NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 1-7-83	
Company: PETRO-LEWIS		Connection: Llano Inc.			
Pool: Osudo, West (Morrow)		Formation: Morrow		Unit: S. E. Lea Unit	
Completion Date: 9/23/82	Total Depth: 13456'		Plug Back TD: 13400'	Elevation: 3665.4'	Farm or Lease Name:
Csg. Size: 4.5 / Wt.: 13.5 / d: 3.920 / Set At: 13456			Perforations: From 12,961 To 13,192		Well No.: 3
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: 1.995 / Set At: 12,950			Perforations: From O.E. To		Unit: G / Sec.: 26 / Twp.: 20S / Rge.: 35E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 12,920		County: Lea
Producing Thru: Tubing	Reservoir Temp. °F: 172 @ 12,920	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2		State: New Mexico
L: 12,950 / H: / Gg: .613	% CO_2:	% N_2:	% H_2S:	Prover:	Meter Run: X / Taps:

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI					4866	54	Pkr		
1.	3.068 x 2.000	520	20	50	3750	58			1 Hr.
2.	3.068 x 2.000	520	78	50	2550	60			1 Hr.
3.	3.068 x 2.000	520	60	52	2910	60			1 Hr.
4.	3.068 x 2.000	530	72	52	2605	59			1 Hr.
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, Fpv	Rate of Flow Q, Mcfd
1	21.32	103.267	533.2	1.010	1.277	1.053	2990
2	21.32	203.935	533.2	1.010	1.277	1.053	5905
3	21.32	178.863	533.2	1.008	1.277	1.053	5169
4	21.32	197.763	543.2	1.008	1.277	1.054	5720
5							

NO.	P_t	Temp. °R	T_r	Z
1				
2				
3				
4				
5				

Gas Liquid Hydrocarbon Ratio: 17.7 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 48 Deg.
Specific Gravity Separator Gas: .613 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: P.S.I.A. P.S.I.A.
Critical Temperature: R R

P_f 6589 P_f^2 43,418

NO	P_t^2	P_s	P_s^2	$P_f^2 - P_s^2$
1	3763.2	5486	30,098	13,320
2	2563.2	4482	20,090	23,328
3	2923.2	4453	19,831	23,587
4	2618.2	4137	17,116	26,302
5				

(1) $\frac{P_f^2}{P_f^2 - P_s^2} = 1.6507$ (2) $\left[\frac{P_f^2}{P_f^2 - P_s^2}\right]^n = 1,6367$

AOF = Q $\left[\frac{P_f^2}{P_f^2 - P_s^2}\right]^n = 9362$

Absolute Open Flow: 9500 Mcfd @ 15.025 Angle of Slope θ: 45.5 Slope, n: .983

Remarks: Bottom Hole Pressures were recorded by Amerada RPG-3 #36078 set @ 12,920

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
ORIGINAL SIGNED BY EDDIE SEAY OIL & GAS INSPECTOR	Hyden, Burris	B. Fetherlin	