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NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS

Form C-122
Revised 9-1-65

RECEIVED
MAR 18 1976
O. C. C.
ARTESIA, OFFICE

Type Test: [x] Initial [ ] Annual [ ] Special				Test Date: 3-10-76	
Company: Bennett and Ryan		Connection: None			Unit
Pool: Wildcat		Formation: Morrow			
Completion Date: 3-10-76	Total Depth: 11375	Plug Back TD: ~~11340~~ 1340		Elevation: 3363 (KB)	Farm or Lease Name: Exxon State
Csg. Size: 5½ / Wt.: 17.0 / d: / Set At: 11375		Perforations: From 11192 To 11197			Well No.: 2
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: / Set At: ~~11448~~ 11217		Perforations: From To			Unit: F / Sec.: 25 / Twp.: 19 / Rge.: 28
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Gas-Gas Dual		Packer Set At: 11148 & 9659 -(Crossover)			County: Eddy
Producing Thru: Csg.	Reservoir Temp. °F: 186° @ 11192 (Est)	Mean Annual Temp. °F	Baro. Press. – P_a		State: New Mexico
L: *10652 / H: *10652 / Gg: .610	% CO_2	% N_2	% H_2S	Prover	Meter Run: 3 / Taps: Flg.

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI											
1.	3	x	1.000	600	14.00	85			2620	74	72 hrs.
2.	3	x	1.000	625	20.00	64			2347		1 hr.
3.	3	x	1.000	630	39.00	70			2172		1 hr.
4.	3	x	1.000	640	50.00	69			1945		1 hr.
5.									1694		1 hr.

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	4.789	92.65	613.2	.9768	1.280	1.047	581
2.	4.789	112.98	638.2	.9962	1.280	1.057	729
3.	4.789	158.38	643.2	.9905	1.280	1.056	1015
4.	4.789	180.72	653.2	.9915	1.280	1.057	1161
5.							

NO.	P_t	Temp. °R	T_r	Z
1	.91	545	1.51	.912
2.	.95	524	1.45	.895
3.	.96	530	1.46	.896
4.	.97	529	1.46	.895
5.				

Gas Liquid Hydrocarbon Ratio: None Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: None Deg.
Specific Gravity Separator Gas: XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 671 P.S.I.A. ____ P.S.I.A.
Critical Temperature: 362 R ____ R

P_c 2633.2 P_c^2 6933.7

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2361.1	5575.0	1358.7
2		2186.8	4782.1	2151.6
3		1961.7	3848.0	3085.7
4		1712.4	2932.3	4001.4
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.733$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.491$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.731$

Absolute Open Flow: 1,731 Mcfd @ 15.025 | Angle of Slope θ: 54 | Slope, n: .727

Remarks: * Equiv. length calculated to account for friction on two sizes of flow string. This length and size would be equiv. to 10,652 ft. 2 7/8 OD. 8.7#/ft. I.D. - 2.259

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	R. Reston & R. Pagan	R. Reston & R. Pagan	