

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Revised 9-1-

SF.
file #
C-122
file

Type Test ☒ Initial ☐ Annual		RECEIVED 5-6-82		1980 FNL	
Company TRANSWESTERN GAS SUPPLY Co		Connection AIR NEW WELL		1980 FEL	
Well UNDESIGNATED		Formation ABO		Unit G	
Completion Date 9-11-81		Total Depth 3,982		Perforations From 2,888 To 3,008	
Perforations From 2,888 To 3,008		Perforations From OPEN To ENDED		Well No. 1	
Type well - Single - Mordenhead - G.G. or G.O. Multiple SINGLE		Packer Set At NONE		Country CHAVES	
Producing thru TUBING		Reservoir Temp. °F 60°		Baro. Press. - P _a 13.2	
State NEW MEXICO		L 2948		H 2948	
G _g .644		% CO ₂ 1.98		% N ₂ 7.70	
Prover 2.00		Meter Run		Error	

FLOW DATA						TUBING DATA		B.H.P. DATA		Duration of Flow
Flow 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.	CHOKE	
1	2.00	X .0625	100	.00	62	650	62		11/64	1 HR.
2	2.00	X .09375	135	.00	57	639	57		12/64	1 HR.
3	2.00	X .125	450	.00	57	591	57		13/64	1 HR.
4	2.00	X .1875	250	.00	53	435	53		15/64	1 HR.

RATE OF FLOW CALCULATIONS							
Flow Line Size	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{sp}	Rate of Flow Q, MCFD
1	0.06405	.00	113.2	.9981	1.246	1.009	9
2	0.1410	.00	148.2	1.003	1.246	1.012	26
3	0.2648	.00	463.2	1.003	1.246	1.039	159
4	0.6082	.00	263.2	1.007	1.246	1.023	205

Flow Line Size	P ₁	Temp. °R	T ₁	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	.17	522	1.50	.983					666	349
2	.22	517	1.48	.977						
3	.69	517	1.48	.927						
4	.39	513	1.47	.956						

676.2	P _c ²	457.2	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.787$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.787}{1.787 - 1.0} = 1.787$
1			439.8	17.4		
2			425.4	31.8		
3			365.3	91.9		
4			201.4	255.8		

366.4	Mcf/d @ 15.025	Angle of Slope °	45	Slope, n	1.000
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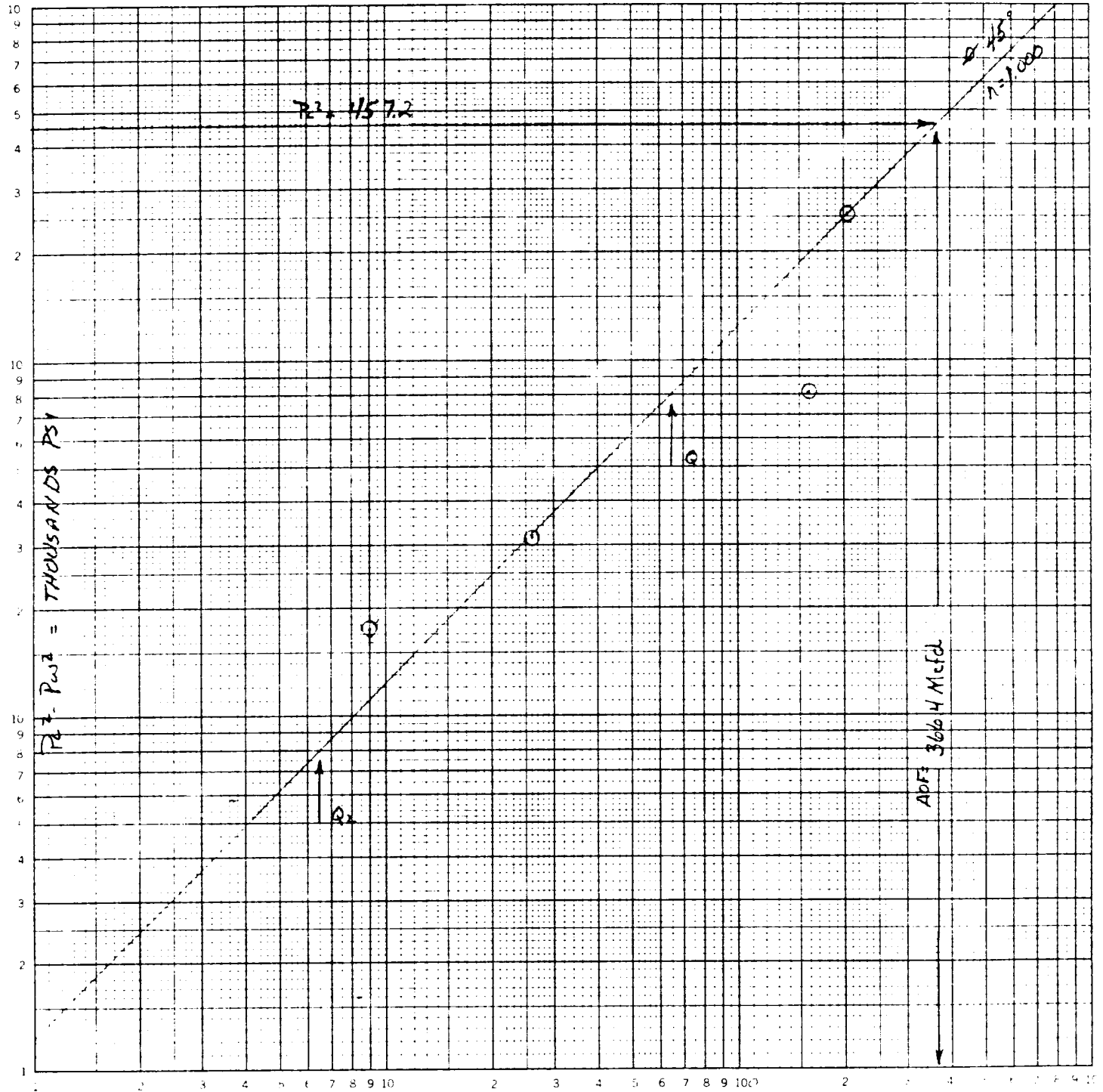
Approved By Commission:	Conducted By: JOHN SIEGWEIN	Calculated By: RICHARD TOWNLEY	Checked By: DON BENNETT
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Pasted ID-2
& Comp Book
6-4-82
SF

TRANSWELLER OIL COMPANY
 MACHO STATE
 SEC. 32 TWP 6S RGE 2E
 CHAVES COUNTY
 5-11-82

46 7400

K-S LOGARITHMIC 3 X 3 CYCLES
 KEUFFEL & ESSER CO. MADE IN U.S.A.



$$\bar{P}_2^2 - P_{w^2} = 80$$

$$\bar{P}_2^2 - P_{w^2} = 8$$

Q_1 , Mcfd

$$\log Q_1 = 1.8139$$

$$\log Q_2 = .8139$$

$$n = 1.000$$

Q_1 6.5
 Q_2 6.5

LOCATION: Unit Macho State #1 Section 32 Township 6S Range 23E
 H 2.45 L/H 1.000 G 644 % CO₂ 1.28 % N₂ 7.70 % H₂S ✓
 d 1.995 F₁ 0.18331 GH 18.98 P_{cr} 6666 T_{cr} 349
 TABLE 18.8

LINE	RATE 1	RATE 2	RATE #3	RATE #4	
1 Q _m	.009	.026	.159	.205	.205
2 T _w (W.H. °R)	534	534	534	534	534
3 T _s (B.H. °R)	563	563	563	563	563
4 T = $(\frac{T_w + T_s}{2})$	548.5	548.5	548.5	548.5	548.5
5 Z (Est.)	923	925	930	947	945
6 TC	506.3	507.4	509.0	519.4	518.3
7 GH/TZ	3.749	3.741	3.721	3.654	3.662
8 e ^s (Table XIV)	1.151	1.151	1.150	1.147	1.149
9 1 - e ^s (Table XIV)	.1312	.1309	.1302	.1281	.1283
10 P ₁	663.2	658.2	644.2	448.2	
11 P ₂ 2.1000	439.8	425.4	365.1	200.9	200.9
12 F ₁ (Table XV)	9.230	9.250	9.300	9.470	9.450
13 F ₂ = F ₁ TC	.0831	.0829	.1477	1.941	1.937
14 F ₃ 2 _m	.0069	.0578	.2.186	3.769	3.753
15 L/H (F ₂ Q _m) ²	.0009	.0076	.2847	.4826	.4815
16 F ₃ = L/H (F ₂ Q _m) ² (1 - e ^{-s})	439.8	425.4	365.3	201.4	201.4
17 P _w ² = P ₁ ² + F _w	506.2	429.4	420.0	230.9	231.0
18 F _s ² = e ^s P _w ²	711.5	699.6	649.1	482.6	480.6
19 F _s	6873	675.9	676.0	644.4	644.4
20 P = $(\frac{P_1 + F_s}{2})$	1.032	1.015	.9402	.6973	.6973
21 P ₁ = (P/P _{cr})					
22 T ₁ = (T/T _{cr})	1.57	1.57	1.57	1.57	1.57
23 Z (Table XI)					

One copy to be filed in District Office (Work copy acceptable)

SUGGESTED FIELD DATA SHEET (Not Required to File)						1980 FNL	
WATER SAMPLE						1980 FEL	
Type Test FLOW TEST (☒ Initial ☐ FOUR POINT) Annual Test Date 5-2-82						Lease No. or Serial No.	
Company TRANSWESTERN GAS SUPPLY Location AIR NEW WELL						Attention	
Field UNDESIGNED Reservoir ABO						Unit	
Completion Date		Total Depth		Plug Back TD		Elevation	
3,982		3,515		4,063		KB	
Day Date		Well		Set At		Perforations From To	
4-1/2		10.5		4,058		2,888 3,008	
Day Date		Well		Set At		Perforations From To	
2-3/8		4.7		1,995		2,772 OPEN ENDED	
Type Completion (Describe)						Former Set At	
SINGLE						NONE	
Flowing Into		Reservoir Temp. F		Mean Annual Temp. F		Flow Press. P ₂	
TUBING		60°		13.2			
T		T _g		S ₁₂		S ₁₂	

TIME	IN. AP	Wellhead Working Pressure			PRESSURE			DIFF.	Temp. F	Gratic	(Pressure drop in tubing) (Type A.B. Gravity Amount)
		Inq. Press.	sg. Press.	Temp. F	Pressure	Temp. F	Gratic				
Time of Reading											MCFD
1330	0	680								.375	
1345	1/4	729			250	55	82			.375	99.5
1400	1/2	690			250	50	82			.375	
1415	3/4	662		72	250	50	80			.375	
1430	1	620		71	245	47	80			.375	91.1
1445	1-1/4	580		71	240	47	81			.375	
1500	1-1/2	565		70	240	45	82			.375	
1515	1-3/4	525		70	240	41	80			.375	
1530	2	497		71	240	37	80			.375	80.0
1545	2-1/4	455		70	240	37	80			.375	
1600	2-1/2	437		70	240	32	80			.375	
1615	2-3/4	405		70	240	34	80			.375	
1630	3	310		70	240	32	78			.375	74.4
1645	3-1/4	350		70	240	26	78			.375	
1700	3-1/2	327		70	240	22	78			.375	
1715	3-3/4	305		70	240	17	78			.375	
1730	4	272		69	240	12	76			.375	45.5
1745	4-1/4	235		69	210	7	76			.375	
1800	4-1/2	233		69	210	5	74			.375	
1815	4-3/4	231		69	210	5	74			.375	27.5
1830	5	230			210	4				.375	24.6
1845	5-1/4	229			210	4				.375	
1900	5-1/2	230			180	3.75				.375	
1915	5-3/4	230			150	3.75				.375	20.1
1930	6	220			145	3.75				.375	19.9
1945	6-1/4	226			90	3.				.375	13.9
2000	6-1/2	226		62	80	2.5	64			.375	
2015	6-3/4	223		62	78	2.5	64			.375	
2030	7	223		61	75	2.5	64			.375	11.6
2045	7-1/4	227		61	75	2.5	63			.375	
2100	7-1/2	230		61	75	2.5	63			.375	
2115	7-3/4	232		61	75	2.5	63			.375	
2130	8	232		61	75	2.5	63			.375	11.6
2145	8-1/4	234		61	78	2.3	63			.375	

SUGGESTED FIELD DATA SHEET (Not Prepared To File)						1980 FNL	
						1980 FEL	
Type Test		Test Date				Lease No. or Serial No.	
FLOW TEST ☒ Initial ☐ Four Point ☐ Annual ☐ Special		5-2-82					
Company		County		Location		Allottee	
TRANSWESTERN GAS SUPPLY		AIR NEW WELL					
Field		Reservoir		Location		Unit	
UNDESIGNED		ABO					
Completion Date		Total Depth		Plug Back TD		Elevation	
		3,982		3,515		4,063 KB	
Casing Size		WT.		Set At		Perforations From	
4-1/2		10.5		4.058		2,888 3,008	
Pipe Size		WT.		Set At		Perforations From	
2-3/8		4.7		1.995		2,772 OPEN ENDED	
Type Completion (Describe)		Reservoir Temp. F		Mean Annual Temp. F		Barrel Set At	
SINGLE				60°		NONE	
Casing thru		Reservoir Temp. F		Barrel Set At		NONE	
TUBING				13.2			
		H		C _g		C _{CO₂}	
				C _{H₂}		C _{H₂O}	
						NEW MEXICO	
						CHAVES	
						MACHO STATE	
						1	
						32 6S 23E	

ATI	FL. APT. TIME	Wellhead Working Pressure			METERS C.G. PHYSICAL				REMARKS (Include all data not on form) Type - A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NN, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ
		Thru	Temp. F	Pressure Pavg.	DIFF.	Temp. F	Orifice		
								MCFD	
2200	8-1/2	235		61	78	2.0	63	.375	10.6
2215	8-3/4	235		60	78	2.0	62	.375	
2230	9	250		60	30	2.0	62	.375	6.6
2245	9-1/4	253		60	5	2.0	62	.375	
2300	9-1/2	253		60	50	2.0	62	.375	
2315	9-3/4	253		60	80	2.0	62	.375	
2330	10	258		60	100	2.0	62	.375	12.0
2345	10-1/4	263		59	110	2.0	62	.375	
2400	10-1/2	267		58	115	2.0	62	.375	
2415	10-3/4	271		58	115	2.0	61	.375	
2430	11	275		57	115	2.0	60	.375	12.9
2445	11-1/4	278		57	110	2.0	59	.375	
0100	11-1/2	282		57	110	2.0	59	.375	
0115	11-3/4	285		57	108	2.0	59	.375	
0130	12	288		57	108	2.0	59	.375	12.5
0145	12-1/4	290		57	108	2.0	59	.375	
0200	12-1/2	294		56	105	1.7	58	.375	
0215	12-3/4	296		57	105	1.7	58	.375	
0230	13	298		58	105	1.7	58	.375	11.3
0245	13-1/4	301		58	105	1.7	58	.375	
0300	13-1/2	305		57	105	1.7	58	.375	
0315	13-3/4	306		57	105	1.7	58	.375	
0330	14	307		57	105	1.7	58	.375	11.3
0345	14-1/4	310		57	105	1.7	58	.375	
0400	14-1/2	315		57	105	1.7	59	.375	
0415	14-3/4	315		58	105	1.7	59	.375	11.3

BENNET - CATHEY

(505) 748-3354 / Artesia, New Mexico 88203

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY TRANSWESTERN GAS SUPPLY WELL NAME MACHO STATE WELL NO. 1
 DATE OF TEST 5-2-82 TO 5-3-82 FORMATION ABO PAGE 1 OF 2
 COMPANY MAN HANK SPRUILL

FOUR POINT INITIAL CHART READINGS AND CALCULATIONS FOR BUILDUP OR DRAWDOWN TEST

ELEMENT NUMBER RPG3 #16150N RANGE 2,000 LBS.
 CLOCK NUMBER 17425 RANGE 72 HOURS
 TIME WELL SHUT IN 4-22-82
 TIME CLOCK STARTED 1156
 DEAD WEIGHT ELEMENT ON SURFACE 693 PSIA SHUT IN LBS.
 TIME ELEMENT REACHED BOTTOM 1245 HOURS
 DEAD WEIGHT ELEMENT ON BOTTOM 693 PSIA SHUT IN LBS.
 ELEMENT SET AT 2,772 FEET.
 TEMPERATURE 2,772 FT. 94 °F.
 DEAD WEIGHT AT THE END OF _____ HOURS _____ MINUTES.

DATE	HOUR	TIME	DEFLECTION in/inches	CALCULATED PRESSURE psig	CORRECTION P ± PC psig	CORRECTED PRESSURE psia	PRESSURE AT M.D. POINT OF PERFORATIONS psia
5-2-82	SIP			902	13.2	915	
START TEST	0	1330		855	13.2	868	
	1/4	1345		817	13.2	830	
	1/2	1400		772	13.2	785	
	3/4	1415		735	13.2	748	
	1	1430		693	13.2	706	
	1-1/4	1445		664	13.2	677	
	1-1/2	1500		624	13.2	637	
	1-3/4	1515		594	13.2	607	
	2	1530		554	13.2	567	
	2-1/4	1545		522	13.2	535	
	2-1/2	1600		488	13.2	501	
	2-3/4	1615		452	13.2	465	
	3	1630		423	13.2	436	
	3-1/4	1645		396	13.2	409	
	3-1/2	1700		374	13.2	387	
	3-3/4	1715		353	13.2	366	
	4	1730		341	13.2	354	
	4-1/4	1745		339	13.2	352	
	4-1/2	1800		338	13.2	351	
	4-3/4	1815		337	13.2	350	
	5	1830		334	13.2	347	
	5-1/4	1845		332	13.2	345	
	5-1/2	1900		331	13.2	344	
	5-3/4	1915		333	13.2	346	
	6	1930		336	13.2	349	
	6-1/4	1945		342	13.2	355	
	6-1/2	2000		345	13.2	358	
	6-3/4	2015		358	13.2	371	
	7	2030		363	13.2	376	
	7-1/4	2045		367	13.2	380	
	7-1/2	2100		371	13.2	384	
	7-3/4	2115		377	13.2	390	
	8	2130		380	13.2	393	
	8-1/4	2145		382	13.2	395	
	8-1/2	2200		386	13.2	399	
	8-3/4	2215		385	13.2	398	

SUBSURFACE PRESSURE MEASUREMENTS

CHART READINGS AND CALCULATIONS FOR BUILDUP OR DRAWDOWN TEST

[illegible]

TEST DEPTH: 2,772 FEET

ELEMENT NO.: RFG3 #16150N
RANGE: 2,000 LBS.

CLOCKS: 17425
RANGE: 72 HOURS

OPERATOR: DON BENNETT

Note: See Attached Sheet for Tabulation of Pressure
And Time.

HANK SPRULL

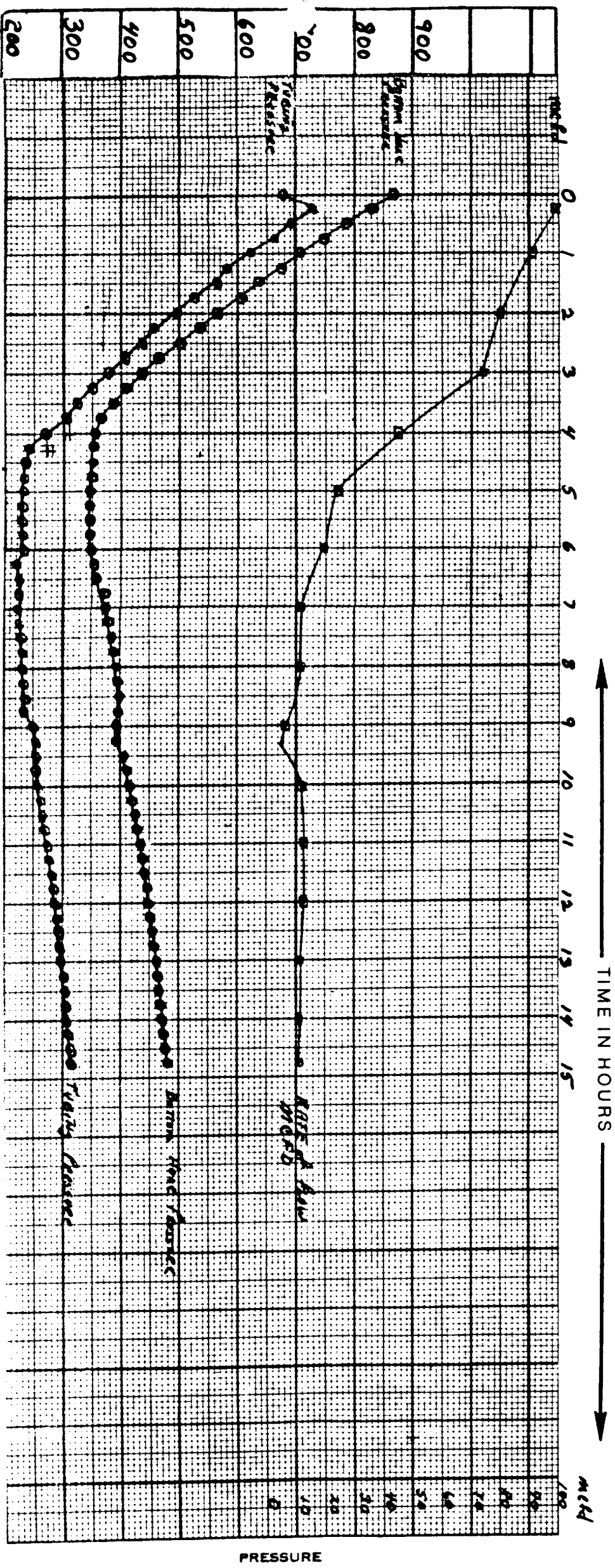
TRANSWESTERN GAS SUPPLY

MACHO STATE WELL NO. 1

BENNETT-CATHEY WIRE LINE SERVICE
Box 787
Artesia, N.M. 88210
505/746-3281

Drawn By Scale: As Shown

BENNETT-
CATHEY
WELL SERVICES



BENNET - CATHEY

05) 748-3354 / Artesia, New Mexico 10

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY TRANSWESTERN GAS SUPPLY WELL NAME MACHO STATE WELL NO. 1
 DATE OF TEST 5-2-82 TO 5-5-82 FORMATION ABO PAGE 1 OF 2
 COMPANY MAN HANK SPRUILL

CHART READINGS AND CALCULATIONS FOR BUILDUP OR DRAWDOWN TEST

ELEMENT NUMBER RPG3 #16150N RANGE 2,000 LBS.
 CLOCK NUMBER 17245 RANGE 72 HOURS
 TIME WELL SHUT IN 0515 HOURS 5-3-82
 TIME CLOCK STARTED 1156 HOURS 5-2-82
 DEAD WEIGHT ELEMENT ON SURFACE 693 PSIA SHUT IN LBS.
 TIME ELEMENT REACHED BOTTOM 1245 HOURS
 DEAD WEIGHT ELEMENT ON BOTTOM 693 PSIA SHUT IN LBS.
 ELEMENT SET AT 2,722 FEET.
 TEMPERATURE 2,772 FT. 94 °F.
 599 PSIA DEAD WEIGHT AT THE END OF 48 HOURS 15 MINUTES.

DATE	HOUR	TIME	DEFLECTION inches	CALCULATED PRESSURE psig	CORRECTION P ± PC psig	CORRECTED PRESSURE psia	PRESSURE AT MID-POINT OF PERFORATIONS psia
5-3-82	0	0415		458	13.2	471	
	1/4	0430		461	13.2	474	
	1/2	0445		464	13.2	477	
	3/4	0500		466	13.2	479	
	1	0515		469	13.2	482	
	1-1/4	0530		471	13.2	484	
	1-1/2	0545		473	13.2	486	
	1-3/4	0600		476	13.2	489	
	2	0615		478	13.2	491	
	2-1/2	0645		482	13.2	495	
	3	0715		488	13.2	501	
	3-1/2	0745		492	13.2	505	
	4	0815		496	13.2	509	
	4-1/2	0845		490	13.2	513	
	5	0915		504	13.2	517	
	6	1015		511	13.2	524	
	7	1115		518	13.2	531	
	8	1215		525	13.2	538	
	9	1315		532	13.2	545	
	10	1415		537	13.2	550	
5-4-82	11	1515		543	13.2	556	
	12	1615		549	13.2	562	
	14	1815		560	13.2	573	
	16	2015		569	13.2	582	
	18	2215		579	13.2	592	
	20	2415		587	13.2	600	
	22	0212		594	13.2	607	
	24	0415		601	13.2	614	
	26	0615		607	13.2	620	
	28	0815		613	13.2	626	
	30	1015		619	13.2	632	
	32	1215		623	13.2	636	
	34	1415		629	13.2	642	
	36	1615		634	13.2	647	
	38	1815		638	13.2	651	
	40	1915		642	13.2	655	
	42	2015		647	13.2	660	
	44	2215		650	13.2	663	

Artesia, New Mexico 88210

COMPANY TRANSWESTERN GAS SUPPLY WELL NAME MACHO STATE WELL NO. 1
DATE OF TEST 5-2-82 TO 5-5-82 LOCATION ABO PAGE 2 OF 2

[illegible]



BENNETT-CATHEY WIRE LINE SERVICE

P. O. BOX 787
ARTESIA, NEW MEXICO 88210
Phone (505) 746-3281



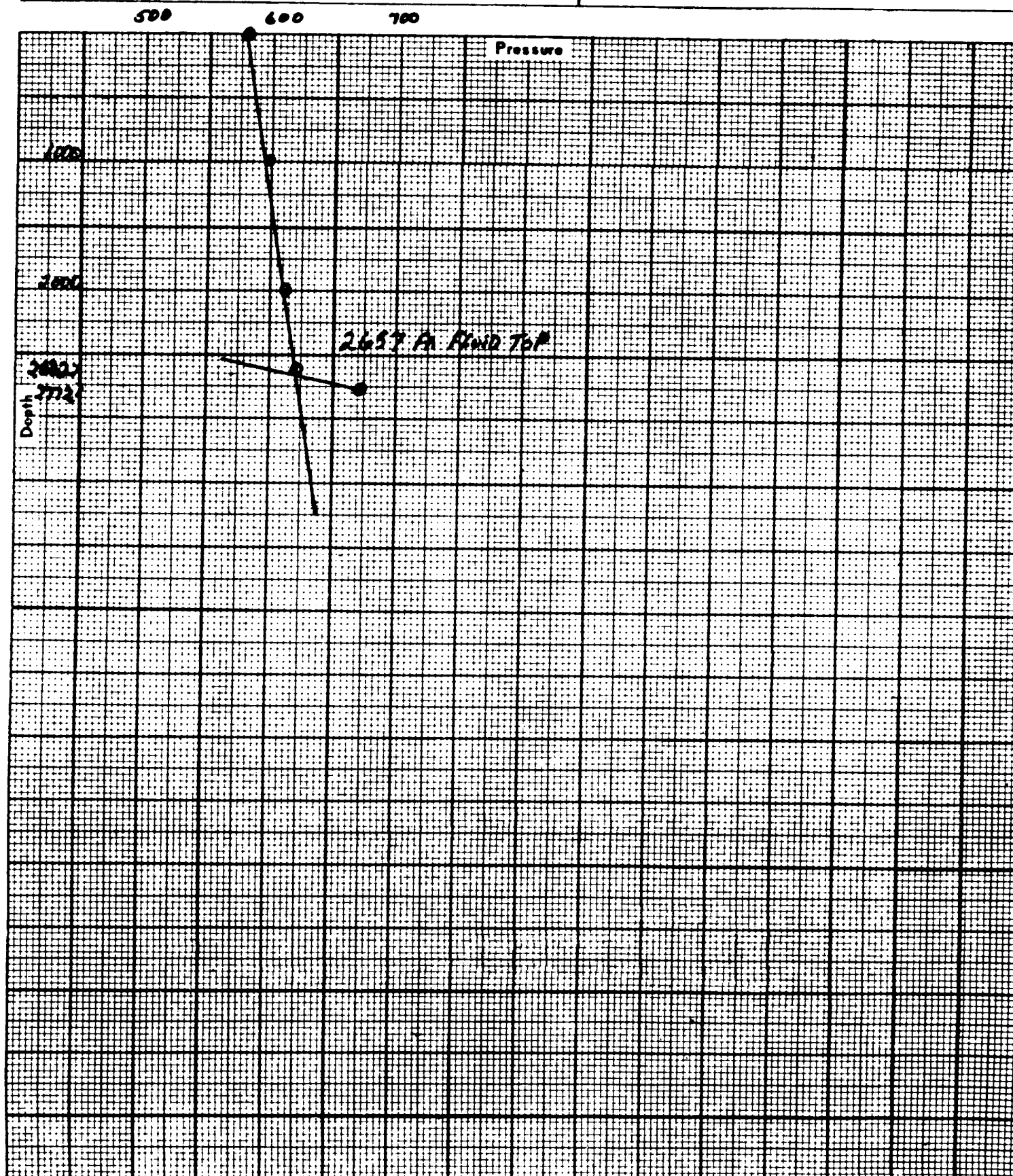
BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR TRANSWESTERN GAS SUPPLY
LEASE MACHO STATE
WELL NO. 1
POOL FORMATION ABO
DATE 5-5-82 TIME 1110 HOURS
CO. MAN HANK SPRUILL
STATUS SHUT IN TEST DEPTH 2,772 FEET
TIME S.I. 1615 HRS. LAST TEST DATE 1ST TEST
5-3-82 BHP LAST TEST
TUB. PRES. 579 BHP CHANGE
CAS. PRES. FLUID TOP
DATUM PLANE WATER TOP
DATUM PSIA 672 RUN BY BOB HERREN
TEMP 94° CLOCK # 17245
PRESSURE RANGE 2,000 LBS.
ELEMENT NO. RPG3 #16150N

DEPTH	PRESSURE	GRADIENT
0	579	
1,000	598	1.9
2,000	613	1.5
2,622	623	1.6
2,772	672	32.7

TIME B.H.P. MEASURED: 1110 HOURS

LENGTH OF TIME WELL SHUT IN: 43 HRS
55 MIN.



TEST DEPTH: 2,772 FEET

ELEMENT NO.: RPG3 #16150N

RANGE: 2,000 LBS.

CLOCKS: 17245

RANGE: 72 HOURS

OPERATOR: BOB HERREN

Note: See Attached Sheet for Tabulation of Pressure
And Time.

HANK SPRULL

TRANSWESTERN GAS SUPPLY

MACHO STATE WELL NO. 1

BENNETT-CATHEY WIRE LINE SERVICE
Box 787
Artesia, N.M. 88210
505/746-3281

Drawn By

Scale: As Shown

BENNETT-
CATHEY
WELL SERVICES

