

1461

30-045-27305

Exhibit D

F

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

Operator MERIDIAN OIL CO. **Location: Unit** SW Sec. 21 Twp 30 Rng 9

Name of Well/Wells or Pipeline Serviced Florence com 260

cps 2166w

Elevation 6051' **Completion Date** 11/8/90 **Total Depth** 260 **Land Type** N/A

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

If Casing Strings are cemented, show amounts & types used N/A

If Cement or Bentonite Plugs have been placed, show depths & amounts used
Set 12 ft. Bentonite Plug at 105 to seal off two water zones.

Depths & thickness of water zones with description of water: Fresh, Clear, Salty, Sulphur, Etc. Water 80' and water at 105' got sample 80'

Depths gas encountered: Gas encountered @250'

Ground bed depth with type & amount of coke breeze used: 243 ft. with Ashbury Petroleum Coke

Depths anodes placed: 235, 225, 215, 205, 195, 185, 175, 160, 150, 140

Depths vent pipes placed: 240 ft.

Vent pipe perforations: Perforated 220 ft.

Remarks: gh #1

RECEIVED
MAY 31 1991
OIL CON. DIV
DIST

If any of the above data is unavailable, please indicate so. Copies of a 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

Prohibit A

Drilling Log (Attach Hereto) ☐Completion Date 11-8-90

CPS #	Well Name, Line or Plant:	Work Order #	Static:	Ins. Union Check																																																												
	<u>FLORANCE Com # 260</u>	<u>3763A</u>		☒ Good ☐ Bad																																																												
	<u>2166W</u>																																																															
Location: <u>SW21-30-9</u>	Anode Size: <u>2" X 60"</u>	Anode Type: <u>ANOTEC</u>	Size Bit: <u>6 3/4</u>																																																													
Depth Drilled: <u>260'</u>	Depth Logged: <u>243</u>	Drilling Rig Time	Total Lbs. Cable Used	Last Circulation Mat'l Used																																																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2">Anode Depth</td> <td colspan="2">Anode Output (Amps)</td> <td colspan="2">Anode Depth</td> <td colspan="2">Anode Output (Amps)</td> <td colspan="2">Total Circuit Resistance</td> </tr> <tr> <td># 1</td><td>235</td> <td># 2</td><td>2.25</td> <td># 3</td><td>215</td> <td># 4</td><td>2.05</td> <td># 5</td><td>195</td> </tr> <tr> <td># 6</td><td>185</td> <td># 7</td><td>175</td> <td># 8</td><td>160</td> <td># 9</td><td>150</td> <td># 10</td><td>140</td> </tr> <tr> <td># 11</td><td></td> <td># 12</td><td></td> <td># 13</td><td></td> <td># 14</td><td></td> <td># 15</td><td></td> </tr> <tr> <td># 16</td><td></td> <td># 17</td><td></td> <td># 18</td><td></td> <td># 19</td><td></td> <td># 20</td><td></td> </tr> <tr> <td colspan="2">Volts <u>12.2</u></td> <td colspan="2">Amps <u>10.6</u></td> <td colspan="2">Ohms <u>1.15</u></td> <td colspan="2">No. 8 C.P. Cable Used</td> <td colspan="2">No. 2 C.P. Cable Used</td> </tr> </table>					Anode Depth		Anode Output (Amps)		Anode Depth		Anode Output (Amps)		Total Circuit Resistance		# 1	235	# 2	2.25	# 3	215	# 4	2.05	# 5	195	# 6	185	# 7	175	# 8	160	# 9	150	# 10	140	# 11		# 12		# 13		# 14		# 15		# 16		# 17		# 18		# 19		# 20		Volts <u>12.2</u>		Amps <u>10.6</u>		Ohms <u>1.15</u>		No. 8 C.P. Cable Used		No. 2 C.P. Cable Used	
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Remarks: SET 20' of 8" PVC CASING. DRILLER SAID WAS AT 80', WAITED 10 MINUTES BLEW WATER AND GOT WATER SAMPLE. SET 240' of 1" PVC VENT PIPE. PERFORATED 220' VENT PIPE. DRILLED TO 260'; HIT WATER SAND AND HAD SOME GAS SMELL. LOADED GROUND BED, STOPPED COKE BREEZE APPROXIMATELY 105'. SET 12' BENTONITE PLUG AT 105' TO SEAL OFF THE 2 WATER ZONES. GAS SMELL HAD DISAPPEARED AFTER APPROXIMATELY 30 MIN

Rectifier Size: _____ V _____ A 4 SACKS OF BENTONITE

Addn'l Depth: _____

Depth Credit: _____

Extra Cable: 30'

Ditch & 1 Cable: _____

25' Meter Pole: _____

20' Meter Pole: _____

10' Stub Pole: _____

Junction Box: 1

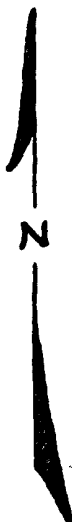
All Construction Completed

Willis Knight Jr
(Signature)

GROUND BED LAYOUT SKETCH

OGB #1

6051



BURGE CORROSION SYSTEMS, INC.P.O. BOX 1359 - PHONE 334-6141
AZTEC, NEW MEXICO 87410COMPANY MERIDIAN OIL DAILY DRILLING REPORT 11-8, 19 90

WELL NAME: <u>FLORENCE</u>	WELL NUMBER: <u>260</u>	SECTION: <u>21</u>	TOWNSHIP: <u>30</u>	RANGE: <u>9</u>
WATER AT: <u>80'</u>		FEET: <u>260'</u>		

DESCRIPTION OF FORMATION

FROM	TO	FORMATION IS	COLOR
0	18'	8" PVC CASING - SAND - SANDSTONE	
18'	30'	SANDSTONE	
30'	50'	SHALE	
50'	90'	SANDSTONE - SAND - WATER @ 80'	
90'	135'	SAND - Bentonite - SANDSTONE	
135'	160'	BENTONITE - SAND	
160'	170'	SANDSTONE	
170'	180'	SHALE	
180'	210'	SHALE - BENTONITE STREAMERS	
210'	220'	SAND - SANDSTONE BENT. MIX	
220'	245'	BENTONITE - SHALE	
245'	260'	SHALE - SAND	

REMARKS: SET 20' 8" PVC - CEMENTED HIT WATER AT 80' approx. 15 gpm.
Drilled to 260' Gas became present to smell at 250'

Brian E. Burge Driller Tool Dresser

CONSTRUCTION LOGGING READINGS

1. edition 011

Exhibit C

CPS 1:

WELL NAME: Florence com #260 LOCATION: SW21-30-9 DATE: 11-8-90

TOTAL VOLTS: 12.2 TOTAL AMPS: 10.6 OILS RESISTANCE: 1.15

												ANODE READINGS			
DEEP	LOG	ANODE	DEEP	LOG	ANODE	DEEP	LOG	ANODE	DEEP	LOG	ANODE	NO.	DEPTH	NO	WITH
ANODE	NO.	NO.	ANODE	NO.	NO.	ANODE	NO.	NO.	ANODE	NO.	NO.			COKE	COKE
5			185	1.0	46	365			545			1	235	1.5	2.7
10			190	1.0		370			550			2	225	1.1	2.3
15			195	1.2	55	375			555			3	215	1.1	2.2
20			200	1.3		380			560			4	205	1.4	2.8
25			205	1.3	44	385			565			5	195	1.2	2.5
30			210	1.1		390			570			6	185	1.1	2.3
35			215	1.80	33	395			575			7	175	1.2	2.5
40			220	1.80		400			580			8	160	1.1	2.4
45			225	1.90	22	405			585			9	150	1.0	2.5
50			230	1.2	1	410			590			10	140	1.8	3.8
55			235	1.4	-1	415			595						
60			240	1.70		420			600						
65			245	1.8	70	425			605						
70			250			430			610						
75			255			435			615						
80	30		260			440			620						
85	140		265			445			625						
90	160		270			450			630						
95	150		275			455			635						
100	150		280			460			640						
105	140		285			465			645						
110	180		290			470			650						
115	160		295			475			655						
120	140		300			480			660						
125	130		305			485			665						
130	150		310			490			670						
135	130		315			495			675						
140	1.8	10	320			500			680						
145	1.8	10	325			505			685						
150	1.0	9	330			510			690						
155	1.1		335			515			695						
160	1.1	8	340			520			700						
165	1.30		345			525			705						
170	1.50		350			530			710						
175	1.2	7	355			535			715						
180	1.0		360			540			720						

REMARKS: Set 20' of 8" PVC CASING. DRILLER said wet at 80'. Next AM Blew WATER Got WATER SAMPLE. HIT WATER SAND and had some GAS Smell. AFTER 30 minutes GAS Smell disappeared. Load Ground Bed. Left coke Breeze APPROXIMATELY 105'. Set 12' BENTONITE Plug at 105' TO Seal off 2 WATER ZONES.

API WATER ANALYSIS REPORT FORM

Exhibit E

Laboratory No. 25-90112-0018

Company MERIDIAN OIL CO.		Sample No.		Date Sampled 11-8-90	
Field CEDAR HILL		Legal Description SW 21-30-9		County or Parish SAN JUAN	
Lease or Unit		Well FLORENCE COM#260		Depth 80'	
Type of Water (Produced, Supply, etc.)		Sampling Point		Water, B/D	
				Sampled By W. Knight Jr.	



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

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	161	6.99
Calcium, Ca	411	20.5
Magnesium, Mg	60	4.9
Barium, Ba	-	-

OTHER PROPERTIES

pH	7.62
Specific Gravity, 60/60 F.	1.0034
Resistivity (ohm-meters) 66.5 F.	6.5

Total Dissolved Solids (calc.)

2132

ANIONS

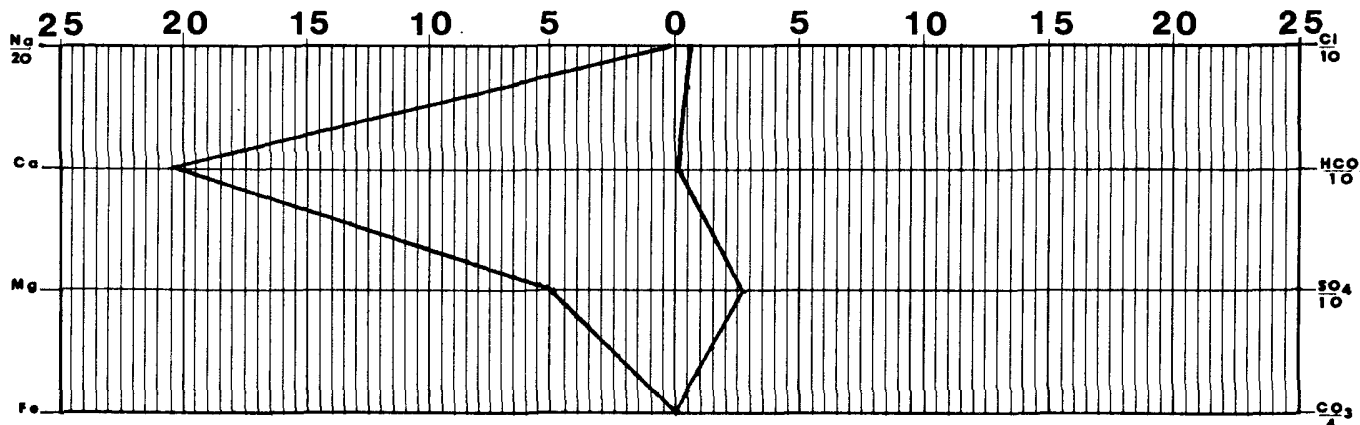
Chloride, Cl	182	5.13
Sulfate, SO ₄	1275	26.56
Carbonate, CO ₃	-	-
Bicarbonate, HCO ₃	43	0.7

Iron, Fe (total)

Sulfide, as H₂S

REMARKS & RECOMMENDATIONS:

ATTN. WARD ARNOLD



Date Received 12th Nov., 1990.	Preserved	Date Analyzed 12th Nov., 1990.	Analyzed By R.H.
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