

1205

B #1-A 30-045-23166

A #3 30-045-20783

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 NW Sec. 15 Twp 30 Rng 10

Name of Well/Wells or Pipeline Serviced SUNRAY B #1A, SUNRAY A #3  
cps 1469w

Elevation 6455' Completion Date 9/12/80 Total Depth 405' 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. 60' & 200' SAMPLE TAKEN

Depths gas encountered: N/A

Type & amount of coke breeze used: 3500 lbs.

Depths anodes placed: 365', 355', 345', 330', 320', 310', 300', 255', 245', 235'

Depths vent pipes placed: 400'

Vent pipe perforations: 320'

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

Completion Date 9-12-80

Drilling Log (Attach Hereto) ☐

2" X 60" Duriron

|                                               |                         |                                     |                             |                                                  |                |
|-----------------------------------------------|-------------------------|-------------------------------------|-----------------------------|--------------------------------------------------|----------------|
| Well Name<br><u>Sunray 8#1A &amp; A#3</u>     |                         | Location<br><u>NW 15-30-10</u>      |                             | CPS No.<br><u>1469W</u>                          |                |
| Type & Size Bit Used<br><u>6 3/4 Rock</u>     |                         |                                     |                             | Work Order No.<br><u>57473-21 &amp; 54844-19</u> |                |
| Anode Hole Depth<br><u>405 Log 405</u>        | Total Drilling Rig Time | Total Lbs. Coke Used<br><u>3500</u> | Lost Circulation Mat'l Used | No. Sacks Mud Used                               |                |
| Anode Depth                                   |                         |                                     |                             |                                                  |                |
| # 1 <u>365</u>                                | # 2 <u>355</u>          | # 3 <u>345</u>                      | # 4 <u>330</u>              | # 5 <u>320</u>                                   | # 6 <u>310</u> |
| # 7 <u>300</u>                                | # 8 <u>255</u>          | # 9 <u>245</u>                      | # 10 <u>235</u>             |                                                  |                |
| Anode Output (Amps)                           |                         |                                     |                             |                                                  |                |
| # 1 <u>2.5</u>                                | # 2 <u>2.9</u>          | # 3 <u>2.1</u>                      | # 4 <u>2.4</u>              | # 5 <u>3.3</u>                                   | # 6 <u>3.7</u> |
| # 7 <u>2.7</u>                                | # 8 <u>3.0</u>          | # 9 <u>3.4</u>                      | # 10 <u>3.6</u>             |                                                  |                |
| Anode Depth                                   |                         |                                     |                             |                                                  |                |
| # 11                                          | # 12                    | # 13                                | # 14                        | # 15                                             | # 16           |
| Anode Output (Amps)                           |                         |                                     |                             |                                                  |                |
| # 11                                          | # 12                    | # 13                                | # 14                        | # 15                                             | # 16           |
| # 17                                          | # 18                    | # 19                                | # 20                        |                                                  |                |
| Total Circuit Resistance<br>Volts <u>12.1</u> |                         | Amps <u>14.8</u>                    | Ohms <u>.82</u>             | No. 8 C.P. Cable Used                            |                |
|                                               |                         |                                     |                             | No. 2 C.P. Cable Used                            |                |

Remarks: STATIC 400' E = .80 u-good (1A) & ST#3 = .84 u-good (#3)

Driller SAID WATER AT 200' CAUGHT WATER SAMPLE DRILLED TO 400' HOLE  
CAVED WHILE DRILLING WENT IN & CLEANED HOLE CAVED AGAIN DRILLED  
SECOND HOLE WITH MUD TO 405' LOG 405' INST 400' VENT PIPE  
WITH 320' PERF. SLURRIED 35 SACKS OF COKE

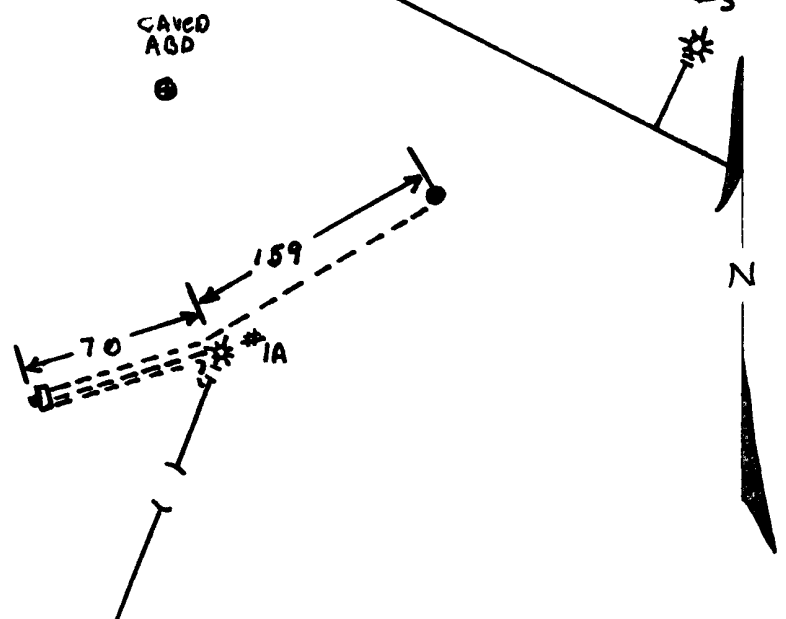
STUB POLE ✓  
60V 30A RECT ✓  
HOLE DEPTH = -95 ✓  
DITCH & CABLE = 229 ✓  
EXTRA CABLE = 170 ✓

| TIME    | REG | O.T. |
|---------|-----|------|
| 9-10-80 | 8   | 1    |
| 9-11-80 | 8   |      |
| 9-12-80 | 8   | 5    |

All Construction Completed

Robert J. Batnick  
(Signature)

GROUND BED LAYOUT SKETCH



DISTRIBUTION:

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

6456

Sun ray

BA HLA  
\*3

Three C Drilling  
CONTRACTOR

2

CPB 1469 W

DAILY DRILLING REPORT

LEASE NW 15-30-10 WELL NO. \_\_\_\_\_

CONTRACTOR

RIG NO.

REPORT NO. 51473-21 DATE Sept 12 1980  
54844-19

MORNING

## DAYLIGHT

7  
EVENING

[illegible]

|                   |                                     |                  |                                     |                  |                                     |
|-------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|
|                   | NO. DC _____ SIZE _____ LENG. _____ |                  | NO. DC _____ SIZE _____ LENG. _____ |                  | NO. DC _____ SIZE _____ LENG. _____ |
| BIT NO. _____     | NO. DC _____ SIZE _____ LENG. _____ | BIT NO. _____    | NO. DC _____ SIZE _____ LENG. _____ | BIT NO. _____    | NO. DC _____ SIZE _____ LENG. _____ |
| SER. NO. _____    | STANDS                              | SERIAL NO. _____ | STANDS                              | SERIAL NO. _____ | STANDS                              |
| SIZE <b>6 3/4</b> | SINGLES                             | SIZE _____       | SINGLES                             | SIZE _____       | SINGLES                             |
| TYPE _____        | DOWN ON KELLY                       | TYPE _____       | DOWN ON KELLY                       | TYPE _____       | DOWN ON KELLY                       |
| MAKE _____        | TOTAL DEPTH _____                   | MAKE _____       | TOTAL DEPTH _____                   | MAKE _____       | TOTAL DEPTH _____                   |

[illegible][illegible][illegible]

SIGNED: Toolpusher Kevin Burge

\_\_\_\_\_  
Company Supervisor

El Paso Natural Gas Company  
ENGINEERING CALCULATION

Sheet: 1 of 1  
Date: 9-10-80  
By: PJB  
File: 1469W

1469W SUNDAY B#1A NW15-30-10 57473-21 S+SE=.80 u=good  
SUNDAY A#3 54844-19 S+SE=.84 u=ok

time 9:10 =  
9-11 =  
9-12 =

Stub Pole 60V 30A Rect

| 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     |

|     |     |     |      |     |      |
|-----|-----|-----|------|-----|------|
| 200 | 2.0 | 100 | 1.4  | 310 | 3.0- |
|     | 1.8 | 10  | .8   |     | 2.7  |
| 10  | 1.8 |     | 1.2  | 20  | 2.5- |
|     | 2.0 | 20  | 2.1  |     | 2.1  |
| 20  | 1.9 |     | 1.0  | 30  | 1.8- |
|     | 1.8 | 30  | .6   |     | 1.6  |
| 30  | 1.8 |     | .5   | 40  | 1.5  |
|     | 1.7 | 40  | .6   |     | 1.7- |
| 40  | 1.7 |     | .7   | 50  | 1.7  |
|     | 1.5 | 50  | .8   |     | 2.3- |
| 50  | .6  |     | .7   | 60  | 2.3  |
|     | .2  | 60  | .7   |     | 2.0- |
| 60  | .1  |     | .8   | 70  | .9   |
|     | .2  | 70  | .7   |     | .9   |
| 70  | .2  |     | .8   | 80  | 1.0  |
|     | .3  | 80  | 1.1  |     | .9   |
| 80  | .3  |     | 1.2  | 90  | .8   |
|     | .2  | 90  | 1.5  |     | —    |
| 90  | 1.0 |     | 1.7  | 400 | —    |
|     | 1.6 | 200 | 2.4  |     | —    |
| 300 | 1.7 |     | 2.9  |     |      |
|     | 2.0 | 10  | 2.6  |     |      |
| 10  | 2.0 |     | 2.8  |     |      |
|     | 1.8 | 20  | 2.9  |     |      |
| 20  | 1.5 |     | 3.1  |     |      |
|     | 1.3 | 30  | 2.6  |     |      |
| 30  | 1.1 |     | 3.0- |     |      |
|     | 1.3 | 40  | 2.7  |     |      |
| 40  |     |     | 2.5- |     |      |
|     |     | 50  | 2.5  |     |      |
| 50  |     |     | 2.3- |     |      |
|     |     | 60  | 1.4  |     |      |
| 60  |     |     | .9   |     |      |
|     |     | 70  | .8   |     |      |
| 70  |     |     | .4   |     |      |
|     |     | 80  | .5   |     |      |
| 80  |     |     | .6   |     |      |
|     |     | 90  | .4   |     |      |
| 90  |     |     | 1.1  |     |      |
|     |     | 300 | 2.3- |     |      |
| 400 |     |     | 2.7  |     |      |

Driller said water at 200'  
caught water sample drilled  
400' logged 340. Inst 400'  
OF vent pipe with 320' PERF.  
First hole caved in went  
back in hole blew out a lot  
of sand logged again  
Logging ANODE stopped  
at 250' moved over to  
drill second hole with  
mud drilled 405' logged  
405. INST 400' vent pipe  
with 320' PERF.  
SLURRED 35 SACKS COKE

- ① 365 - 1.9 - 2.5
- ② 355 - 2.2 - 2.9
- ③ 345 - 1.5 - 2.1
- ④ 330 - 1.7 - 2.4
- ⑤ 320 - 2.5 - 3.3
- ⑥ 310 - 2.7 - 3.7
- ⑦ 300 - 1.9 - 2.7
- ⑧ 255 - 2.3 - 3.0
- ⑨ 245 - 2.5 - 3.4
- ⑩ 235 - 2.8 - 3.6

$$12.1 \vee 14.8 A = .82 \text{ ohms}$$

CP

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

Analysis No. 1-10062 Date 12-2-80  
Operator El Paso Natural Gas Well Name Sunray B #1A  
Location NW 15-30-10 County San Juan State New Mexico  
Field Kutz Formation \_\_\_\_\_  
Sampled From CPS 1469-W @200'

Date Sampled 9-10-80 By Robert Babnick

| Tbg. Press.            | Csg.        | Surface Csg. Press.    |
|------------------------|-------------|------------------------|
| ppm                    | epm         | ppm                    |
| Sodium <u>54</u>       | <u>2.4</u>  | Chloride <u>24</u>     |
| Calcium <u>276</u>     | <u>13.8</u> | Bicarbonate <u>120</u> |
| Magnesium <u>76</u>    | <u>6.3</u>  | Sulfate <u>950</u>     |
| Iron _____             | _____       | Carbonate <u>0</u>     |
| H <sub>2</sub> S _____ | _____       | Hydroxide <u>0</u>     |

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

Total Solids Dissolved 1774  
pH 8.0  
Sp. Gr. .9954 At 60°F  
Resistivity 455 ohm-cm at 77°F  
*Gennie Bird*  
Chemist

