

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

P-14

4261

Operator: BLACKWOOD & NICHOLS CO. Location: Unit A, Sec. 1, Twp 30N, Rng 8W.

Name of Well/Wells or Pipeline Served NEBU 465, 36

465-30-045-21326 36-30-045-09954

Elevation 6430' Completion Date 12-4-93 Total Depth 495' Land Type\* Surface: F Mineral: SF-078581

Casing, Sizes, Types & Depths 8-5/8" SCH 40 P.V.C. - 100'

If Casing is cemented, show amounts & types used 20 sks Portland Zia I-II

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. 380' - Small Amount, Damp at 180'

Depths gas encountered: N/A

Type & amount of coke breeze used: Asbury

Depths anodes placed: 427' - 210' (15)

Depths vent pipes placed: Bottom to 4' Above Ground Level

Vent pipe perforations: Bottom - 380'

Remarks: Groundbed located 178° North and 122' from NEBU 465 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. Allen

Title: Operations Engineer

Date: 2/3/94



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

Lab Number:

W93-510

Standard A.P.I. Water Analysis Report

Company: BLACKWOOD & NICHOLS CO., LTD. Date Collected: 12/1/93  
Well Name: P-14; NEBU #465 & #36 Date Received: 12/8/93  
Formation: San Jose Date Analyzed: 12/8/93  
Location: UNIT A SEC.1-T3ON-R08W County: San Juan State: New Mexico  
Collected By: J. Evans Analyst: Sheila Feltman *Sheila*  
Remarks: Groundbed - Drilling @ 360'

| PARAMETER              | as ION    | Comment   | PARAMETER                     | as ION     | Comment |
|------------------------|-----------|-----------|-------------------------------|------------|---------|
| Sodium, Na             | 38 mg/l   |           | Chloride, Cl                  | 9 mg/l     |         |
| Potassium, K           | 4 mg/l    |           | Sulfate, SO <sub>4</sub>      | 340 mg/l   |         |
| Calcium, Ca            | 140 mg/l  |           | Hydroxide, OH                 | 0 mg/l     |         |
| Magnesium, Mg          | 5 mg/l    |           | Carbonate, CO <sub>3</sub>    | 0 mg/l     |         |
| Iron, Fe (Total)       | 0 mg/l    | NOT RUN   | Bicarbonate, HCO <sub>3</sub> | 93 mg/l    |         |
| Hydrogen Sulfide       | 0 mg/l    | <0.1 mg/L | Resistivity                   | 11.4 ohm-m |         |
| pH                     | 7.6 units |           | (@25 Degrees C)               |            |         |
| Total Dissolved Solids | 680 mg/l  |           | Conductivity                  | 880 uS     |         |
|                        |           |           | Specific Gravity              | 1.003      |         |
|                        |           |           | (@ 60 Degrees F)              |            |         |

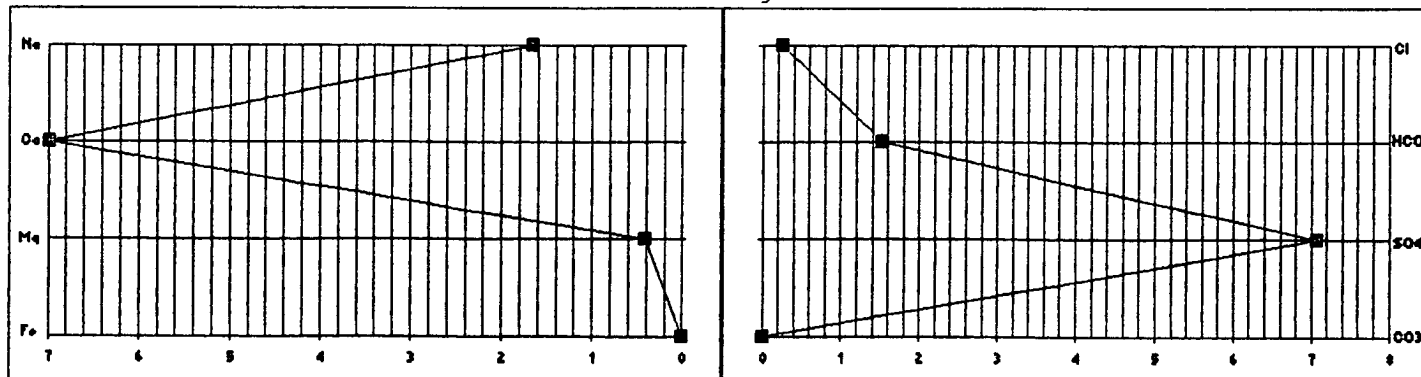
Remarks:

RECEIVED  
DEC 10 1993  
BLACKWOOD & NICHOLS CO., LTD.

Anion/Cation:

978

Stiff Diagram



# BLACKWOOD & RICHOLS CATHODIC GROUND BED DRILLERS REPORT

P-14 WELL# N.E.B.U. #465, #36

A S / T 30-8

[illegible]

LER Mack A. Spruill

INSPECTOR MM

BLACKWOOD & NICHOLS  
CATHODIC GROUND BED  
DRILLERS REPORT

P-14

WELL# N.E.B.U. #465, #36

AS 1 130-8

| TH      | STRATA    | NOTES | DEPTH | STRATA | NOTES |
|---------|-----------|-------|-------|--------|-------|
| 0-100   | Casing    |       |       |        |       |
| 100-130 | Sandstone |       |       |        |       |
| 130-140 | Shale     |       |       |        |       |
| 140-150 | Sandstone |       |       |        |       |
| 150-160 | Sandstone |       |       |        |       |
| 160-170 | Sandstone |       |       |        |       |
| 170-180 | Shale     |       |       |        |       |
| 180-190 | Sandstone |       |       |        |       |
| 190-200 | Sandstone |       |       |        |       |
| 200-210 | Sandstone |       |       |        |       |
| 210-220 | Sandstone |       |       |        |       |
| 220-230 | Sandstone |       |       |        |       |
| 230-240 | Sandstone |       |       |        |       |
| 240-250 | Sandstone |       |       |        |       |
| 250-260 | Sandstone |       |       |        |       |
| 260-270 | Sandstone |       |       |        |       |
| 270-280 | Sandstone |       |       |        |       |
| 280-290 | Sandstone |       |       |        |       |
| 290-300 | Sandstone |       |       |        |       |
| 300-310 | Sandstone |       |       |        |       |
| 310-320 | Sandstone |       |       |        |       |
| 320-330 | Sandstone |       |       |        |       |
| 330-340 | Sandstone |       |       |        |       |
| 340-350 | Sandstone |       |       |        |       |
| 350-360 | Sandstone |       |       |        |       |
| 360-370 | Sandstone |       |       |        |       |
| 370-380 | Sandstone |       |       |        |       |
| 380-390 | Sandstone |       |       |        |       |
| 390-400 | Sandstone |       |       |        |       |
| 400-410 | Sandstone |       |       |        |       |
| 410-420 | Sandstone |       |       |        |       |
| 420-430 | Sandstone |       |       |        |       |
| 430-440 | Sandstone |       |       |        |       |
| 440-450 | Sandstone |       |       |        |       |
| 450-460 | Sandstone |       |       |        |       |
| 460-470 | Sandstone |       |       |        |       |
| 470-480 | Sandstone |       |       |        |       |
| 480-490 | Sandstone |       |       |        |       |
| 490-500 | Sandstone |       |       |        |       |

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INSPECTOR MDM