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C-122

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 4-2-74		APR 25 1974	
Company Samedan Oil Corporation		Connection NONE		O. C. C. ARTESIA, OFFICE	
Pool Undesignated		Formation MORROW		Unit 320	
Completion Date 3-4-74		Total Depth 9370'		Plug Back TD 9339'	
Elevation 3556' GL		Farm or Lease Name Amoco Federal		Well No. 1	
Csq. Size 1 1/2	Wt. 11.6	d 4.000	Set At 9370'	Perforations: From 9326' To 9336'	Unit 1
Wq. Size 2 3/8	Wt. 4.7	d 1.995	Set At 9249'	Perforations: From OPEN To ENDED	Unit G
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE		Packer Set At 9218'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 156° 9200'		Mean Annual Temp. °F 60	
Baro. Press. - P _g 13.2		State New Mexico			
L 9331'	H -	G _g 0.663	% CO ₂ 0.95	% N ₂ 0.39	% H ₂ S 0.00
Prover X		Meter Run X		Taps F	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
1.	1 1/2		1.250	750	95	75	1778	72	PACKER		21.0 Hrs
2.	1 1/2		1.250	750	79	74	1824	69			1.5
3.	1 1/2		1.250	570	57	74	1905	68			1.0
4.	1 1/2		1.250	570	45	74	2055	68			1.0
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	7.469	269.27	763.2	0.9859	1.228	1.073	2612.6
2.	7.469	245.54	763.2	0.9868	1.228	1.055	2342.6
3.	7.469	182.33	583.2	0.9868	1.228	1.055	1741.0
4.	7.469	161.20	583.2	0.9868	1.228	1.055	1539.2
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	1.13	535	1.43	0.869	51.099	60.1	0.663	XXXXXXX	674	378
2.	0.87	534	1.43	0.899				XXXXX		
3.	0.87	534	1.43	0.899						
4.	0.87	534	1.43	0.899						
5.										

NO.	P _r ²	P _w ²	P _w ² - P _r ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} =$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n =$
1.	2284.2	5217.6	2933.4	1.766	1.500
2.	2478.2	6141.5	3663.3		
3.	2861.2	8186.5	5325.3		
4.	2946.2	8680.1	5733.9		
5.					

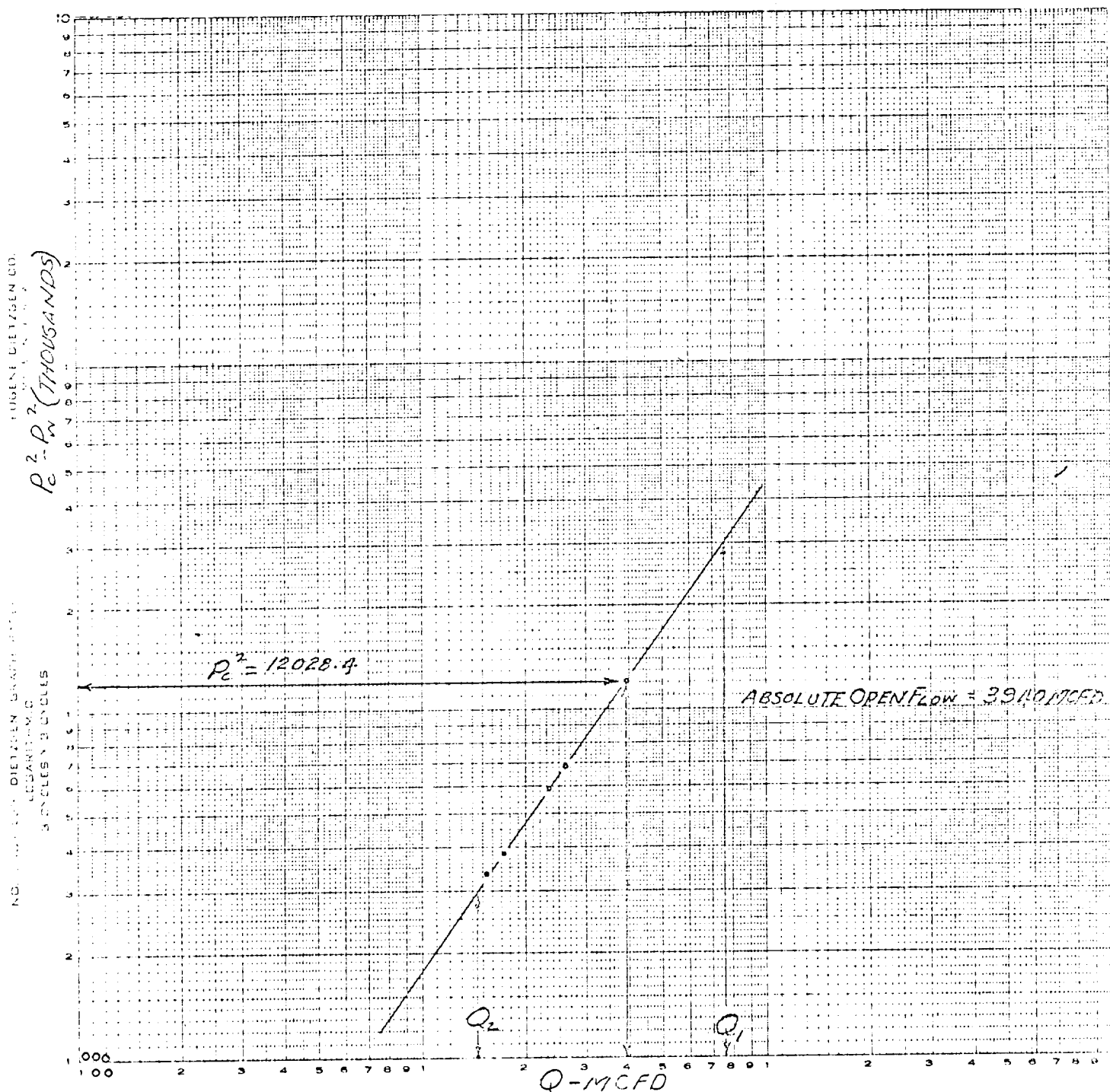
AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 3934.6$

Absolute Open Flow	3934.6	Mcfd @ 15.025	Angle of Slope @	54° 16'
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Remarks: * BHP @ (-5774') 9331' used for pressure calculations

Approved By Commission	Conducted By: Coleman Pet. Eng. Co.	Calculated By: Joe A. Coleman	Checked By: Joe A. Coleman
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COMPANY SANBORN OIL CO. ALBA
 WELL AMOCO FEDERAL. 10.1
 LOCATION Unit G. Sec. 19 16 s 28 e
 COUNTY EDDY, NEW MEXICO
 DATE APRIL 2, 1974



$$\begin{aligned}
 Q_1 &= 7600 \text{ MCFD}; \text{LOG } Q_1 = 3.88081 \\
 Q_2 &= 1450 \text{ MCFD}; \text{LOG } Q_2 = 3.16137 \\
 n &= 0.71944 = 0.719
 \end{aligned}$$



COLEMAN PETROLEUM ENGINEERING COMPANY

PHONE 393-3813

3713 W. MARLAND ST.

P. O. BOX 1829

HOBBS, NEW MEXICO 88240

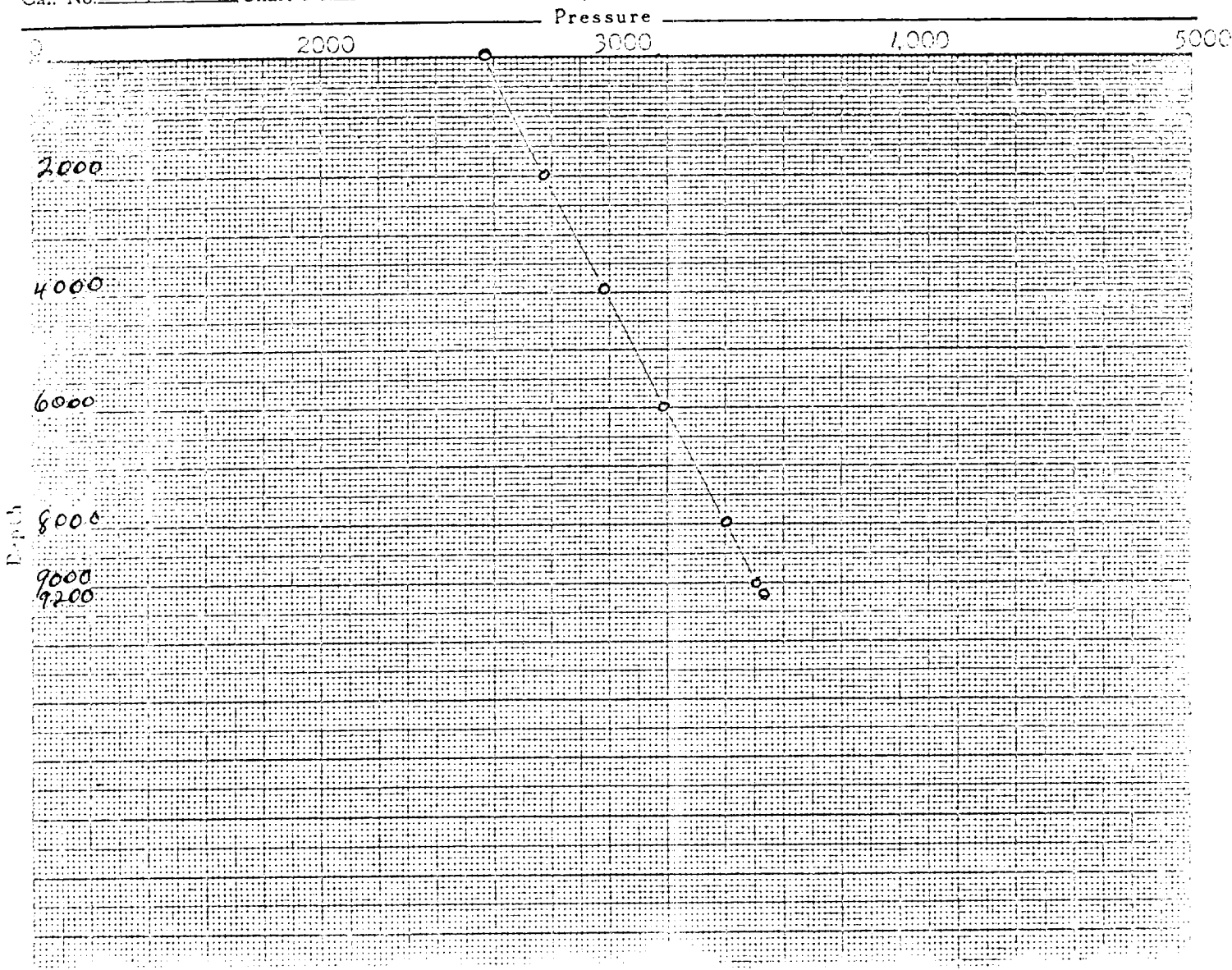
BOTTOM HOLE PRESSURE RECORD

OPERATOR Samedan Oil Corporation
FIELD Undesignated FORMATION Morrow
LEASE Amoco Federal WELL No. 1
COUNTY Eddy STATE New Mexico
DATE 4-1-74 TIME 12:00 N
Status Shut In Test depth 9200'
Time S. 1549.0 Hrs Last test date Initial
Tub Pres. 2576 DWT BHP last test -
Cas. Pres. PMR BHP change -
Elev. 3556' GL Fluid top NONE
Datum (-5775') ** Water top NONE
Temp. @ 1550°F Run by Adkins
Cal. No. 18476N Chart No. 1

Depth	Pressure	Gradient
0	2576	-
2000	2781	.103
4000	2987	.103
6000	3195	.104
8000	3403	.104
9000	3507	.104
9200	3528	.105
9331(-5775)	3542* **	(.105)

* Extrapolated pressure

** Mid point of casing perforations





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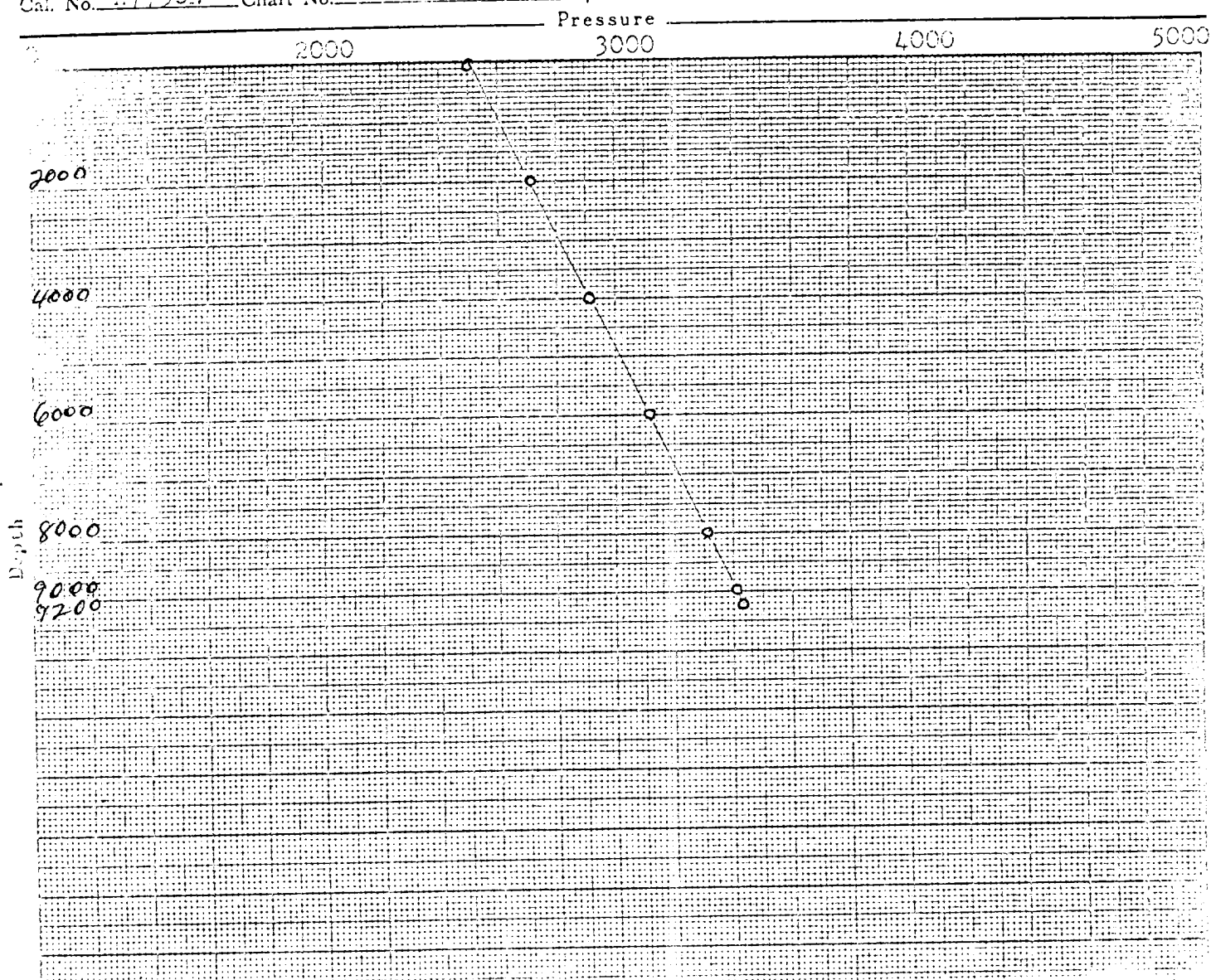
BOTTOM HOLE PRESSURE RECORD

OPERATOR Samedan Oil Corporation
FIELD Undesignated FORMATION Morrow
LEASE Amoco Federal WELL No. 1
COUNTY Eddy STATE New Mexico
DATE 4-2-74 TIME 11:00 Am
Status Shut In Test depth 9200'
Time S. 121.0 Hrs Last test date -
Tub Pres. 2528 DWT BHP last test -
Cas. Pres. PMP BHP change -
Elev. 2556' GL Fluid top NONE
Datum (-2775') ** Water top NONE
Temp. @ 1500F Run by Adkins
Cal. No. 47756N Chart No. 1

Depth	Pressure	Gradient
0	2528	-
2000	2721	.097
4000	2914	.097
6000	3113	.100
8000	3315	.101
9000	3420	.105
9200	3441	.105
9331(-5775)	3455* **	(.105)

* Extrapolated pressure

** Mid point of casing perforations





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BOTTOM HOLE PRESSURE RECORD

OPERATOR Samedan Oil Corporation
FIELD Undesignated FORMATION Morrow
LEASE Amoco Federal WELL No. 1
COUNTY Eddy STATE New Mexico
DATE 1-2-74 TIME 7:00 Pm
Status Flowing On Test depth 9200'
Tub Pres. 2095 DWT Last test date -
Cas. Pres. PKE BHP last test -
Elev. 3556' GL Fluid top Flowing
Datum (-5775')** Water top -
Temp. @ 1560' Run by Adkins
Cal. No. 47756N Chart No. 2

Depth	Pressure	Gradient
0	2095	-
2000	2288	.097
4000	2451	.082
6000	2639	.094
8000	2815	.088
9000	2904	.089
9200	2919	.075
9331(-5775)	2933	(.075)

* Extrapolated Pressure

** Mid point of casing perforations

