

N 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 11-22-78			
Company Atlantic Richfield Co.				Connection El Paso Natural Gas Co.					
Pool Undesignated				Formation Ellenburger				Unit	
Completion Date 11-18-78		Total Depth 15500		Plug Back TD 15415		Elevation 3525. Gr.		Farm or Lease Name Langley Getty Com.	
Csg. Size 7	Wt. 29#	d 6.184	Set At 15500	Perforations: From 15157 To 15358				Well No. 1	
Tbg. Size 2.375	Wt. 4.7	d 1.945	Set At 14925	Perforations: From Open To Ended				Unit Sec. Twp. Rge. N 21 22S 36E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single (See Remarks)						Packer Set At 14925		County Lea	
Producing Thru Tbg.		Reservoir Temp. °F 199 @ 15258		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 15258	H 15258	Gg 0.667	% CO ₂ 0.21	% N ₂ 1.37	% H ₂ S ---	Prover ---	Meter Run 4	Taps Flg	

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							3595		Pkr	---	40 hrs	
1.	4	x	2.000	500.0	7.84	0	76	3493	71		1 hr	
2.	4	x	2.000	505.0	7.84	9.61	79	3410	74		1 hr	
3.	4	x	2.000	518.0	25.0	26.01	67	3122	74		1 hr	
4.	4	x	2.000	530.0	38.44	56.25	64	2772	75		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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	19.81	63.43	0	513.2	0.9850	1.224	1586
2	19.81	63.74	70.57	518.2	0.9822	1.224	1588+1758=3346
3	19.81	115.24	117.54	531.2	0.9933	1.224	2920+2978=5898
4	19.81	144.50	174.80	543.2	0.9962	1.224	3679+4450=8129
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 11.703 Mcf/bbl.
1	0.76	536	1.44	0.913	A.P.I. Gravity of Liquid Hydrocarbons 57.0 Deg.
2	0.77	539	1.45	0.914	Specific Gravity Separator Gas 0.667 XXXXXXXXXX
3	0.79	527	1.42	0.904	Specific Gravity Flowing Fluid XXXXXX 0.901
4	0.81	524	1.41	0.900	Critical Pressure 671 P.S.I.A. 662 P.S.I.A.
5					Critical Temperature 371 R 457 R

P _c 5798.2 P _c ² 33619.1						
NO	P _i ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 14.0601$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 6.4296$
1		5775.2	33352.9	266.2		
2		5740.2	32949.9	669.2		
3		5672.2	32173.9	1445.2		
4		5588.2	31228.0	2391.1		
5						

Absolute Open Flow 52266 Mcfd @ 15.025			Angle of Slope @ 54° 50'	Slope, n 0.704
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Remarks: Well is now a single completion. We propose to dual complete with the Devonian Gas Zone. BHP is recorded at mid point of perforations. Produced 16.9 BDPH Gravity 57°API. Used two meters.	
Approved By Commission: <i>Leslie H. Clements</i>	Conducted By: Reggie Reston (El Paso)
Calculated By: R. Dailey	Checked By: <i>L.C. Hudry</i>