

# DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS

NORTHWESTERN NEW MEXICO

(Submit 3 copies to OCD Aztec Office)

API 30-045-06322

3300-

Operator EPFS Location: Unit P Sec. 24 Twp 27 Rng 12

Name of Well/Wells or Pipeline Served H B McGRADY BH1 # 73901

Elevation \_\_\_\_\_ Completion Date 3-11-97 Total Depth 360 Land Type \* F 035634

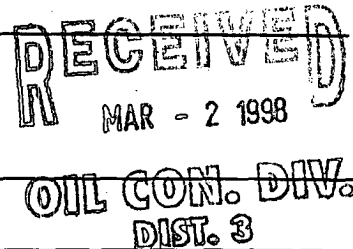
Casing, Sizes, Types & Depths 8 5/8 P.V.C. 20'

If Casing is cemented, show amounts & types used 5 Bags ZIA Type 1 #2

If Cement or Bentonite Plugs have been placed, show depths & amounts used \_\_\_\_\_

Depths & thickness of water zones with description of water when possible:

Fresh, Clear, Salty, Sulphur, Etc. \_\_\_\_\_



Depths gas encountered: \_\_\_\_\_

Type & amount of coke breeze used: 4600 lbs Lioresco SW

Depths anodes placed: 125 - 275

Depths vent pipes placed: 280

Vent pipe perforations: 160

Remarks: \_\_\_\_\_

*[Signature]*

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.

## DEEP WELL GROUND BED DATA

DATE March 11, 1997COMPANY EPFS/AmocoCOUNTY San JuanSTATE NMCONTRACT NO. FC-96-1000UNIT NO. 73901LOCATION H.B. McGrady B#1GROUNDBED: DEPTH 360 Ft., DIA. 7 7/8 In., ANODES (15) 2 x 60 SHA-2CASING: SIZE 8 In., DEPTH 20 Ft.

| DEPTH<br>FT. | DRILLER'S LOG  | RESISTIVITY |      | ANODE<br>NUMBER | DEPTH TO<br>ANODE TOP | BEFORE<br>COKE | AFTER<br>COKE |
|--------------|----------------|-------------|------|-----------------|-----------------------|----------------|---------------|
|              |                | OHMS        | AMPS |                 |                       |                |               |
| 5            | Casing         |             |      |                 |                       |                |               |
| 10           | "              |             |      |                 |                       |                |               |
| 15           | "              |             |      |                 |                       |                |               |
| 20           | Gray Sandstone |             |      |                 |                       |                |               |
| 25           | "              |             |      |                 |                       |                |               |
| 30           | "              |             |      |                 |                       |                |               |
| 35           | "              |             |      |                 |                       |                |               |
| 40           | Shale          |             | 2.1  |                 |                       |                |               |
| 45           | "              |             | 1.8  |                 |                       |                |               |
| 50           | "              |             | 1.8  |                 |                       |                |               |
| 55           | "              |             | 1.7  |                 |                       |                |               |
| 60           | "              |             | 1.7  |                 |                       |                |               |
| 65           | "              |             | 1.6  |                 |                       |                |               |
| 70           | "              |             | 1.5  |                 |                       |                |               |
| 75           | "              |             | 1.9  |                 |                       |                |               |
| 80           | "              |             | 1.7  |                 |                       |                |               |
| 85           | "              |             | 1.1  |                 |                       |                |               |
| 90           | "              |             | 1.6  |                 |                       |                |               |
| 95           | "              |             | 1.3  |                 |                       |                |               |
| 100          | Sandstone      |             | 0.8  |                 |                       |                |               |
| 105          | "              |             | 0.6  |                 |                       |                |               |
| 110          | Shale          |             | 0.6  |                 |                       |                |               |
| 115          | "              |             | 0.7  |                 |                       |                |               |
| 120          | "              |             | 0.8  |                 |                       |                |               |
| 125          | "              |             | 1.5  | 15              | 125                   | 1.6            | 6.5           |
| 130          | "              |             | 1.6  |                 |                       |                |               |
| 135          | "              |             | 1.7  | 14              | 134                   | 2.0            | 7.4           |
| 140          | "              |             | 2.0  | 13              | 140                   | 2.0            | 7.5           |
| 145          | "              |             | 1.7  |                 |                       |                |               |
| 150          | "              |             | 1.5  |                 |                       |                |               |
| 155          | "              |             | 1.2  |                 |                       |                |               |
| 160          | "              |             | 1.1  |                 |                       |                |               |
| 165          | "              |             | 1.1  |                 |                       |                |               |
| 170          | "              |             | 1.0  |                 |                       |                |               |
| 175          | "              |             | 1.0  |                 |                       |                |               |
| 180          | "              |             | 1.0  |                 |                       |                |               |
| 185          | "              |             | 1.5  | 12              | 187                   | 1.5            | 6.0           |
| 190          | "              |             | 1.7  |                 |                       |                |               |
| 195          | "              |             | 1.5  | 11              | 193                   | 1.8            | 6.5           |
| 200          | "              |             | 1.4  | 10              | 199                   | 1.7            | 6.1           |
| 205          | "              |             | 1.4  | 9               | 205                   | 1.6            | 5.6           |
| 210          | "              |             | 1.2  |                 |                       |                |               |
| 215          | "              |             | 0.8  |                 |                       |                |               |
| 220          | "              |             | 0.7  |                 |                       |                |               |
| 225          | "              |             | 1.1  |                 |                       |                |               |
| 230          | "              |             | 1.3  |                 |                       |                |               |
| 235          | "              |             | 1.6  | 8               | 233                   | 1.5            | 5.0           |
| 240          | Shale          |             | 1.7  | 7               | 239                   | 1.7            | 5.1           |

COMPANY EPFS/AmocoDATE March 11, 1997LOCATION H.B. McGrady B#1UNIT NO. 73901

| DEPTH<br>FT | DRILLER'S LOG | RESISTIVITY<br>OHMS AMPS |     | ANODE<br>NUMBER | DEPTH TO<br>ANODE TOP | BEFORE<br>COKE | AFTER<br>COKE |
|-------------|---------------|--------------------------|-----|-----------------|-----------------------|----------------|---------------|
| 245         | Shale         |                          | 1.6 | 6               | 245                   | 1.7            | 5.4           |
| 250         | "             |                          | 1.8 | 5               | 251                   | 1.4            | 5.6           |
| 255         | "             |                          | 2.8 | 4               | 257                   | 1.9            | 5.6           |
| 260         | "             |                          | 2.2 |                 |                       |                |               |
| 265         | "             |                          | 1.5 | 3               | 263                   | 1.6            | 5.7           |
| 270         | "             |                          | 1.2 | 2               | 269                   | 1.2            | 4.5           |
| 275         | "             |                          | 1.4 | 1               | 275                   | 1.5            | 4.7           |
| 280         | "             |                          | 1.2 |                 |                       |                |               |
| 285         | "             |                          | 0.8 |                 |                       |                |               |
| 290         | Sandstone     |                          | 0.8 |                 |                       |                |               |
| 295         | "             |                          | 0.7 |                 |                       |                |               |
| 300         | "             |                          | 0.6 |                 |                       |                |               |
| 305         | "             |                          | 0.6 |                 |                       |                |               |
| 310         | "             |                          | 0.7 |                 |                       |                |               |
| 315         | "             |                          | 0.6 |                 |                       |                |               |
| 320         | "             |                          | 0.5 |                 |                       |                |               |
| 325         | "             |                          | 0.5 |                 |                       |                |               |
| 330         | "             |                          | 0.5 |                 |                       |                |               |
| 335         | "             |                          | 0.6 |                 |                       |                |               |
| 340         | "             |                          |     |                 |                       |                |               |
| 345         | "             |                          |     |                 |                       |                |               |
| 350         | "             |                          |     |                 |                       |                |               |
| 355         | "             |                          |     |                 |                       |                |               |
| 360         | Sandstone     |                          |     |                 |                       |                |               |
| 365         |               |                          |     |                 |                       |                |               |
| 370         |               |                          |     |                 |                       |                |               |
| 375         |               |                          |     |                 |                       |                |               |
| 380         |               |                          |     |                 |                       |                |               |
| 385         |               |                          |     |                 |                       |                |               |
| 390         |               |                          |     |                 |                       |                |               |
| 395         |               |                          |     |                 |                       |                |               |
| 400         |               |                          |     |                 |                       |                |               |
| 405         |               |                          |     |                 |                       |                |               |
| 410         |               |                          |     |                 |                       |                |               |
| 415         |               |                          |     |                 |                       |                |               |
| 420         |               |                          |     |                 |                       |                |               |
| 425         |               |                          |     |                 |                       |                |               |
| 430         |               |                          |     |                 |                       |                |               |
| 435         |               |                          |     |                 |                       |                |               |
| 440         |               |                          |     |                 |                       |                |               |
| 445         |               |                          |     |                 |                       |                |               |
| 450         |               |                          |     |                 |                       |                |               |
| 455         |               |                          |     |                 |                       |                |               |
| 460         |               |                          |     |                 |                       |                |               |
| 465         |               |                          |     |                 |                       |                |               |
| 470         |               |                          |     |                 |                       |                |               |
| 475         |               |                          |     |                 |                       |                |               |
| 480         |               |                          |     |                 |                       |                |               |
| 485         |               |                          |     |                 |                       |                |               |
| 490         |               |                          |     |                 |                       |                |               |
| 495         |               |                          |     |                 |                       |                |               |
| 500         |               |                          |     |                 |                       |                |               |
| 505         |               |                          |     |                 |                       |                |               |
| 510         |               |                          |     |                 |                       |                |               |