NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
MAY 1 1972

Type Test: [ ] Initial [ ] Annual [X] Special — Test Date: 2/18/72

Company: Corinne Grace	Gathering Co.: Transwestern Pipeline Company	Unit: P
Pool: South Carlsbad	Formation: Morrow	
Completion Date: 6/20/71	Total Depth: 12,011	Plug Back TD: 11,945
Elevation: 3250 GR	Farm or Lease Name: Humble Grace	
Csg. Size: 7" / 4 1/2"	Wt.: 29# / 13.5#	d: 6.184 / 3.920
Set At: 11196 / 11964	Perforations: From 11680 To 11690	Well No.: 1
Tbg. Size: 2 3/8"	Wt.: 4.70#	d: 1.995
Set At: 10616	Perforations: From To	Unit: P — Sec.: 2 — Twp.: 23S — Rge.: 26E

Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 10616	County: Eddy			
Producing Thru: Tubing	Reservoir Temp. °F: 167 @ 10,616	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2	State: New Mexico	
L: 10,616	H: 10,616	Gg: .580	% CO_2: –	% N_2: –	% H_2S: –
Prover:	Meter Run: 4"	Taps: Flange			

NO.	FLOW DATA: Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI							2877.0	65			29.5
1.	4	X	2.25	826.8	4.5	85	2739.0	69			1.75
2.	4	X	2.25	786.8	18.5	89	2470.0	73			1.5
3	4	X	2.25	741.8	36.5	88	2180.0	74			1.0
4.	4	X	2.25	746.8	76.5	102	1238.0	70			1.75
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	25.64	61.48	840.0	.9768	1.313	1.057	2137
2	25.64	121.66	800.0	.9732	1.313	1.052	4193
3	25.64	166.00	755.0	.9741	1.313	1.049	5710
4	25.64	241.12	760.0	.9619	1.313	1.044	8152
5							

NO.	P_t	Temp. °R	T_t	Z
1	1.25	545	1.56	.895
2	1.19	549	1.57	.903
3	1.12	548	1.57	.908
4	1.13	562	1.61	.917
5				

Gas Liquid Hydrocarbon Ratio: TSTM Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 672 P.S.I.A. — P.S.I.A.
Critical Temperature: 350 R — R

P_c 2390.2 P_c^2 8353

NO	P_w	P_w^2	$P_c^2 - P_w^2$
1	2776.9	7711	642
2	2585.7	6686	1667
3	2400.6	5763	2590
4	1906.7	3636	4717
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.225$ $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.267$

AOF = $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 12,945$

Absolute Open Flow: 12,945 Mcfd @ 15.025 — Angle of Slope θ: — Slope, n: 0.699

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By: