NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOIN' 'ND ONE POINT BACK PRESSURE T! FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: XX Initial ☐ Annual ☐ Special				Test Date: 9-16-77	
Company: Harvey E. Yates Co., Inc.		Connection			
Pool		Formation: Reeves Queen			Unit
Completion Date: 9-16-77	Total Depth: 4699		Plug Back TD: 4657	Elevation: 3916 KB	Farm or Lease Name: Hanlad State
Csg. Size: 4½ / Wt.: 9.5 / d: 4.090 / Set At: 4699			Perforations: From 4212 To 4220		Well No.: 1
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: 1.995 / Set At: 4162			Perforations: From To		Unit: 2 / Sec.: 185 / Twp.: 35E / Rge.
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 4162		County: Lea
Producing Thru: Tubing	Reservoir Temp. °F: 103@ 4116	Mean Annual Temp. °F	Baro. Press. – P_a		State: New Mexico
L: 4216 / H: 4216 / Gg: .652 / % CO_2 / % N_2 / % H_2S / Prover: Pos.Ck. / Meter Run / Taps					

FLOW DATA

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		1303			1303				
1.	2 X 6/64"	1285		76	1285	76	pkr		1 hr.
2.	2 X 7/64"	1273		78	1273	78	"		1 hr.
3.	2 X 9/64"	1245		77	1245	77	"		1 hr.
4.	2 X 11/64"	1209		77	1209	77	"		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	0.1880		1298.2	0.9850	1.238	1.124	334.52
2	0.2610		1286.2	0.9831	1.238	1.124	459.23
3	0.3346		1258.2	0.9840	1.238	1.122	575.42
4	0.5090		1222.2	0.9840	1.238	1.117	846.50
5							

NO.	P_t	Temp. °R	T_f	Z
1.	1.94	536	1.43	.791
2.	1.92	538	1.43	.792
3.	1.88	537	1.43	.795
4.	1.82	537	1.43	.801
5				

Gas Liquid Hydrocarbon Ratio: Dry Gas Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons: None Deg.

Specific Gravity Separator Gas: 0.652 XXXXXXXXX

Specific Gravity Flowing Fluid: XXXXX

Critical Pressure: 670 P.S.I.A. ____ P.S.I.A.

Critical Temperature: 375 R ____ R

P_f 1512.2 P_f^2 2287

NO	P_t^2	P_s	P_s^2	$P_f^2 - P_s^2$
1		1499.2	2248	39
2		1484.2	2203	84
3		1455.2	2118	169
4		1416.2	2006	281
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 8.13879$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.85286$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2414.943$

Absolute Open Flow: 2414.943 Mcfd @ 15.025 Angle of Slope θ: 63° 30' Slope, n: 0.5000

Remarks: BHP measured with Amerada RPG-3 gauge serial No. 32030, 0-4000 PSIG

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Tefteller, Inc.	B. Combest	