

2684

#64 30-039-07032

E

#168 30-039-20480

#197 30-039-20957

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO
(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: Unit SW Sec. 14 Twp 27 Rng 6

Name of Well/Wells or Pipeline Serviced SAN JUAN 28-6 UNIT #64, #168, #197

cps 1299w

Elevation 6471' Completion Date 7/29/87 Total Depth 440' 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. 170' & 280' SAMPLE TAKEN

Depths gas encountered: N/A

Type & amount of coke breeze used: N/A

Depths anodes placed: 412', 404', 396', 390', 382', 285', 253', 248', 240', 225', 215', 205'

Depths vent pipes placed: 430'

Vent pipe perforations: 260'

Remarks: gb #2

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.

2685 E

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO
(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL Location: Unit SW Sec. 14 Twp 27 Rng 6
Name of Well/Wells or Pipeline Serviced SAN JUAN 28-6 UNIT #64, #168, #197
cps 1299w
Elevation 6471 Completion Date 8/29/78 Total Depth 480' 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. 170' & 280'

Depths gas encountered: N/A
Type & amount of coke breeze used: 64 SACKS
Depths anodes placed: 430', 420', 410', 395', 385', 255', 245', 235', 210', 200'
Depths vent pipes placed: 440'
Vent pipe perforations: 330'
Remarks: gb #1

RECEIVED
MAY 31 1991
OIL CON. DIV. I
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.

CPS #		Well Name, Line or Plant:		Work Order #		State:		Ins. Union Check	
1299 W		S.J. 28-6 # 64 (M) 71-43901						☐ Good ☐ Bad	
		" " # 168 (N) 87-44001							
		" " # 197 (L) 89-74801							
Location: SW 14-27-6		Anode Size: 2" X 60"		Anode Type: DUTION		Size Bit: 6 3/4"			
Depth Drilled 440'		Depth Logged 430'		Drilling Rig Time		Total Lbs. Coke Used		Lost Circulation Mat'l Used	
Anode Depth		Anode Output (Amps)		Anode Depth		Anode Output (Amps)		Total Circuit Resistance	
# 1 412	# 2 404	# 3 396	# 4 390	# 5 382	# 6 285	# 7 255	# 8 248	# 9 240	# 10 225
# 1 2.1	# 2 2.2	# 3 2.5	# 4 2.5	# 5 2.6	# 6 1.9	# 7 2.5	# 8 3.7	# 9 3.8	# 10 2.0
# 1 12.15	# 2 12.05	# 3 13	# 4 14	# 5 15	# 6 16	# 7 17	# 8 18	# 9 19	# 10 20
# 1 12.1	# 2 12.5	# 3 13	# 4 14	# 5 15	# 6 16	# 7 17	# 8 18	# 9 19	# 10 20
Volts 12.0 V		Amps 12.4 A		Ohms .97		No. 8 C.P. Cable Used		No. 2 C.P. Cable Used	

Remarks: HIT WATER AT 180' (TOOK WATER SAMPLE) HIT LOTS OF WATER AT 300'. INSTALLED 430' of VENT pipe (1" P.V.C.) PERFORATED 260'.

GB. \$4300.00

Rectifier Size: —V—A
 Addn'l Depth: —
 Depth Credit: -70'
 Extra Cable: 440'
 Ditch & 1 Cable: 70'
 Ditch & 2 Cable: —
 25' Meter Pole: —
 20' Meter Pole: —
 10' Stub Pole: —
 Junction Box: 1
 2 EXTRA ANODES

280.00 ✓
 110.00 ✓
 27.30 ✓

40.00 ✓
 139.50 ✓
 G.B. 41

4336.80
 TAX 216.84
 TOTAL \$4553.64 ✓

EXTRA ANODE LEAD
 wire + Hook up All Construction Completed
 wire

(Signature)

6471

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

005 12994

COMPANY.

Meridian oil

DAILY DRILLING REPORT

19

WELL NAME:

WELL NUMBER:

SECTION:

TOWNSHIP:

RANGE

San Juan 28-6

64

14

27

7

WATER AT:

FEET

HOLE MADE

180

20 GPr

DESCRIPTION OF FORMATION

CP5-1299-W

REMARKS:

Driller

Steve King

Tool Dresser

BURGE CORROSION SYSTEMS, C.

P.O. BOX 1359 - PHONE 334-6141

AZTEC, NEW MEXICO 87410

DEEP WELL GROUND BED LOG

Date 7/29/87

Company CPS 1299 W Meridian Co.

Well No. SJ-28-6 Location SW 14-27-6 Volts Applied 12.0 V Amperes 12.4 A

5		230	.7	455		680	
10		235	.8	460		685	
15		240	1.5 - (9)	465		690	
20		245	1.6 - (8)	470		695	
25		250	1.2 - (8)	475		700	
30		255	1.1 - (7)	480		705	
35		260	.5	485		710	
40		265	.4	490		715	
45		270	.4	495		720	
50		275	.4	500		725	
55		280	.4	505		730	
60		285	1.0 - (6)	510		735	1-412-1.1-2.1
65		290	.7	515		740	2-404-1.1-2.2
70		295	.5	520		745	3-398-1.3-2.5
75		300	.5	525		750	4-390-1.5-2.5
80		305	.4	530		755	5-382-1.4-2.6
85		310	.5	535		760	6-285-1.0-1.9
90		315	.5	540		765	7-245-1.2-2.5
95		320	.5	545		770	8-248-1.7-3.7
100		325	.5	550		775	9-440-1.8-3.8
105		330	.7	555		780	10-225-1.0-2.0
110		335	.5	560		785	11-215-1.0-2.1
115		340	.5	565		790	12-205-1.4-2.5
120		345	.4	570		795	
125		350	.5	575		800	
130		355	.5	580		805	
135		360	.4	585		810	
140		365	.5	590		815	
145		370	.5	595		820	
150		375	.6	600		825	
155		380	1.1	605		830	
160		385	1.2 - (5)	610		835	
165		390	1.3 - (4)	615		840	
170		395	1.2 - (3)	620		845	
175		400	1.0	625		850	
180	Water	405	1.0 - (2)	630		855	
185	.6	410	1.0	635		860	
190	.7	415	1.0 - (1)	640		865	
195	.8	420	1.0	645		870	
200	.7	425	.9	650		875	
205	.9 - (12)	430	T.D.	655		880	
210	1.0	435		660		885	
215	.9 - (11)	440	Dried to	665		890	
220	.8	445		670		895	
225	.8 - (10)	450		675		900	

EL PASO NATURAL GAS COMPANY
SAN JUAN DIVISION
FARMINGTON, NEW MEXICO
PRODUCTION DEPARTMENT WATER ANALYSIS

Analysis No. 1-9354 Date 11-8-78

Operator _____ Well Name San Juan 28-6 #64, 168, 197

Location SW 14-27-6 County - State -

Field _____ Formation _____

Sampled From C.P.S. #299W WTR @ 170' 280' 25 GPM

Date Sampled _____ By TD - 250'

Tbg. Press. _____ Csg. Press. _____ Surface Csg. Press. _____

ppm epm ppm epm

Sodium 331 14 Chloride 12 .3

Calcium 9 .5 Bicarbonate 503 8

Magnesium 2 .2 Sulfate 287 6

Iron PRESENT Carbonate 24 .8

H₂S ABSENT Hydroxide 0 0

cc: D.C.Adams Total Solids Dissolved 1150

R.A.Ullrich

E.R.Paulek

J.W.McCarthy

A.M.Smith

W.B.Shropshire

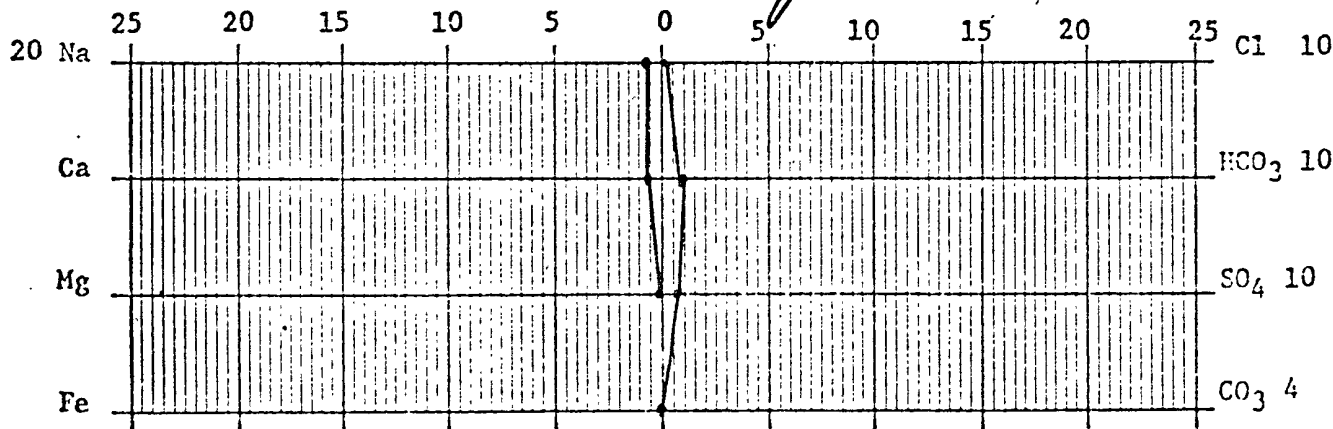
File

pH 8.7

Sp. Gr. 1.0013 at 60°F

Resistivity 720 ohm-cm at 71°F

Je Barnett RZE
Chemist



Scale: epm

CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

Drilling Log (Attach Hereto) ☐

Completion Date 8-29-78

Well Name <u>S.J. 28-6</u> # <u>64</u> # <u>168</u> # <u>197</u>		Location <u>SW 14-27-6</u>		CPS No. <u>1299W</u>	
Type & Size Bit Used <u>6 3/4"</u>		Work Order No. <u>#64-52853-19</u> <u>#168-55199-19</u>			
Anode Hole Depth <u>60560'</u> <u>480 - 470</u>	Total Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used <u>197-55830-21</u>	
Anode Depth					
#1 <u>430</u>	#2 <u>420</u>	#3 <u>410</u>	#4 <u>395</u>	#5 <u>385</u>	#6 <u>255</u>
#7 <u>245</u>	#8 <u>235</u>	#9 <u>210</u>	#10 <u>200</u>		
Anode Output (Amps)					
#1 <u>2.0</u>	#2 <u>2.1</u>	#3 <u>2.0</u>	#4 <u>2.4</u>	#5 <u>3.2</u>	#6 <u>2.9</u>
#7 <u>4.1</u>	#8 <u>2.5</u>	#9 <u>2.8</u>	#10 <u>2.9</u>		
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	No. 2 C.P. Cable Used
Volts <u>12.1</u>	Amps <u>13.3</u>	Ohms <u>0.91</u>			

Remarks: Static #64 600' NW = 0.81. Static #168 600' NW = 0.78. Static #197 600' W = 0.76
Driller said Damp @ 110'. Water @ 170'. More water @ 280'. Water sample taken
is from both water zones. 2.5 Gals per min. Both water zones. Perforated 33'
of 1" PVC vent pipe. Installed 440' of 1" PVC vent pipe. Shipped 64 sacks of coke

60V 30A Rectifier on
Stub Pole.

Hole Depth = -30

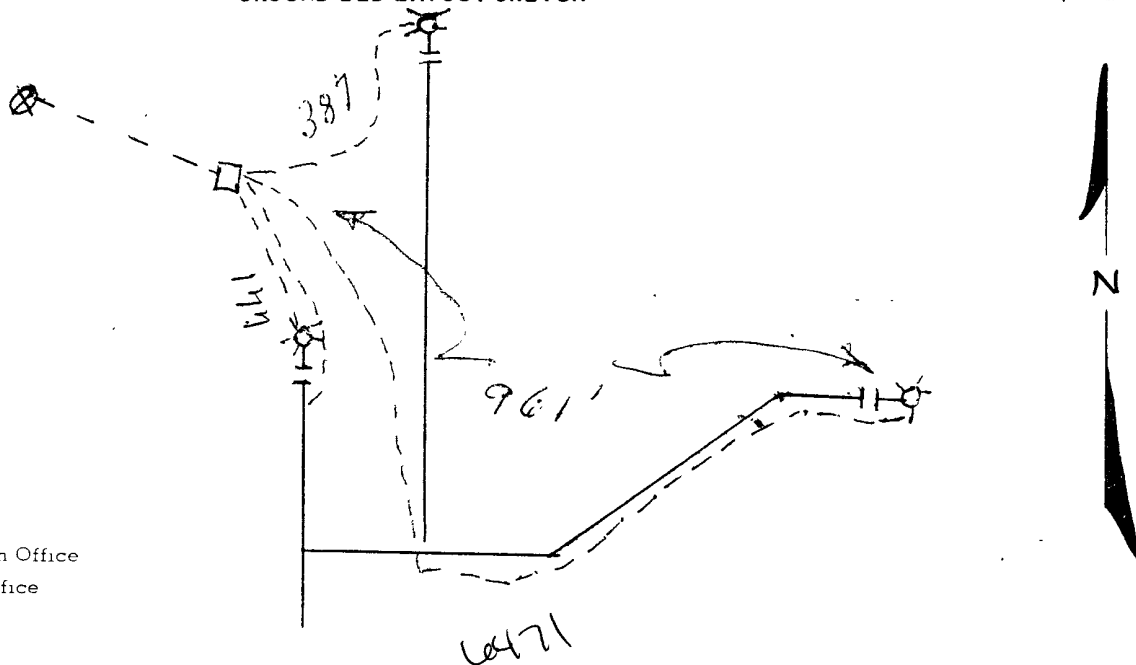
Ditch & Cable = 152.5

Extra Cable = 177

All Construction Completed

W 2 Louth
(Signature)

GROUND BED LAYOUT SKETCH



DISTRIBUTION:

- WHITE - Division Corrosion Office
- YELLOW - Area Corrosion Office
- PINK - Originator File

El Paso Natural Gas Company
ENGINEERING CALCULATION

Sheet: _____ of _____

Date: _____

By: _____

File: _____

S.J. 28-6# 64

52853-19

S.J. 28-6# 168

SW 14-27-6

1299W

55199-19

S.J. 28-6# 197

55930-21

MW	gals/mol
16.04	C1 6.4
30.07	C2 10.12
44.10	C3 10.42
58.12	IC4 12.38
58.12	nC4 11.93
72.15	IC5 13.85
72.15	nC5 13.71
86.18	IC6 15.50
86.18	C6 15.57
100.21	IC7 17.2
100.21	C7 17.48
114.23	C8 19.39
28.05	C2 9.84
42.08	C3 9.67

MW	MISC.	gals/mol
32.00	O2	3.37
28.01	CO	4.19
44.01	CO2	6.38
64.06	SO2	5.50
34.08	H2S	5.17
28.01	N2	4.16
2.02	H2	3.38

Static 600' #64 = 0.81 NW
 Static 600' #168 = 0.78 NW
 Static 600' #197 = 0.76 W
 160.8'

DRILLER SAID DUMP @ 110' WATER @ 178' NIBBLE
 WATER @ 280' WATER SAMPLE FROM BOTH WATER
 ZONES 25 GALS PER MIN. BOTH ZONES
 PERFORATED 330' of 1" PVC VENT PIPE
 INSTALLED 440' of 1" PVC VENT PIPE

170	2.0		50	.6	
	2.1			.6	
80	2.0		60	.6	
	1.6			.6	
90	1.5		70	.6	
	1.5			.6	
200	1.6	(10)	80	.7	
	1.5			1.6 (5)	
10	1.5	(9)	90	1.6	
	1.1			1.4 (4)	
20	1.0		400	1.2	
	.8			.9	
30	.8		10	1.1 (3)	
	1.0 (8)			1.2	
40	1.8		20	1.2 (2)	
	2.0 (7)			1.2	
50	1.5		30	1.3 (1)	
	1.5 (6)			1.1	
60	.8		40	.8	
	.6			.6	
70	.5		50	.7	
	.5			.6	
80	.5		60	.6	
	.5			.7	
90	.5		70	.6 (10)	
	.5				

SLURRIED SACKS OF COKE

60V30A Reaction
Stub Pole

Hole Depth = -30

Pitch 8' CABLE = 1525
EXTRA CABLE = 1.77

300	1.0	80	(1) 430	1.3	2.0
	.6		(2) 420	1.3	2.1
10	.5		(3) 410	1.1	2.0
	.6		(4) 395	1.5	2.4
20	.6		(5) 385	1.9	3.2
	.6		(6) 255	1.6	2.9
30	.5		(7) 245	2.3	4.1
	.5		(8) 235	1.1	2.5
40	1.0		(9) 210	1.8	2.8
	.5		(10) 200	1.8	2.9

VOLTS = 12.1

AMPS = 13.3

OHMS = 0.91

EVENING

Company Supervisor