

#69 30-039-06957

#146 30-039-20274

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. 24 Twp 27 Rng 6

Name of Well/Wells or Pipeline Serviced SAN JUAN 28-6 UNIT #69, #146

cps 130lw

Elevation 6611' Completion Date 9/1/78 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. 305' SAMPLE TAKEN

Depths gas encountered: N/A

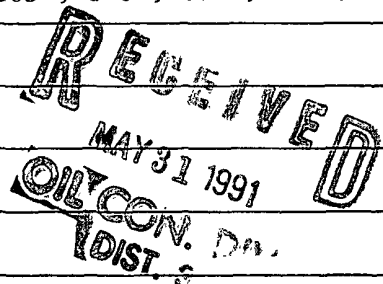
Type & amount of coke breeze used: 55 SACKS

Depths anodes placed: 415', 405', 395', 385', 375', 365', 310', 300', 275', 265'

Depths vent pipes placed: 440'

Vent pipe perforations: 200'

Remarks: gb #1



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 9/1/78

|                                                           |                         |                            |                                         |                                                   |                    |
|-----------------------------------------------------------|-------------------------|----------------------------|-----------------------------------------|---------------------------------------------------|--------------------|
| Well Name <u>S.J. #28-6 #69</u><br><u>S.J. #28-6 #146</u> |                         | Location <u>SW 24-27-6</u> |                                         | CPS No. <u>1301W</u>                              |                    |
| Type & Size Bit Used <u>6 3/4"</u>                        |                         |                            |                                         | Work Order No. <u>53148-19</u><br><u>54711-19</u> |                    |
| Anode Hole Depth<br><u>440' - T.D. 440'</u>               | Total Drilling Rig Time |                            | Total Lbs. Coke Used<br><u>55 SACKS</u> | Lost Circulation Mat'l Used                       | No. Sacks Mud Used |
| Anode Depth                                               | # 1 <u>415'</u>         | # 2 <u>405'</u>            | # 3 <u>395'</u>                         | # 4 <u>385'</u>                                   | # 5 <u>375'</u>    |
|                                                           | # 6 <u>365'</u>         | # 7 <u>310'</u>            | # 8 <u>300'</u>                         | # 9 <u>275'</u>                                   | # 10 <u>265'</u>   |
| Anode Output (Amps)                                       | # 1 <u>2.7</u>          | # 2 <u>2.8</u>             | # 3 <u>3.1</u>                          | # 4 <u>3.0</u>                                    | # 5 <u>2.9</u>     |
|                                                           | # 6 <u>3.2</u>          | # 7 <u>3.1</u>             | # 8 <u>4.7</u>                          | # 9 <u>3.1</u>                                    | # 10 <u>4.4</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                                  | Volts <u>12.1 V</u>     |                            | Amps <u>16.5 A</u>                      | Ohms <u>.73</u>                                   |                    |
| No. 8 C.P. Cable Used                                     |                         |                            |                                         | No. 2 C.P. Cable Used                             |                    |

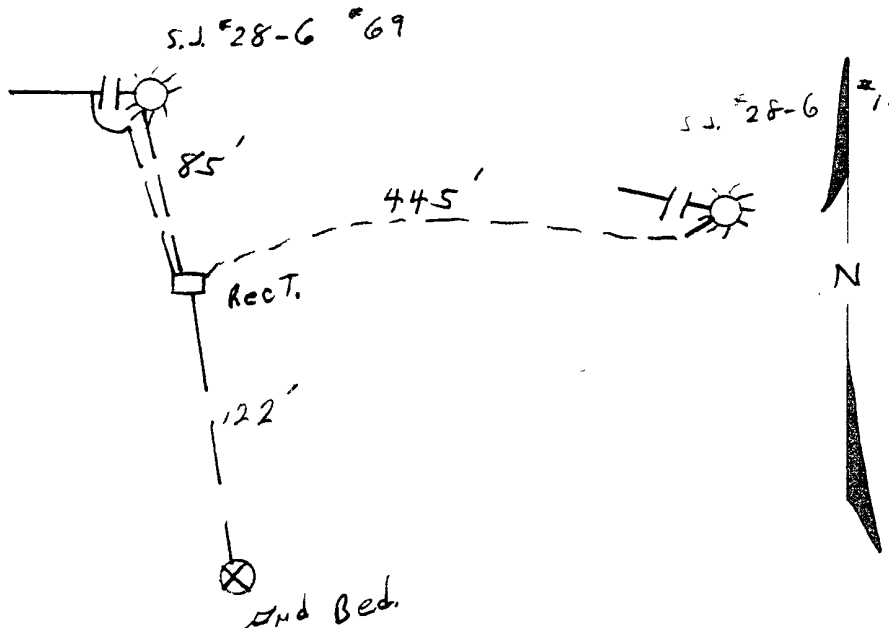
Remarks: (STATIC 600' south = .81V. well #69) (STATIC 600' south = .79V. well #146)  
Drilled 320', HIT WATER AT 305'. WATER STANDING IN HOLE NEXT A.M.  
AT 250'. HOLE MAKING APPROX 35 GAL/MIN. DRILLED TO 440'. LOGGING ANODE  
STOPPED AT 440'. INSTALLED 440' of 1" P.V.C. VENT PIPE PERFORATE  
TO 200'.

Ditch + 1 cable = 652'  
EXTRA cable = 85'  
Stub Pole + 60V 30A RECT.  
Hole Depth = 60'

All Construction Completed

*JE Stalk*  
(Signature)

GROUND BED LAYOUT SKETCH



DISTRIBUTION

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

Well

El Paso Natural Gas Company  
ENGINEERING CALCULATIONSheet \_\_\_\_\_ of \_\_\_\_\_  
Date: \_\_\_\_\_  
By: \_\_\_\_\_  
File: \_\_\_\_\_CPS #1301 W 4.0-53148-19-S.J. 28-6-69  
W.O. - 54711-19 - " " - 9146

SW 24-27-6

| 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 17.46  |
| 114.23 | C8 19.39  |
| 28.05  | C2 9.64   |
| 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     |

250 - 2.5 40 - 1.2 F.D.  
 60 - 2.4 50 -  
 70 - 2.1 60 -  
 80 - 1.1 70 -  
 90 - .5 80 -  
 300 - 1.6 - ⑧ 90 -  
 10 - 1.5 - ① 500 -  
 20 - .4  
 30 - .5  
 40 - .3  
 50 - 1.2  
 60 - 1.7  
 70 - 1.6 - ⑥  
 80 - 1.5 - ⑤  
 90 - 1.6 - ④  
 400 - 1.7 - ③  
 10 - 1.5 - ②  
 20 - 1.3  
 30 - 1.4  
 - 1.2

Drilled 320 HIT WATER.  
 AT 305' WATER STANDING IN  
 hole NEXT A.M. AT 250'.  
 Took WATER SAMPLE, Drilled To  
 440'. Logged hole. Logging  
 ANODE STOPPED AT 440'.  
 440' of 1" P.V.C. vent pipe  
 Perforated To 200'.  
 Hole MAKING Approx. 35 g/h

1 - 415 - 1.5 - 2.7  
 2 - 405 - 1.7 - 2.8  
 3 - 395 - 1.8 - 3.1  
 4 - 385 - 1.8 - 3.0  
 5 - 375 - 1.7 - 2.9  
 6 - 365 - 1.9 - 3.2  
 7 - 310 - 1.5 - 2.1  
 8 - 300 - 2.1 - 4.7  
 9 - 275 - 1.5 - 3.1  
 10 - 265 - 2.2 - 4.4

16.5 A 12.1 V = .73

9/1/78  
JL

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

Analysis No. 1-9334 Date SEPTEMBER 19, 1978

Operator EPNG Well Name SAN JUAN 28-6 #69 & #146

Location 24-27-6 County RIO ARRIBA State NM

Field CPS 1301 Formation

Sampled From CPS ~~1301W~~ 305' 9 gal/m

Date Sampled  By

|                     |                     |                             |
|---------------------|---------------------|-----------------------------|
| Tbg. Press. <u></u> | Csg. Press. <u></u> | Surface Csg. Press. <u></u> |
| ppm                 | epm                 | ppm epm                     |

|                   |                    |    |
|-------------------|--------------------|----|
| Sodium <u>278</u> | Chloride <u>10</u> |    |
|                   |                    | .3 |

|                  |                        |     |
|------------------|------------------------|-----|
| Calcium <u>5</u> | Bicarbonate <u>354</u> |     |
|                  |                        | 5.8 |

|                      |                    |     |
|----------------------|--------------------|-----|
| Magnesium <u>1.5</u> | Sulfate <u>250</u> |     |
|                      |                    | 5.2 |

|                     |                     |     |
|---------------------|---------------------|-----|
| Iron <u>PRESENT</u> | Carbonate <u>36</u> |     |
|                     |                     | 1.2 |

|                                |                    |   |
|--------------------------------|--------------------|---|
| H <sub>2</sub> S <u>ABSENT</u> | Hydroxide <u>0</u> |   |
|                                |                    | 0 |

cc: D.C.Adams  
R.A.Ullrich  
E.R.Paulek  
J.W.McCarthy  
A.M.Smith  
W.B.Shropshire  
File

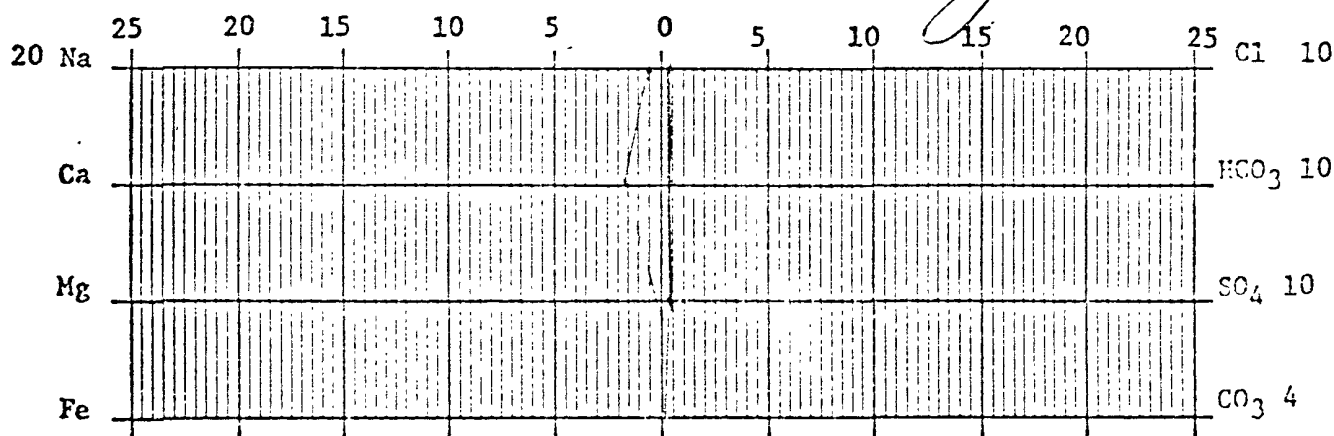
Total Solids Dissolved 358

pH 9.25

Sp. Gr.  at  60°F

Resistivity 850 ohm-cm at  °F

*Alton Jones*  
Chemist



Scale: epm

## DAILY DRILLING REPORT

[illegible]

SIGNED: Toolpusher

D. F. M.<sup>c</sup> Donald

\_\_\_\_\_ (Print Name) \_\_\_\_\_ (Print Name)