

N MEXICO OIL CONSERVATION COMM ON
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 06/12/79			
Company ARCO Oil & Gas Company				Connection El Paso Natural Gas Company					
Pool Langley Devonian Gas				Formation Devonian				Unit	
Completion Date 06/02/79		Total Depth 16,302		Plug Back TD 14,673		Elevation 3527.9		Farm or Lease Name Langley Greer Com	
Csq. Size 7"	Wt. 29	d 6.184	Set At 16,302	Perforations: From 12,381 To 12,606			Well No. 1		
Thq. Size 2-7/8"	Wt. 6.5	d 2.441	Set At 12,340	Perforations: From Open To			Unit Sec. Twp. Rge. F 21 22S 36E		
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single						Packer Set At 12,310		County Lea	
Producing Thru Tubing		Reservoir Temp. °F 173 @ 12494		Mean Annual Temp. °F 60°		Baro. Press. - P _o 13.2		State New Mexico	
L 12494	H 12494	G _g .751	% CO ₂ 2.33	% N ₂ 2.71	% H ₂ S .77	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							2945				88 hrs
1.	4" x 2.25			540	4.0	61	2765	78	Pkr		1 hr
2.	4" x 2.25			540	9.61	69	2689	80	Pkr		1 hr
3.	4" x 2.25			540	15.21	70	2606	82	Pkr		1 hr
4.	4" x 2.25			540	25.00	61	2495	82	Pkr		1 hr
5.	4" x 2.25			545	37.82	58	2387	81	Pkr		1 hr

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	25.64	47.04	553.2	.9990	1.154	1.071	1,489
2	25.64	72.91	553.2	.9915	1.154	1.068	2,285
3	25.64	91.73	553.2	.9905	1.154	1.066	2,866
4	25.64	117.60	553.2	.9990	1.154	1.071	3,723
5	25.64	145.30	558.2	1.002	1.154	1.073	4,622

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 12.243 Mcf/bbl.	A.P.I. Gravity of Liquid Hydrocarbons 53.6 Deg.	Specific Gravity Separator Gas .751	Specific Gravity Flowing Fluid X X X X X	Critical Pressure 674 P.S.I.A.	Critical Temperature 394 R
1	.82	521	1.32	.872				X X X X X X X X	666 P.S.I.A.	469 R
2	.82	529	1.34	.877						
3	.82	530	1.35	.880						
4	.82	521	1.32	.872						
5	.83	518	1.31	.868						

P _r 5095.2		P _c 25961.1	
NO.	P _t ²	P _w	P _w ²
1		4980.2	24802.4
2		4836.2	23388.8
3		4661.2	21754.8
4		4746.2	22526.4
5		4896.2	23972.8

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

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

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

Will retest in two to four weeks.

Absolute Open Flow _____ Mcfd @ 15.025		Angle of Slope θ _____		Slope, n _____	
Remarks: Well made 51 barrels of fluid during test. BHP is recorded at midpoint of perforations. 12,494					
Approved By Commission:		Conducted By: J. Cogburn		Checked By: R. Dailey	
				L. C. Hudry	

RECEIVED

JUN 15 1979

OIL CONSERVATION COMM.
HOBBBS, N. M.