

MEXICO OIL CONSERVATION COM 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 9-8-80	
Company U. S. Operating, Inc.			Connection Tipperary Corporation		
Pool Undesignated			Formation Mississippian		Unit
Completion Date December 5, 1980		Total Depth 12,160'	Plug Back TD 12156	Elevation 3984.5 RKB	Farm or Lease Name Leavelle
Csg. Size 5 1/2	Wt. 23	d 4.670"	Set At 12160	Perforations: From 12091 To 12102	Well No. 1
Tbg. Size 2 3/8	Wt. 4.7	d 1.995"	Set At 12054	Perforations: From To	Unit Sec. Twp. Rge. B 23 16S 35E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 12054'	County Lea
Producing Thru Tubing		Reservoir Temp. °F 182 @ 12040	Mean Annual Temp. °F 70	Baro. Press. - P _a 13.2	State New Mexico
L 12097	H 12097	G _g 0.737	% CO ₂ 1.19	% N ₂ 0.88	% 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. Chart	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F		Press. p.s.i.g.
SI	284 1/2 HOURS						2300			
1.	3" X 1.000			4.6	2.0	110	1852	70	Pkr.	-
2.	3" X 1.000			4.6	2.3	116	1680	70	Pkr.	-
3.	3" X 1.000			4.8	4.1	107	1560	70	Pkr.	-
4.	3" X 1.000			4.8	5.7	88	1201	70	Pkr.	-
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$ h _w X P _m	Pressure P Factor	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	4.789	9.20	3.873	0.9551	1.165	1.029	195.4
2	4.789	10.58	3.873	0.9501	1.165	1.029	223.5
3	4.789	19.68	3.873	0.9577	1.165	1.035	421.5
4	4.789	27.36	3.873	0.9741	1.165	1.040	598.9
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	USED SIMPLIFIED				7.359	54.4°	0.737	XXXXXX	671	397
2	SUPERCOMPRESSIBILITY TABLES							XXXXXX		
3										
4										
5										

P _f 3950.2	P _f ² 15604	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.66389$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.64259$		
NO.	P _i ²	P _s	P _s ²	P _f ² - P _s ²		
1		3554.2	12632	2972		
2		3424.2	11725	3879		
3		3081.2	9494	6110		
4		2495.2	6226	9378		
5						

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 983.746$		
Absolute Open Flow	983.746	Mcfd @ 15.025
Angle of Slope	45.73°	Slope, n
Slope, n 0.97469		

Remarks: BHP measured with Amerada RPG-3, Gauge No. 47612, 0-8000 PSI

Approved By Commission:	Conducted By: TEFTELLER, INC.	Calculated By: D. A. Warren, Jr.	Checked By:
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