

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 11-14-78		NOV 28 1978	
Company CARL A. SCHELLINGER ✓				Connection AIR		O. C. C.	
Pool <i>Paso Mesa Premier Gas</i> UNDESIGNATED				Formation PREMIER		Unit ARTESIA OFFICE	
Completion Date 8-28-78		Total Depth 2405		Plug Back TD 2394		Elevation 3636.6 GL	
Csg. Size 4 1/2		Wt. 9.5		Set At 2405		Perforations: From 2360 To 2384	
Trq. Size 2 3/8		Wt. J 55		Set At 2318		Perforations: From 2318 To 2321	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple SINGLE GAS WELL				Packer Set At NONE		Form or Lease Name EXYON FED.	
Producing Thru TUBING		Reservoir Temp. °F 70 @ PERFS		Mean Annual Temp. °F 60°		Baro. Press. - P ₀ 13.2	
L 2318		H 2318		Gg .702		% CO ₂ .116	
				% N ₂ 12.		% H ₂ S -----	
				Prover 2"		Meter Run -----	
				Taps -----			

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							790		768		
1.	2	X	.125				591	69	571	60°	1 HR.
2.	2	X	.187				310	69	290	60°	1 HR.
3.	2	X	.218				186	55	166	60°	1 HR.
4.	2	X	.250				126	55	106	60°	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	.2648		604.2	.9915	1.194	1.046	198.
2	.6082		323.2	.9915	1.194	1.029	239.
3	.8393		199.2	1.005	1.194	1.019	204.
4	1.087		139.2	1.005	1.194	1.013	184.
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio ----- Mcf/bbl.
1	.934	529	1.47	.9014	A.P.I. Gravity of Liquid Hydrocarbons ----- Deg.
2	.500	529	1.47	.9448	Specific Gravity Separator Gas ----- X X X X X X X X X
3	.308	515	1.43	.9638	Specific Gravity Flowing Fluid ----- X X X X X
4	.215	515	1.43	.975	Critical Pressure 668-21 P.S.I.A. 647 P.S.I.A.
5					Critical Temperature 392-33 R 359 R

P _c 781.2 P _c ² 6103				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.177$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.177$	
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	AOF = C $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 281.$		
1		594.2	3530.7	2572.3			
2		303.2	919.3	5183.7			
3		179.2	321.1	5781.9			
4		119.2	142.	5961.0			
5							

Absolute Open Flow 281.		Mold @ 15.025		Angle of Slope @ 45°		Slope, n 1	
Remarks: THE SLOPE WAS NOT IN STATE OF NEW MEXICO GUIDE LINES 45° SLOPE DRAWN THREW RATE TO PROVE A.O.F.							
Approved By Commission:		Conducted By: LARRY DAVIS		Calculated By: LARRY DAVIS		Checked By:	

COMPANY : CARL A. SCHELLINGER --
LEASE : EXXON FED.
WELL NO : # 1
UNIT : M 29/16/29
COUNTY : EDDY
DATE : 11-14-78


$$Q = \text{MCF} / \text{DAY}$$

$Q_1 = 1370$; LOG OF Q_1 ; = 3.1367206

$Q_2 = 137$; LOG OF Q_2 : = 2.1367206

N = 1.0

PHILLIPS PETROLEUM CO. - GAS CHROMATOGRAPH ANALYSIS - G & C SURVEY
CO. CARL A. SCHELLINGER TEA. EXXON FED WELL # 1 TYPE GAS - GAS 14 L
LOCATION 6605 W 29-16-29 COUNTY EDDY STATE NEW MEX.
FIELD RED LAKE FORM PREMIER CHOKE 3/4" OPEN TYPE TRAP NONE
TRAP TEMP. TRAP PRESS. FTP 120" ATMOS TEMP 60° GAS TEMP 62° BARO 676
DATE SEC 9-26-78 DATE RUN 10-3-78 SEC BY EGC RUN BY RM BOMB PRESS 120"
H2S GR. (CORR) STLN CO2 ON TAG 0.5% MISC PRODUCED DRY
GAS VOLUME 134 MCFD

INST 1 METH. 1 FILE 36

PIIN 1 5-436 9 : 14.0 10 / 3 / 78

DISTRIBUTION

COMPONENT	FINAL MOL %
H2S	0
C6 PLUS	.1817
N2	11.8034
O1	75.2629
CO2	.116
ETHANE	7.8807
O3	3.2525
IC4	.3664
NC4	.7081
IC5	.196
NC5	.2323

C.H. ROSKAMP
W.L. WARE
C.G. MITCHELL
J.W. MAHARG
R. LOPER
CENTRAL FILES
LAB FILES

100

PRESSURE BASE AT 60 DEG F.

14.696 PSI 14.65 PSI

DA PLUS	GPM	7.82218E-2	.07.79249E-2
ETHANE	GPM	2.10154	2.09517
O3	GPM	.892811	.890106
IC4	GPM	.119541	.119179
NC4	GPM	.222605	.22193
IC5	GPM	7.15596E-2	.07.13428E-2
NC5	GPM	8.39532E-2	.08.36988E-2

TOTAL GPM 3.57024 3.55942

UNCORRECTED SPECIFIC GRAVITY= .702135

Z FACTOR= .997514

SATURATED BASIS BTU

PRESSURE BASE	14.696	14.65	14.7345	14.735
	1026.96	1023.65	1029.67	1029.7

CALCULATED SPECIFIC GRAVITY

PRESSURE BASE	14.696	14.65
	.703604	.701401

PERKIN-ELMER PART No. 332-1910