

3-30-045-09746
250-30-045-27039

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

Operator MERIDIAN OIL CO. Location: Unit A Sec. 7 Twp 30 Rng 9

Name of Well/Wells or Pipeline Serviced PIERCE # 3 & # 250

Elevation _____ Completion Date 7/23/90 Total Depth 500 Land Type _____

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

If Casing Strings are cemented, show amounts & types used _____

If Cement or Bentonite Plugs have been placed, show depths & amounts used _____

Depths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. Hit water at 200 ft., 100 gpm +, sample taken

Depths gas encountered: _____

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

455 ft. with 3800 lbs Ashbury Petroleum Coke

Depths anodes placed: 450, 443, 436, 429, 422, 415, 400, 390, 380, 331

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

Vent pipe perforations: 300 ft.

Remarks: _____

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) ☒Completion Date 7-23-90

CPS #	Well Name, Line or Plant	Work Order #	State	Ins. Union Check
45-W	Pierce # 3			☒ Good ☐ Bad
	Pierce # 250			
Location	Anode Size	Anode Type	Size Bit	
A7-30-9	2' x 60"	ANOTEC	6 3/4	
Depth Drilled	Depth Logged	Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used
500	455		3800	5
No. Sacks Mud Used				
12				
Anode Depth				
# 1 450	# 2 443	# 3 436	# 4 429	# 5 422
# 6 415	# 7 400	# 8 390	# 9 380	# 10 331
Anode Output (Amps)				
# 1 1.5	# 2 1.7	# 3 1.7	# 4 1.7	# 5 1.7
# 6 1.7	# 7 1.5	# 8 1.5	# 9 1.6	# 10 1.1
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	
Volts 12.5	Amps 23.6	Ohms .52		
			No. 2 C.P. Cable Used	

Remarks: DRILLER said hit water at 200' DRILLED TO 500' Hole caved IN TO 460, mudded up and cleaned out TO 500' Hole filled TO 455. Spaced Anodes 7' APART. Counter SKIPPED 100' on #7. Pulled #7 out of hole after coke settled and ran another Anode TO 331' and covered with coke. Ran 500' of 1" VENT PIPE, PERFORATED 300' of VENT PIPE. Left COKE Breeze APPROXIMATELY 310' from surface. Final Reading on Ground Bed was NOT good. Got water sample

Rectifier Size: _____ V _____ A
 Addn'l Depth _____
 Depth Credit: _____
 Extra Cable: 10
 Ditch & 1 Cable: 261'
 25' Meter Pole: _____
 20' Meter Pole: _____
 10' Stub Pole: _____
 Junction Box: 1

All Construction Completed

Wills L. Knight, Jr.
(Signature)

GROUND BED LAYOUT SKETCH

* Pierce # 250

261' ————— □ Rect

Gt. Bed

RECEIVED
 AUG 28 1990
 OIL CON. DIV.
 DIST 3

* Pierce # 3

CONSTRUCTION LOGGING READINGS

MERIDIAN 011

CPS #: 45 W WELL NAME: Pierce #3 x 250 LOCATION: A7-30-9 DATE: 7-23-90

TOTAL VOLTS: 12.5 TOTAL AMPS: 23.6 OHM RESISTANCE: .52

												ANODE READINGS			
DEEP	LOG ANODE	ANODE NO.	DEEP	LOG ANODE	ANODE NO.	DEEP	LOG ANODE	ANODE NO.	DEEP	LOG ANODE	ANODE NO.	NO.	DEPTH	NO COKE	WITH COKE
5			185			365	.80		545			1	450	1.3	1.5
10			190			370	.90	9	550			2	443	1.3	1.7
15			195			375	1.0		555			3	436	1.4	1.7
20		-	200	.60		380	1.0	8	560			4	429	1.4	1.7
25			205	.50		385	1.0		565			5	422	1.4	1.7
30			210	.50		390	1.0	7	570			6	415	1.4	1.7
35			215	.50		395	1.0		575						
40			220	.50		400	1.0	6	580			7	406	1.1	1.5
45			225	.70		405	1.0		585			8	390	1.2	1.5
50			230	.80		410	1.2	5	590			9	380	1.2	1.6
55			235	.80		415	1.2		595			10	331	9.0	1.1
60			240	.90		420	1.2	4	600						
65			245	.90		425	1.2		605						
70			250	.70		430	1.1	3	610						
75			255	.60		435	1.2		615						
80			260	.10		440	1.2	2	620						
85			265	.40		445	1.2		625						
90			270	.50		450	1.1	1	630						
95			275	.40	T.D	455	1.1		635						
100			280	.40		460			640						
105			285	.40		465			645						
110			290	.30		470			650						
115			295	.30		475			655						
120			300	.40	✓	480			660						
125			305	.50		485			665						
130			310	.50		490			670						
135			315	.60		495			675						
140			320	.70		500			680						
145			325	.60		505			685						
150			330	.80	10	510			690						
155			335	.80		515			695						
160			340	.80		520			700						
165			345	.70		525			705						
170			350	.60		530			710						
175			355	.40		535			715						
180			360	.20		540			720						

REMARKS: HIT WATER AT 200', DRILLED TO 500' ON 7-22-90, NEXT A.M. Hole had Filled To 440. ON 7-25-90 MIXED 3 PITS OF Heavy Mud WITH cedar FIBER, COTTONSEED hulls AND Gel, Pumped in Hole and left OVERNIGHT. MIXED 3 PITS OF Heavy Mud WITH hull & FIBER for CIRCULATION ON 7-26-90 A.M. - cleaned out hole, lost 45'. loaded hole. COUNTER SKIPPED 100' ON #7 ANODE. Pulled out of hole and Ran ANOTHER ANODE IN, SET IT AT 331' and covered WITH COKE

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

WELL NAME:	WELL NUMBER:	SECTION:	TOWNSHIP:	RANGE:
PIERCE	250	1	30	9

HOLE MADE:

200'

500'

[illegible]

REMARKS: Had water standing at 200' 100 gpm + plus
Lost 65' Hole - Had to reenter

Drills

Driller Brian E. Burge

Tool Dresser

API WATER ANALYSIS REPORT FORM

Laboratory No. M. McFarland

Company <u>Meridian O.I. Co</u>		Sample No. <u>2</u>	Date Sampled <u>7-20-90</u>	
Field	Legal Description <u>A 7-30-9</u>	County or Parish		State
Lease or Unit <u>Pierce</u>	Well <u># 250</u>	Depth	Formation	Water, B/D
Type of Water (Produced, Supply, etc.) <u>Ground bet</u>		Sampling Point		Sampled By



TECH, Inc.
333 East Main
Farmington
New Mexico
87401
505/327-3311

DISSOLVED SOLIDS

CATIONS

	mg/l	me/l
Sodium, Na (calc.)	<u>329</u>	<u>14.3</u>
Calcium, Ca	<u>411</u>	<u>20.5</u>
Magnesium, Mg	<u>26</u>	<u>2.1</u>
Barium, Ba	<u>0</u>	<u>0</u>

OTHER PROPERTIES

pH	<u>7.33</u>
Specific Gravity, 60/60 F.	<u>1.0050</u>
Resistivity (ohm-meters) <u>73</u> F.	<u>3.90</u>

Total Dissolved Solids (calc.)

2570

ANIONS

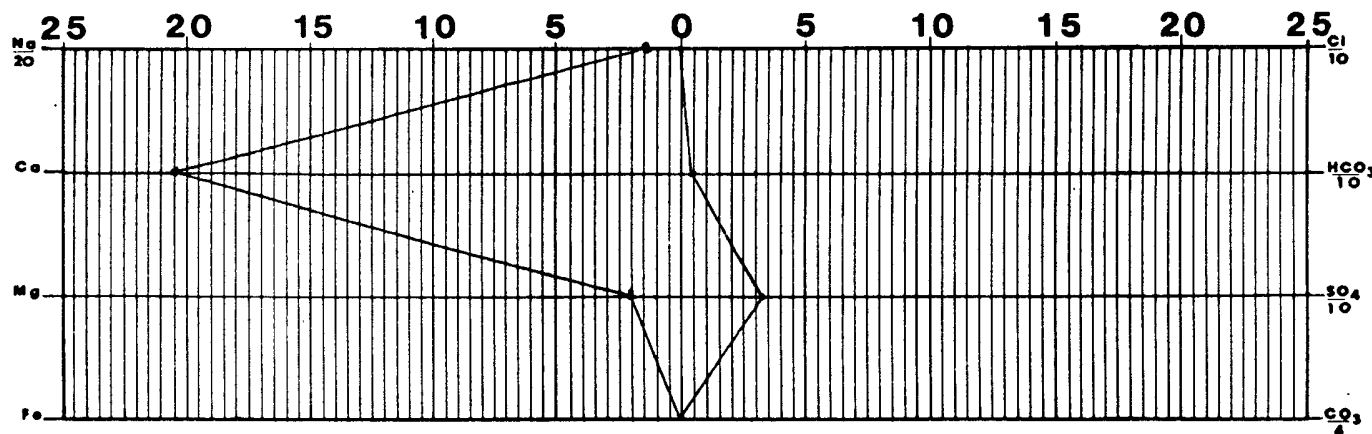
Chloride, Cl	<u>27</u>	<u>0.8</u>
Sulfate, SO_4	<u>1548</u>	<u>32.3</u>
Carbonate, CO_3	<u>0</u>	<u>0</u>
Bicarbonate, HCO_3	<u>232</u>	<u>3.8</u>

Iron, Fe (total)

Sulfide, as H_2S

0

REMARKS & RECOMMENDATIONS:



Date Received <u>8/14/90</u>	Preserved	Date Analyzed <u>8/16/90</u>	Analyzed By <u>DRH</u>
---------------------------------	-----------	---------------------------------	---------------------------