

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

Form C-122
 Revised 9-1-69

Type Test ☒ Initial ☐ Annual		Test Date 6/10-77		Re-spud date 4/13/77	
Company DEPCO		Connection None		Unit G	
Pool Undesignated		Formation MORRISON		Farm or Lease Name Beall Fed.	
Completion Date 6/3/77		Total Depth 9434		Elevation 9182	
Csg. Size 4 1/2	Wt. d	Set At 9433	Perforations: From 9096 To 9182		Well No. 1
Tbg. Size 2 3/8	Wt. d	Set At 9158	Perforations: From To		Unit Soc. Twp. R1/4 G 17 11 30
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single			Packoff Set At 9060		County Chaves Co.
Producing Thru Tbg.		Reservoir Temp. °F 150 @ 9200		Mean Annual Temp. °F 9060	
L 9200		H 9200	Gg .644	% CO ₂	% N ₂
				% H ₂ S	Prover
					Meter Run 2"
					Taps Flg.

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
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
SI							1780				72 hr.
1.	2 X 1.250			630	7.29	118	1700				1 hr.
2.	2 X 1.250			640	17.64	95	1620				1 hr.
3.	2 X 1.250			642	46.24	81	1514				1 hr.
4.	2 X 1.250			642	61.62	79	1351				1 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	8.120	68.48	643.2	.9485	1.246	1.045	687
2	8.120	107.34	653.2	.9680	1.246	1.053	1107
3	8.120	174.06	655.2	.9804	1.246	1.059	1828
4	8.120	200.93	655.2	.9822	1.246	1.059	2375
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.96	578	1.55	.916	48.053	57.1 @ 60°	.644	X X X X X X X X	670	372
2.	.97	555	1.49	.902				X X X X X X X X		
3.	.98	541	1.45	.892						
4.	.98	539	1.45	.892						
5.										

NO.	P _t	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1	1876.6	3521.6	228.8		2.723	1.996
2	1811.2	3280.4	470.0			
3	1686.7	2845.0	905.5			
4	1540.5	2373.1	1377.3			
5						

Absolute Open Flow 4.741 Mcfd @ 15.025		Angle of Slope 55.5°		Slope, n .690	
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Remarks: 5.2 BBls of distillate were produced during the test.
 Bottom-hole pressures obtained from bomb set at 9200.

Approved By Commission:	Conducted By: Rick Pagan	Calculated By: Rick Pagan	Checked By:
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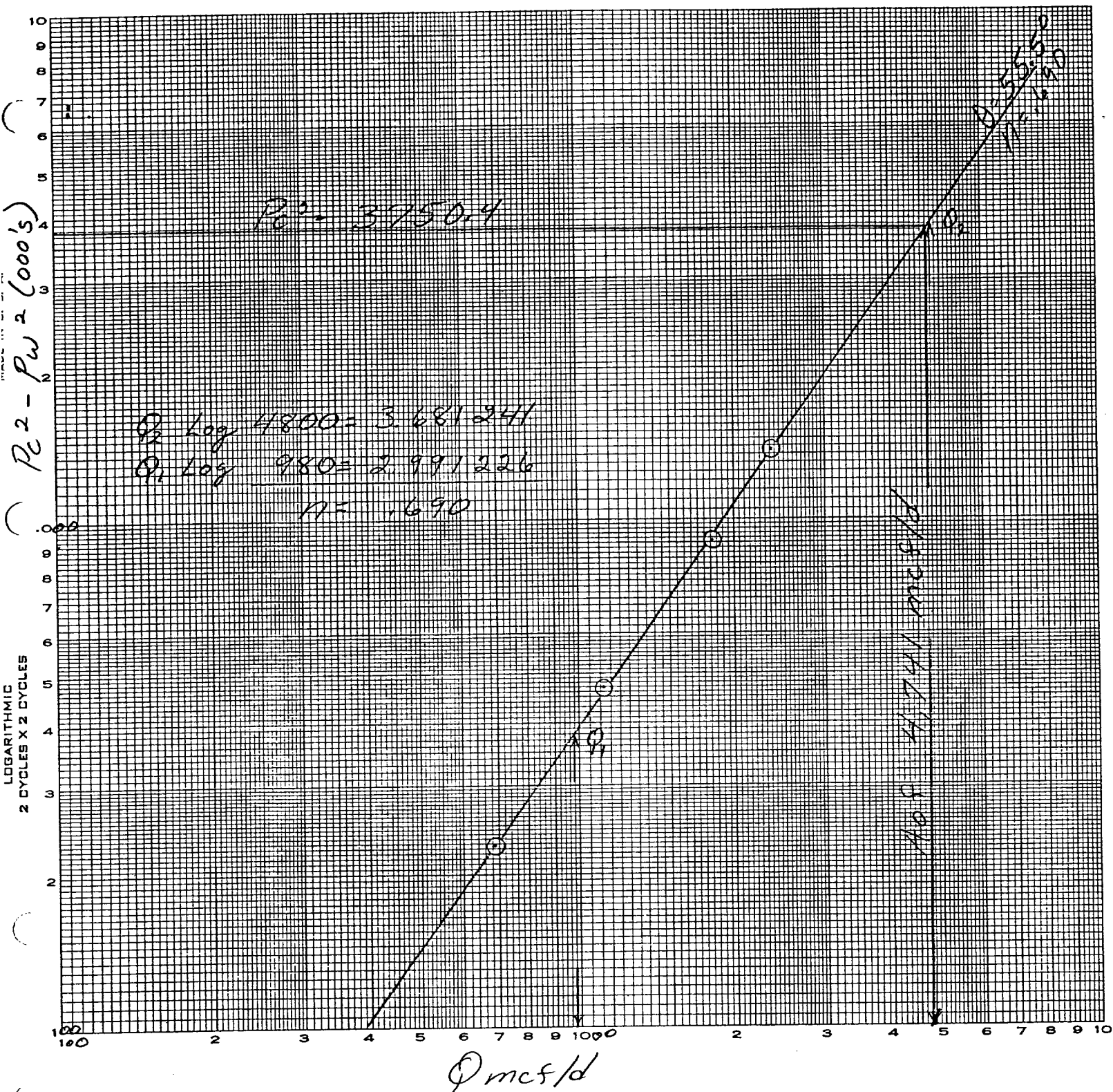
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JUN 27 1977

OIL CONSERVATION COMM.
HOBBS, N. M.

DEPCO, INC

Beall Fed. No. 1
G-17-11-30
Chaves County, New Mexico
June 10, 1977



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OIL CONSERVATION COMM.
HOBBS, N. M.

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (P_c or P_w)

S.I.P.

Form C-122F
Adopted 9-1-65

FROM KNOWN BOTTOM HOLE PRESSURE (P_f or P_{fz})

COMPANY DEPCO LEASE Beall Fed. WELL NO. 1 DATE 6/10/77

LOCATION: Unit G Section 17 Township 11 Range 30

L 9200 H 9200 L/H 1.000 G max .704 % CO₂ _____ % N₂ _____ % H₂S _____

GH 6477 P_{CT} 668 T_{CT} 392
TABLE IX & X TABLE IX & X

LINE	1	2	3	4	5	6	7	8
1	$T_w(W.H. \cdot R)$	534	534					
2	$T_s(B.H. \cdot R)$	610	610					
3	$T = (\frac{T_w + T_s}{2})$	572	572					
4	Z (Est.)	.742	.739					
5	TZ	424.4	422.7					
6	GH/TZ	15.261	15.323					
7	e^S (Table XIV)	1.772	1.776					
8	P_f or P_{fz}	2581.2	2581.2					
9	P_f^2 or P_{fz}^2	6662.6	6662.6					
10	$P_c^2 = P_f^2/e^S$ or $P_w^2 = P_s^2/e^S$	3759.3	3750.6					
11	P_c or P_w	1938.9	1936.6					
12	$P_s = (\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	2260.0	2258.9					
13	$P_r = (P/P_{ca})$	3.38	3.38					
14	$T_r = (T/T_{ca})$	1.46	1.46					
15	Z (Table XI)	.739	.739					

JUN 27 1977
OIL CONSERVATION COMM.
HOBBS, N. M.

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (P_e or P_w)

FROM KNOWN BOTTOM HOLE PRESSURE (P_4 or P_5)

Form C-122F
Adopted 9-1-65

COMPANY DEPCO LEASE Beall Fed. WELL NO. 1 DATE 6/10/77

LOCATION: Unit G Section 17 Township 11 Range 30

L 9200 H 9200 LH 1000 GMIX 1704 % CO₂ _____ % N₂ _____ % H₂S _____

GH 6477 P_{CT} 668 T_{CT} 392
TABLE IX & X TABLE IX & X

1st 2nd 1st 2nd 1st 2nd 1st 2nd

LINE	1	2	3	4	5	6	7	8
1	$T_w(W.H. \cdot R)$	534	534	534	534	534	534	534
2	$T_s(B.H. \cdot R)$	610	610	610	610	610	610	610
3	$T = (\frac{T_w + T_s}{2})$	572	572	572	572	572	572	572
4	Z (Est.)	.741	.740	.740	.742	.740	.747	.744
5	TZ	424	423	423	424	423	427	426
6	GH/TZ	15.281	15.302	15.302	15.261	15.302	15.159	15.220
7	e^s (Table XIV)	1.774	1.775	1.775	1.772	1.775	1.766	1.770
8	P_4 or P_5	2500.2	2500.2	2411.2	2241.2	2241.2	2039.2	2039.2
9	P_2 or P_{s2}	6251.0	6251.0	5813.9	5813.9	5023.0	4158.3	4158.3
10	$P_c^2 = P_1^2/e^s$ or $P_w^2 = P_s^2/e^s$	3524.3	3521.6	3275.4	3280.4	2829.9	2349.9	2373.1
11	P_c or P_w	1877.3	(1876.6)	1809.8	(1811.2)	1682.2	(1686.7)	1532.9
12	$P_1 = (\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	2188.8	2188.4	2110.5	2111.2	1961.7	1964.0	1786.1
13	$P_f = (P/P_{CT})$	3.28	3.28	3.16	3.16	2.94	2.94	2.67
14	$T_f = (T/T_{CT})$	1.46	1.46	1.46	1.46	1.46	1.46	1.46
15	Z (Table XI)	.740	.740	.742	.742	.747	.747	.757

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