

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator DEVON ENERGY CORP. (NEVADA)					Lease or Unit Name STATE BR COM #1					
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 07/02/97					
Completion Date 7/1/97					Well No. 1					
Total Depth 11140'					Unit Lr. - Sec. - TWP - Rge. K 16 21S 26E					
Plug Back TD 10040'					Elevation 3298' RKB					
Csg. Size 5 1/2 170					Country EDDY					
Wt. 15.5					Perforations: From: 9758 To: 9764'					
Sct. At 11134'					To: 9944'					
Tbg. Size 2 7/8					Pool NE Happy Valley Str.					
Wt. 6.5					Formation STRAWN					
Sct. At 9633					Connection Pinnacle					
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE					Packer Set At					
Producing Thru					Baro. Press - P _a 13.2					
Reservoir Temp. °F 137					Mean Annual Temp. °F 60.0					
G _g .672					Meter Run 4.0					
% CO ₂ .28					Taps FLANGE					
% N ₂ .82										
% H ₂ S .00										
Prover .0										
L 9849 H 9849										
FLOW DATA					TUBING DATA					
CASING DATA					Duration of Flow					
NO.	Prover Line Size	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						2870.	74.			72.0
1.	4.03 X 1.250		763.	7.5	64.	2390.	73.	0.	0.	1.0
2.	4.03 X 1.250		753.	11.0	59.	2350.	75.	0.	0.	2.0
3.	4.03 X 1.250		753.	23.0	62.	2030.	76.	0.	0.	1.0
4.	4.03 X 1.250		728.	54.5	71.	1637.	77.	0.	0.	1.0
5.										
RATE OF FLOW CALCULATIONS										
NO.	COEFFICIENT (24 HOUR)	h _w P _m	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd			
1.	7.47	76.30	776.2	.9962	1.2199	1.0859	752.			
2.	7.47	91.81	766.2	1.0010	1.2199	1.0882	911.			
3.	7.47	132.75	766.2	.9981	1.2199	1.0860	1311.			
4.	7.47	200.99	741.2	.9896	1.2199	1.0773	1952.			
5.										
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio		18.8 Mcrbbl.			
1.	1.16	524.	1.39	.848	A.P.I. Gravity of Liquid Hydrocarbons		56.7 Deg.			
2.	1.15	519.	1.37	.845	Specific Gravity Separator Gas		.672 XXXXXXXXXX			
3.	1.15	522.	1.38	.848	Specific Gravity Flowing Fluid		.807 XXXXX			
4.	1.11	531.	1.40	.862	Critical Pressure		669. P.S.I.A.		.662 P.S.I.A.	
5.					Critical Temperature		378. R		.421 R	
P _c	2861.4	P _w ²	8188.							
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²						
1.	5775.	2377.	5662.	2536.						
2.	5585.	2333.	5444.	2743.						
3.	4175.	2010.	4042.	4146.						
4.	2723.	1616.	2613.	5575.						
5.										
1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.4687$					(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4687$					
AOF = Q					$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2867.$					
Absolute Open Flow					2867.					
Mcfd @ 15.025					Angle of Slope θ					
					45.0					
					Slope, n					
					1.000					

Remarks:

Approved By Division

Conducted By:
Well Testing Services Inc.

Calculated By:
Well Testing Services Inc.

Checked By: *Walter M. Frank*
Devon Energy Corp.