NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 1-1-65

RECEIVED
MAY 24 1977
O. C. C.
ARTESIA, OFFICE

Type Test: [x] Initial [ ] Annual [ ] Special						Test Date: 5-5-77			
Company: Depco, Inc.				Connection: Natural Gas P. L. Co. of America					
Pool: Redlake Penn				Formation: Penn				Unit	
Completion Date: 4-30-77	Total Depth: 9196 (BP)			Plug Back TD: 9196		Elevation: 3290 Gr.		Farm or Lease Name: Terry Evans Communitized	
Csg. Size: 4½	Wt.: 11.6	d:	Set At: 9640	Perforations: From 9152	To 9164			Well No.: 1	
Tbg. Size: 2 3/8"	Wt.: 4.7	d:	Set At: 9112	Perforations: From Open Ended	To			Unit: G	Sec.: 24	Twp.: 18	Rge.: 26
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single				Packer Set At: 9112				County: Eddy	
Producing Thru: Tubing	Reservoir Temp. °F: 170 @ 9050		Mean Annual Temp. °F	Baro. Press. – P_a: 13.2				State: New Mexico	
L: 9052	H: 9052	Gg: .627	% CO_2	% N_2	% H_2S	Prover	Meter Run: 2"	Taps: Flange	

	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
SI						2691	70			5 days
1.	2"	X 1.250"	680	9	75	2531	72			1 Hr.
2.	2"	X 1.250"	690	15	75	2441	72			1 Hr.
3.	2"	X 1.250"	690	30	62	2278	68			1 Hr.
4	2"	X 1.250"	690	67	64	1975	68			1½ Hrs.
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	8.120	78.99	693.2	0.9859	1.263	1.059	846
2.	8.120	102.70	703.2	0.9859	1.263	1.060	1101
3.	8.120	145.24	703.2	0.9781	1.263	1.067	1586
4.	8.120	217.06	703.2	0.9962	1.263	1.065	2362
5.							

NO.	P_t	Temp. °R	T_t	Z
1	1.03	535	1.47	0.892
2.	1.05	535	1.47	0.890
3.	1.05	522	1.43	0.879
4.	1.05	524	1.44	0.882
5.				

Gas Liquid Hydrocarbon Ratio: 70.24 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: 0.627 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 671 P.S.I.A. P.S.I.A.
Critical Temperature: 365 R R

P_f 3506.2 P_f^2 12293

NO	P_t^2	P_s	P_s^2	$P_f^2 - P_s^2$
1		3300.2	10891	1402
2		3193.2	10197	2096
3		2989.2	8935	3358
4		2548.2	6493	5800
5				

(1) $\frac{P_f^2}{P_f^2 - P_s^2} = 2.119$ (2) $\left[\frac{P_f^2}{P_f^2 - P_s^2}\right]^n = 1.754$

AOF = Q $\left[\frac{P_f^2}{P_f^2 - P_s^2}\right]^n = 4143$

Absolute Open Flow: 4143 Mcfd @ 15.025 Angle of Slope θ: 53.2 Slope, n: 0.748

Remarks: Bottom Hole Pressure was recorded @ 9050' with an Amerada RPG-3 Instrument No. 23451 N (0-5000 psi range).

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	McPherson	Harrington	