

30-045-23186

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

Operator Union Oil Company of California Location: Unit      Sec. 19 Twp 25N Rng 10W

Name of Well/Wells or Pipeline Serviced Navajo 4Y-K-19

Elevation      Completion Date 12/13/89 Total Depth 300' Land Type\* I

Casing, Sizes, Types & Depths 40' 6"DIA. PVC Pipe Surface Casing

If Casing is cemented, show amounts & types used None

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

None

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

Fresh, Clear, Salty, Sulphur, Etc. 120' Deep 20' Thick SEE ATTACHED SHEET

Depths gas encountered: NA

Type & amount of coke breeze used: Carbo 60 2500 lbs

Depths anodes placed: 175' to 205'

Depths vent pipes placed: 205'

Vent pipe perforations: 175'

Remarks: Unocal was the operator when this ground bed was installed

First ground bed installed at this location

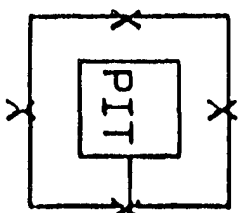
If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included

\*Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.  
If Federal or Indian, add Lease Number.



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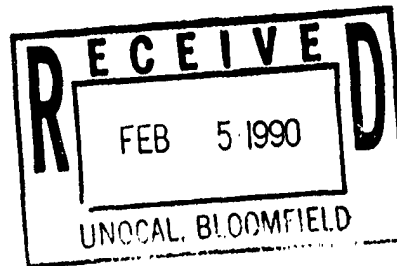
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Cathodic Protection Services Company  
P. O. Box 388  
Farmington, New Mexico 87499  
1608 Schofield Lane  
Farmington, New Mexico 87401  
(505) 325-1946



February 2, 1990

Unocal Corporation  
3300 N. Butler, Suite 201  
Farmington, NM 87401

Attention: Mr. Steve Gregory

Subject: Major Water Zones in Cathodic Protection Deep-Well Groundbeds

Dear Mr. Gregory:

Per your recent request for information concerning the cathodic protection deep-well groundbeds for your well casings in the San Juan Basin area, we are pleased to submit the following information.

Township & Range	Depths Ranging From Shallowest to Deepest	Average Depth	Average Thickness of Water Zone
T-25N - R-10W	110' - 140'	122.5'	20'
T-25N - R-11W	60' - 140'	93.3'	45'
T-26N - R-7W	80' - 150'	112.5'	30'
T-27N - R-7W	80' - 200'	123.3'	22.5'
T-27N - R-6W	80' - 200'	131.1'	30'

This data reflects information supplied by the drilling logs acquired at the time the wells were drilled. The depths shown are based on the type of sand which was being extruded from the drilled hole and the dampness of the sand.

The thickness of the water zones are determined by the change in the strata which was being drilled.

It has been a pleasure providing this information to your company. If you have any further questions or desire additional information, please do not hesitate to contact us.

Sincerely,

Cathodic Protection Services Company

  
John Kerr, Corrosion Technician

cc: Mike Tabet

**CPS**  
Cathodic Protection Services  
A LUKENS COMPANY

DATA SHEET NO. 1 of 1

151-

COMPANY UNION JOB NO. 80027 DATE: 12-13-89  
 WELL: WADASO # 44-1619 PIPELINE:  
 LOCATION: SEC 19 TWP 25 RGE. 10 CO. SAW SPAN STATE IL 12241  
 ELEV. \_\_\_\_\_ FT: ROTARY 300 FT: CABLE TOOL ⊕ FT: CASING 40 FT  
 GROUND BED: DEPTH 300 FT. DIA. 6 IN. GAS 3000 LBS ANODES knock string

DEPTH. FT.	DRILLER'S LOG	EXPLORING ANODE TO STRUCTURE			NO COEF.	WITH COEF.	ANODE NO.	DEPTH TOP OF ANODES
		N	I	R				
	First Water 120							
	0-150 SAND							
150			2.7					
5			2.3					
60			2.6					
5			3.3					
70			3.4					
5	Top of knock anodes		4.0			4.0	1100	120
80			4.0					
5			4.4					
80			4.4					
5			4.0					
200			4.0					
5			3.8					
10			3.8					
5			3.9					
20			4.0					215
5			3.8					
30			3.5					
5			3.5					
40			3.0					
5			2.7					
50			2.7					
5			2.4					
60			2.4					
5			3.0					
70			3.2					
5			3.2					
80			3.2					
5			3.8					
90			3.4					
5			3.2					
300	T.R. 300							

GROUND BED RESISTANCE: (1) VOLTS 12.0 - AMPS 11.8 - 0.71 OHMS

(2) VIBROGROUND: \_\_\_\_\_ OHMS



JOB NUMBER	INVOICE NO
751-00027	751416

12/18/89

# INVOICE

REMIT TO  
P.O. BOX 297294  
HOUSTON, TX 77297

PAYMENT DUE DATE

1/18/90



PAYMENT OF THE FULL  
AMOUNT OF THIS INVOICE  
IS DUE, IN ACCORDANCE  
WITH CONTRACT TERMS.

Unocal Oil & Gas Division  
Unocal Corporation  
P.O. Box 850  
Bloomfield, NM 87413  
Attn: Mr. Mike Tabet & Accts. Payable

CUSTOMER NUMBER

541168

CONTRACT NO. & NAME AFE - 392129

CONTRACT DATE 8/7/89 &  
10/2/89

ITEM NO.	DESCRIPTION	PRICE	UNIT	% COMPLETE	AMOUNT EARNED
	Providing all necessary materials, labor, supervision, equipment and other pertinent items to install a groundbed to a depth of 300 feet, as follows:				
Well: Mavajo #4Y-K19		\$3,496.00	ea	100%	\$3,496.00
a. Provision and installation of (6" diameter) PVC surface casing = 40 ft.		17.50	ft	100%	700.00

NOTES

LESS - RETAINAGE @

\$4,196.00

Plus 5.25% New Mexico State and  
San Juan County tax  
LESS - PREVIOUS INVOICES

220.29

TERMS: NET 30 DAYS. LATE PAYMENT ADMINISTRATION FEE OF  
1.5% PER MONTH WILL BE CHARGED AFTER THE DUE DATE.

AMOUNT OF THIS INVOICE →

\$4,416.29

ACCOUNTING COPY