

PHILLIPS PETROLEUM COMPANY
NATURAL GAS DIVISION
BACK-PRESSURE TEST SHEET

Southern Union 126 Gas (2/15/51)
LEASE Jicarilla Well No. 1-E
DATE 7-27 1954

FIELD _____ COUNTY Rio Arriba STATE New Mexico
SEC. 16 TWP. 26 RGE. 4 BLK. _____ SURVEY _____
CASING SIZE 7 WT. _____ SET AT 3407 PERF. _____ TO _____
GAS PAY FROM 3416 TO 3437 L. _____ G. .650 (ave) GL _____
TUBING SIZE 2 3/8 WT. 4.7 SET AT 3423 PERF. _____ TO _____
SIZE PROVER _____ METER RUN _____ TYPE CONT. _____ BAROMETER 12
e^s _____ F_d _____ ☒ Initial Test _____ Retest _____ Official _____ PPCo. Only
REMARKS _____

OBSERVED DATA

Date	NO.	ORIFICE SIZE	METER PRESSURES			Flow. Temp. °F	WELLHEAD		DURATION OF FLOW (Hrs.)
			Static Psig	P _m Psia	Diff. h _w		(UP) Psig	(P _w) Psia	
7-27-54	1.	1/8"				65	1052.5	1064.5	3
7-28-54	2.	5/32"				64	1029	1041	3
7-29-54	3.	7/32"				65	975	987	3
7-30-54	4.	5/16"				66	875	887	3
	5.								

FLOW CALCULATIONS

NO.	COEFF. "C" (24 Hr.)	P _m h _w	$\sqrt{P_{m}h_w}$ F _{pv}	WORKING PRESS. ON PROVER		FLOW TEMP. FACTOR F _t	GRAVITY FACTOR F _g	RATE OF FLOW Q-M ³ cfd @ 14.65 Psia
				Psig	Psia			
1.	3499		1.112	1050.5	1062.5	.9952	.9608	395
2.	5452		1.108	1020	1032	.9962	.9608	597
3.	1.109		1.104	963	975	.9952	.9608	1147
4.	2.208		1.089	854	866	.9943	.9608	1989
5.								

PRESSURE CALCULATIONS (All squared pressures in thousands)

SIP	1089	1088	1087	1086	
Bar	1112	12	12	12	
P _{c2}	1101	1100	1099	1098	
P _c	1212.20	1210.00	1207.8	1205.60	
x e ^s					
P _f					
	(1)	(2)	(3)	(4)	(5)

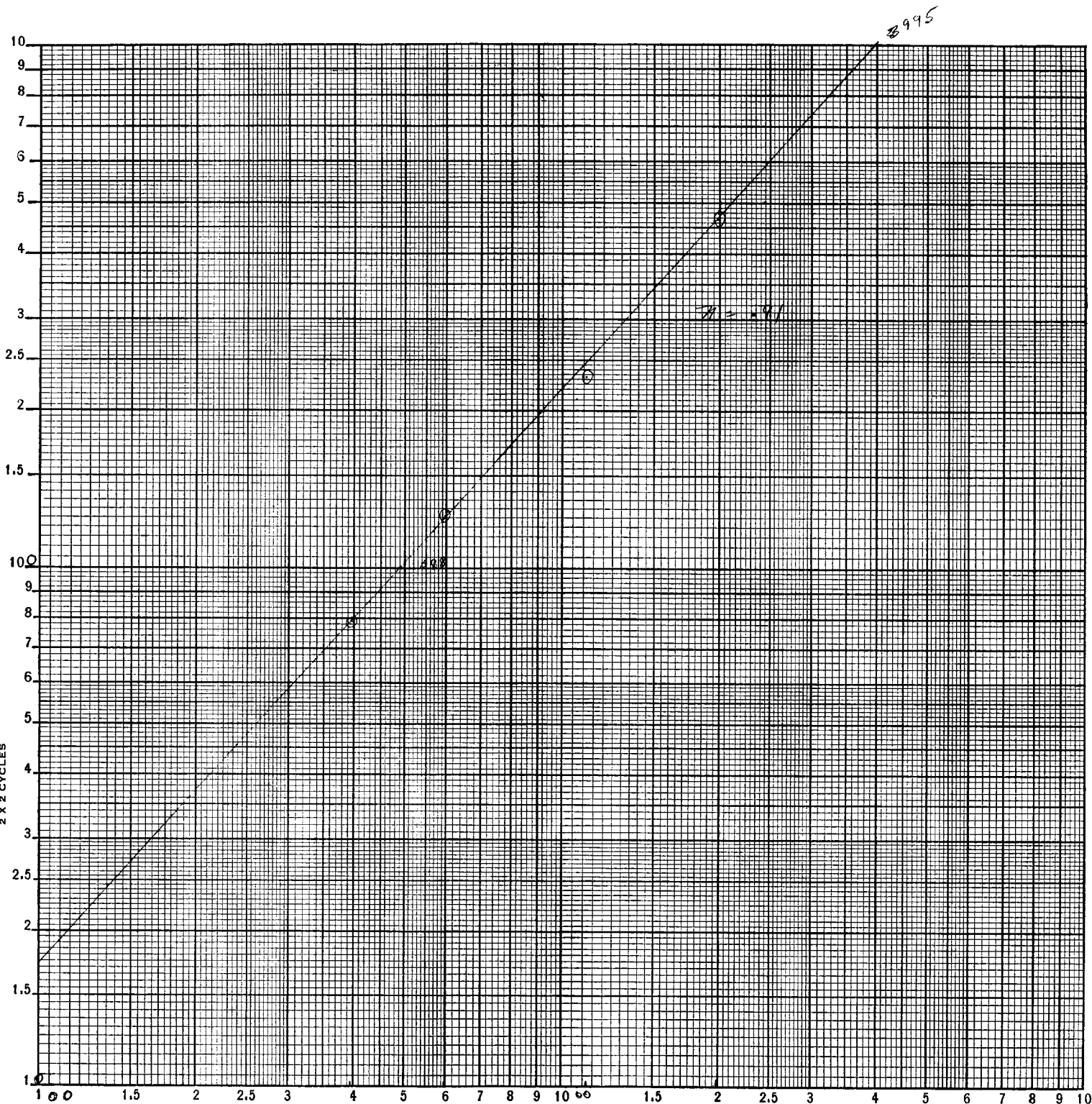
Well Shut-in _____ Days
before or after test. _____ hrs.

NO.	P _w ²	e ^s P _w ²	F _d Q	F ²	R ²	P _s ²	P _c ² - P _w ² P _c ² - P _w ²
1.	1133.16						79.04
2.	1083.68						126.32
3.	974.17						233.63
4.	786.77						418.83
5.							

ABSOLUTE POTENTIAL _____ Mcf Per Day @ 14.65 Psia FAG _____ Mcfd
ABSOLUTE POTENTIAL _____ Mcf Per Day @ _____ Psia
SHUT-IN WELLHEAD PRESSURE _____ Psig

Computed by W. B. Smith Date 8-4-54
Checked by _____ Date _____

Commission _____
Company W. B. Smith
Pipeline C. R. Warner
Others _____



3995 - 3.601517
488 - 2.688420

.713097

GAS WELL B.P. TEST PRESSURE DR/DOWN DATA

Les se

Jicarilla

Well No. 1-E

Date By: **Wagner**

Date	Hrs.	Time of Day	Working Pressure Data			Crit. Flow Prover			Remarks
			W.P. Psig	(ΔP)	ΔP/Hr.	Psig	OF	Orifice	
7-27-54		11:20A	1089		1089			1/8	2" Prover
		11:25	Opened Well						
		11:45	1060	29		1058	65		Dry
		12:05P	1056	4		1054	65		Freezing off slightly
		12:25	1054	2		1053	65		
		12:40	1053.5	5		1052 1/2	65		Ice on plate
		12:55	1053.5	0		1052	65		
		1:25P	1053	5		1051	64		
		1:55	1052.5	5		1051	65		Dry
		2:25	1052.5	0		1050.5			
		3 1/2	1056						
		4 1/2	1055	1					
		50	1054.5	5					
	1	0	1054	5					
		12	1053.5	5					
		26 1/2	1053.5	0					
		44	1053	5					
	2	5	1052.5	5					
		30	1052.5	0					
	3	0	1052.5	0					

Company Southern Union Lease Jicarilla Well No. 1-E

Date	Hrs.	Time of Day	Working Pressure Data			Crit. Psig	Flow OF	Prover Orifice	Remarks
			W.P. Psig	(ΔP)	ΔP/Hr.				
7-28-54			CSG		Tub.				
		11:05A	1088		1087			5/32	2" Prover
		11:10	Opened Well						
		11:30A	1043	45		1039	63		Dry
		11:50A	1036	7		1032	64		Ice on plate
		12:10P	1033	3		1029	64		
		12:25	1031.5	1.5		1027	64		Freezing off
		12:40	1031	.5		1026	64		
		1:10	1030.5	.5		1024	64		
		1:40	1029.5	1.0		1022	64		
		2:10	1029	.5		1020	64		Ice on bottom of plate
		3:4 1/2	1037						
		4:1 1/2	1035	2					
		50	1033	2					
	1	0	1033	0					
		12	1032	1					
		26 1/2	1031	1					
		44	1030.5	.5					
	2	5	1030	.5					
		30	1029.5	.5					
	3	0	1029	.5					
			S P G R .647 @ 1:15P						

Company Southern Union Lease Jicarilla Well No. 1-E

[illegible]

GAS WELL E.P. TEST PRESSURE DR/DOWN DATA

Company Southern Union Lease Jicarilla Well No. 1-E

Date By: **Wagner**

Date	Hrs.	Time of Day	Working Pressure Data			Crit. Psig	Flow OF	Prover Orifice	Remarks
			W.P. Psig	(ΔP)	ΔP/Hr.				
7-30-54			CSC		TUB.				
		10:55A	1086		1085	SIP			
		11:00A	Opened Well					5/16	2" Prover
		11:20	914	172		898	61		Ice on plate
		11:40	907	7		883	64		Freezing off
		12:00N	897	10		871	64		Sl. wet H ₂ O & Dist.
		12:15	890	7		865	64		"
		12:30P	887	3		860	64		"
		1:00P	878	9		852	64		"
		1:30P	872	6		846	65		"
		2:00	875	13		854	66		Freezing off
		34 1/2	907						
		41 1/2	905.5	1.5					
		50	903.5	2					
	1	0	897	6.5					
		12	891	6					
		26 1/2	887.5	3.5					
		44	880.5	7					
	2	5	878	2.5					
	2	30	872	6					
	3	0	875	13					

OTIS PRESSURE CONTROL, INC.

BOTTOM HOLE PRESSURE REPORT

MAIN OFFICE OGC
Work Order No. 40803

COMPANY Southern Union Gas Co. 1957 OCT 11 Jicarilla
LEASE Jicarilla SW $\frac{1}{4}$, Sec. 29, T-26N, R-3W WELL NO. 2-D
DATE 10/8/57 TIME 1600 STATUS OF WELL Flowing
PAY TOP 3790 BOTTOM 3821 T.D. 3821 DATUM
TUBING 3800 DEPTH B.H.C. Plug PACKER
CASING 5 $\frac{1}{2}$ " DEPTH 3790 PERFS. Open Hole LINER TREE TOP

Deflection					
Depth Feet	Pressure-PSIG	Pressure	Gradient LBS./FT.	Casing Pressure	#DWT
Lube	.353	513		Tubing Pressure	513 #DWT
1000	.366	530	.017	Oil Level	FT.
2000	.379	549	.019	Water Level	FT.
3000	.394	569	.020	Hours - Shut In	Flow
3500	.402	581	.024	Temp. @ <u>3800</u>	F. 112° F.
3600	.406	586	.050	Elev.-D.F.	Ground
3700	.409	592	.060	Last Test Date	
3800	.412	599	.070	Press. Last Test	PSIG
				B.H.P. Change	#s/ DAYS
				Loss	#s/DAY
				Choke Size	
				Oil Bbls./Day	
Last Cumulative Production		Present Cumulative Production		Water Bbls./Day	
Production Between Tests		Recovery Factor Bbls./Pound Loss		Total Bbls./Day	
Instrument <u>13030</u>		Calculated by		Orifice Line	
Remarks:				Static # Diff.	
				Gas Sp. Gr. TF. F	
				Cu. Ft./Day	
				GOR Cu. Ft./Bbl.	
				GFR Cu. Ft./Bbl.	
				P.I. Bbls./Day# Drop	

OTIS PRESSURE CONTROL, INC.

BOTTOM HOLE PRESSURE REPORT

Work Order No. 40663

COMPANY Southern Union Gas Co. FIELD Jicarilla
 LEASE Jicarilla NE/4, Sec.30 T-26N R-3W WELL NO. 4-D
 DATE 10/8/57 TIME 1200 STATUS OF WELL Shut-in
 PAY TOP 3786 BOTTOM 3814 T.D. 3849 DATUM
 TUBING 3750 DEPTH 3814 B.H.C. Pin Plug PACKER
 CASING 4 1/2" DEPTH 3849 PERFS. 3786-3814 LINER TREE TOP

Depth Feet	Deflection Pressure PSIG	Pressure	Gradient LBS./FT.	Casing Pressure	#DWT
Lube	.735	1061		Tubing Pressure 1061	#DWT
1000	.755	1094	.033	Oil Level	FT.
2000	.780	1128	.034	Water Level	FT.
3000	.805	1162	.034	Hours - Shut In	Flow
3500	.818	1180	.036	Temp. @ 3750	F. 113° F.
3600	.821	1185	.050	Elev.-D.F.	Ground
3700	.825	1190	.050	Last Test Date	
3750	.830	1199	.180	Press. Last Test	PSIG
				B.H.P. Change	#s/ DAYS
				Loss	#s/DAY
				Choke Size	
				Oil Bbls./Day	
Last Cumulative Production		Present Cumulative Production		Water Bbls./Day	
Production Between Tests		Recovery Factor Bbls./Pound Loss		Total Bbls./Day	
Instrument 13030		Calculated by		Orifice	Line
Remarks:				Static	# Diff.
				Gas Sp. Gr.	TF. F
				Cu. Ft./Day	
				GOR	Cu. Ft./Bbl.
				GFR	Cu. Ft./Bbl.
				P.I.	Bbls./Day/# Drop

OTIS PRESSURE CONTROL, INC.

BOTTOM HOLE PRESSURE REPORT

Work Order No. 40664

COMPANY Southern Union Gas Co. FIELD Jicarilla
 LEASE Jicarilla SW $\frac{1}{4}$ Sec. 30, T-26N, R-3W WELL NO. 5-D
 DATE 10/8/57 TIME 1400 STATUS OF WELL Flowing
 PAY TOP 3860 BOTTOM 3916 T.D. 3867 ~~3867~~ 3934 DATUM Pin
 TUBING 2" DEPTH 3867 B.H.C. Plug PACKER
 CASING 4 1/2" DEPTH 3934 PERFS. 3860 - 3916 LINER TREE TOP

Deflection					
Depth Feet	Pressure PSIG	Pressure	Gradient LBS./FT.	Casing Pressure	#DWT
Lube	.352	512		Tubing Pressure 512	#DWT
1000	.372	540	.028	Oil Level	FT.
2000	.391	567	.027	Water Level	FT.
3000	.405	585	.018	Hours - Shut In	Flow
3500	.412	598	.026	Temp. @ 3867	F. 112° F.
3600	.414	600	.020	Elev.-D.F.	Ground
3700	.416	602	.020	Last Test Date	
3800	.419	606	.040	Press. Last Test	PSIG
3867	.422	610	.040	B.H.P. Change	#s/ DAYS
				Loss	#s/DAY
				Choke Size	
				Oil Bbls./Day	
Last Cumulative Production		Present Cumulative Production		Water Bbls./Day	
Production Between Tests		Recovery Factor Bbls./Pound Loss		Total Bbls./Day	
Instrument # 13030		Calculated by		Orifice Line	
				Static # Diff.	
Remarks:				Gas Sp. Gr. TF. F	
				Cu. Ft./Day	
				GOR Cu. Ft./Bbl.	
				GFR Cu. Ft./Bbl.	
				P.I. Bbls./Day# Drop	