

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 1-28-82				
Company AMOCO PRODUCTION COMPANY				Connection LLANO PIPE LINE					
Pool WILDCAT				Formation UND. MORROW				Unit F	
Completion Date 1-8-82		Total Depth 14623.		Plug Back TD 14593.		Elevation 3268.		Form or Lease Name STATE IT	
Csg. Size 4.500	Wt. 15.1	d 3.707	Set At 14623.	Perforations: From 14418. To 14450.			Well No. 1		
Tbg. Size 2.875	Wt. 6.5	d 2.441	Set At 14165.	Perforations: From 0. To 0.			Unit Sec. Twp. Rge. F 16 26 33		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE					Packer Set At 11613.		County LEA		
Producing Thru TUBING		Reservoir Temp. °F 184 @ 14434.		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2		State NEW MEXICO	
L 14434.	H 14434.	G _g 0.635	% CO ₂ 0.59	% N ₂ 0.97	% H ₂ S 0.	Prover 0.	Meter Run 4.0	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.		Temp. °F
SI							8390.	69.			46.0
1.	4.03 x 1.500			380.	5.0	36.	7210.	64.	0.	0.	0.7
2.	4.03 x 1.500			385.	10.0	34.	6100.	68.	0.	0.	0.7
3.	4.03 x 1.500			390.	18.0	30.	5325.	70.	0.	0.	0.7
4.	4.03 x 1.500			390.	29.0	23.	4250.	71.	0.	0.	0.7
5.											

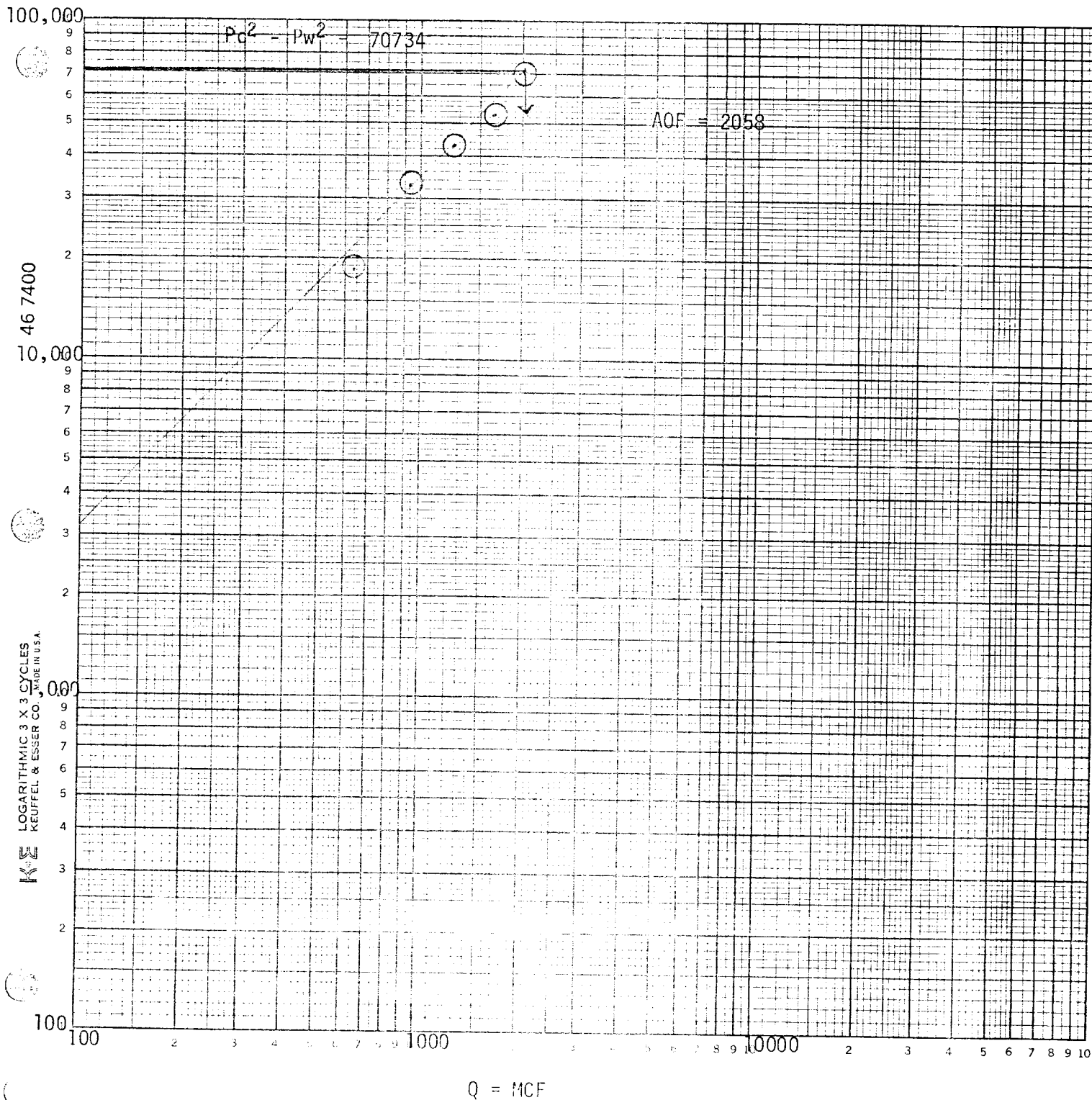
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	10.84	44.34	393.2	1.0239	1.2549	1.0452	646.
2	10.84	63.10	398.2	1.0260	1.2549	1.0465	922.
3	10.84	85.19	403.2	1.0302	1.2549	1.0484	1252.
4	10.84	108.13	403.2	1.0376	1.2549	1.0506	1604.
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	0.59	496.	1.36	0.915	A.P.I. Gravity of Liquid Hydrocarbons	0.
2.	0.59	494.	1.35	0.913	Specific Gravity Separator Gas	0.635
3.	0.60	490.	1.34	0.910	Specific Gravity Flowing Fluid	XXXXXX
4.	0.60	483.	1.32	0.906	Critical Pressure	672. P.S.I.A.
5.					Critical Temperature	366. R

P _c 8410.4 P _c ² 70734						
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.6799$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.6437$
1	52175.	7224.	52183.	18551.		
2	37371.	6108.	37305.	33429.		
3	28496.	5330.	28409.	42325.		
4	18175.	4253.	18089.	52645.		
5						

Absolute Open Flow 2058 Mcfd @ 15.025			Angle of Slope θ 46.2	Slope, n .958
Remarks: Point No. 3 used to extrapolate AOF.				
Signed By _____				
Approved by _____ Dist. L. Supv.		Conducted By:		Calculated By: Barbara Hemmeline
				Checked By: Larry Sheppard

STATE IT #1



915-586-3387

[illegible]

NEW-TEX LAB
P.O. BOX 1161
HOBBS NM 88241-1161
505-393-3561

ANALYSIS NUMBER: 6589
DATE OF RUN: 1/29/82
DATE RECEIVED: 1/23/82

ANALYSIS CERTIFICATE

SAMPLE IDENT: A4000 - STATE 17
CLIENT: JARREL WELL TESTING
ADDRESS: BOX 1654
CITY, STATE: HOBBS NM 88240

SAMPLING PRESS: 0 PSIG
STATION NUMBER:
SAMPLING TEMP: 2 DEG F

***** GASE ANALYSIS *****

MOLE
PERCENT

WAL/
MCF

ILLEGIBLE

NITROGEN	0.9664039	
CARBON DIOXIDE	0.3924004	
METHANE	57.9921570	
ETHANE	7.5293975	2.0002900
PROPANE	1.5549197	0.5365980
ISO-BUTANE	0.3286667	0.1272430
NORMAL BUTANE	0.3497443	0.1100232
ISO-PENTANE	0.1336362	0.0495228
NORMAL PENTANE	0.0678990	0.0242496
HEXANES	0.0257353	0.0126480
HEPTANES PLUS	0.0575102	0.0214112
TOTAL	100.2303000	0.8703420

PROPANE GPM:	0.54	BUTANES GPM:	0.22
ETHANE GPM:	2.2	PENTANES PLUS GPM:	2.11

SPECIFIC GRAV (CALC): 1.6322
MOLE WEIGHT: 11.07

HHV-BTU/CU FT	PRESSURE (PSIA)	TEMP
14.676	1000	1126
14.630	1001	1102
14.732	1002	1108
14.730	1003	1109

ANALYZED BY:

APPROVED BY:

JARREL SERVICES, INC.

POST OFFICE BOX 1654

PHONES 505 393-5396 — 393-8274

HOBBS, NEW MEXICO 88240

COMPANY: Amoco Production Company

WELL: State IT, No. 1

FIELD: Undesignated - Morrow

CHRONOLOGICAL PRESSURE DATA

DATE	STATUS OF WELL	TIME	ELAPSED TIME		SURFACE PRESSURE		BHP @ (-11166)	
			HRS.	MIN.	TBG	CSG	14095'	14434'PSIG
1982								
1/25	Flowing. run Flowing							
	Gradient w/Tandem Bombs							
	& Set Bombs off @							
	14095'	5:30 PM	-	-	523	PKR	761	764
	Shut in	6:00	0	30	523	-	761	764
	"	6:02	0	02	-	-	802	854
	"	6:04	0	04	-	-	851	903
	"	6:06	0	06	-	-	916	968
	"	6:08	0	08	-	-	949	1001
	"	6:10	0	10	-	-	1014	1066
	"	6:12	0	12	-	-	1072	1124
	"	6:14	0	14	-	-	1137	1189
	"	6:16	0	16	-	-	1186	1238
	"	6:18	0	18	-	-	1243	1295
	"	6:20	0	20	-	-	1301	1353
	"	6:22	0	22	-	-	1342	1394
	"	6:24	0	24	-	-	1382	1434
	"	6:26	0	26	-	-	1448	1500
	"	6:28	0	28	-	-	1497	1549
	"	6:30	0	30	-	-	1562	1614
	"	6:32	0	32	-	-	1611	1663
	"	6:34	0	34	-	-	1661	1713
	"	6:36	0	36	-	-	1701	1753
	"	6:38	0	38	-	-	1751	1803
	"	6:40	0	40	-	-	1775	1827
	"	6:42	0	42	-	-	1800	1852
	"	6:44	0	44	-	-	1832	1884
	"	6:46	0	46	-	-	1898	1950
	"	6:48	0	48	-	-	1955	2007
	"	6:50	0	50	-	-	2020	2072
	"	6:52	0	52	-	-	2061	2113
	"	6:54	0	54	-	-	2127	2179
	"	6:56	0	56	-	-	2160	2212
	"	6:58	0	58	-	-	2200	2252
	"	7:00	1	00	-	-	2241	2293
	"	7:15	1	15	-	-	2667	2719
	"	7:30	1	30	-	-	3018	3070
	"	7:45	1	45	-	-	3395	3400
	"	8:00	2	00	-	-	3787	3839
	"	8:15	2	15	-	-	4221	4273
	"	8:30	2	30	-	-	4687	4739
	"	8:45	2	45	-	-	5170	5222
	"	9:00	3	00	-	-	5710	5762
	"	10:00	4	00	-	-	7485	7537

WELL: State IT, No. 1

PAGE: 2

DATE	STATUS OF WELL	TIME	ELAPSED TIME		SURFACE PRESSURE		BHP @ (-11166)	
			HRS.	MIN.	TBG	CSG	14095'	14434' PSIG
	Shut in	11:00	5	00	-	-	8270	8322
1/26	"	12:00 MN	6	00	-	-	8613	8665
	"	1:00 AM	7	00	-	-	8916	8968
	"	2:00	8	00	-	-	9153	9205
	"	3:00	9	00	-	-	9301	9353
	"	4:00	10	00	-	-	9407	9459
	"	5:00	11	00	-	-	9497	9549
	"	6:00	12	00	-	-	9538	9590
	"	7:00	13	00	-	-	9636	9688
	"	8:00	14	00	-	-	9685	9737
	"	9:00	15	00	-	-	9734	9786
	"	10:00	16	00	-	-	9767	9819
	"	11:00	17	00	-	-	9800	9852
	"	12:00 N	18	00	-	-	9873	9925
	"	1:00 PM	19	00	-	-	9914	9966
	"	2:00	20	00	-	-	9980	10032
	"	3:00	21	00	-	-	10045	10097
	"	4:00	22	00	-	-	10094	10146
	"	5:00	23	00	-	-	10110	10162
	"	6:00	24	00	-	-	10110	10162
	"	7:00	25	00	-	-	10110	10162
	"	8:00	26	00	-	-	10110	10162
	"	9:00	27	00	-	-	10110	10162
	"	10:00	28	00	-	-	10110	10162
	"	11:00	29	00	-	-	10110	10162
	"	12:00 MN	30	00	-	-	10110	10162
1/27	"	1:00 AM	31	00	-	-	10110	10162
	"	2:00	32	00	-	-	10110	10162
	"	3:00	33	00	-	-	10110	10162
	"	4:00	34	00	-	-	10110	10162
	"	5:00	35	00	-	-	10135	10187
	"	6:00	36	00	-	-	10135	10187
	"	7:00	37	00	-	-	10135	10187
	"	8:00	38	00	-	-	10135	10187
	"	9:00	39	00	-	-	10143	10195
	"	10:00	40	00	-	-	10151	10203
	"	11:00	41	00	-	-	10151	10203
	"	12:00 N	42	00	-	-	10151	10203
	"	1:00 PM	43	00	-	-	10160	10212
	"	2:00	44	00	-	-	10168	10220
	"	3:00	45	00	-	-	10184	10236
	"	4:00	46	00	-	-	10184	10236
	"	5:00	47	00	-	-	10192	10244
	"	6:00	48	00	-	-	10192	10244
	"	7:00	49	00	-	-	10208	10260
	"	8:00	50	00	-	-	10241	10293
	"	9:00	51	00	-	-	10249	10301
	"	10:00	52	00	-	-	10249	10301
	"	11:00	53	00	-	-	10249	10301
	"	12:00 MN	54	00	-	-	10307	10359
1/28	"	1:00 AM	55	00	-	-	10339	10391
	"	2:00	56	00	-	-	10356	10408
	"	3:00	57	00	-	-	10372	10424
	"	4:00	58	00	-	-	10372	10424

WELL: State IT, No. 1

PAGE: 3

DATE	STATUS OF WELL	TIME	ELAPSED TIME		SURFACE PRESSURE			BHP @ (-11166)	
			HRS.	MIN.	TBG	CSG		14095'	14434'PSIG
	Shut in	5:00	59	00	-	-		10372	10424
	"	6:00	60	00	-	-		10372	10424
	Clock Stopped	7:00	61	00	-	-		10372	10424
	"	8:00	62	00	8390 DWT	-		10372	10424
	Started 1st Rate	8:30	62	30	8390	-	MCF/D	-	-
	Finished 1st Rate	9:30	1	00	7210	1300	705	-	-
	& Started 2nd Rate								
	Finished 2nd Rate	10:30	1	00	6100	1300	1007	-	-
	& Started 3rd Rate								
	Finished 3rd Rate	11:30	1	00	5325	1300	1365	-	-
	& Started 4th Rate								
	Finished 4th Rate	12:30 PM	1	00	4250	1300	1753	-	-
	& Fished Bombs	12:30 PM	1	00	4250	1300		-	-

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HOBBS, NEW MEXICO 88240

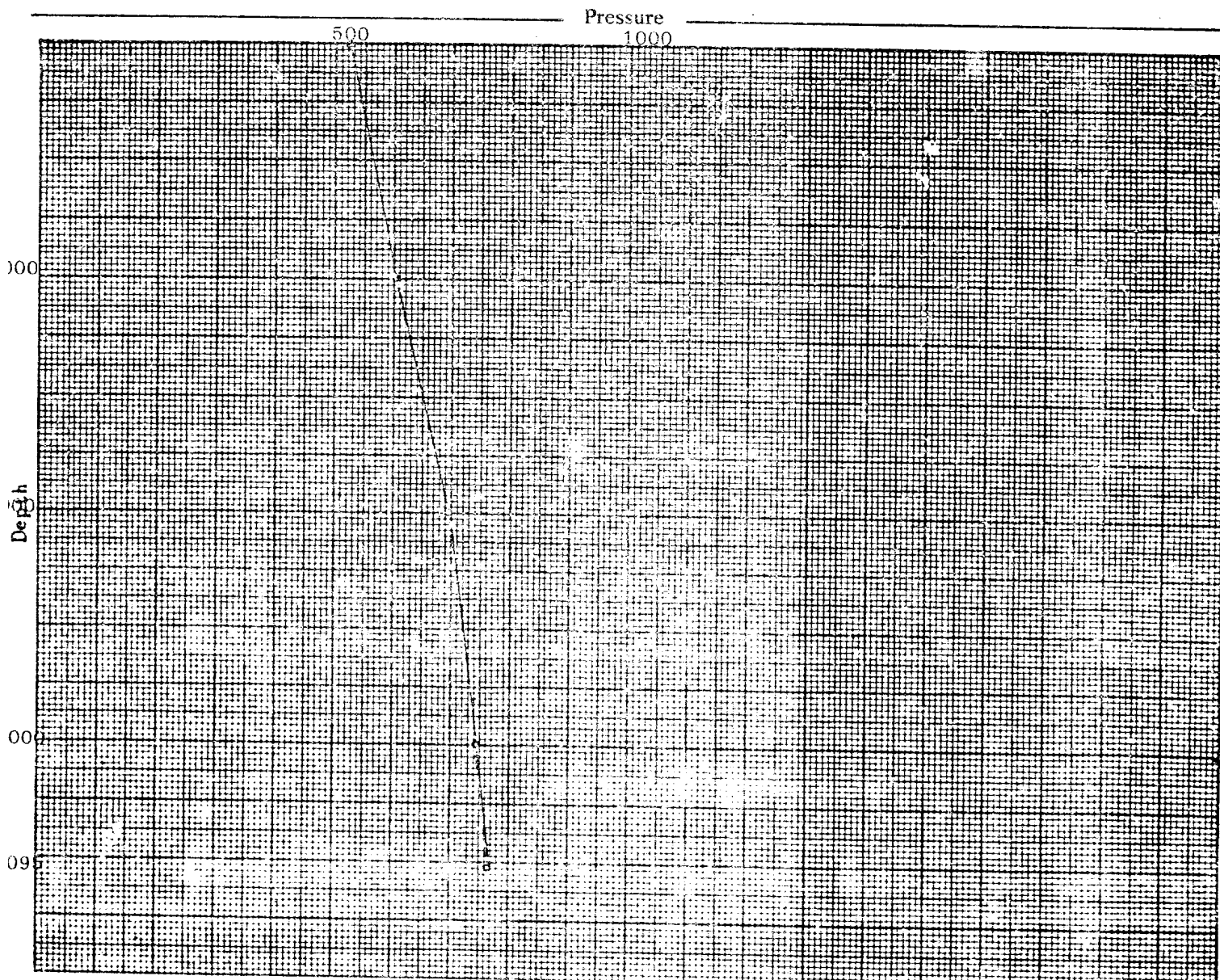
OPERATOR Amoco Production Company
 FIELD Undesignated
 FORMATION Morrow
 LEASE State IT WELL # 1
 COUNTY Lea STATE New Mexico
 DATE 1/25/82 TIME 5:30 PM
 Status Flowing
 Test Depth 14095'
 Time S. I. - Last test date -
 Tub Pres. 523 BHP last test -
 Cas. Pres. PKR BHP change -
 Elev. 3268' GL Fluid top Flowing
 Datum (-11166)** Water top -
 Temp. @ 202° F Run by JSI #20
 Cal. No. A48090N Chart No. 1

BOTTOM HOLE PRESSURE RECORD

Depth	Pressure	Gradient
0	523	-
4000	605	.021
8000	695	.023
12000	744	.013
14095	761	.008
14434 (-11166)	764 * **	(.008)

* EXTRAPOLATED PRESSURE

** MIDPOINT OF CASING PERFORATIONS



NO. 340R-L310 D
SEMI-L
3 CYCLES X 10

NO. 340R-L310 DIETZGEN GRAPH PAPER
SEMI-LOGARITHMIC
3 CYCLES X 10 DIVISIONS PER INCH

DIETZGEN CORPORATION
MADE IN U.S.A.

JARREL SERVICES, INC.

