c/SF. File

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
JAN 04 '89
O. C. D.
ARTESIA, OFFICE

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 12 13 88	
Company: H. L. BROWN		Connection: AIR			
Pool: ~~Wildcat~~ Delaware BURTON FLATS		Formation: CHERRY CANYON		Unit:	
Completion Date: 12 10 88	Total Depth: 3858	Plug Back TD: 3850	Elevation: 3221	Farm or Lease Name: FEDERAL 8	
Csg. Size: 15.5 / Wt.: 17 / d: 4.892 / Set At: 3858		Perforations: From 3532 To 3554		Well No.: 1	
Tbg. Size: 2.375 / Wt.: 4.6 / d: 1.995 / Set At: 3451		Perforations: From To		Unit: E / Sec.: 8 / Twp.: 21S / Rge.: 27E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 3451'		County: EDDY	
Producing Thru: TUBING	Reservoir Temp. °F: 105@ 3543	Mean Annual Temp. °F: 60	Baro. Press. – P_a:	State: NEW MEXICO	
L: 3543	H: 3543	Gg: .693	% CO_2: .02	% N_2: 7.44	% H_2S: 0
Prover:	Meter Run: 4.0	Taps: FLANGE			

FLOW DATA					TUBING DATA		BHP DATA		
NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	CHOKE	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					1425		1574	105	24
1.	4.03X1.625	520	5.5	60	1384	8/64	1551	105	1.0
2.	4.03X1.625	530	6.0	60	1280	12/64	1538	105	1.0
3.	4.03X1.625	550	27.5	60	1195	17 1/2/64	1479	105	1.0
4.	4.03X1.625	560	59.0	60	1090	22 1/2/64	1423	105	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	12.79	54.15	533.2	1.0000	1.2012	1.0535	877
2	12.79	57.09	543.2	1.0000	1.2012	1.0545	925
3	12.79	124.45	563.2	1.0000	1.2012	1.0566	2020
4	12.79	183.90	573.2	1.0000	1.2012	1.0577	2988
5							

NO.	P_t	Temp. °R	T_r	Z
1	0.81	520	1.42	.901
2	0.83	520	1.42	.899
3	0.86	520	1.42	.896
4	0.88	520	1.42	.894
5				

Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0 Deg.

Specific Gravity Separator Gas	0.693	XXXXXXXXX
Specific Gravity Flowing Fluid	XXXXX	.0693
Critical Pressure	655 P.S.I.A.	655 P.S.I.A.
Critical Temperature	367 R	367 R

P_c 1426 P_c^2 2033

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		1406	1977	57
2		1394	1942	91
3		1342	1802	231
4		1293	1671	362
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.6160$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4.2537$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 12710$

Absolute Open Flow 12710 Mcfd @ 15.025 Angle of Slope θ 50.0 Slope, n 0.839

Remarks:

Approved By Division	Conducted By:	Calculated By:	Checked By:
	BENNETT CATHEY	MATT LEE	