4 TOTAL AMPS: 8.8 OHMS RESISTANCE: 1.40.

DEEP	LOG ANODE	ANODE NO.	DEEP	LOG ANODE	ANODE NO.	DEEP	LOG ANODE	ANODE No.	DEEP	LOG ANODE	ANODE No.
5			185	.40		365	.60		545		
10			190	.40		370	.50		550		
15			195	.40		375	.50		555		
20			200	.40		380	.40		560		
25			205	.40		385	.50		565		
30			210	.60		390	.60		570		
35			215	.90	12	395	.60		575		
40			220	.70		400	.70		580		
45			225	.60		405	.70		585		
50			230	.60		410	.70		590		
55			235	.50		415	1.0		595		
60			240	.80	11	420	.90	8	600		
65			245	.40		425	.80	7	605		
70			250	.30		430	.80	6	610		
75			255	.30		435	.80	5	615		
80			260	.30		440	1.0		620		
85			265	.30		445	1.1	4	625		
90			270	.30		450	1.0		630		
95			275	.30		455	1.1	3	635		
100	.50		280	.40		460	1.0	2	640		
105	.50		285	.40		465	.80		645		
110	.30		290	.40		470	.80	1	650		
115	.40		295	.60		475	.70		655		
120	.50		300	1.0	10	480	.80		660		
125	.70		305	1.3		485	.70		665		
130	.70		310	.90	9	490	—	TD	670		
135	.40		315	.60		495			675		
140	.40		320	.70		500			680		
145	.50		325	.80		505			685		
150	.60		330	.50		510			690		
155	.70		335	.40		515			695		
160	.60		340	.50		520			700		
165	.40		345	.60		525			705		
170	.40		350	.70		530			710		
175	.40		355	.70		535			715		
180	.40		360	.70		540			720		

ANODE READINGS

NO.	DEPTH	NO COKE	WITH COKE
1	470	.80	2.4
2	463	.90	2.6
3	456	1.2	2.6
4	445	1.2	2.2
5	435	.90	2.0
6	428	.80	2.1
7	421	.80	2.0
8	417	1.1	2.2
9	309	1.2	2.4
10	300	1.1	2.3
11	240	.70	1.7
12	215	1.0	2.0

REMARKS: Set 20' of 8" PVC casing. Driller said wet at 35', 95 and 210'. Drilled 240', set overnight. Next A.M. could not blow water, no water sample. Started injecting at 260'.