

A MEYER OIL CONSERVATION COMMISSION MULTI-POINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form G-12
Revised 9-1-64

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 5-27-82			
Company H. L. Brown, Jr.					Connection			
Pool					Formation Cisco Sand		Unit	
Completion Date 5-27-82		Total Depth 7825		Plug Back TD 7795		Elevation		Farm or Lease Name V. L. Smith
Cas. Size 5 1/2	Wt. 17#	d	Set At 7795	Perforations: From 7556 To 7588		Well No. 1		
Tub. Size 2 3/8	Wt. 4.7	d	Set At 7494	Perforations: From To		Unit Sec. Twp. Rge. P 11 6 33		
Type Well - Single - Bradenhead - G.G. or G.D. Multiple Single					Facker Set At 7494		County Roosevelt	
Producing Thru Tubing		Reservoir Temp. °F 141 7489		Mean Annual Temp. °F 68		Baro. Press. - P _a		State New Mexico
L 7494	H 7494	Gg .75	% CO ₂ 0	% N ₂ 0	% H ₂ S 0	Prover	Meter Run 4.026	Taps Flange

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.	
5							1399			
1.	4.026		1.75	550	9	83	1309	70	Facker	
2.	4.026		1.75	558	14	94	1274	71		
3.	4.026		1.75	580	34	94	1199	73		
4.	4.026		1.75	585	62	90	1089	72		
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 _{sp}	Rate of Flow Q, Mhd
1	14.93	71.19	563.2	.9786	1.155	1.064	1278
2	14.93	89.42	571.2	.9668	1.155	1.069	1594
3	14.93	142.02	593.2	.9668	1.155	1.071	2536
4	14.93	192.58	598.2	.9723	1.155	1.072	3461
5							

NO.	P _r	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	.84	543	1.33	.877	148	48.0	.75	X X X X X X X X	667	408
2	.86	554	1.36	.875				X X X X X		
3	.89	554	1.36	.871						
4	.90	550	1.35	.870						
5										

NO.	P _c	P _w	P _w ²	P _c ² - P _w ²
1	1889.2	1800.2	3241	328
2		1772.2	3141	428
3		1695.2	2874	695
4		1608.2	2586	983
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 3.631$$

$$ACF = C \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 11.673$$

$$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.373$$

Absolute Open Flow	11,673	Mhd @ 15.025	Angle of Slope °	46.5	Slope, n	.9428
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Remarks: PW Substituted for PT - Measured with Amerada Instrument No. 33109
 0-7000# Element

Approved By Commission:	Conducted By: Jernigan	Calculated By: Jernigan	Checked By: Spruell
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HOLLES OFFICE



KUYKENDALL

Bottom Hole Pressure Service Company

P.O. Box 11296 / A/C 915-337-5241 / Odessa, Texas 79760

STATIC-FLOWING-B. H. PRESSURES

COMPANY H. L. Brown, Jr. Well & No. V. L. Smith No. 1
 FIELD _____ Date 5-26/28-82 Instrument No. 15317N

DATE	STATUS	SERV. TIME	ELAPSED TIME		D. W. T. TP	BHP PSIG @ 7489
			HRS.	MIN		
5-26-82	Instruments on Bottom	15:30				
	Well Shut In	16:00	00	00		1736
		19:00	03	00		1860
		20:00	04	00		1862
		22:00	06	00		1863
		24:00	08	00		1865
5-27-82		02:00	10	00		1867
		04:00	12	00		1869
		06:00	14	00		1871
		08:00	16	00		1872
		10:00	18	00		1874
		12:00	20	00		1874
		14:00	22	00		1874
	End of Build Up	16:00	24	00		1875
	Start of 4-Point					
	Opened on 1st Rate	16:00	00	00		
		16:30	00	30		1799
		17:00	01	00		1787
	Opened on 2nd Rate	17:00	00	00		
		17:30	00	30		1770
		18:00	01	00		1759
	Opened on 3rd Rate	18:00	00	00		
		18:30	00	30		1692
		19:00	01	00		1682
	Opened on 4th Rate	19:00	00	00		
		19:30	00	30		1602
		20:00	01	00		1595
	Well Shut In	20:00	00	00		

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Bottom Hole Pressure Service Company

P.O. Box 11296 / A/C 915-337-5241 / Odessa, Texas 79760

STATIC-FLOWING-B. H. PRESSURES

COMPANY H. L. Brown, Jr. Well & No. V. L. Smith No. 1

FIELD _____ Date 5-26/28-82 Instrument No. 15317N

DATE	STATUS	SERV. TIME	ELAPSED TIME		D. W. T. TP	BHP PSIG @ 7489
			HRS	MIN		
5-27-82		24:00	04	00		1859
5-28-82		04:00	08	00		1868
		08:00	12	00		1875

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Bottom Hole Pressure Service Company

P.O. Box 11296 / A/C 915-337-5241 / Odessa, Texas 79760

BOTTOM HOLE PRESSURE REPORT

Operator H. L. Brown, Jr. Lease V. L. Smith Well No. 1
Field _____ Reservoir Cisco Datum _____
Test Date 5-28-82 Well Status _____ Hours Shut In _____
Tubing 2 3/8 Depth _____ End _____ Packer _____ S. N. _____
Casing 5 1/2 Depth _____ Perf. 7556 - 7795 Total Depth _____

	Depth	Press. Lbs/Sq. In.	Δ Press.	Gradient Lbs/Ft.
Tubing Press.....	-0-	1399		
Casing Press.....	2000	1537	138	.069
Top of Fluid.....	4000	1655	118	.059
Top of Water.....				
Temp. @.....°F.....	6000	1779	124	.062
Elev. KB.....GI.....	7289	1863	84	.065
Last Test Date.....	7489	1876	13	.065
Press. Last Test.....				
Change.....Per Day.....				
Inst. No. <u>33109</u> Cal. <u>5-82</u>				
Tested By..... <u>Thompson</u>				
Calcu. By..... <u>Spruell</u>				
Prod. Index..... <u>5</u> bbls/day/lb.....				
Drop.....				
Cumulative prod.				

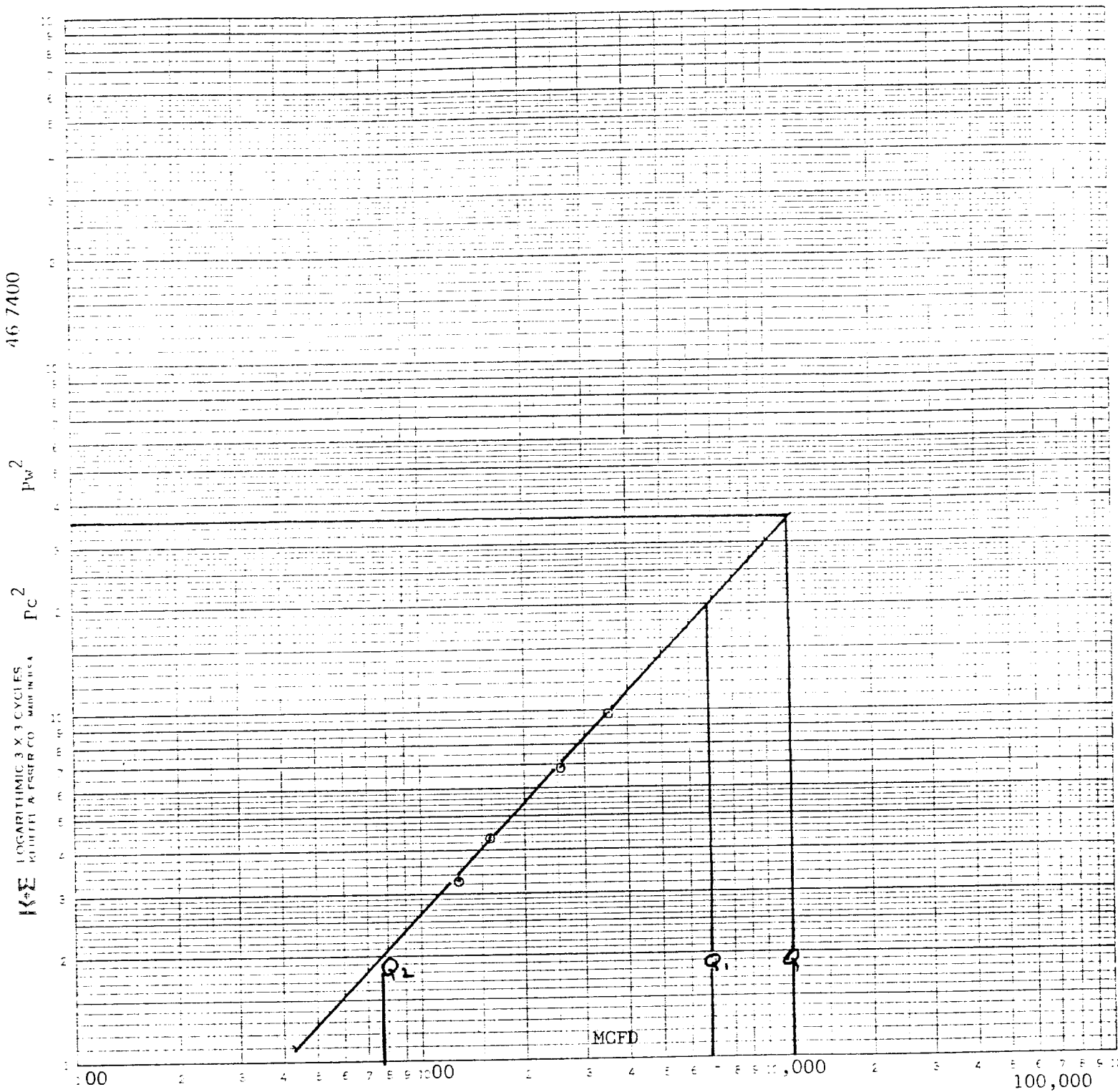
Remarks:

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C.C.D.
HOBBS OFFICE

H. L. Brown, Jr.
 V. L. Smith No. 1
 Absolute Open Flow Test
 5-27-82



$$Q_1 = 6800$$

$$\text{Log } Q_1 = 3.83251$$

$$Q_2 = 775$$

$$\text{Log } Q_2 = 2.8893$$

$$N = .94$$

$$Q = 11,674 \text{ MCFD}$$

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