

3 NMOCD 1 Pioneer

OIL CONSERVATION DIVISION

2 EPNG 1 File

STATE OF NEW MEXICO

P. O. BOX 2088

ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

RECEIVED

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 5-19-84		JUN 05 1984 OIL CON. DIV. DIST. 3	
Company Pioneer Production Corp.				Connection None			
Pool Otero Chacra				Formation Chacra		Unit	
Completion Date 5-19-84		Total Depth 3065'		Plug Back TD 2975'		Elevation 5406' GL	
Farm or Lease Name Shepherd & Kelsey C				Well No. 1			
Csq. Size 4-1/2"	Wt. 9.5#	d 4.090"	Set At 3065'	Perforations: From 2470' To 2587'		Unit M	
Tbg. Size 1-1/2"	Wt. 2.76#	d 1.610"	Set At 2466'	Perforations: From open ended To		Sec. 29	Twp. 29N
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At None		County San Juan	
Producing Thru tubing		Reservoir Temp. °F 106 @ 2466'		Mean Annual Temp. °F		Baro. Press. - P _a 12.2	
L 2466		H 2466	G _g 0.62 est.	% CO ₂ --	% N ₂ --	% H ₂ S --	Prover 2"
Meter Run --		Taps --		State NM			

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
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
SI							948		948		7 days
1.	2"		5/16	722					772	65	3 hrs
2.			1/2	377					524	68	3 hrs
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	1.672		734.2	0.9952	1.2700	1.069	1659
2	4.279		389.2	0.9924	1.2700	1.032	2166
3							
4							
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	1.09	525	1.44	0.879	dry		X X X X X X X X		671	365
2	0.68	528	1.45	0.939			X X X X X			
3										
4										
5										

NO.	P _t	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1	960.2	922.0			3.018	2.290
2						
3						
4						
5						

NO.	P _t	P _w	P _w ²	P _c ² - P _w ²	ADP = Q
1		785.2	616.5	302.4	
2					
3					
4					
5					

Absolute Open Flow 3799 Mcfd @ 15.075 Angle of Slope 0.75

Remarks: 7 day SIWHP measured w/ dead weight tester 5-27-84. Flowed dry natural gas throughout test.

Approved By Division	Conducted By:	Calculated By:	Checked By:
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