

#101 30-039-07893 SW-15
#411 30-039-24365

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

Operator: BLACKWOOD & NICHOLS CO. Location: Unit G, Sec. 10, Twp 30N, Rng 7W.

Name of Well/Wells or Pipeline Served NEBU 411, 101

Elevation 6261' Completion Date 7-9-93 Total Depth 418' Land Type* Surface: F Mineral: SF-079001A

Casing, Sizes, Types & Depths 8-5/8" SCH 40 P.V.C. - 100' , 7 7/8" OPEN HOLE

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 _____

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

Fresh, Clear, Salty, Sulphur, Etc. Clear water at 265'

Depths gas encountered: N/A

Type & amount of coke breeze used: Asbury 120 sx

Depths anodes placed: 405'

Depths vent pipes placed: 418' to 4' above ground level

Vent pipe perforations: 88' to 418'

Remarks: Groundbed located 166' S 86° W of NEBU 411

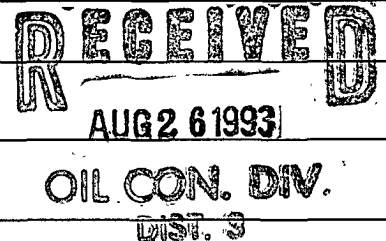
If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

*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: 8/11/93





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

Lab Sample No.: W93-212

Standard A.P.I. Water Analysis Report

Collected By: J. Evans

Company: Blackwood and Nichols Co.

Collection Date: 9-Jul-93

Well Name: SN #15

Collection Time: Unknown

Formation: Surface

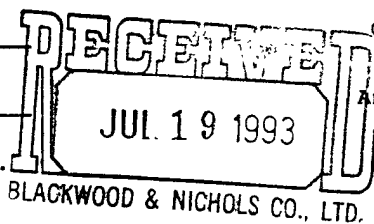
County: Rio Arriba State: NM

Location: (G) Sec. 10-T30-R07

Analyst: K. Lambdin *Karen Lambdin*

Remarks: Sample from groundbed.

Analysis Date: 7/14/93



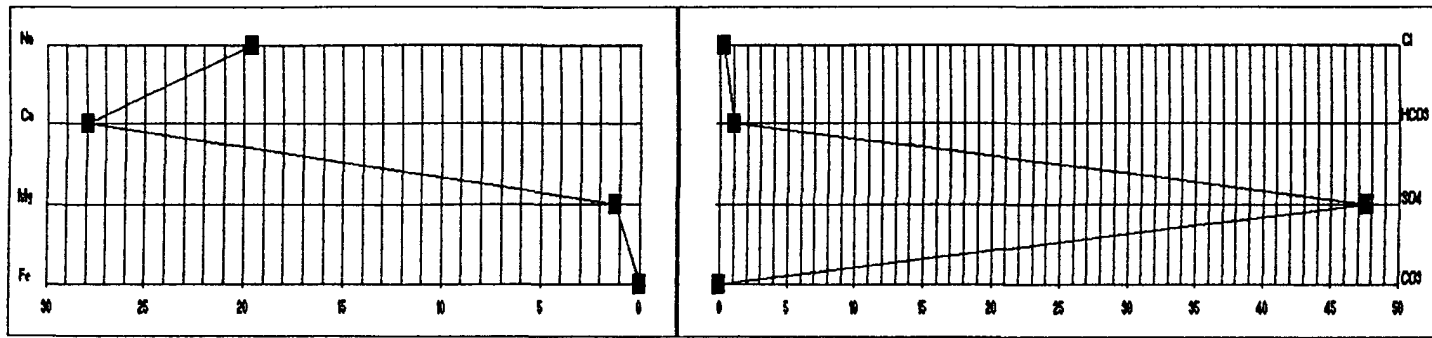
PARAMETER	as ION	Comment	PARAMETER	as ION	Comment
Sodium, Na	<u>450</u> mg/l	calculated	Chloride, Cl	<u>11</u> mg/l	
Potassium, K	<u>14</u> mg/l		Sulfate, SO4	<u>2290</u> mg/l	
Calcium, Ca	<u>560</u> mg/l		Hydroxide, OH	<u>0</u> mg/l	
Magnesium, Mg	<u>15</u> mg/l		Carbonate, CO3	<u>0</u> mg/l	
Iron, Fe (Total)	<u>0.0</u> mg/l	NR	Bicarbonate, HCO3	<u>60</u> mg/l	
Hydrogen Sulfide	<u>0</u> mg/l	<5	Resistivity	<u>3.106</u> ohm-m	
pH	<u>7.78</u> Units		(@25 Degrees C)		
TDS	<u>2,140</u> mg/l		Conductivity	<u>3,220</u> uS	
			Specific Gravity	<u>1.000</u> Units	
			(@ 60 Degrees F)		

Remarks: Gray clay observed at bottom of sample.

NR = Test Not Run

Anion/Cation: 99.6%

Stiff Diagram



BLACKWOOD & NICHOLS
CATHODIC GROUND BED
DRILLERS REPORT

SW/5 WELL# NEB 411

S 10 T 30N R 7W

DEPTH	STRATA	NOTES	DEPTH	STRATA	NOTES
0					
10'	SANDSTONE ↑				
20'					
30'	SANDSTONE X				
40'					
50'	SOFT SHALE X				
60'					
70'	HARD SHALE X				
80'					
90'	HARD SHALE V				
100'					
110'					
120'					
130'					
140'					
150'					

DRILLER gerse martinez

INSPECTOR Joe Matyssek

BLACKWOOD & NICHOLS CATHODIC GROUND BED DRILLERS REPORT

#SN-15 WELL# NEBU-411 + 101

S 10 T 30 R 07

[illegible]

ILLER

INSPECTOR



OR Joseph. Evans