

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Type Test: ☒ Initial ☐ Annual ☐ Special Test Date: 5/12/80						JUL 3 1980													
Company: EXXON Company USA						Location: El Paso Natural Gas						O. C. D. ARTESIA, OFFICE							
Field: Burton Flats						Formation: Morrow						Unit:							
Completion Date: 10/25/79				Total Length: 11749'				Plug hole To: 11701'				Elevation: 3263' GL				State or Lease Name: New Mexico CW State			
Csg. Size: 7"		Wt. 23 29		ID 6.366 6.278 6.184		Set At: 11743'		Perforations: From 11174' To 11498'				Well No.: #1							
Trg. Size: 2 7/8"		Wt. 32 6.50		ID 6.094 2.441		Set At: 10902'		Perforations: Open Ended From To				Unit: I Sec.: 16 Twp.: 21s Rge.: 27e							
Type Well - Sample - Provenhead - G.G. or G.O. Multiple: Single												Packer Set At: 10902'				County: Eddy			
Producing thru: Tubing				Reservoir Temp. °F: 200 @ 10900'				Mean Annual Temp. °F: 60				Zero. Press. - P _g : 13.2				State: New Mexico			
L: 11334'		H: -		Gg: 0.5781		% CO ₂ : 1.105		% N ₂ : 0.192		% H ₂ S: -		Prover:		Meter Run: 4 X 1.250		Tag: F			

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. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	
51							1000	75	PACKER		64.5 hr
1.	4	20/64	1.250	463	56	86	755				1.0 hr
2.	4	16/64	1.250	470	37	91	825				1.0 hr
3.	4	13/64	1.250	470	19	89	895				1.0 hr
4.	4	10/64	1.250	477	11	92	940				2.0 hr
5.											

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, Mscf/d
1	7.469	163.21	476.2	0.9759	1.315	1.028	1608.18
2	7.469	133.64	483.2	0.9715	1.315	1.028	1310.87
3	7.469	95.83	483.2	0.9732	1.315	1.029	942.56
4	7.469	73.50	490.2	0.9706	1.315	1.028	720.29
5.							

NO.	P _f	Temp. °R	T _f	Z	Dry Gas		
1.	0.70	546	1.61	0.946	Gas Liquid Hydrocarbon Ratio	Method	
2.	0.71	551	1.62	0.947	A.P.I. Gravity of Liquid Hydrocarbons	Deg.	
3.	0.71	549	1.61	0.945	Specific Gravity Separator Gas	0.5781	XXXXXXXXXX
4.	0.72	552	1.62	0.947	Specific Gravity Flowing Fluid	XXXXXX	-
5.					Critical Pressure	679	P.S.I.A.
					Critical Temperature	340	R

$P_c = 1285.2$ $P_c^2 = 1651.7$					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.600$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.847$	
NO.	P _f	P _w *	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2970$			
1		1008.2	1116.5	635.2				
2		1090.2	1188.5	463.2				
3		1167.2	1362.4	289.1				
4		1212.2	1469.4	182.3				
5								

Absolute Open Flow: 2970 Method: IS.025			Angle of Slope: 57° 18'		Slope, n: 0.642	
Remarks: * BOTTOM HOLE PRESSURE @ (-8071) 11334' USED FOR PRESSURE CALCULATIONS						

Approved By: Conducted By:		Calculated By:		Checked By:	
JARREL SERVICES, INC.		Joe A. Coleman		Joe A. Coleman	