

Submit in duplicate to
appropriate district office
See Rule 401 & Rule 1122

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Maralo, Inc.						Lease or Unit Name Prohibition Federal					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 3-11-94		Well No. 3			
Completion Date 2-14-94		Total Depth 15209		Plug Back TD 14759		Elevation		Unit Ltr. - Sec. - TWP - Rge. 12- 22- 32			
Csg. Size 7" & 4 1/2"	Wt. d	d	Set At 15209	Perforations: From: 13806 To: 13814				County Lea			
Tbg. Size 2-7/8"	Wt. 6.5	d 2.441	Set At 13802	Perforations: From: To:				Pool Bootleg Ridge			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 13732				Formation Atoka			
Producing Thru Tbg		Reservoir Temp. °F 60		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection EPNG			
L 13810	H 13810	Gg .652	% CO ₂ .43	% N ₂ 1.13	% H ₂ S	Prover		Meter Run 4.026	Taps Flg.		

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI						6075		Pkr.		72 Hours
1.	4 X 1.500		435	8.00	71	5265		"		1 Hour
2.	4 X 1.500		450	31.00	66	4290		"		" "
3.	4 X 1.500		460	45.00	65	3665		"		" "
4.	4 X 1.500		470	65.00	60	2905		"		" "
5.										

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super. Compress. Factor, F _{pv} .	Rate of Flow Q, Mcfd
1.	10.84	59.88	448.2	.9896	1.238	1.045	817
2.	10.84	119.83	463.2	.9943	1.238	1.047	1,674
3.	10.84	145.92	473.2	.9952	1.238	1.048	2,042
4.	10.84	177.22	483.2	1.0000	1.238	1.049	2,495
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl
1.	.66	531	1.42	.916	34.158	51.5 @ 60°
2.	.69	526	1.41	.912		
3.	.70	525	1.41	.911		
4.	.72	520	1.39	.909		
5.						

P_c **6467.9** P_c² **41833.7**

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1.		5591.1	31260.4	10573.3
2.		4731.1	22383.3	19450.4
3.		4047.3	16380.6	25453.1
4.		3285.1	10791.9	31041.8
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.348$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.303$

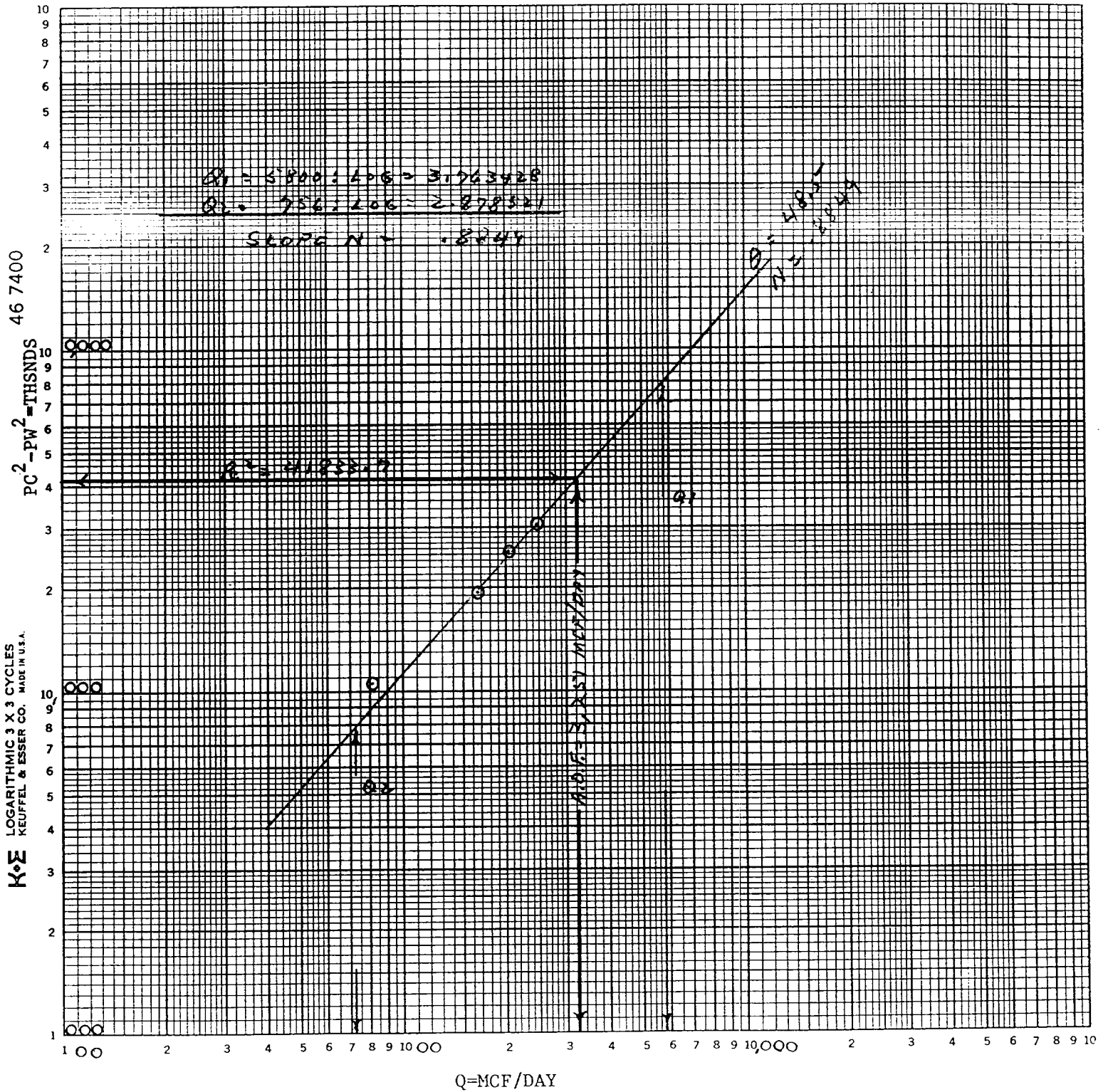
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.251$

Absolute Open Flow	3.251	Mcf/d @ 15.025	Angle of Slope θ	48.5	Slope, n	.8849
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Remarks: ***BHP INSTRUMENT SET @ THIS DEPTH, **CORRECTED TO 1.13% N2 ***CAL. FROM KNOWN BHP'S**
WELL MADE 8.28 BBLS OF 51.5 @ 60° CONDENSATE & 1.38 BBLS H2O

Approved By Division	Conducted By: WEST-TEST, INC.	Calculated By: B.M.	Checked By: B.M.
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MARALO, INC.
 PROHIBITION FEDERAL NO.3
 LEA COUNTY, NEW MEXICO
 12-22-32
 MARCH 11, 1994



WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURE (Pc or Pw)

FORM C-122F

FROM KNOWN BOTTOM HOLE PRESSURE (Pf or Ps)

COMPANY MARALO, INC. LEASE :PROH FED WELL NO. : 3 DATE 3 11 94
 UNIT SECTION : 12 TOWNSHIP : 22 RANGE : 32
 L 13810 H : 13810 L/H : 1 G/GMIX : 0.6520
 CO2 : 0.43 N2 : 1.13 H2S :
 GH : 9004.1 PCR : 669 TCR : 372

LINE		1	2	3	4	5	6	7	8
1	TW(W.H. R)	534	534	534	534	534	534	534	534
2	Ts(B.H. R)	672.1	672.1	672.1	672.1	672.1	672.1	672.1	672.1
3	$T = (Tw + Ts / 2)$	603.1	603.1	603.1	603.1	603.1	603.1	603.1	603.1
4	Z (EST.)	1.334	1.170	ERR	ERR	ERR	ERR	ERR	ERR
5	TZ	805	706	ERR	ERR	ERR	ERR	ERR	ERR
6	GH/TZ	11.189	12.760	ERR	ERR	ERR	ERR	ERR	ERR
7	eS(TABLE XIV)	1.521	1.614	ERR	ERR	ERR	ERR	ERR	ERR
8	Pf or Ps	8216.2	8216.2	0	0	0	0	0	0
9	Pf2 or Ps2	67505.9	67505.9	0.0	0.0	0.0	0.0	0.0	0.0
10	$Pc2 = Pf / eS$ or $Pw2 = Ps2 / eS$	44373.0	41833.8	ERR	ERR	ERR	ERR	ERR	ERR
11	Pc or Pw	6661	6468	ERR	ERR	ERR	ERR	ERR	ERR
12	$P = (Pw + Ps / 2)$ or $(Pc + Pf / 2)$	7439	7342	ERR	ERR	ERR	ERR	ERR	ERR
13	Pr=(P/Pcr)	11.12	10.97	ERR	ERR	ERR	ERR	ERR	ERR
14	Tr(T/Tcr)	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62
15	Z (TABLE XI)	1.170	1.161	ERR	ERR	ERR	ERR	ERR	ERR

PC 1 : 6467.9 PW 2 : ERR PW 3 : ERR PW 4 : ERR

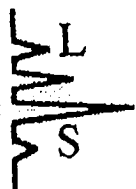
WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURE (Pc or Pw)
FROM KNOWN BOTTOM HOLE PRESSURE (Pf or Ps)

FORM C-122F

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L 13810 H : 13810 L/H : 1 G/GMIX : 0.6520
CO2 : 0.43 N2 : 1.13 H2S :
GH : 9004.1 PCR : 669 TCR : 372

LINE		1	2	3	4	5	6	7	8
1	TW(W.H. R)	534	534	534	534	534	534	534	534
2	Ts(B.H. R)	672.1	672.1	672.1	672.1	672.1	672.1	672.1	672.1
3	T=(Tw+Ts/2)	603.1	603.1	603.1	603.1	603.1	603.1	603.1	603.1
4	Z (EST.)	1.236	1.084	1.062	0.997	0.991	0.935	0.915	0.872
5	TZ	745	654	640	601	597	564	552	526
6	GH/TZ	12.081	13.778	14.063	14.970	15.072	15.970	16.324	17.117
7	eS(TABLE XIV)	1.573	1.676	1.694	1.753	1.760	1.820	1.844	1.900
8	Pf or Ps	7239.2	7239.2	6264.2	6264.2	5460.2	5460.2	4528.2	4528.2
9	Pf2 or Ps2	52406.0	52406.0	39240.2	39240.2	29813.8	29813.8	20504.6	20504.6
10	Pc2=Pf/eS or Pw2=Ps2/eS	33313.6	31259.9	23158.1	22383.6	16941.9	16380.4	11117.5	10791.6
11	Pc or Pw	5772	5591	4812	4731	4116	4047	3334	3285
12	P=(Pw+Ps/2)or(Pc+Pf/2)	6505	6415	5538	5498	4788	4754	3931	3907
13	Pr={P/Pcr}	9.72	9.59	8.28	8.22	7.16	7.11	5.88	5.84
14	Tr(T/Tcr)	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62
15	Z (TABLE XI)	1.084	1.075	0.997	0.994	0.935	0.932	0.872	0.871

PW 1 : 5591.1 PW 2 : 4731.1 PW 3 : 4047.3 PW 4 : 3285.1



Laboratory Services, Inc.

1331 Tasker Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR:

West Test Inc.
Attention: Mr. Buz Thomason
412 N. Dal Paso
Hobbs, New Mexico 88240

SAMPLE

IDENTIFICATION:

COMPANY:

LEASE:

PLANT:

Sampled Downstream
From The Dehydrator
Prohibition Federal #3
Maralo Inc.

SAMPLE DATA: DATE SAMPLED: 03-11-94
ANALYSIS DATE: 03-12-94
PRESSURE - PSIG 470.00
SAMPLE TEMP. °F 65.00
ATMOS. TEMP. °F

GAS (XX) LIQUID ()
SAMPLED BY: Sutton-West Test
ANALYSIS BY: Rolland Perry

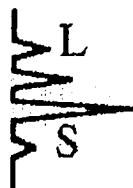
REMARKS:

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)	1.13	
Nitrogen (N2)	0.43	
Carbon Dioxide (CO2)	88.11	
Methane (C1)	6.05	1.608
Ethane (C2)	2.22	0.609
Propane (C3)	0.43	0.140
I-Butane (IC4)	0.54	0.170
N-Butane (NC4)	0.24	0.086
I-Pentane (IC5)	0.13	0.047
N-Pentane (NC5)	0.72	0.311
Hexane (C6)	0.00	0.000
Heptanes Plus (C7+)	100.00	2.971

BTU/CU.FT. - DRY 1133
AT 14.650 DRY 1130
AT 14.650 WET 1110
AT 15.025 DRY 1159
AT 15.025 WET 1139
AT 14.73 WET
SPECIFIC GRAVITY -
CALCULATED 0.652
MEASURED

MOLECULAR WT. 18.8879
26# GASOLINE - 0.501



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Attention: Mr. Buz Thomason
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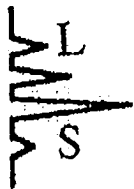
SAMPLE
IDENTIFICATION: Sampled At The
COMPANY: Meter Run
LEASE: Prohibition Federal #3
PLANT: Maralo Inc.

SAMPLE DATA:	DATE SAMPLED:	03-11-94	GAS (XX)	LIQUID ()
	ANALYSIS DATE:	03-12-94	SAMPLED BY:	Sutton-West Test
	PRESSURE - PSIG	450.00	ANALYSIS BY:	Rolland Perry
	SAMPLE TEMP. °F			
	ATMOS. TEMP. °F			

REMARKS:

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM	
Hydrogen Sulfide (H2S)			
Nitrogen (N2)	1.15		
Carbon Dioxide (CO2)	0.42		
Methane (C1)	86.59		
Ethane (C2)	6.00	1.596	
Propane (C3)	2.32	0.637	
I-Butane (IC4)	0.48	0.156	
N-Butane (NC4)	0.64	0.201	
I-Pentane (IC5)	0.35	0.126	
N-Pentane (NC5)	0.22	0.079	
Hexane (C6)	1.83	0.790	
Heptanes Plus (C7+)	0.00	0.000	
	100.00	3.585	
BTU/CU.FT. - DRY	1185	MOLECULAR WT.	19.8627
AT 14.650 DRY	1182		
AT 14.650 WET	1161	26# GASOLINE -	1.062
AT 15.025 DRY	1212		
AT 15.025 WET	1191		
AT 14.73 WET			
SPECIFIC GRAVITY -			
CALCULATED	0.686		
MEASURED			



Laboratory Services, Inc.

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Hobbs, New Mexico 88240

Telephone: (505) 397-3713

WATER ANALYSIS

COMPANY West Test Inc.

SAMPLE Maralo Inc. Prohibition Fed. #3

SAMPLED BY West Test

DATE TAKEN 03-11-94

REMARKS

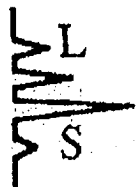
Barium as Ba	0.00	
Carbonate alkalinity PPM	0.00	
Bicarbonate alkalinity PPM	412.00	
pH at Lab	6.76	
Specific Gravity @ 60° F	1.071	
Magnesium as Mg	12,180	
Total Hardness as CaCO ₃	21,000	
Chlorides as Cl	55,774	
Sulfate as SO ₄	95.00	
Iron as Fe	43.75	
Potassium	2.68	
Hydrogen Sulfide	0.00	
Resistivity Ohms	0.1320	23.60
Total Dissolved Solids	87,000	
Carbonate as CO ₃ Gm/L	0.00	
Calcium as Ca	8,820	
Nitrate	2.20	

Results reported as Parts per Million unless stated

Langelier Saturation Index +1.06

Analysis by Rolland Perry

Date: 03-13-94



Laboratory Services, Inc.

1331 Tasker Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: West Test Inc.
Attention: Mr. Buzz Thomason
412 N. Dal Paso
Hobbs, New Mexico 88240

SAMPLE IDENTIFICATION: Condensate
COMPANY: Prohibition Fed. #3
LEASE: Maralo Inc.
PLANT:

SAMPLE DATA:	DATE SAMPLED:	03-11-94	GAS (I)	LIQUID (XX)
	ANALYSIS DATE:	03-14-94	SAMPLED BY:	Sutton-West Test
	PRESSURE - PSIG		ANALYSIS BY:	Rolland Perry
	SAMPLE TEMP. °F		C1 to C2 RATIO	31.71 to 1
	ATMOS. TEMP. °F		CO2 to C2 RATIO	1.41 to 1
REMARKS:	API Gravity = 51.5			

COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	LIQ. VOL PERCENT
Hydrogen Sulfide	(H2S)		
Nitrogen	(N2)	0.69	0.19
Carbon Dioxide	(CO2)	0.05	0.02
Methane	(C1)	1.50	0.65
Ethane	(C2)	2.05	1.40
Propane	(C3)	2.48	1.75
I-Butane	(IC4)	1.59	1.33
N-Butane	(NC4)	3.51	2.83
I-Pentane	(IC5)	4.06	3.80
N-Pentane	(NC5)	3.22	2.98
Hexane	(C6)	80.85	85.05
Heptanes Plus	(C7+)	0.00	0.00
		100.00	100.00

SPECIFIC GRAVITY -
CALCULATED 0.642

VAPOR PRESSURE (ABSOLUTE) -
CALCULATED 104.40

MOLECULAR WT. 80.06

CU. FT. /GAL. 26.53

COMPANY: WEST-TES INC.
CLIENT: MARALO, INC.
GAUGE NUMBER: 20203
WELL NAME: PROHIBITION FEDERAL
WELL NUMBER: 3
TEST NUMBER: 94-14-0420
LOCATION: LEA COUNTY, NEW MEXICO
TEST OPERATOR: WS AND BJT
COMMENTS: FLOWING GRADIENTS

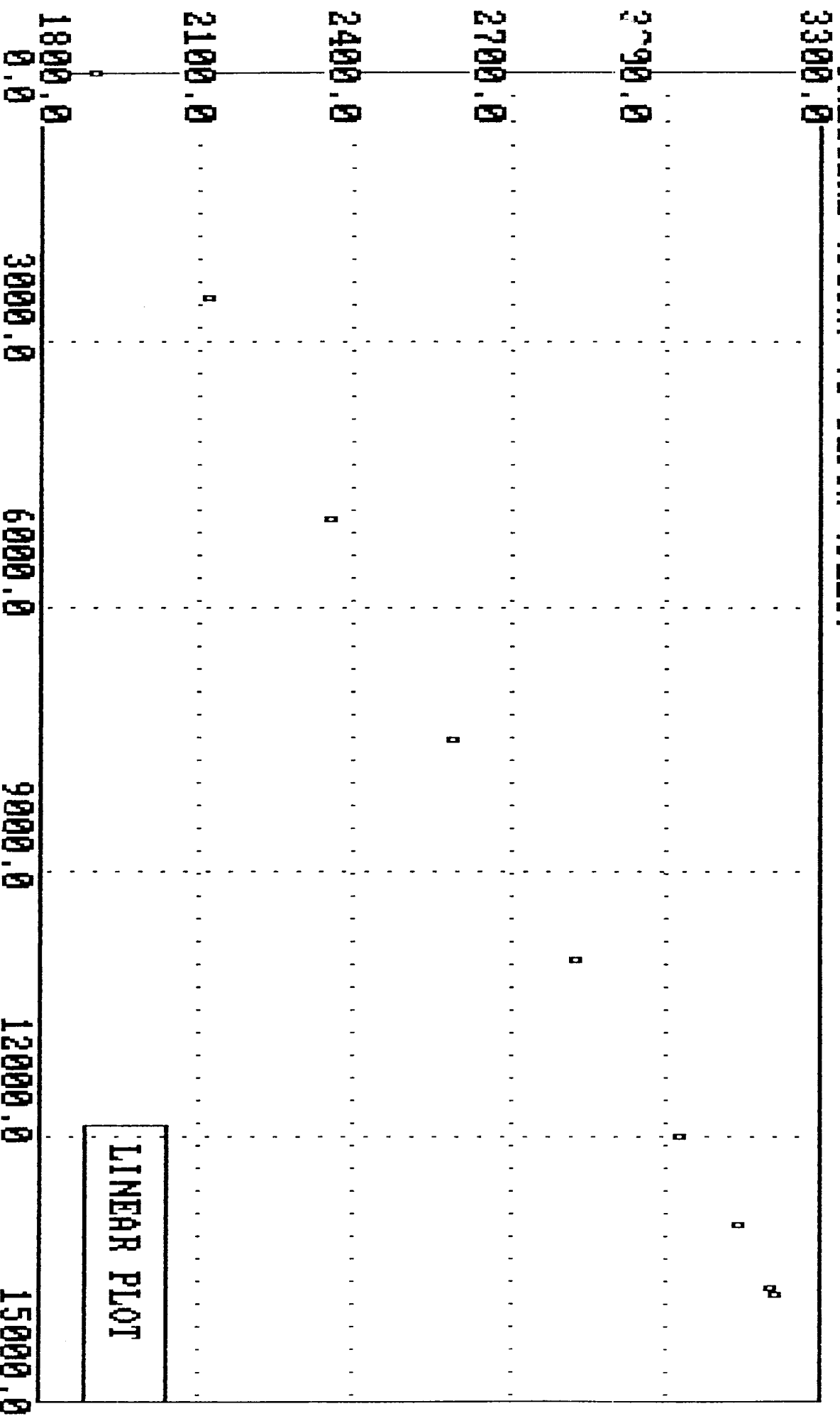
POSITION	GAUGE SERIAL NUMBER
1	

PAGE START DATE: 3/ 8/94
PAGE START TIME: 0: 0: 0
DATA FILE: 1

	DELTA TIME HRS	DEPTH FEET	PRESSURE PSIA	GRADIENT	COMMENTS
104	0.000	0.0	1898.20		
105	0.000	2500.0	2121.20	0.0892	
106	0.000	5000.0	2353.20	0.0928	
107	0.000	7500.0	2590.20	0.0948	
108	0.000	10000.0	2826.20	0.0944	
109	0.000	12000.0	3028.20	0.1010	
110	0.000	13000.0	3136.20	0.1080	
111	0.000	13732.0	3203.20	0.0915	
112	0.000	13810.0	3210.20	0.0897	

MARALO, INC.
PROHIBITION FEDERAL NO.3
LEA COUNTY, NEW MEXICO
FLOWING GRADIENTS
MARCH 8, 1994

PRESSURE (PSIA) vs DEPTH (FEET)



COMPANY: WEST-TES INC.
CLIENT: MARALO, INC.
GAUGE NUMBER: 20203
WELL NAME: PROHIBITION FEDERAL
WELL NUMBER: 3
TEST NUMBER: 94-14-0420
LOCATION: LEA COUNTY, NEW MEXICO
TEST OPERATOR: WS AND BJT
COMMENTS: 68 HOUR BUILD-UP

POSITION	GAUGE SERIAL NUMBER
1	

PAGE START DATE: 3/ 8/94
PAGE START TIME: 11: 0: 0
DATA FILE: 1

DELTA TIME HRS	PRESSURE PSIA	COMMENTS
0.000	3237.20	GAUGE REACHED 13,732', SHUT IN BEGIN BUILD-UP
0.017	3308.20	
0.033	3375.20	
0.050	3436.20	
0.067	3493.20	
0.083	3544.20	
0.100	3652.20	
0.117	3764.20	
0.133	3882.20	
0.150	3959.20	
0.167	4088.20	
0.183	4190.20	
0.200	4287.20	
0.217	4379.20	
0.233	4471.20	
0.250	4548.20	
0.267	4614.20	
0.283	4681.20	
0.300	4742.20	
0.317	4799.20	
0.333	4850.20	
0.350	4921.20	
0.367	4988.20	
0.383	5052.20	
0.400	5103.20	
0.417	5154.20	
0.433	5251.20	
0.450	5353.20	
0.467	5435.20	
0.483	5526.20	
0.500	5628.20	
0.517	5720.20	
0.533	5807.20	
0.550	5889.20	
0.567	5970.20	
0.583	6052.20	
0.600	6143.20	
0.617	6234.20	
0.633	6320.20	
0.650	6406.20	
0.667	6487.20	
0.683	6552.20	
0.700	6618.20	
0.717	6679.20	
0.733	6729.20	
0.750	6780.20	
0.767	6860.20	
0.783	6941.20	
0.800	7017.20	
0.817	7082.20	

PAGE START DATE: 3/ 8/94
PAGE START TIME: 11:50: 0
DATA FILE: 1

DELTA TIME
HRS

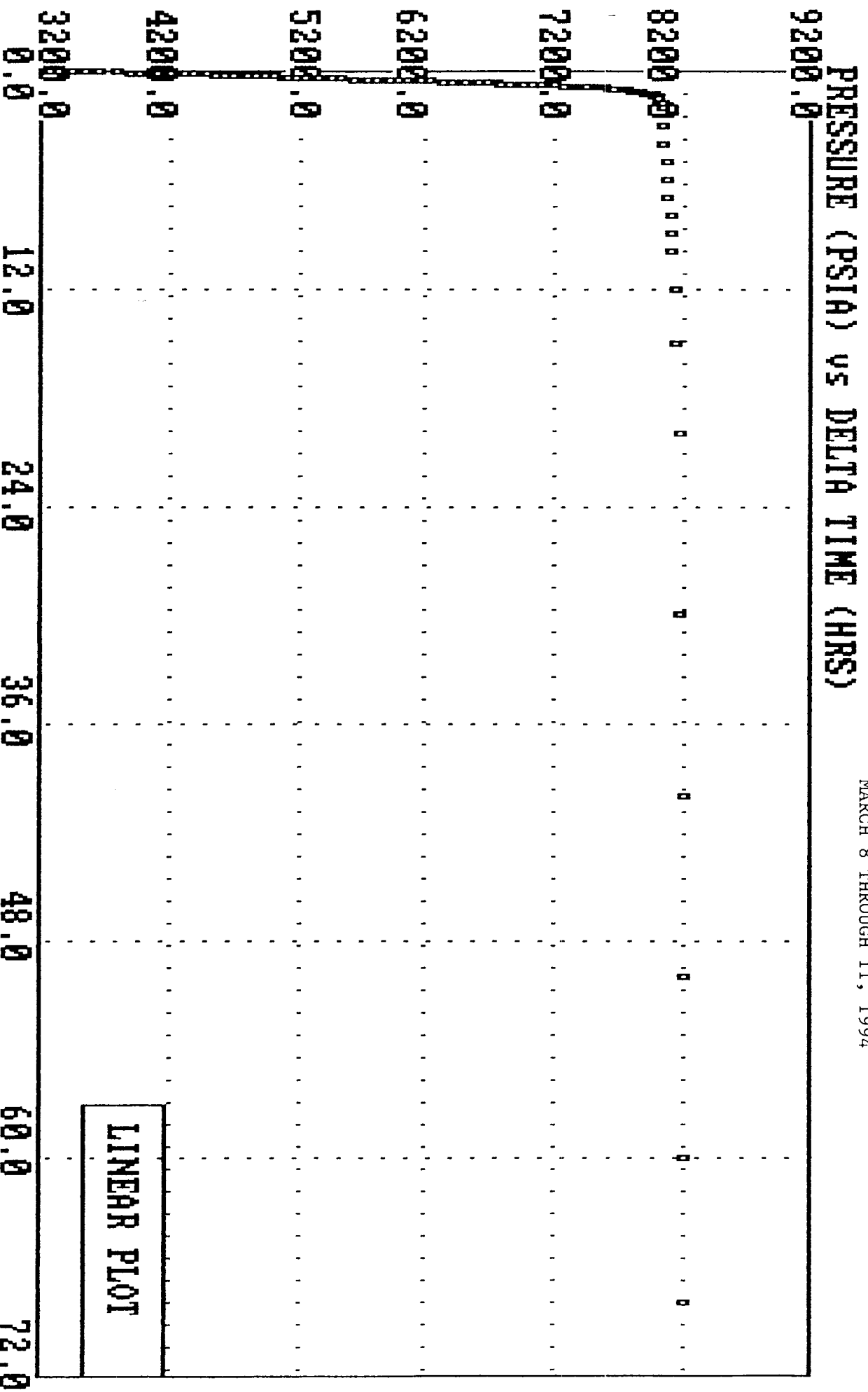
PRESSURE
PSIA

COMMENTS

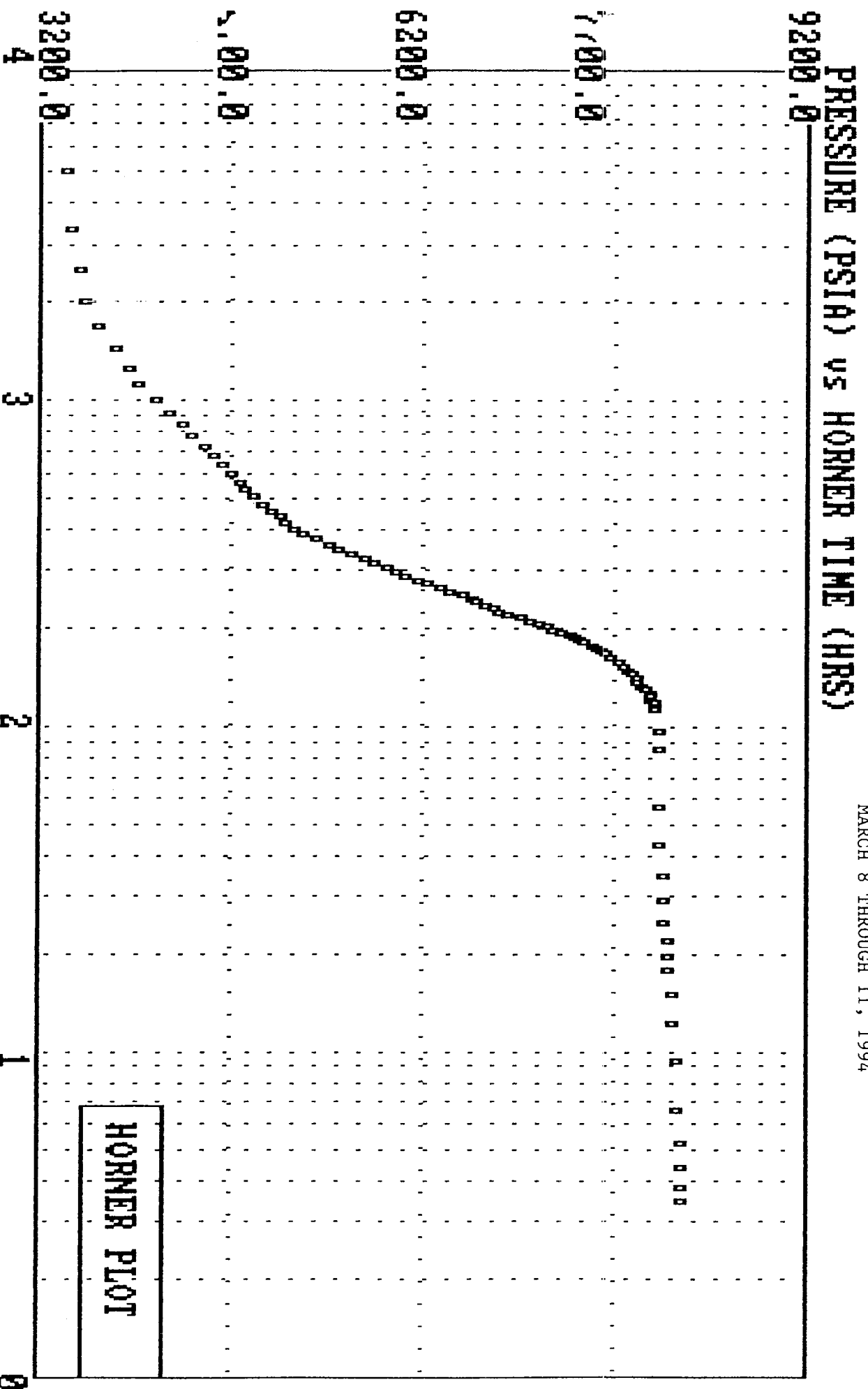
0.833	7143.20
0.850	7203.20
0.867	7263.20
0.883	7319.20
0.900	7369.20
0.917	7409.20
0.933	7454.20
0.950	7500.20
0.967	7540.20
0.983	7585.20
1.000	7610.20
1.033	7656.20
1.067	7701.20
1.100	7736.20
1.133	7776.20
1.167	7811.20
1.200	7842.20
1.233	7872.20
1.267	7897.20
1.300	7922.20
1.333	7947.20
1.367	7962.20
1.400	7977.20
1.433	7987.20
1.467	7997.20
1.500	8003.20
1.750	8018.20
2.000	8028.20
3.000	8038.20
4.000	8047.20
5.000	8057.20
6.000	8067.20
7.000	8077.20
8.000	8087.20
9.000	8094.20
10.000	8102.20
12.000	8122.20
15.000	8137.20
20.000	8157.20
30.000	8177.20
40.000	8192.20
50.000	8206.20
60.000	8211.20
68.000	8216.20

GAUGE OUT TO CHANGE CHART

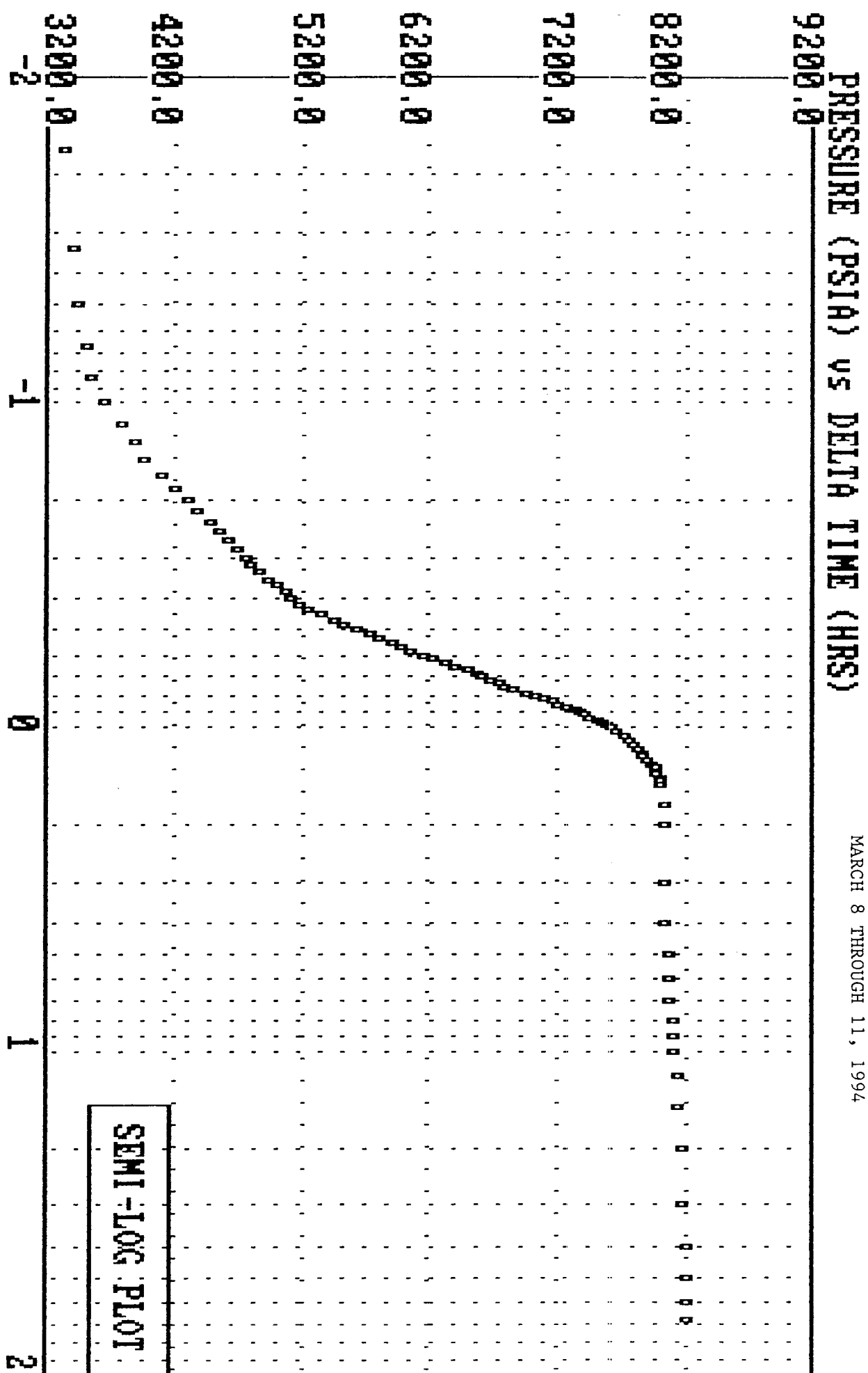
MARALO, INC.
PROHIBITION FEDERAL NO.3
LEA COUNTY, NEW MEXICO
68 HOUR BUILD-UP
MARCH 8 THROUGH 11, 1994



MARALO, INC.
PROHIBITION FEDERAL NO.3
LEA COUNTY, NEW MEXICO
68 HOUR BUILD-UP
MARCH 8 THROUGH 11, 1994



MARALO, INC.
PROHIBITION FEDERAL NO.3
LEA COUNTY, NEW MEXICO
68 HOUR BUILD-UP
MARCH 8 THROUGH 11, 1994



COMPANY: WEST-TES INC.
CLIENT: MARALO, INC.
GAUGE NUMBER: 20203
WELL NAME: PROHIBITION FEDERAL
WELL NUMBER: 3
TEST NUMBER: 94-14-0420
LOCATION: LEA COUNTY, NEW MEXICO
TEST OPERATOR: WS AND BJT
COMMENTS: STATIC GRADIENTS

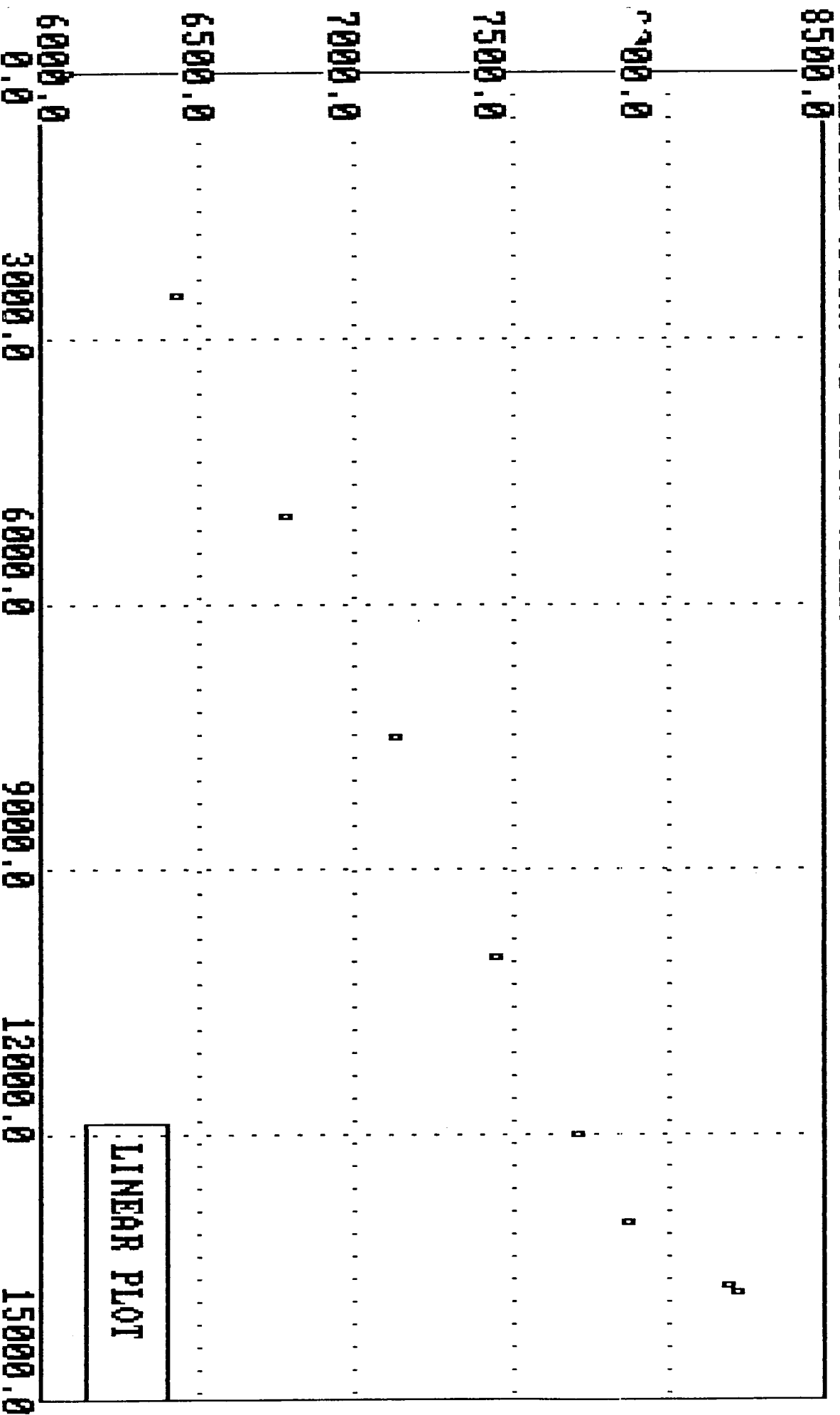
POSITION	GAUGE SERIAL NUMBER
1	

PAGE START DATE: 3/11/94
PAGE START TIME: 0: 0: 0
DATA FILE: 1

	DELTA TIME HRS	DEPTH FEET	PRESSURE PSIA	GRADIENT	COMMENTS
1	0.000	0.0	6079.20		
2	0.000	2500.0	6432.20	0.1412	
3	0.000	5000.0	6781.20	0.1396	
4	0.000	7500.0	7119.20	0.1352	
5	0.000	10000.0	7451.20	0.1328	
6	0.000	12000.0	7707.20	0.1280	
7	0.000	13000.0	7863.20	0.1560	
8	0.000	13732.0	8182.20	0.4358	
9	0.000	*13810.0	8216.20	0.4359	*Extrapolated to mid-perfs.

MARALO, INC.
PROHIBITION FEDERAL NO.3
LEA COUNTY, NEW MEXICO
STATIC GRADIENTS
MARCH 11, 1994

PRESSURE (PSIA) vs DEPTH (FEET)



LINEAR FIT

COMPANY: WEST-TES INC.
CLIENT: MARALO, INC.
GAUGE NUMBER: 20203
WELL NAME: PROHIBITION FEDERAL
WELL NUMBER: 3
TEST NUMBER: 94-14-0420
LOCATION: LEA COUNTY, NEW MEXICO
TEST OPERATOR: WS AND BJT
COMMENTS: FOUR POINT

POSITION	GAUGE SERIAL NUMBER
1	

PAGE START DATE: 3/11/94
PAGE START TIME: 9:45: 0
DATA FILE: 1

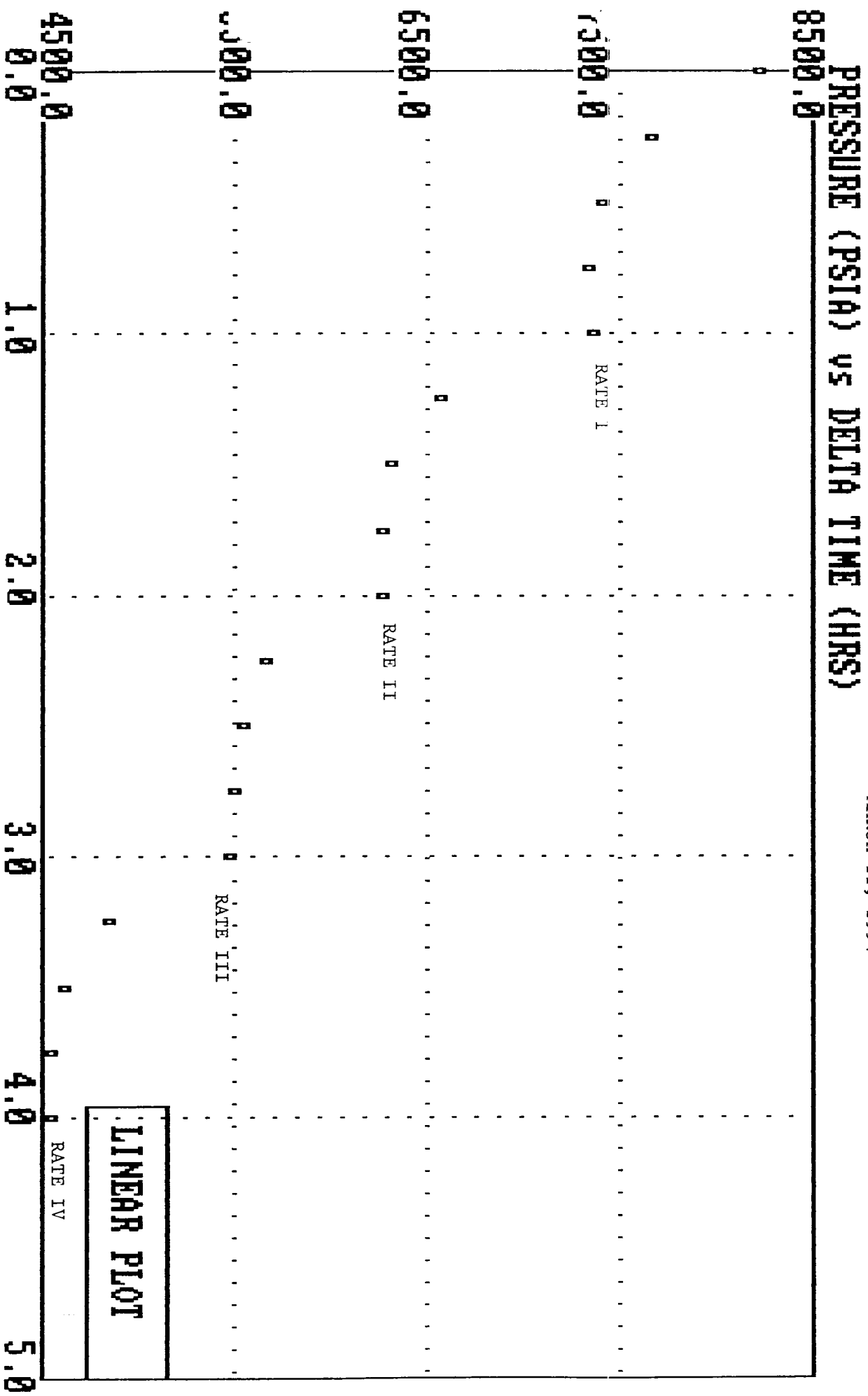
DELTA TIME
HRS

PRESSURE
PSIA

COMMENTS

0.000	8216.20	OPEN CHOKE - BEGIN TEST
0.250	7640.20	
0.500	7389.20	
0.750	7319.20	
1.000	7339.20	RATE I
1.250	6547.20	
1.500	6305.20	
1.750	6259.20	
2.000	6264.20	RATE II
2.250	5649.20	
2.500	5532.20	
2.750	5491.20	
3.000	5460.20	RATE III
3.250	4839.20	
3.500	4614.20	
3.750	4543.20	
4.000	4528.20	RATE IV

MARALO, INC.
PROHIBITION FEDERAL NO.3
LEA COUNTY, NEW MEXICO
FOUR POINT
MARCH 11, 1994



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other In-
structions on
reverse side)

FOR APPROVED
OMB NO. 1004-0137
Expires: December 31, 1991

5. LEASE DESIGNATION AND SERIAL NO.

NM-64606

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

PROHIBITION FEDERAL UNIT

8. FARM OR LEASE NAME, WELL NO.

PROHIBITION FEDERAL UNIT #3

9. API WELL NO.

30-025-32142

10. FIELD AND POOL, OR WILDCAT

BOOTLEG RIDGE - ATOKA

11. SEC., T., R., M., OR BLOCK AND SURVEY
OR AREA

SEC. 12, T22S, R32E

12. COUNTY OR
PARISH
LEA

13. STATE
NM

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other _____

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. REVR. ☐ Other _____

2. NAME OF OPERATOR

MARALO, INC.

3. ADDRESS AND TELEPHONE NO.

P. O. BOX 832, MIDLAND, TX 79702

(915) 684-7441

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At surface 990' FEL & 1980' FNL

At top prod. interval reported below 990' FEL & 1980' FNL

At total depth 990' FEL & 1980' FNL

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED 10-02-93 16. DATE T.D. REACHED 12-14-93 17. DATE COMPL. (Ready to prod.) 02-15-94 18. ELEVATIONS (OF. RKB, RT, CR, ETC.)* 3617.7 19. ELEV. CASINGHEAD -

20. TOTAL DEPTH, MD & TVD 15,209' 21. PLUG BACK T.D., MD & TVD 14,330' 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 25. WAS DIRECTIONAL SURVEY MADE

13,806 - 13,814' ATOKA

26. TYPE ELECTRIC AND OTHER LOGS RUN

GR/CCL/CBL GR/CNL/LDT/DLL/MSFL

SEE
DEVIATION TEST

27. WAS WELL CORRED

NO

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54#	1200'	17-1/2"	SURF.- 950 SX CL. "C"	
9-5/8"	36#	4750'	12-1/4"	SURF.-1750 SX HL/PREM.	
7"	26 & 29#	12050'	8-1/2"	3560'-1600 SX 50/50	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
4-1/2"	11638'	15209'	300 SX CL. "H"		2-7/8 & 2-3/8	13732'	13732'

30. TUBING RECORD

31. PERFORATION RECORD (Interval, size and number)

- 14836-14840', 14845-14852', 14857-14862', 14865-14868', 14878-14880'. TOTAL 104 HOLES.
- 14396- 14617'. TOTAL 22 HOLES
- 13806- 13814'.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
14759'	CAP PKR W/20' CEMENT.
14396-14617'	ACIDZ'D W/1000 GALS 7 1/2% MCA
14350'	CAP PKR W/20' CEMENT.

33.*

PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)					WELL STATUS (Producing or shut-in)	
03-01-94		FLOWING					PRODUCING	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO	
3-11-94	4	14/64"	→	8.28	3.251	1.38	34.158	
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)		
2905		→				51.5		

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

SOLD

TEST WITNESSED BY
PHILLIP SMITH

35. LIST OF ATTACHMENTS

LOGS, C-104, DEVIATION REPORT, C-122 MULTIPOINT BACK PRESSURE TEST, WATER ANALYSIS, GAS ANALYSIS.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

Donald Lee Owens

TITLE

REGULATORY ANALYST

DATE

MARCH 16, 1994

*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
SURFACE ROCK & REBED ANHYDRITE	0	860	
SALT	860	1950	
ANHY & SALT	1950	3135	
ANHY	3135	4325	
DOLomite	4325	5800	
DOL & SAND	5800	6911	
LE & SAND	6911	7700	
SHALE & LIME	7700	8750	
SAND & LIME	8750	9125	
SHALE & LIME	9125	9775	
DOL & LIME	9775	10465	
LIME, SHALE & SAND	10465	11450	
SAND & LIME	11450	12050	
SHALE & LIME	12050	12340	
SHALE	12340	12590	
SHALE & LIME	12590	12970	
SHALE	12970	13200	
SHALE	13200	13535	
CHERT, LIME & SHALE	13535	13835	
LIME	13835	13847	
LIME & SHALE	13847	14028	
LIME	14028	14133	
LIME & SHALE	14133	14274	
LIME, SHALE, CHERT	14274	14324	
LIME & SHALE	14324	14387	
LIME, SHALE & SAND	14387	14473	
LIME & SHALE	14473	14647	
LIME, SHALE & SAND	14647	14905	
SAND	14905	14912	
SHALE & SAND	14912	14944	
LIME, SHALE & SAND	14944	15198	
SHALE & LIME	15198	15220	

38.

GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE DEPTH
RUSTLER	930'	+2707'
BELL CANYON SS	4727'	-1090'
CHERRY CANYON SS	5607'	-1970'
MANZANITA MARKER	5933'	-2296'
BRUSHY CANYON SS	6884'	-3247'
BONE SPRING MARKER	8663'	-5026'
AVALLON SAND	8820'	-5193'
1ST BONE SPRING SAND	9815'	-6178'
2ND BONE SPRING SAND	10408'	-6781'
3RD BONE SPRING SAND	11778'	-8151'
STRAM	13450'	-9813'
ATOKA CLASTICS	13620'	-9983'
ATOKA LIME	13842'	-10,205'
MORROW CLASTICS	14212'	-10,575'
ZONNE SAND	14408'	-10,763'
PADUCA SAND	14568'	-10,931'
LOTOS SAND	14710'	-11,073'
TEAL SAND	14834'	-11,197'
LOWER MORROW	14938'	-11,301'