

## DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS

MA-33

NORTHWESTERN NEW MEXICO  
(Submit 3 Copies to OCD Aztec Office)

30-045-60186

3529

Operator: BLACKWOOD & NICHOLS CO. Location: Unit B, Sec. 4, Twp 30N, Rng 7W.Name of Well/Wells or Pipeline Served NEBU 44Elevation 6120' Completion Date 10-14-93 Total Depth 440' Land Type\* Surface: F Mineral: SF-079043Casing, Sizes, Types & Depths 8-5/8" SCH 40 P.V.C. - 100', 7-7/8" Open HoleIf Casing is cemented, show amounts & types used 20 sks Portland Zia I-II - 90# ea.If Cement or Bentonite Plugs have been placed, show depths & amounts used N/A

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

Fresh, Clear, Salty, Sulphur, Etc. Clear at 40'.Depths gas encountered: N/AType & amount of coke breeze used: Asbury flo-coke - 5,700#.Depths anodes placed: 114' - 375'

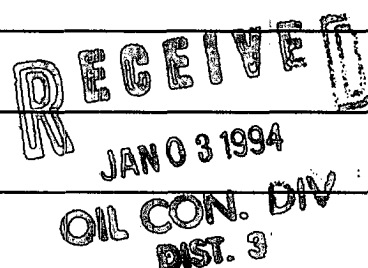
Depths vent pipes placed: \_\_\_\_\_

Vent pipe perforations: \_\_\_\_\_

Remarks: Groundbed is located at 38° N.E. & 92' from NEBU #44 wellhead.

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.

Signed by: James K. AllenTitle: Operations EngineerDate: 12-22-93



1115 Farmington Avenue - Farmington, NM 87401  
(505) 325-1085

Lab Sample No.: W93-413

Standard A.P.I. Water Analysis Report

Collected By: J. Evans

Company: Blackwood & Nichols Co.

Collection Date: 10/10/93

Well Name: MA #33

Collection Time: Unknown

Formation: Groundbed

County: Unknown State: Unknown

Location: Unknown

Analyst: K. Lambdin & S. Spencer

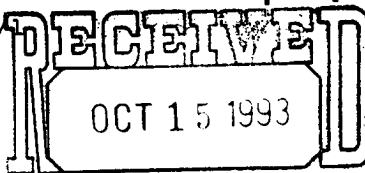
Remarks: 430 feet

Analysis Date: 10/13/93

*S. Spencer*

| PARAMETER        | as ION | Comment   | PARAMETER                     | as ION | Comment         |
|------------------|--------|-----------|-------------------------------|--------|-----------------|
| Sodium, Na       | 140    | mg/l      | Chloride, Cl                  | 15     | mg/l            |
| Potassium, K     | 35     | mg/l      | Sulfate, SO <sub>4</sub>      | 1800   | mg/l            |
| Calcium, Ca      | 600    | mg/l      | Hydroxide, OH                 | 0      | mg/l            |
| Magnesium, Mg    | 10     | mg/l      | Carbonate, CO <sub>3</sub>    | 0      | mg/l            |
| Iron, Fe (Total) | 0      | mg/l NR   | Bicarbonate, HCO <sub>3</sub> | 70     | mg/l            |
| Hydrogen Sulfide | 0      | mg/l <0.1 | Resistivity                   | 4.000  | ohm-m           |
| pH               | 7.38   | Units     | (@25 Degrees C)               |        |                 |
| TDS              | 1,700  | mg/l      | Conductivity                  | 2,500  | uS              |
|                  |        |           | Specific Gravity              | 1.000  | Units           |
|                  |        |           |                               |        | @ 60 Degrees F) |

Remarks: None.

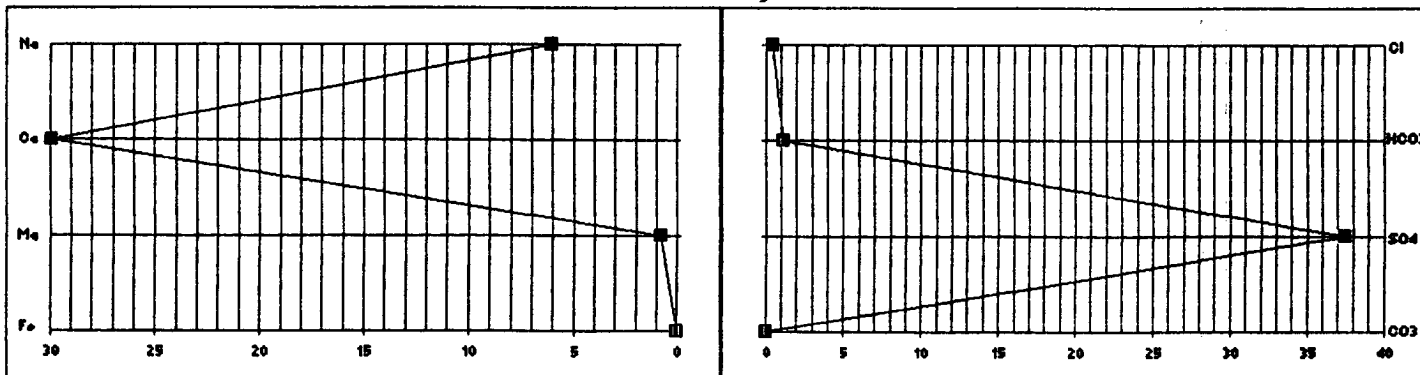


BLACKWOOD & NICHOLS CO. LTD.

NR = Test Not Run

Anion/Cation: 103.38

Stiff Diagram



Scale: Meq/L

## DRILLERS' REPORT

A-33 WELL# NEBU#44

S 4 T 3/4

[illegible]

LER game marking

INSPECTOR John M. [unclear]

# CATHODIC GROUND BED DRILLERS REPORT

NA-33 WELL# N.F.B. #44

B s 4 T 30 -

[illegible]

ER Mark A. Spruill (Cottis)

INSPECTOR MJM