NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
MAR 07 '89
O. C. D.
ARTESIA, OFFICE

dsf

Type Test: ☐ Initial ☐ Annual ☒ Special				Test Date: 2-23-89	
Company: TXO PRODUCTION CO.		Connection: CABOT			
Pool: LA HUERTA		Formation: WOLFCAMP		Unit: P	
Completion Date: 3-14-85	Total Depth: 11600	Plug Back TD: 11148	Elevation: 3168' KB, 3147' GL	Farm or Lease Name: CHALLENGER RAYROUX	
Csg. Size: 4½ / Wt. / d / Set At: 11600		Perforations: From 8936 To 8964		Well No.: 1	
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: 1.995 / Set At: 8839		Perforations: From OPEN To END		Unit: P / Sec.: 19 / Twp.: 21S / Rge.: 27E	
Type Well – Single – Bradenhead – G.C. or G.O. Multiple: SINGLE		Packer Set At: 8839		County: EDDY	
Producing Thru: TB6	Reservoir Temp. °F: 16.4 @ 8950	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: NM	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
*8950	8950	.616	.86	.53	0	2"		

FLOW DATA

NO.	Prover Line Size	X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA Press. p.s.i.g.	TUBING DATA Temp. °F	CASING DATA Press. p.s.i.g.	CASING DATA Temp. °F	Duration of Flow
SI						779		PKR		72
1.	2	X 1/16	748		71	749		"		1 HR
2.	2	X 3/16	587		76	592		"		1 HR
3.	2	X 7/32	302		78	302		"		1 HR
4.	2	X ¼	238		79	241		"		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	.06405		761.2	.9896	1.274	1.068	66
2	.06082		600.2	.9850	1.274	1.054	483
3	.8393		315.2	.9831	1.274	1.028	341
4	1.087		251.2	.9822	1.274	1.022	350
5							

NO.	P_t	Temp. °R	T_r	Z
1	1.13	531	1.46	.876
2.	.89	536	1.48	.900
3.	.46	538	1.48	.947
4.	.37	539	1.48	.957
5				

Gas Liquid Hydrocarbon Ratio 33.7 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 47.9 @60 Deg.
Specific Gravity Separator Gas .616 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 671 P.S.I.A. ____ P.S.I.A.
Critical Temperature 362 R ____ R

*** P_c 789.2 P_c^2 622.8

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	***	782.8	612.8	10.0
2		761.8	580.4	42.4
3		756.9	572.9	50.0
4		750.3	563.0	59.8
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 62.28

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 7.892

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 5.21

Post ID-3
3-17-89
chg from oil well to gas well

Absolute Open Flow 521 Mcfd @ 15.025 Angle of Slope θ 63.5 Slope, n 1500

Remarks: **BHP INSTRUMENT SET @ THIS DEPTH MADE 1.45 BBL'S 47.9 @ 60°
**= Star. Cal BACK TO SURF. THE CURVE PLOTTED BACKWARD A SLOPE OF 63.5°
**=FLOWING BHP'S CAL. BACK TO SURF. WAS DRAWN THRU LOW RATE.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	R.W.	B.M	B.M.