

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3/26/79	
Company Adobe Oil & Gas Corporation				Connection None	
Pool Austin				Formation Mississippian	
Completion Date 3/26/79		Total Depth 13821'		Elevation 3969' KB	
Casing Size 5 1/2"		Wellbore Size 4.892"		Perforations: From 13397 To 13460	
Well No. #1		Unit H		Sec. 17	
Tubing Size 2 3/8"		Wellbore Size 4.7"		Perforations: Open Ended	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At 13214'		County Lea	
Producing Thru TBG		Reservoir Temp. °F 200°		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State New Mexico		Meter Run 3	
L 13429		H -		G _g 0.6805	
% CO ₂ 1.362		% N ₂ 1.175		% H ₂ S -	
Prover 13429		Meter Run 3		Type F	

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	
1.	3	8/64	1.500	820	4	92	2915	68			89.00
2.	3	12/64	1.500	840	13	93	2375	72	PACKER		2.00
3.	3	16/64	1.500	840	41	77	2330	75			1.00
4.	3	18/64	1.500	840	63	74	2225	83			1.25
5.							1980				1.00

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	11.13	57.74	833.2	0.9706	1.212	1.071	809.66
2	11.13	105.45	853.2	0.9697	1.212	1.073	1480.07
3	11.13	186.94	853.2	0.9840	1.212	1.082	2684.86
4	11.13	231.93	853.2	0.9868	1.212	1.084	3346.67
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	1.24	552	1.47	0.871	35.46	53.2 @ 60°	0.6805	X X X X X X X X	674	376
2	1.27	553	1.47	0.868				X X X X X		
3	1.27	537	1.43	0.854						
4	1.27	534	1.42	0.851						
5										

NO.	P _r	P _w *	P _w ²	P _r ² - P _w 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		4013.2	16105.8	2171.5	2.234	2.144
2		3844.2	14777.9	3499.4		
3		3432.2	11780.0	6497.3		
4		3177.2	10094.6	8182.7		
5						

Absolute Open Flow 7176		Mcf @ 15.025		Angle of Slope @ 46° 29'		Slope, n 0.949	
Remarks: Produced 12.17 BD in 5.0 hours. 58.42 BD/D							
* Bottom Hole Pressure @ (9460) 13429' used for Pressure Calculations							
Approved By Commission:		Conducted By:		Calculated By:		Checked By:	
		Jannet Services, Inc.		Joe A. Coleman		Joe A. Coleman	

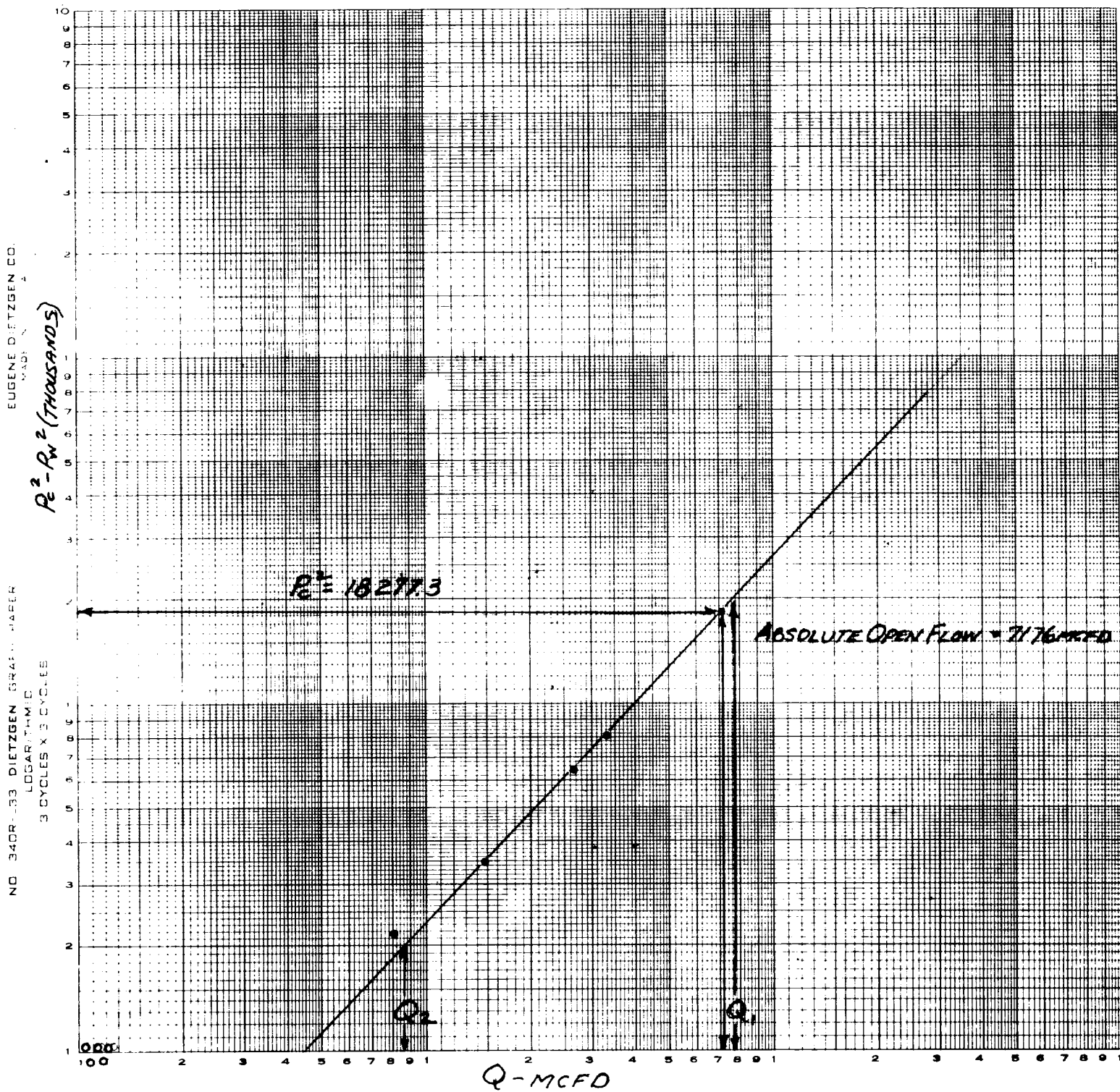
COMPANY: Adobe Oil & Gas Corporation

WELL: Hannah, No. 1

LOCATION: H 17 14s 36e

COUNTY: Lea

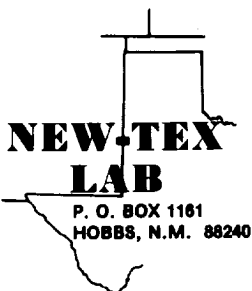
DATE: March 26, 1979



$$Q_1 = 7700 \text{ MCFD}; \log Q_1 = 3.88649$$

$$Q_2 = 865 \text{ MCFD}; \log Q_2 = 2.93702$$

$$\eta = 0.94947 = 0.949$$



No. 1088
Run No. _____
Date of Run 3-27-79
Date Secured 3-26-79

CERTIFICATE OF ANALYSIS

A Sample of Adobe Oil & Gas Hanna #1
Secured from Jarrel Services
At Box 1654 Secured by _____
Hobbs, N. M. 88240 Time _____ Date _____
Sampling conditions Press _____
Temp. _____

FRACTIONAL ANALYSIS

Percentage Composition

	MOL %	LIQ. %	G.P.M.
Carbon Dioxide	1.362		
Air			
Nitrogen	1.175		
Oxygen			
Hydrogen sulfide			
Hydrogen			
Methane	85.431		
Ethane	6.699	1.787	
Propane	2.770	.763	
Butanes			
Iso-Butane	.448	.146	
N-Butane	.687	.216	
Pentanes			
Iso-Pentane	.315	.115	
N-Pentane	.242	.087	
Hexanes	.238	.098	
Heptanes	.633	.269	
Octanes			
TOTAL	100.000	3.481	

Calc. Sp. Gr. 0.6805
Calc. A.P.I. _____
Calc. Vapor Press. _____ PSIA
Sp. Gr. _____
Mol. Wt. 19.77

LIQUID CONTENT (GAL./MCF)

Propane Calc. G.P.M. .763
Butanes Calc. G.P.M. .362
Pentanes Plus. G.P.M. .569
Ethane Calc. G.P.M. 1.787
RVP Gasoline G.P.M. _____

B.T.U./Cu. Ft. @ 14.696 P.S.I.A.
Dry Basis 1156
Wet Basis 1136

Sulfur Analysis by Titration
Gr./100 Cu. Ft. _____
Hydrogen Sulfide _____
Mercaptans _____
Sulfides _____
Residual Sulfur _____
Total Sulfur _____

Run by Jim Tucker Checked by Deane Simpson Approved by *Deane Simpson*

Additional Data and Remarks

RECEIVED

APR 11 1979

OIL CONSERVATION COMM.
HOBBS, N. M.

JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

COMPANY: Adobe Oil & Gas Corporation

WELL: Hannah, No. 1

FIELD: Austin Mississippian

CHRONOLOGICAL PRESSURE DATA

DATE	STATUS OF WELL	TIME	ELAPSED TIME		SURFACE PRESSURE		BHP @ (-9460)
			HRS.	MIN.	TBG	CSG	13429' PSIG
1979							
3/22	Shut in. Run Static						
	Gradient & Set Bombs						
	@ 13240'	12:30 PM	3	00	2333	PKR	3497
	Opened Well	1:00	3	30	-	-	3516
	Flowing	2:00	1	00	-	-	2906
	Shut in	3:00	2	00	1500	-	2612
	"	3:15	0	15	-	-	3029
	"	3:30	0	30	-	-	3184
	"	4:00	1	00	-	-	3258
	"	5:00	2	00	-	-	3429
	"	6:00	3	00	-	-	3504
	"	7:00	4	00	-	-	3552
	"	8:00	5	00	-	-	3587
	"	9:00	6	00	-	-	3610
	"	10:00	7	00	-	-	3639
	"	11:00	8	00	-	-	3658
	"	12:00 MN	9	00	-	-	3681
3/23	"	1:00 AM	10	00	-	-	3697
	"	2:00	11	00	-	-	3713
	"	3:00	12	00	-	-	3729
	"	4:00	13	00	-	-	3752
	"	5:00	14	00	-	-	3765
	"	6:00	15	00	-	-	3775
	"	7:00	16	00	-	-	3791
	"	8:00	17	00	-	-	3800
	"	9:00	18	00	-	-	3816
	"	10:00	19	00	-	-	3829
	"	11:00	20	00	-	-	3836
	"	12:00 N	21	00	-	-	3842
	"	1:00 PM	22	00	-	-	3855
	"	2:00	23	00	-	-	3868
	"	3:00	24	00	-	-	3878
	"	4:00	25	00	-	-	3887
	"	5:00	26	00	-	-	3900
	"	6:00	27	00	-	-	3907
	"	7:00	28	00	-	-	3920
	"	8:00	29	00	-	-	3929
	"	9:00	30	00	-	-	3936
	"	10:00	31	00	-	-	3945
	"	11:00	32	00	-	-	3958
	"	12:00 MN	33	00	-	-	3965

WELL: Hannah, No. 1PAGE: 2

DATE	STATUS OF WELL	TIME	ELAPSED TIME		SURFACE PRESSURE		BHP @ (-9460)
			HRS.	MIN.	TBG	CSG	
3/24	Shut in	1:00 AM	34	00	-	-	3975
	"	2:00	35	00	-	-	3984
	"	3:00	36	00	-	-	3997
	"	4:00	37	00	-	-	4007
	"	5:00	38	00	-	-	4013
	"	6:00	39	00	-	-	4023
	"	7:00	40	00	-	-	4032
	"	8:00	41	00	-	-	4039
	"	9:00	42	00	-	-	4048
	"	10:00	43	00	-	-	4058
	"	11:00	44	00	-	-	4064
	"	12:00 N	45	00	-	-	4071
	"	1:00 PM	46	00	-	-	4080
	"	2:00	47	00	-	-	4087
	"	3:00	48	00	-	-	4093
	"	4:00	49	00	-	-	4099
	"	5:00	50	00	-	-	4106
	"	6:00	51	00	-	-	4112
	"	7:00	52	00	-	-	4119
	"	8:00	53	00	-	-	4125
	"	9:00	54	00	-	-	4131
	"	10:00	55	00	-	-	4138
	"	11:00	56	00	-	-	4144
	"	12:00 MN	57	00	-	-	4147
3/25	"	1:00 AM	58	00	-	-	4154
	"	2:00	59	00	-	-	4160
	"	3:00	60	00	-	-	4163
	"	4:00	61	00	-	-	4170
	"	5:00	62	00	-	-	4176
	"	6:00	63	00	-	-	4179
	"	7:00	64	00	-	-	4186
	"	8:00	65	00	-	-	4192
	"	9:00	66	00	-	-	4198
	"	10:00	67	00	-	-	4205
	"	11:00	68	00	-	-	4208
	"	12:00 N	69	00	-	-	4211
	"	1:00 PM	70	00	-	-	4214
	"	2:00	71	00	-	-	4218
	"	3:00	72	00	-	-	4224
	"	4:00	73	00	-	-	4230
	"	5:00	74	00	-	-	4234
	"	6:00	75	00	-	-	4237
	"	7:00	76	00	-	-	4240
	"	8:00	77	00	-	-	4243
	"	9:00	78	00	-	-	4246
	"	10:00	79	00	-	-	4250
	"	11:00	80	00	-	-	4250
	"	12:00 MN	81	00	-	-	4253
3/26	"	1:00 AM	82	00	-	-	4253
	"	2:00	83	00	-	-	4256
	"	3:00	84	00	-	-	4256
	"	4:00	85	00	-	-	4259
	"	5:00	86	00	-	-	4259
	"	6:00	87	00	-	-	4259

WELL: Hannah, No. 1

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DATE	STATUS OF WELL	TIME	ELAPSED TIME		SURFACE PRESSURE		BHP @ (-9460)
			HRS.	MIN.	TBG	CSG	13429' PSIG
	Shut in	7:00	88	00	-	-	4262
	Started 1st Rate	7:45	88	45	2915 DWT	MCF/D	4262
	Finished 1st Rate	9:45	2	00	2375 DWT	809.66	4000
	& Started 2nd Rate						
	Finished 2nd Rate	10:45	1	00	2330 DWT	1480.07	3811
	& Started 3rd Rate						
	Finished 3rd Rate	12:00 N	1	15	2225 DWT	2684.86	3419
	& Started 4th Rate						
	Finished 4th Rate	1:00 PM	1	00	1980 DWT	3346.67	3164
	Shut in						
	Fished Bombs	2:00					

JANIEL SERVICES, INC.

POST OFFICE BOX 1654

PHONE 505 393-5396

HOBBS, NEW MEXICO 88240

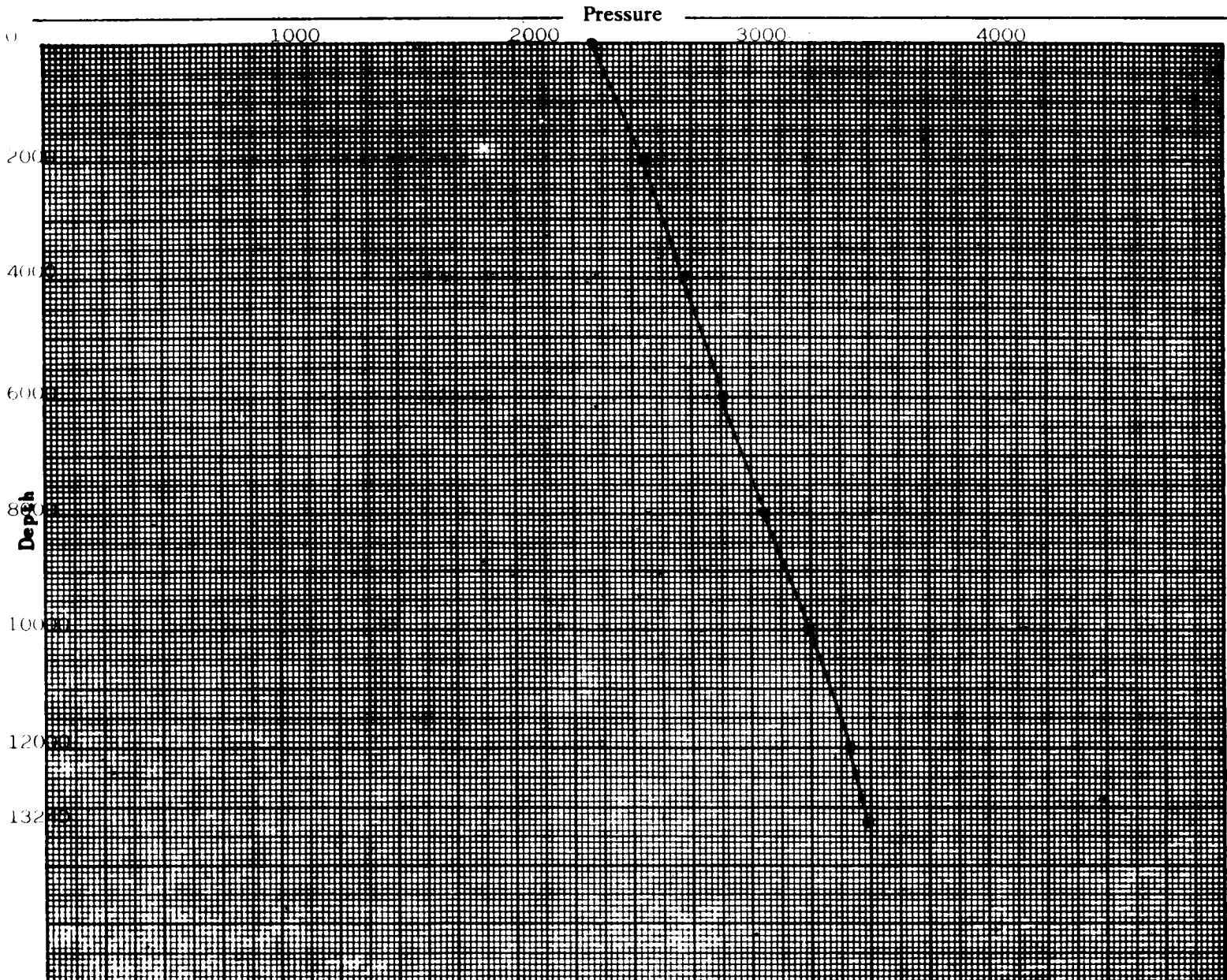
OPERATOR Adobe Oil & Gas Corporation
FIELD Austin
FORMATION Mississippian
LEASE Hannah WELL #1
COUNTY Lea STATE New Mexico
DATE March 22, 1979 TIME 11:45 AM
Status Shut in
Test Depth 13240'
Time S. I. 3.0 hrs. Last test date -
Tub Pres. 2333 BHP last test -
Cas. Pres. PKR BHP change -
Elev. 3969'KB Fluid top Flowing
Datum (-9460) ** Water top -
Temp. @ 200' F Run by JSI #21
Cal. No. A 2604 N Chart No. 1

BOTTOM HOLE PRESSURE RECORD

Depth	Pressure	Gradient
0	2333	-
2000	2547	.107
4000	2721	.087
6000	2889	.084
8000	3061	.086
10000	3245	.092
12000	3421	.088
13240	3487	.053
13429 (-9460)	3497 * **	(.053)

* EXTRAPOLATED PRESSURE

** MIDPOINT OF CASING PERFORATIONS



NO. 340P L310 DIETZGEN GRAPH PAPER
 SEMI-LOGARITHMIC
 3 CYCLES X 10 DIVISIONS PER INCH

JARREL SERVICES, INC.

