

OIL CONSERVATION DIVISION

P. O. BOX 2088

Form C-122

Revised 10-1-78

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test		☒ Initial		☐ Annual		☐ Special		Test Date		2-8-82	
Company				Connection				Unit			
Pioneer Production Corp.											
Pool				Formation				Well No.			
Undesignated Chacra				Chacra				1E			
Completion Date		Total Depth		Plug Back TD		Elevation		Farm or Lease Name			
1-24-82		6200'		6158' RKB		5462' GL		Salmon			
Coq. Size	Wt.	d	Set At	Perforations:		Well No.					
4 1/2"	11.6	4.000	6197'	From 2671 To 2687		1E					
Trq. Size	Wt.	d	Set At	Perforations:		Unit		Sec.		Twp.	
1 1/4"	2.3	1.380	2453' RKB	From open ended To		B		30		29N 11W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple				Packer Set At				County			
Gas-Gas dual				2900' RKB				San Juan			
Producing Thru		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _a		State			
tbq.								NM			
L	H	Cq	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps			
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
51	SEE REVERSE FOR DETAILED INFORMATION ON BACK PRESSURE TEST FOR THE										
1.	CHACRA FORMATION.										
2.											
3.											
4.											
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											
2											
3											
4											
5											
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio		Mcfd/bbl.				
1					A.P.I. Gravity of Liquid Hydrocarbon		Deg.				
2					Specific Gravity Separator Gas		XXXXXXX				
3					Specific Gravity Flowing Fluid		XXXXX				
4					Critical Pressure		P.S.I.A.		P.S.I.A.		
5					Critical Temperature		R		R		
$P_c^2 - P_w^2 = \frac{P_c^2}{R^2 - R_w^2} \cdot \left[\frac{R^2}{R^2 - R_w^2} \right]^n$											
NO.	P _t	P _w	R _w	P _c	AOF = Q		[$\frac{R^2}{R^2 - R_w^2} $] ⁿ				
1											
2											
3											
4											
5											
Absolute Open Flow				2318 MCFGPD				Mcf @ 15.025			
Remarks											
Conducted By				Calculated By				Checked By			

PIONEER PRODUCTION CORPORATION

Salmon #1E

BACK PRESSURE TEST

Chacra Formation

4" Meter Run	1.500" Orifice Plate		400# Static Spring		100" Range
<u>2-8-82</u>	<u>Static</u>	<u>Diff.</u>	<u>Chacra Tubing</u>	<u>Chacra Casing</u>	<u>Dakota Tubing</u>
9:30 a.m.	---	ON ---	945 psi SI	950 psi SI	1352 psi SI
9:45	5.8	4.2	210 psi	815 psi	1352 psi
10:00	6.2	4.6	210	692	1352
10:15	6.3	4.5	203	640	1352
10:30	7.5	3.2	232	618	1352
11:00	7.5	3.6	234	595	1352
11:30	7.7	3.5	245	580	1352
12:30 p.m.	7.8	3.5	247	580	1352
1:30	7.9	3.6	250	585	1352
2:30	7.6	4.0	238	588	1352
3:30	7.6	4.1	242	590	1352
4:30	7.8	4.8	247	595	1352
5:30	7.8	6.7	251	610	1352

Diff. was up to 7.5 at end of test.

Made estimated 25 bbls. water on 8 hrs. test; down to $\frac{1}{2}$ bbl.per hr. at end of test.

Q = 1463 MCFGPD

CAOF = 2318 MCFGPD