

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS

MA-23

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

30-045-24858

4264

Operator: BLACKWOOD & NICHOLS CO. Location: Unit D, Sec. 33, Twp 31N, Rng 7W.Name of Well/Wells or Pipeline Serviced NEBU 46AElevation 6360' Completion Date 9-27-93 Total Depth 450' 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-IIIf Cement or Bentonite Plugs have been placed, show depths & amounts used N/A

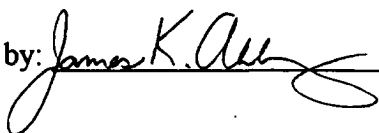
Depths & thickness of water zones with description of water when possible:

Fresh, Clear, Salty, Sulphur, Etc. Clear, 355'Depths gas encountered: N/ARECEIVED
MAY 23 1993Type & amount of coke breeze used: Asbury Flo-Coke - 5,850#OIL CON. DIV.
DIST. 3Depths anodes placed: 142' - 318'Depths vent pipes placed: TD to 4' Above Ground LevelVent pipe perforations: Bottom - 340'Remarks: Groundbed located 350' from North, 200' from NEBU 46A 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:

Title: Operations EngineerDate: 11/19/93



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

Lab Sample No.: W93-395

Standard A.P.I. Water Analysis Report

Collected By: M.D.M.

Company: Blackwood and Nichols Co.

Collection Date: 9/27/93

Well Name: MA #23

Collection Time: Unknown

Formation: Groundbed

County: Unknown State: Unknown

Location: Unknown

Analyst: K. Lambdin & S. Spencer

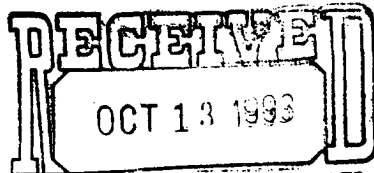
Remarks: Depth - 355'. THIEF

Analysis Date: 9/29/93

S. Spencer

PARAMETER	as ION	Comment	PARAMETER	as ION	Comment
Sodium, Na	190	mg/l	Chloride, Cl	10	mg/l
Potassium, K	5	mg/l	Sulfate, SO ₄	1670	mg/l
Calcium, Ca	540	mg/l	Hydroxide, OH	0	mg/l
Magnesium, Mg	24	mg/l	Carbonate, CO ₃	0	mg/l
Iron, Fe (Total)	0	mg/l NR	Bicarbonate, HCO ₃	180	mg/l
Hydrogen Sulfide	0	mg/l <0.1	Resistivity	3.759	ohm-m
pH	7.59	Units	(@25 Degrees C)		
TDS	1,855	mg/l	Conductivity	2,660	uS
			Specific Gravity	1.000	Units
			(@ 60 Degrees F)		

Remarks: None.

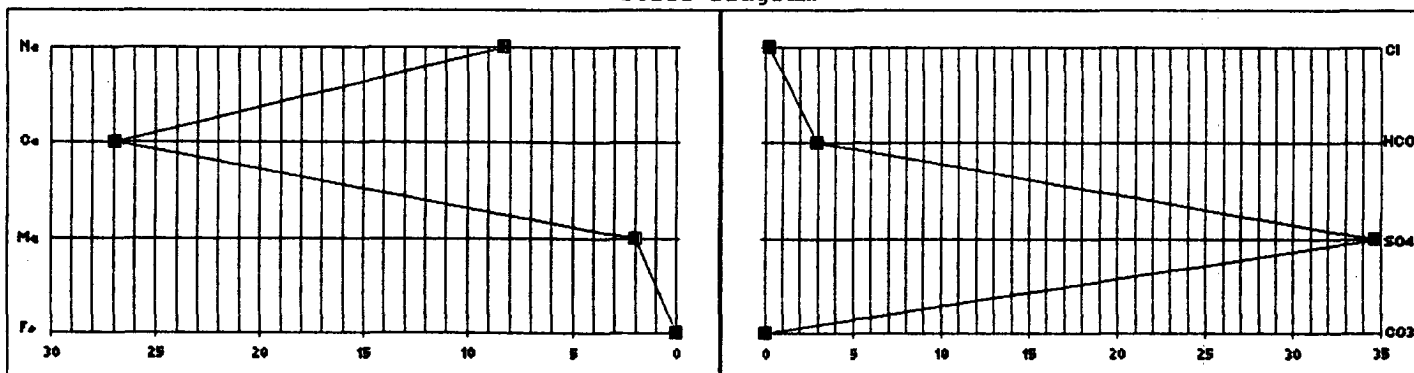


NR = Test Not Run

BLACKWOOD & NICHOLS CO., LTD

Anion/Cation: 101.8%

Stiff Diagram



Scale: Meq/L

BLACKWOOD & NICHOLS CATHODIC GROUND BED DRILLERS REPORT

7A-23 WELL # NIB # 46A

S 33 T 3/N 7 1/2

[illegible]

LER gas mixture

INSPECTOR Joe Matysch

9-27-93

D S 32 T 31 -

LER 

INSPECTOR *MDM*