

Type Test ☒ Initial		Date 6-23-81		N M 19209	
Company Florida Exploration Co.				Form No.	
Pool Wildcat		Formation Atoka <i>Marrero</i>		Unit SRM-1538	
Completion Date 5-09-81		Total Depth 19,170'		Fluid Level 16,648'	
		Elevation 3225' DF		Farm or Lease Name Reno Com.	
Csg. Size See 9-330	Wt. 2 7/8	d 14519	Set At 14519	Perforations: From 15246 To 15398	Well No. 1
Type Well - Single - Brodenhead - G.G. or G.O. Multiple Single				Packer Set At 14490	County Lea
Producing Thru Tubing		Reservoir Temp. °F 188 @ 14422	Mean Annual Temp. °F 70	Baro. Press. - P _a 13.2	State New Mexico
L 14519	H 15322	G _g 0.586	% CO ₂ 0.41	% N ₂ 0.28	% H ₂ S Nil
Prover				Meter Run X	Taps Flange

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.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI	140 ¹ / ₂ hours										
1.	4.026 X 1.500			580	1.0	74	7462	70	Pkr.		60 mins.
2.	4.026 X 1.500			600	5.0	42	7200	70	Pkr.		60 mins.
3.	4.026 X 1.500			600	23.0	78	6580	70	Pkr.		60 mins.
4.	4.026 X 1.500			600	80.0	62	5250	70	Pkr.		60 mins.
5.							2375	70	Pkr.		

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	10.84	24.36	593.2	0.9868	1.3063	1.051	357.8
2	10.84	55.37	613.2	1.0178	1.3063	1.057	843.5
3	10.84	118.76	613.2	0.9831	1.3063	1.048	1732.6
4	10.84	221.49	613.2	0.9981	1.3063	1.054	3299.4
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	86.574	Mcf/bbl.
1	USED SIMPLIFIED				A.P.I. Gravity of Liquid Hydrocarbons	53.3	Deg.
2	SUPERCOMPRESSIBILITY				Specific Gravity Separator Gas	0.586	X X X X X X X X X
3	TABLES				Specific Gravity Flowing Fluid	X X X X X	
4					Critical Pressure	672	P.S.I.A.
5					Critical Temperature	350	R

P _f 9449.2	P _f 89287		
NO.	P _f ²	P _s ²	P _f ² - P _s ²
1	9154.2	83799	5488
2	8461.2	71592	17695
3	6905.2	47682	41605
4	3816.2	14563	74724
5			

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.194891$$

$$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.194891$$

$$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3942.422$$

$$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3942.422$$

Absolute Open Flow	3942.422	Mcf @ 15.025	Angle of Slope	45.0°	Slope, n	1.000
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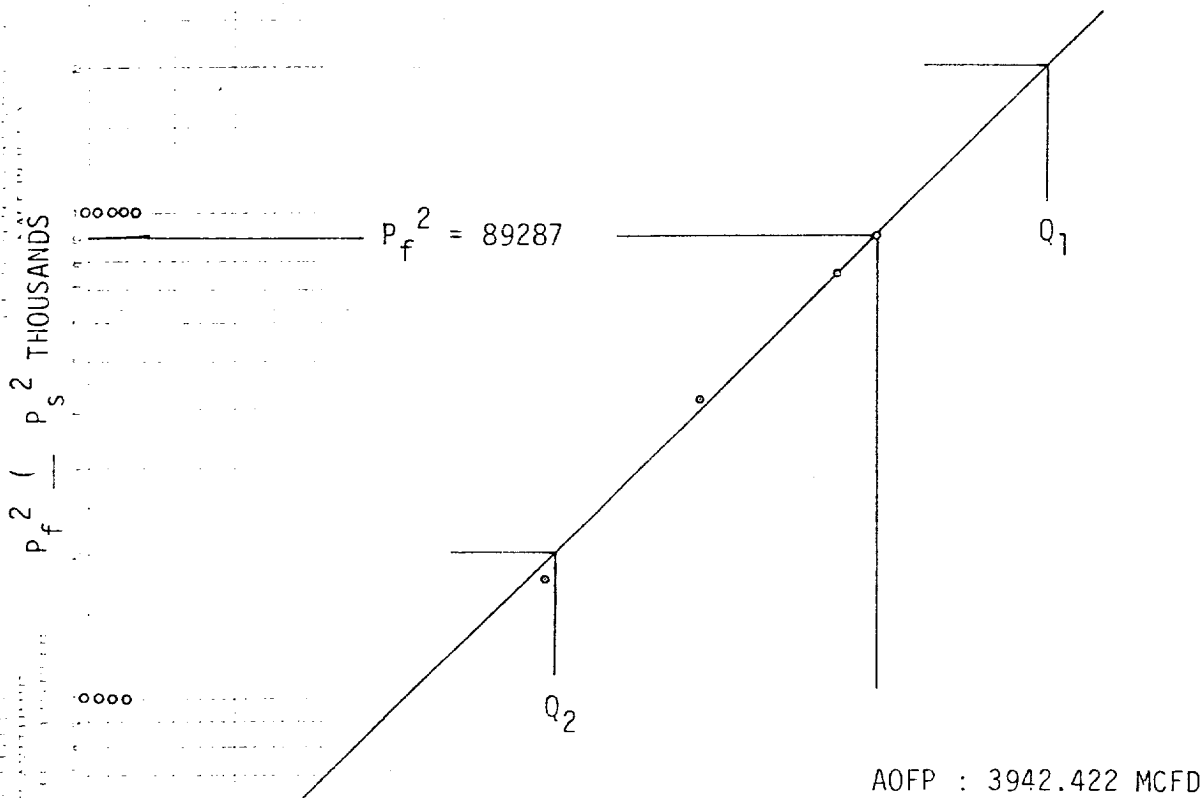
Remarks: BHP measured with Amerada RPG-3 Guage No. 32708, 0-11000 P.S.I. Range

Original Signed By Les Clements	Conducted By: TEFTELLER, INC.	Calculated By: D. A. Warren, Jr.	Checked By:
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Oil & Gas Insp.

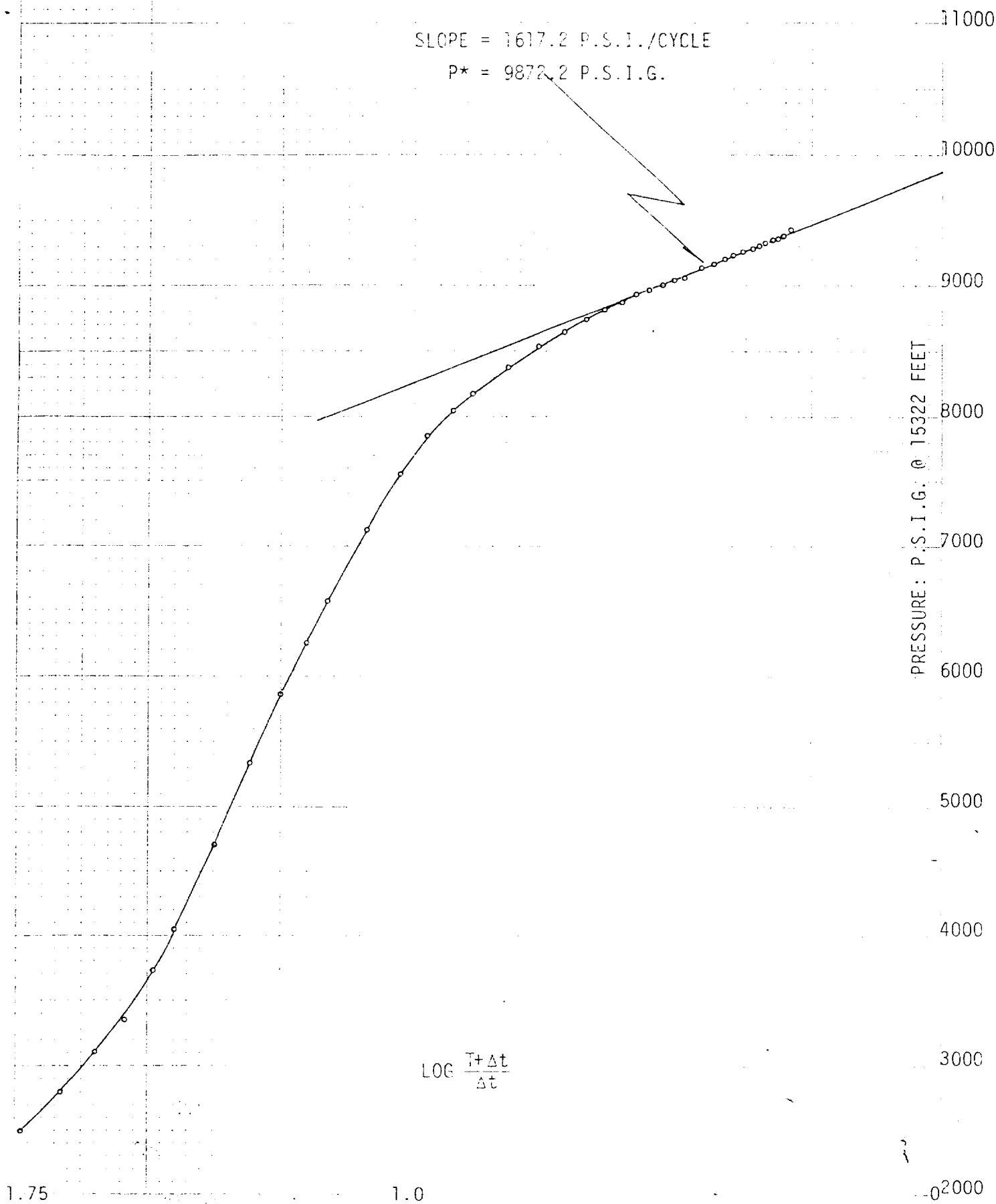
Company : FLOREDA EXPLORATION COMPANY
 Well : Re Comm. No. 1
 Field : Wildcat
 County : Lea
 State : New Mexico
 Date : June 23, 1981

BACK PRESSURE CURVE



$Q_1 = 8830.898$; $\text{LOG } Q_1 = 3.946005$
 $Q_2 = 883.089$; $\text{LOG } Q_2 = 2.946005$
 $n = 1.000000$
 $\phi = 45.0^\circ$

SLOPE = 1617.2 P.S.I./CYCLE
 $P^* = 9872.2$ P.S.I.G.

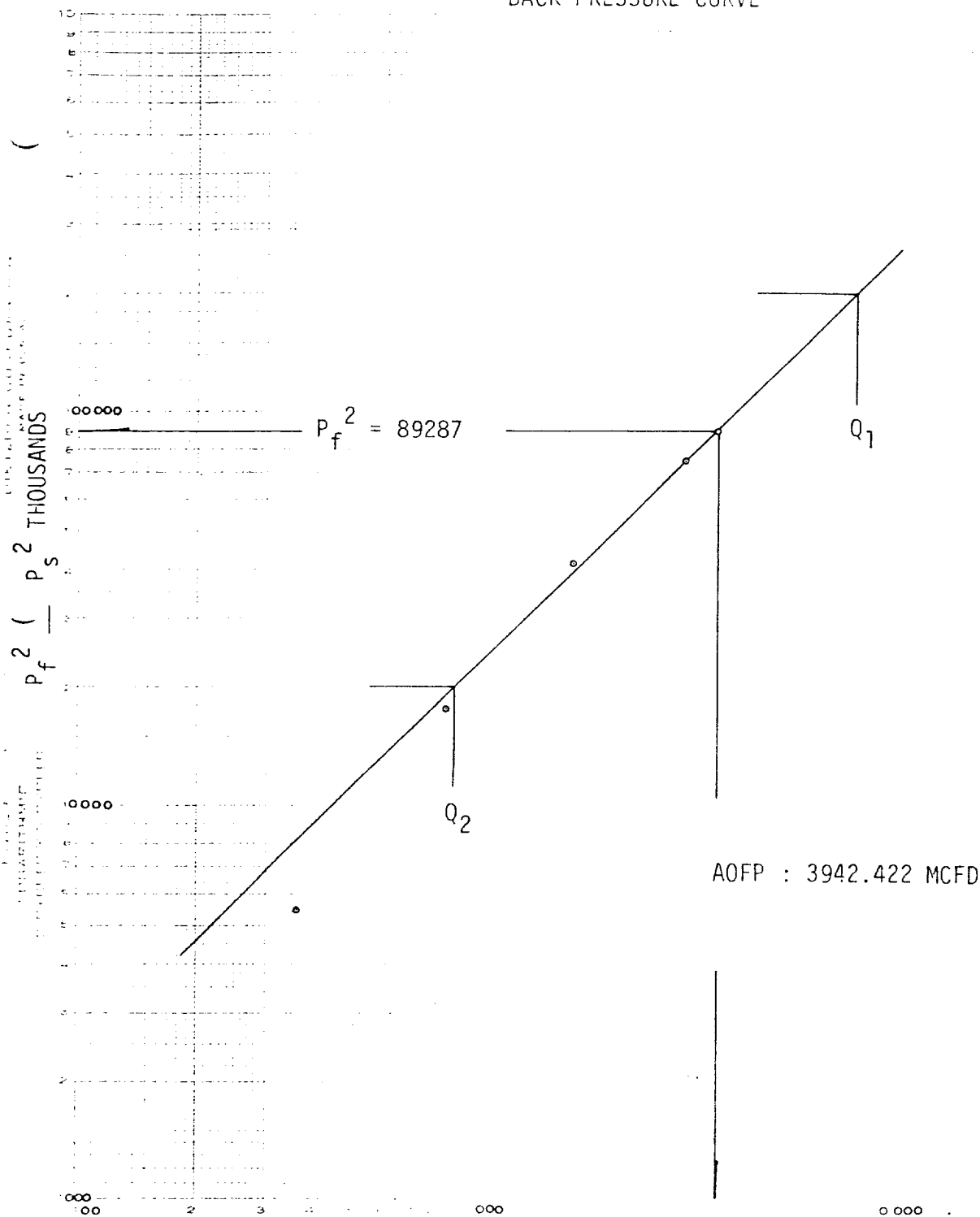


ASSUMPTIONS:

1) Gas Specific Gravity (S_{pGr}) =	0.586
2) Reservoir Temperature =	200 °F / 660 °R
3) Gas Saturation (S_g) =	67%
4) Water Saturation (S_w) =	33%
5) Pressure @ Standard Conditions (P_s) =	14.65 P.S.I.A.
6) Reservoir Pressure (P^*) =	9872 P.S.I.G.
7) Final Flowing Pressure (P_{wf}) =	742 P.S.I.G.
8) Average Pressure Drawdown (P_a) =	5307 P.S.I.G.
9) Psuedo Critical Pressure (P_c) =	672 P.S.I.A.
10) Psuedo Critical Temperature (T_c) =	352 °F. ABS.
11) Psuedo Reduced Pressure (P_r) =	7.919
12) Psuedo Reduced Temperature (T_r) =	1.875
13) Gas Deviation Factor (Z) =	1.040
14) Gas Viscosity (μ) =	0.0239 cps.
15) Gas Formation Volume Factor (B_g) =	3.633×10^{-3} CF/SCF
16) Gas Compressibility (C_g) =	1.265×10^{-4} P.S.I. ⁻¹
17) Water Compressibility (C_w) =	2.95×10^{-6} P.S.I. ⁻¹
18) Rock Compressibility (C_f) =	6.00×10^{-6} P.S.I. ⁻¹
19) Total Compressibility (C_t) =	9.173×10^{-5} P.S.I. ⁻¹
20) Test Production Rate (Q_g) =	702 MSCF/DAY
21) Equivalent Liquid Rate of Gas Rate (Q_{RBPD}) =	454.21 RBPD
22) Porosity (ϕ) =	6.8%
23) Net Zone Thickness (h) =	17 FEET
24) Wellbore Radius (r_w) =	2.389 INCHES
25) Psuedo Flow Time (T_D) =	135 HOURS
26) Shut in Time (Δt) =	140.5 HOURS
27) Slope of Build up (Horner) M_1 =	1617.2 P.S.I./CYCLE
28) Recorded Depth (RD) =	15322 FEET

Company : Hoya Exploration Company
 Well : Ref Comm. No. 1
 Field : Wildcat
 County : Lea
 State : New Mexico
 Date : June 23, 1981

BACK PRESSURE CURVE



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Page 11 of 14
File 3-12087-BU&OFF

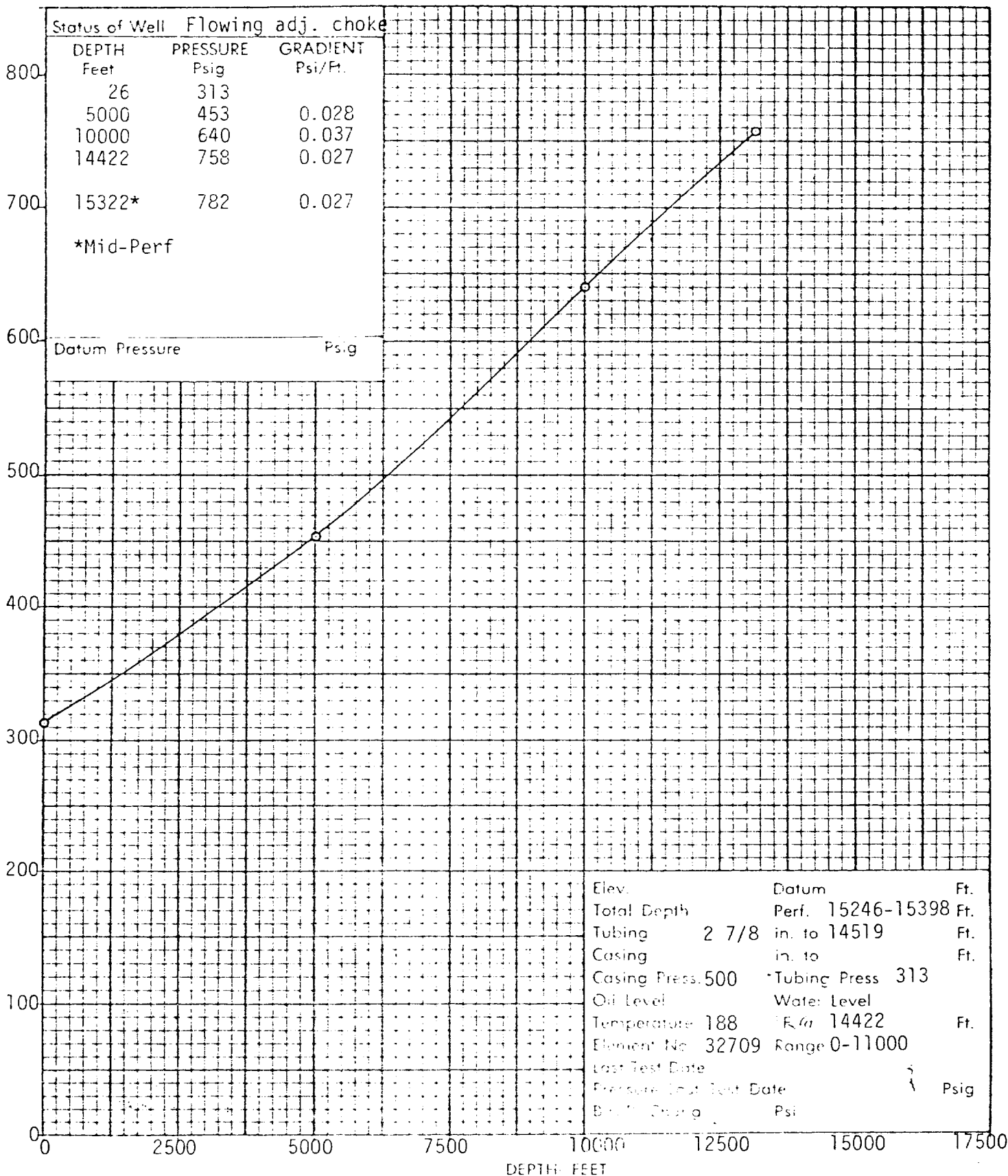
Company FLORIDA EXPLORATION COMPANY Lease RENO COM. Well No. 1
Field WILDCAT County LEA State NEW MEXICO
Formation ATOKA Test Date JUNE 17, 1981

Status of Well Flowing adj. choke

DEPTH Feet	PRESSURE Psig	GRADIENT Psi/Ft.
26	313	
5000	453	0.028
10000	640	0.037
14422	758	0.027
15322*	782	0.027

*Mid-Perf

Datum Pressure Psig



SOUTHWESTERN LABORATORIES

1700 West University Ave., P. O. Box 2155

MIDLAND, TEXAS 79701

(915) 683-3348

FRACTIONAL ANALYSIS REPORT

SAMPLE MARKED Reno Comm., No. 1 DATE RECEIVED 6-24-81
Meter Run, 600 psi @ 42° F. FILE NO C-1902-G
 SAMPLE FROM Florida Exploration LAB NO 45457
 DATE OF RUN 6-24-81 DATE SECURED 6-23-81
 SECURED BY Tefsteller, Inc.

COMPONENT	MOL. %	G. P. M.	LIQUID VOL. %
Oxygen			
Nitrogen	0.28		
Carbon Dioxide	0.41		
Methane	94.64		
Ethane	3.76	1.003	
Propane	0.75	0.206	
I-Butane	0.08	0.026	
N-Butane	0.08	0.025	
I-Pentane	0.00	---	
N-Pentane	0.00	---	
Hexanes	0.00	---	
Heptanes & Heavier			
Hydrogen Sulfide *	None Det.		
Helium			
Hydrogen			
Carbon Monoxide			
TOTALS	100.00	1.260	

CONDENSATE VALUES, G.P.M.

Propane

Butane

Gasoline

HEATING VALUE, B.T.U. Per Cu. Ft.*

Calculated from % Composition

Calculated water saturated

SULPHUR CONTENT, Grains Per 100 Cu. Ft.*

Hydrogen Sulfide

Mercaptans

SPECIFIC GRAVITY*

Calculated from % Composition

*14.696 lbs./sq. in., 60° F

REMARKS *Determined on laboratory sample.

Propane + GPM --- 0.257

COPIES: 3cc Florida Exploration
 1cc Tefsteller

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Larry M. Burch