well file

NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
MAY 3 1973
O. C. C.
ARTESIA, OFFICE

Type Test: ☒ Initial ☐ Annual ☐ Special			Test Date: 4-19-73	
Company: ADOBE OIL COMPANY		Connection: TO AIR		
Pool: ROCK TANK Lower Morrow		Formation: LOWER MORROW		Unit:
Completion Date: 4-10-73	Total Depth: 10,300	Plug Back TD: 10,250	Elevation: 3874 GR.	Farm or Lease Name: SMITH FEDERAL
Csg. Size: 5½ / Wt.: 17 / d: / Set At: 10,300		Perforations: From 10,185 To 10,225		Well No.: 2
Tbg. Size: 2½ / Wt.: 6.5 / d: / Set At: 10,091		Perforations: From OPEN To ENDED		Unit: P / Sec.: 11 / Twp.: 23S / Rge.: 24E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: G.G. MULTIPLE		Packer Set At: 10,091		County: EDDY
Producing Thru: TUBING	Reservoir Temp. °F: 175 @ 10,200	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10091	10091	.5834	.76	.75	TRACE		6"	FLANGE

	FLOW DATA					TUBING DATA		CASING DATA		
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	Duration of Flow
SI							1619.0		CHOKE		72.0
1.	6"	X	1.50"	510.0	2.0	84	1380.0	73	8/64		1.0
2.	6"	X	1.50"	560.0	9.0	82	1035.0	74	12/64		1.0
3.	6"	X	1.50"	520.0	18.0	80	823.0	74	16/64		1.0
4.	6"	X	1.50"	580.0	22.0	78	686.0	72	22/64		1.0
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	10.70	32.34	523.3	0.9777	1.310	1.036	459
2.	10.70	71.83	573.2	0.9795	1.310	1.039	1025
3.	10.70	97.97	533.2	0.9813	1.310	1.038	1399
4.	10.70	114.24	593.2	0.9831	1.310	1.042	1640
5.							

NO.	P_t	Temp. °R	T_f	Z
1.	.78	544	1.55	.931
2.	.85	542	1.55	.926
3.	.79	540	1.54	.928
4.	.88	538	1.54	.921
5.				

Gas Liquid Hydrocarbon Ratio: DRY GAS Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: .5834 XXXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 672 P.S.I.A. P.S.I.A.
Critical Temperature: 350 R R

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		1747.2	3052.7	1278.7
2		1324.2	1753.5	2577.9
3		1072.2	1149.6	3181.8
4		943.2	889.6	3441.8
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.2584$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.2584$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2064$

Absolute Open Flow: 2064 Mcfd @ 15.025 | Angle of Slope θ: 45.0° | Slope, n: 1.0 LIMITED

Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA GAUGE AT 10,200'

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	D.T.	R.L.W.	J.W.W.