

TEFTELLER, INC.

RESERVOIR ENGINEERING DATA AND PRODUCTIVITY ENHANCEMENT SERVICES
MIDLAND, TEXAS • FARMINGTON, NEW MEXICO • GRAND JUNCTION, COLORADO

CHRONOLOGICAL PRESSURE AND PRODUCTION DATA

1989 DATE	STATUS OF WELL	TIME	ELAPSED TIME HRS. MIN.	DAILY RATE GAS MCF/D	WELLHEAD PRESSURE TBG CSG	BHP @ 5100' PSIG
11-6	Arrived on location, well shut-in	09:30			40 873	
	Instrument @ 5100'	10:45				1048
		11:00				1048
	Open well, Rate #1	11:00	0 00			
	Casing flow	11:15	0 15		870 870	1042
		11:30	0 30		867 866	1039
		11:45	0 45		863 863	1035
		12:00	1 00		861 860	1032
		12:15	1 15		857 857	1030
		12:30	1 30		855 855	1030
		12:45	1 45		850 850	1029
		13:00	2 00	803	851 851	1027
	Change to Rate #2	13:00	0 00			
	Tubing flow	13:15	0 15		610 848	994
		13:30	0 30		685 850	989
		13:45	0 45		660 845	984
		14:00	1 00		689 842	981
		14:15	1 15		700 847	978
		14:30	1 30		680 840	977
		14:45	1 45		690 838	975
		15:00	2 00	1093	690 838	974
	Change to Rate #3	15:00	0 00			
		15:15	0 15		648 830	966
		15:30	0 30		641 829	963
		15:45	0 45		635 828	960
		16:00	1 00		638 823	959
		16:15	1 15		631 820	956
		16:30	1 30		629 819	954
		16:45	1 45		621 818	951
		17:00	2 00	1493	620 817	949

RECEIVED
JAN 02 1990
OIL CON. DIV.
DIST. 3

TEFTELLER, INC.

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MIDLAND, TEXAS • FARMINGTON, NEW MEXICO • GRAND JUNCTION, COLORADO

CHRONOLOGICAL PRESSURE AND PRODUCTION DATA

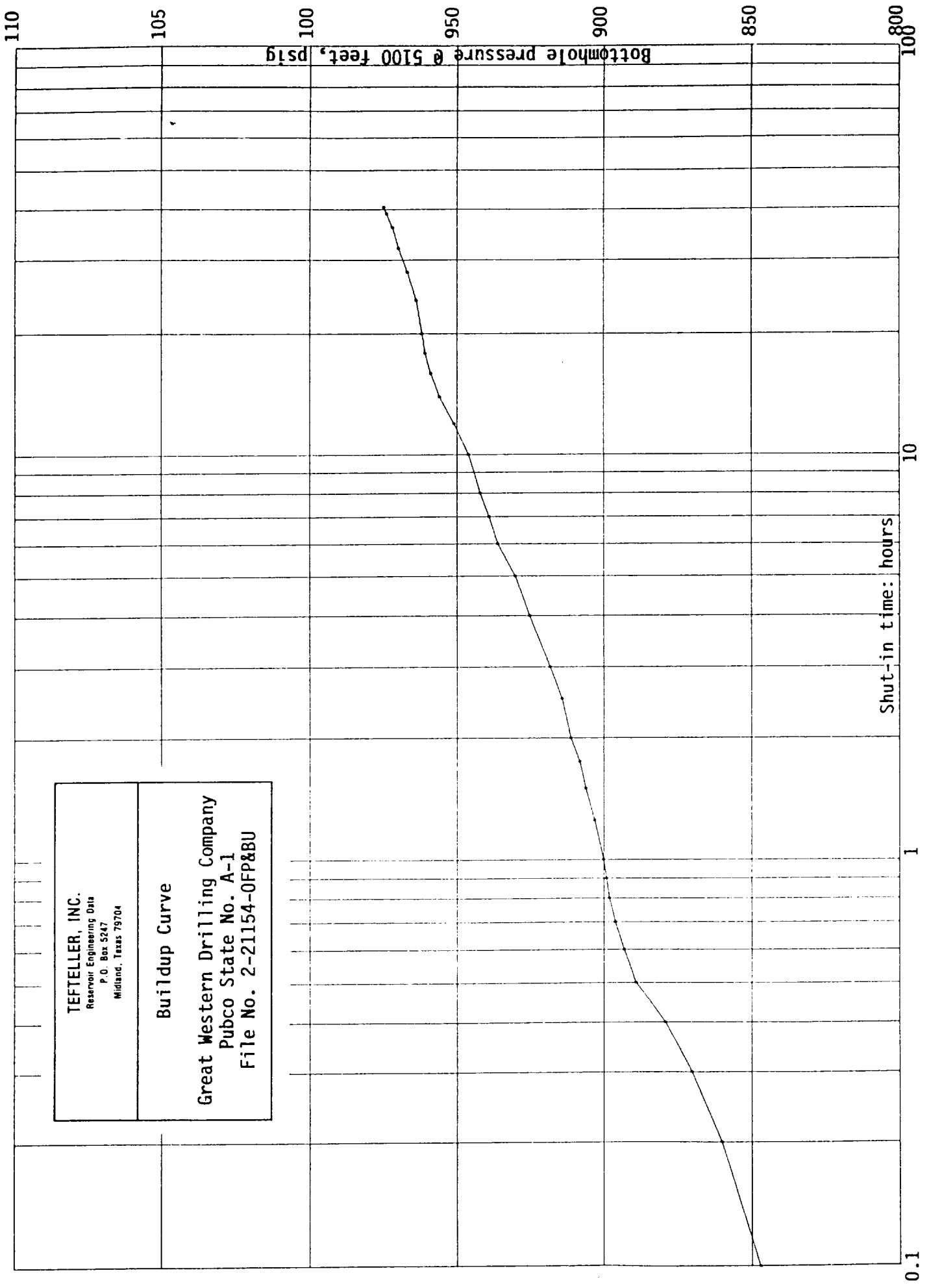
1989 DATE	STATUS OF WELL	TIME	ELAPSED TIME HRS. MIN.	DAILY RATE GAS MCF/D	WELLHEAD PRESSURE TBG CSG	BHP @ 5100' PSIG
11-6	Change to Rate #4	17:00	0 00			
		17:15	0 15		521 805	939
		17:30	0 30		525 801	933
		17:45	0 45		519 799	928
		18:00	1 00		511 796	925
		18:15	1 15		500 793	924
		18:30	1 30		498 791	922
		18:45	1 45		498 790	921
		19:00	2 00	1898	491 789	918
		20:00	3 00			910
		21:00	4 00			902
		22:00	5 00			896
		23:00	6 00			892
11-7		00:00	7 00			886
		01:00	8 00			881
		02:00	9 00			876
		03:00	10 00			872
		05:00	12 00			863
		07:00	14 00			857
		09:00	16 00	1564	435 735	851
		11:00	18 00			843
		13:00	20 00			839
		15:00	22 00			829
	Well produced 123.34 <i>123.34 bbls water + 2.5 bbls condensate</i> bbls. water and condensate in last 24 hour flow period					
		17:00	24 00	1499	411 711	824
	Shut-in for buildup	17:00	0 00			
		17:06	0 06			847
		17:12	0 12			860
		17:18	0 18			870

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CHRONOLOGICAL PRESSURE AND PRODUCTION DATA

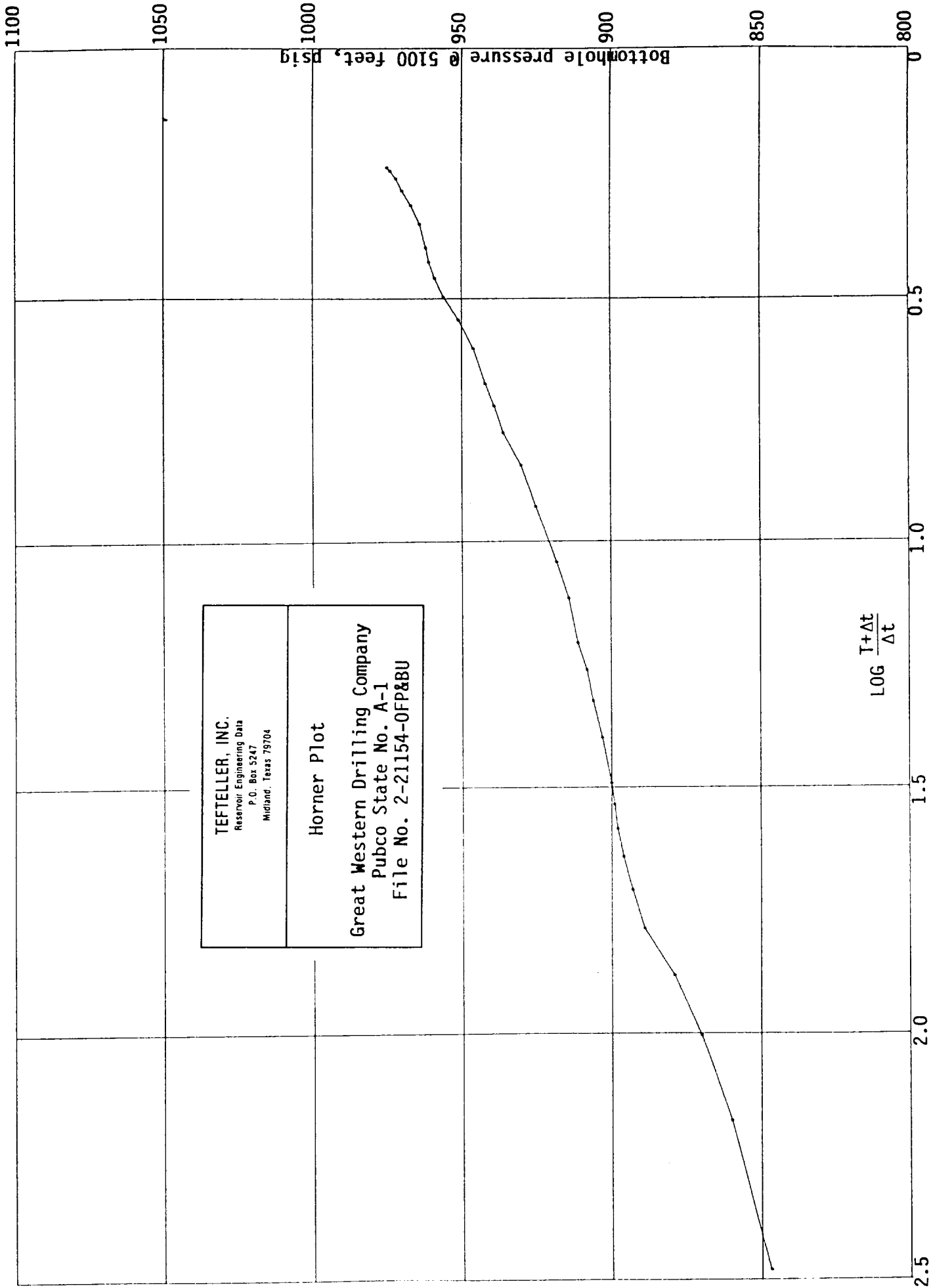
1989 DATE	STATUS OF WELL	TIME	ELAPSED TIME HRS. MIN.	DAILY RATE GAS MCF/D	WELLHEAD PRESSURE TBG CSG	BHP @ 5100' PSIG
11-7		17:24	0 24			879
		17:30	0 30			889
		17:36	0 36			893
		17:42	0 42			896
		17:48	0 48			898
		17:54	0 54			899
		18:00	1 00			900
		18:15	1 15			903
		18:30	1 30			906
		18:45	1 45			908
		19:00	2 00			911
		19:30	2 30			914
		20:00	3 00			918
		21:00	4 00			925
		22:00	5 00			930
		23:00	6 00			936
		00:00	7 00			939
		01:00	8 00			942
		03:00	10 00			946
		05:00	12 00			951
		07:00	14 00			956
		09:00	16 00			959
		11:00	18 00			961
		13:00	20 00			962
		17:00	24 00			964
		21:00	28 00			967
11-8		01:00	32 00			970
		05:00	36 00			972
11-9	Instrument off bottom	08:00	39 00			974
	Gradient traverse	09:30	40 30		122 826	975



TEFTTELLER, INC.
Reservoir Engineering Data
P.O. Box 5247
Midland, Texas 79704

Buildup Curve

Great Western Drilling Company
Pubco State No. A-1
File No. 2-21154-0FP&BU



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Reservoir Engineering Data
P.O. Box 5247
Midland, Texas 79704

Horner Plot

Great Western Drilling Company
Pubco State No. A-1
File No. 2-21154-0FP&BU

Company : Great Western Drilling Company
 Well : Pubco State No. A-1
 County : San Juan
 State : New Mexico
 Date : November 6, 1989

Back Pressure Curve

NO. 340R-133 DIETZGEN GRAPH PAPER
 LOGARITHMIC
 3 CYCLES X 3 CYCLES

DIETZGEN CORPORATION
 IN U.S.A.

$P_f^2 - P_s^2$ (THOUSANDS)

$P_f^2 = 1124$

AOFP : 8236.880 mcf/d

Q ; mcf/d

Adjusted AOFP 3964.414 mcf/d

AOFP : 8236.880 mcf/d

θ : 45°

n : 1.000

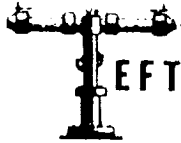
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GAS PRODUCTION DATA

Date of Test	11-6-89	11-6-89	11-6-89	11-6-89	11-7-89
Rate No.	1	2	3	4	2
Stabilization Period (Hours)	2	2	2	2	24
Flow Time Used for Calculations (Hours)	Final	Final	Final	Final	Final
Type of Meter	CFP				
Size Line (Inch)	2	2	2	2	2
Size Orifice (Inch)	1/2	5/8	3/4	7/8	7/8
Flowing Temperature (°F)	73	68	64	60	63
Gas Gravity (Est.)	.650	.650	.650	.650	.650
Temperature Base (°F)	60	60	60	60	60
Pressure Base (Psia)	15.025	15.025	15.025	15.025	15.025
Coefficient (MCF/D)	4.279	6.437	9.453	13.0	13.0
GAS VOLUME (MCF/D)	803	1093	1493	1898	1499
P _f	1060	1060	1060	1060	1060
P _s	1039	986	961	930	836
P _f ² (Thousands)	1124	1124	1124	1124	1124
P _s ² (Thousands)	1080	972	924	865	699
P _f ² - P _s ² (Thousands)	44	152	200	259	425

Note: Rate #1 was casing flow, equalized tubing and casing to unload water from tubing, Rates #2, #3 and #4 were flowing up tubing



EFTELLER, INC.

reservoir engineering data

MIDLAND, TEXAS

Page 8 of 8
File 2-21154-0FP&BU

Company GREAT WESTERN DRILLING COMPANY Lease PUBCO STATE Well No A-1
Field BLANCO MESA VERDE County SAN JUAN State NEW MEXICO
Formation MESA VERDE Test Date NOVEMBER 9, 1989

Status of Well Shut-in 40 1/2 hours

DEPTH Feet	PRESSURE Psig	GRADIENT Psi/Ft.
0	122	
2000	132	0.005
4000	498	0.183
4700	801	0.433
4900	888	0.435
5100	975	0.435

Datum Pressure Psig

WATER
LEVEL
3168'

*5215 PBTD 5180

Elev	Datum	Ft.
Total Depth *	Perf. 4280-5170	Ft.
Tubing 2 3/8	in. to 5127	Ft.
Casing	in. to	Ft.
Casing Press. 826	Tubing Press. 122	
Oil Level	Water Level 3168	
Temperature 155	°F @ 5100	Ft.
Element No.	Range	
Last Test Date		
Pressure Last Test Date		Psig
B.H.P. Change	Psi	

PRESSURE POUNDS PER SQUARE INCH GAUGE

1600

1400

1200

1000

800

600

400

200

0

0

1000

2000

3000

4000

5000

6000

7000

DEPTH FEET