

-1460

Exhibit D

30-039-24717

E

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

Operator MERIDIAN OIL CO. Location: Unit NE Sec. 9 Twp 30 Rng 6

Name of Well/Wells or Pipeline Serviced SAN JUAN 30-6 # 403

cps 2167w

Elevation 6217 Completion Date 11/13/90 Total Depth 420 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

Bentonite Plugs set 375 to 420 ft.

Depths & thickness of water zones with description of water: Fresh, Clear,

Salty, Sulphur, Etc. Wet at 140 ft., Water at 240 ft. got a sample

Depths gas encountered: 400 to 420 ft.

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

10,000 lbs of Ashbury Petroleum Coke used 375 ft.

Depths anodes placed: 355, 220, 170, 164, 157, 150, 120, 112, 105, 95

Depths vent pipes placed: 400 ft. 1" PVC

Vent pipe perforations: 280 ft. perforated

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.

WELL CASING
CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

Exhibit A

Drilling Log (Attach Hereto) ☐Completion Date 11-13-90

CPS #	Well Name, Line or Plant:	Work Order #	DP NO.	Static:	Ins. Union Check
2167W	ST 30-6 # 403	4692A			☒ Good ☐ Bad
Location: S.W. NE 9-30-6	Anode Size: 2" x 60"	Anode Type: ANOTEC	Size Bit: 6 3/4		
Depth Drilled: 420'	Depth Logged: 375'	Drilling Rig Time:	Total Lbs. Cable Used: 10,000 #	Loss Completion Mat'l Used:	No. Sacks Mud Used:
Anode Depth	# 1 355'	# 2 220'	# 3 170'	# 4 164'	# 5 157'
Anode Output (Amps)	# 1 2.1	# 2 2.5	# 3 3.3	# 4 4.4	# 5 4.6
Anode Depth	# 6 150'	# 7 120'	# 8 112'	# 9 105'	# 10 95'
Anode Output (Amps)	# 6 4.2	# 7 3.5	# 8 4.2	# 9 4.1	# 10 3.3
Anode Depth	# 11	# 12	# 13	# 14	# 15
Anode Output (Amps)	# 11	# 12	# 13	# 14	# 15
Total Circuit Resistance	Volts 11.8		Amps 12.8		Ohms .92
No. 8 C.P. Cable Used			No. 2 C.P. Cable Used:		1

Remarks: Set 20' of 8" PVC casing. Driller said wet at 140'. Next A.M. could NOT blow water. Driller said wet at 240', waited 20 minutes, blew approx. 190' of mud, got water sample - hit some gas at 400' to 420'. Next A.M. gas had disappeared, set BENTONITE Plug from 420' to 375'. Ran 400' of 1" vent pipe, perforated 280' of vent pipe. Left coke breeze approx. 50'.

5 SACKS OF BENTONITE

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

All Construction Completed

Willis Knight Jr.
 (Signature)

GROUND BED LAYOUT SKETCH

☒ RECTIFIER

O.
 G.B. #1

6217

30-6 # 403



REMARKS: Set 20' 8" PVC casing - cemented - Drilled to 140' waited to next A.M. no water. Drilled to 246' Got water - mud sample. Hit gas at 400-420' Plugged hole back to 375'

Brian E. Burge Driller

Tool Dresser

CONSTRUCTION LOGGING HEADINGS

Exhibit C

Meridian 011

CPS 1:

WELL NAME:

S.J 30-6-403

LOCATION:

NE 9-30-6

DATE:

11-13-90

TOTAL VOLTS:

11.8

TOTAL AMPS:

12.8

OHMS RESISTANCE:

- 92

DEEP	LOG ANODE NO.	ANODE NO.	DEEP	LOG ANODE NO.	ANODE NO.	DEEP	LOG ANODE NO.	ANODE NO.	DEEP	LOG ANODE NO.	ANODE NO.	ANODE READINGS		
												NO.	DEPTH	NO COKE
5			185	30		365	50		545			1	355	1.0
10			190	30		370	50		550			2	220	1.1
15			195	20		375	50	T.D	555			3	170	1.1
20			200	30		380			560			4	164	1.8
25			205	30		385			565			5	159	2.0
30	30		210	50		390			570			6	150	1.3
35	20		215	160		395			575			7	120	1.5
40	20		220	1.2	2	400			580			8	112	1.6
45	10		225	1.1		405			585			9	105	1.2
50	20		230	60		410			590			10	95	1.2
55	30		235	50		415			595					
60	160		240	50		420			600					
65	130		245	140		425			605					
70	130		250	140		430			610					
75	30		255	140		435			615					
80	50		260	160		440			620					
85	50		265	160		445			625					
90	90		270	170		450			630					
95	1.0	10	275	160		455			635					
100	80		280	60		460			640					
105	90	9	285	50		465			645					
110	1.5	9	290	50		470			650					
115	1.3	7	295	50		475			655					
120	1.3	7	300	160		480			660					
125	1.80		305	50		485			665					
130	1.80		310	140		490			670					
135	1.60		315	50		495			675					
140	1.80		320	160		500			680					
145	1.60		325	160		505			685					
150	1.2	6	330	160		510			690					
155	1.9	5	335	170		515			695					
160	2.1	5	340	160		520			700					
165	1.7	4	345	160		525			705					
170	1.0	3	350	80		530			710					
175	50		355	1.0	1	535			715					
180	40		360	160		540			720					

REMARKS: SET 20' OF 8" PVC CASING. DRILLER SAID WET AT 140'.
 NEXT A.M. DID NOT BLOW WATER. SAID WET AT 240'.
 WAITED 20 MINUTES. BLEW APPROXIMATELY 1 GAL. OF MUDDY
 WATER. GOT WATER SAMPLE. DRILLER SAID HIT SOME
 SAND AND WATER WITH A TRACE OF GAS. 420'. NEXT
 A.M. GAS HAD DISAPPEARED. PUT APPROXIMATELY 4.5' BENTONITE
 PLUG FROM 420' TO 395' TO SEAL OFF BOTTOM ZONE.

API WATER ANALYSIS REPORT FORM

Exhibit E

Laboratory No. 25-901203-1C

Company MERIDIAN OIL INC.		Sample No. 1		Date Sampled 11-12-90	
Field GOVERNADOR		Legal Description NE 9-30-6		County or Parish RIO ARRIBA	
State NM		Lease or Unit ST 30-6 #403		Depth 240'	
Formation		Water, B/D		Type of Water (Produced, Supply, etc.)	
Sampling Point		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.)	331	14.4
Calcium, Ca	180	9
Magnesium, Mg	26.7	2.2
Barium, Ba	-	-

OTHER PROPERTIES

pH	7.66
Specific Gravity, 60/60 F.	1.0017
Resistivity (ohm-meters) 61 F.	3.7

Total Dissolved Solids (calc.)

1768

ANIONS

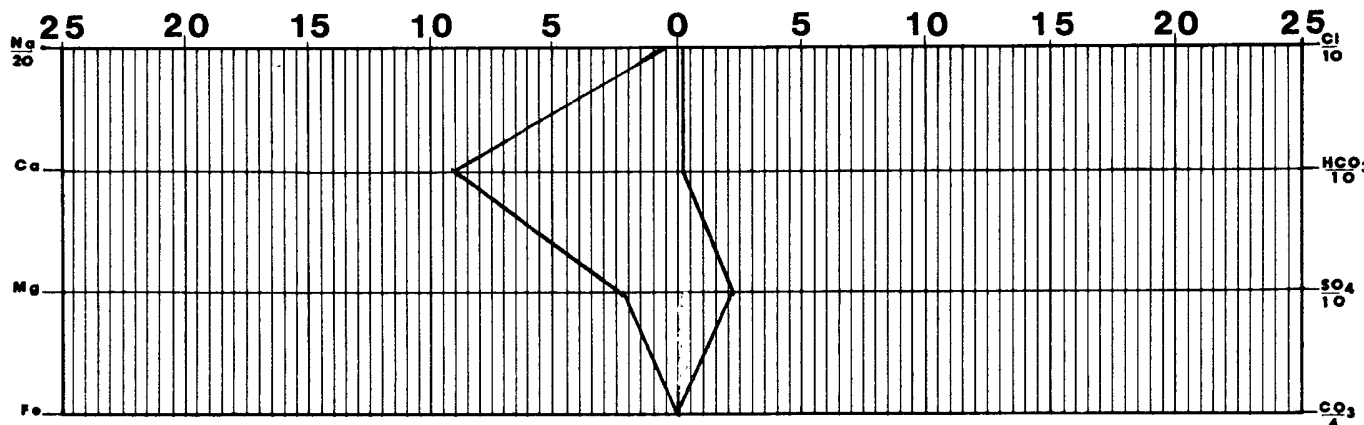
Chloride, Cl	72.7	2.05
Sulfate, SO_4	102.7	21.4
Carbonate, CO_3	-	-
Bicarbonate, HCO_3	13.1	2.5

Iron, Fe (total)

Sulfide, as H_2S

REMARKS & RECOMMENDATIONS:

ATTN. WARD ARNOLD



Date Received 3rd Dec, 1990.	Preserved	Date Analyzed 4th Dec, 1990.	Analyzed By R.H.
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