NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
FEB 4 1976
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special		Test Date: 1-26-76	
Company: Penroc Oil Corporation	Connection: El Paso Natural Gas Company		Unit: G
Pool: ~~Undesignated~~ Tongell Ranch Morrow	Formation: Morrow		
Completion Date	Total Depth: 11,121	Plug Back TD: 11,068	Elevation
Farm or Lease Name: Wright Federal			
Csg. Size: 4 1/2 / Wt.: 13.0 / d / Set At: 11,121	Perforations: From 10,729 To 10,940		Well No.: 2
Tbg. Size: 2 3/8 / Wt.: 4.7 / d / Set At: 10,581	Perforations: From open To		Unit: G / Sec.: 6 / Twp.: 20S / Rge.: 28E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 10,581		County: Eddy
Producing Thru: Tbg.	Reservoir Temp. °F: 182 @ 10,802	Mean Annual Temp. °F	Baro. Press. – P_a: 13.2 / State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
*10,723	10,723	.633					4"	Flg.

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							2925				48
1.	4	x	2.000	535	2.6	78	2787				1 hr.
2.	4	x	2.00	535	5.3	36	2712				1 hr.
3.	4	x	2.00	580	16.0	68	2464				1 hr.
4.	4	x	2.00	595	24.0	78	2347				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	19.81	37.75	548.2	.9831	1.257	1.048	968
2.	19.81	53.90	548.2	1.024	1.257	1.066	1465
3.	19.81	97.42	593.2	.9924	1.257	1.057	2545
4.	19.81	120.82	608.2	.9831	1.257	1.054	3117
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	.82	538	1.46	.910
2.	.82	496	1.35	.880
3.	.89	528	1.43	.895
4.	.91	538	1.46	.900
5.				

Gas Liquid Hydrocarbon Ratio 193 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 51 @ 60 Deg.
Specific Gravity Separator Gas .633 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX G Mix-.649
Critical Pressure 670 P.S.I.A. 670 P.S.I.A.
Critical Temperature 368 R 372 R

P_c 2938.2 P_c^2 8633.0

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2806.7	7877.6	755.4
2		2739.1	7502.7	1130.3
3		2518.6	6343.3	2289.7
4		2424.9	5880.1	2752.9
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.136$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.885$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 8.993$

Absolute Open Flow 8,993 Mcfd @ 15.025 Angle of Slope θ 47.25 Slope, n .927

Remarks: * Equiv. length. Well made 1.75 Bbl. cond., 1.75 Bbl. H_2O during test.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Reggie Reston	Jack Whitling & Reggie Reston	