

RECEIVED

Type Test ☐ Initial ☐ Annual ☒ Special		RECOMPLETION		Test Date 3-10-83		MAR 17 1983	
Company SANDERS PETROLEUM CORP.				Connection AIR NEW WELL		O.C.D. 1980 FEL ARTESIA, OFFICE	
Pool U.D. Pecan & Slope Abo				Formation ABO		Unit B	
Completion Date 3-6-83		Total Depth 4960		Plug Hole 1 4900		Elevation 3564 3650	
Form or Lease Name MCKAY SAMEDAN		Well No. #1		Unit B		Sec. 16	
Twp. 7S		Rge. 26E		County CHAVES		State NEW MEXICO	
Producing thru TUBING		Reservoir Temp. °F 103 @ 4045		Mean Annual Temp. °F 60.0		Base. Press. - P ₀ 13.2	
L 4045		H 4045		Q _g 0.751		% CO ₂ 11.90	
% N ₂ 5.38		% H ₂ S 0		Prover 0		Meter Run 2.1	
Tape FLANGE							

FLOW DATA						TUBING DATA		B.H.P. DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. In. H ₂ O	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
SI										CHOKE
1.	2.07 X 0.875			180	9.0	43.	993	72.	1118	72.0
2	2.07 X 0.875			180	20.0	42.	940	72.	1083	1.0
3	2.07 X 0.875			180	47.0	40.	883	72.	1051	1.0
4	2.07 X 0.875			195	88.0	40.	773	73.	1003	1.0
5.							680	74.	926	1.0

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super. Compress. Factor F _{sp}	Rate of Flow Q, Mscf/d
1	3.73	41.70	193.2	1.0168	1.1539	1.0205	186.
2	3.73	62.16	193.2	1.0178	1.1539	1.0206	278.
3	3.73	95.29	193.2	1.0198	1.1539	1.0209	427.
4	3.73	135.36	208.2	1.0198	1.1539	1.0226	607.
5							

NO.	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	0.27	503.	1.36	0.960	0.	68.0	0.751	XXXXXX	708.	371.
2	0.27	502.	1.35	0.960						
3	0.27	500.	1.35	0.959						
4	0.29	500.	1.35	0.956						
5										

NO.	P ₁ ²	P ₀ ²	R ₁ ²	R ₀ ²	R ₁ ² - R ₀ ²
1	1202.	968.	937.	884.	59.
2	1133.	940.	884.	808.	112.
3	1033.	899.	808.	692.	189.
4	882.	832.	692.		305.
5					

(1) $\frac{P_0^2}{R_0^2 - R_1^2} = 3.2698$ (2) $\left[\frac{R_1^2}{R_0^2 - R_1^2} \right]^n = 2.3596$

AOF = 0 $\left[\frac{R_0^2}{R_0^2 - R_1^2} \right]^n = 1433.$

Absolute Open Flow	1433.	Mscf @ 15.023	Angle of Slope @	54.1	Slope, n	0.725
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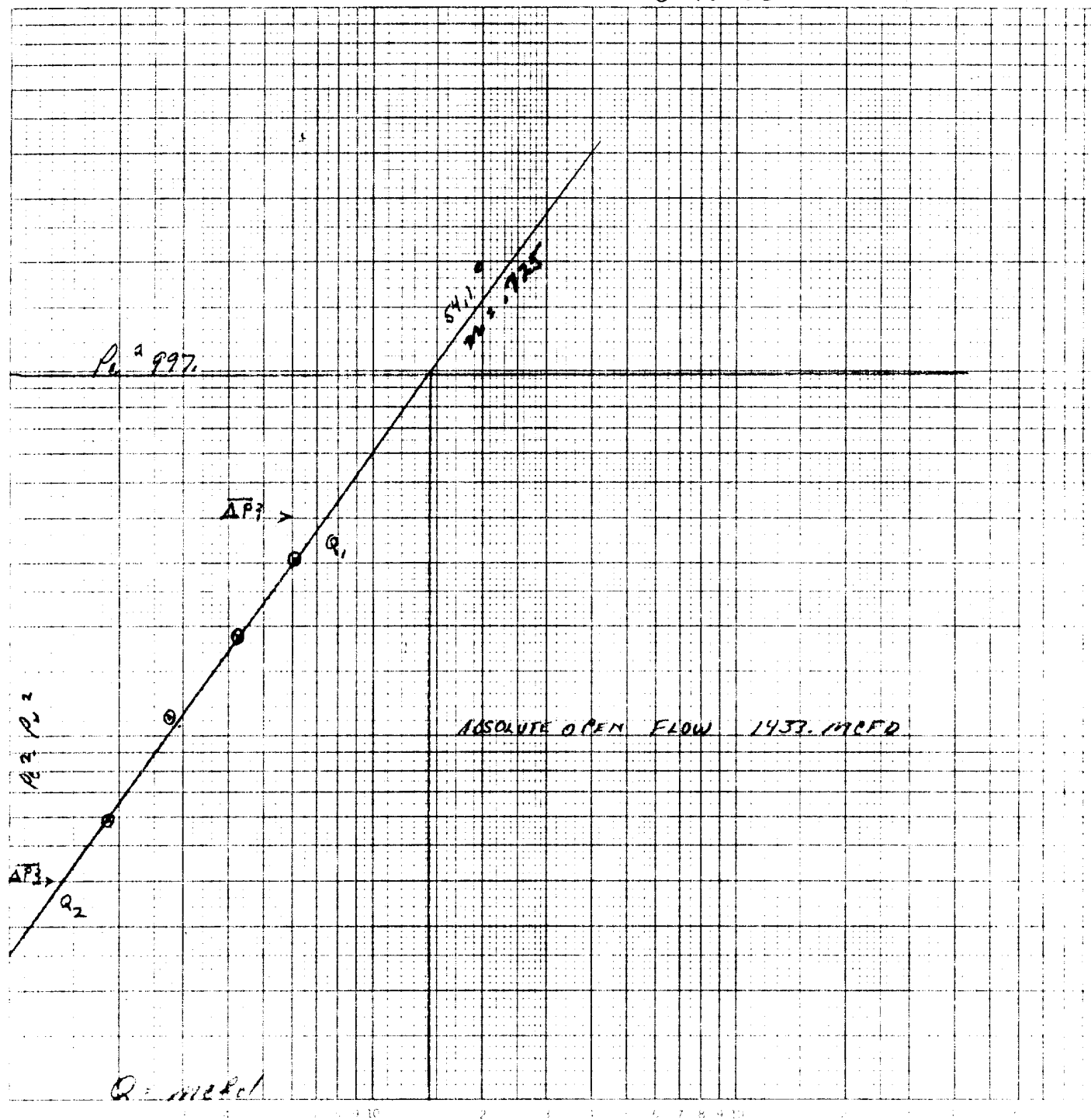
Remarks: BOTTOM HOLE PRESSURE MEASURED WITH AMERADA PRESSURE ELEMENTS.

Approved By Commission	Conducted By RICHARD TOWNLEY	Calculated By BENNETT & CATHEY	Checked By <i>[Signature]</i>
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Miley S. ...
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3-10-83

467400



$$\Delta P_1: P_1 - P_2 = 110$$

$$\Delta P_2: P_1 - P_2 = 110$$

$$Q_1 = 143.11 \text{ mscfd}$$

$$Q_2 = 140.11 \text{ mscfd}$$

$$\log Q_1 = 2.1571$$

$$\log Q_2 = 2.146$$

$$n = .725$$



PRECISION SERVICE INC.

Flow Measurement Engineers

Analysis Results Summary

Casper, WY 82601

Run No. 310-2

Date Run 03/10/83

Date Sampled 03/10/83

Analysis For: BENNETT & CATHEY WRLN.

Lease: McKay Samedan #1 Producer Sanders Petr. Corp.

Location Undesignated County Chaves State New Mexico

Purpose Well Test Sampled By B & C WRLN.

Sampling Temp. 40 °F Atmos Temp. 74 °F

Volume/day 600 MCF Formation ABQ

Pressure on Bomb 190 PSIG; Line Pressure _____ PSIG

Gas Component

Analysis

Press. Base: 14.73

	Mol. %	Liq. %	GPM Per MCF
Carbon Dioxide CO ₂	<u>11.902</u>		
Oxygen O ₂			
Nitrogen N ₂	<u>5.376</u>		
Hydrogen Sulfide H ₂ S			
Methane C ₁	<u>75.793</u>		<u>12.846</u>
Ethane C ₂	<u>4.055</u>		<u>1.081</u>
Propane C ₃	<u>1.496</u>		<u>.411</u>
Iso-Butane IC ₄	<u>.262</u>		<u>.086</u>
Nor-Butane NC ₄	<u>.499</u>		<u>.157</u>
Iso-Pentane IC ₅	<u>.155</u>		<u>.057</u>
Nor-Pentane NC ₅	<u>.167</u>		<u>.060</u>
Hexanes C ₆			
Heptanes Plus C ₇ +	<u>.295</u>		<u>.121</u>
Total	<u>100.000</u>		<u>14.819</u>
Pentane + G.P.M.			<u>.238</u>
OPANE + G.P.M.			<u>.891</u>
-lb GASOLINE			

BTU Dry 931

BTU Wet 915

Calc. Specific Gravity .751

@ Std. Press. 14.696

BTU Dry 929

BTU Wet 913

Calc. Vap. Press. #/Sq.In. _____

Reid Vap. Press. #/Sq.In. _____

Z Factor .9975

N Value 1.3007

Ave Mol Wt 21.7118

Run by JAP

Calculated By JAP

Remarks:

Distribution:

(505) 748—3354 / Artesia, New Mexico 88210

COMPANY SANDERS PETROLEUM CORP. WELL NAME MCKAY SAMEDAN #1
DATE OF TEST 3-10-83 FORMATION PAGE 1 OF 1
COMPANY MAN CHARLES SANDERS

CHART READINGS AND CALCULATIONS FOR BUILDUP OR DRAWDOWN TEST

[illegible]

TEST DATE: 3-10-83
TEST DEPTH: 4040 FEET

ELEMENT NO.: RPG3# 23914
RANGE: 5025 LBS.

CLOCKS: 27744
RANGE: 24 HOUR

OPERATOR: BOB HERREN

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

4 POINT INITIAL BACK PRESSURE TEST

CHARLES SANDERS

SANDERS PETROLEUM

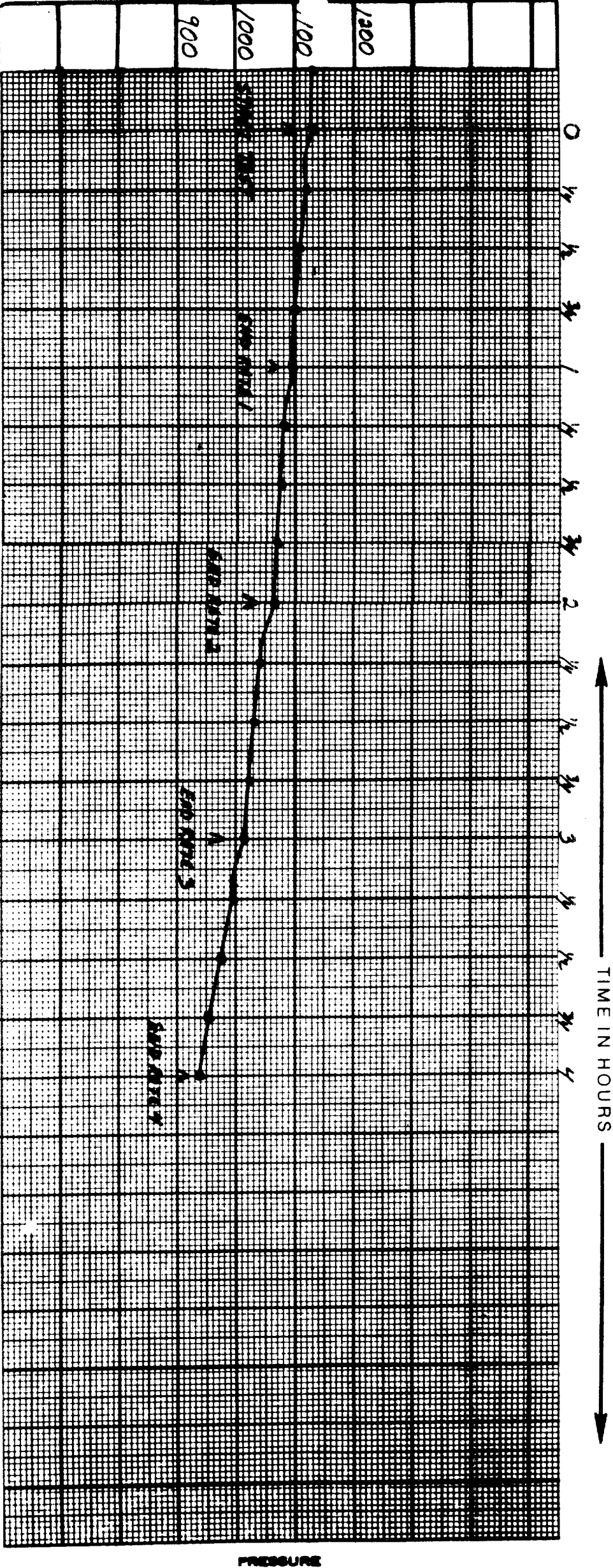
MCKAY SAMEKAN #1

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

Drawn By

Scale: As Shown

BENNETT-
CATHEY
WELL SERVICES



(505) 748—3354 / Artesia, New Mexico 88210

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY SANDERS PETROLEUM CORP. WELL NAME MCKAY SAMEDAN # 1
DATE OF TEST 3-10-83 TO 3-11-83 FORMATION PAGE 1 OF 1
COMPANY MAN CHARLES SANDERS

20 HOUR BUILD UP TEST

CHART READINGS AND CALCULATIONS FOR BUILDUP OR DRAWDOWN TEST

ELEMENT NUMBER	RPG3# 23914	RANGE	5025 LBS.
CLOCK NUMBER	27744	RANGE	24 HOUR
TIME WELL SHUT IN	1500 3-10-83		
TIME CLOCK STARTED	1030 3-10-83		
DEAD WEIGHT ELEMENT ON SURFACE	1004 PSIA	SHUT IN	LBS.
TIME ELEMENT REACHED BOTTOM	1055 3-10-83		
DEAD WEIGHT ELEMENT ON BOTTOM	1004 PSIA	SHUT IN	LBS.
ELEMENT SET AT	4040		FEET.
TEMPERATURE	4040	FT.	91 °F.
1014 PSIA DEAD WEIGHT AT THE END OF	25	HOURS	17 MINUTES.

[illegible]

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OPERATOR: BOB HERREN

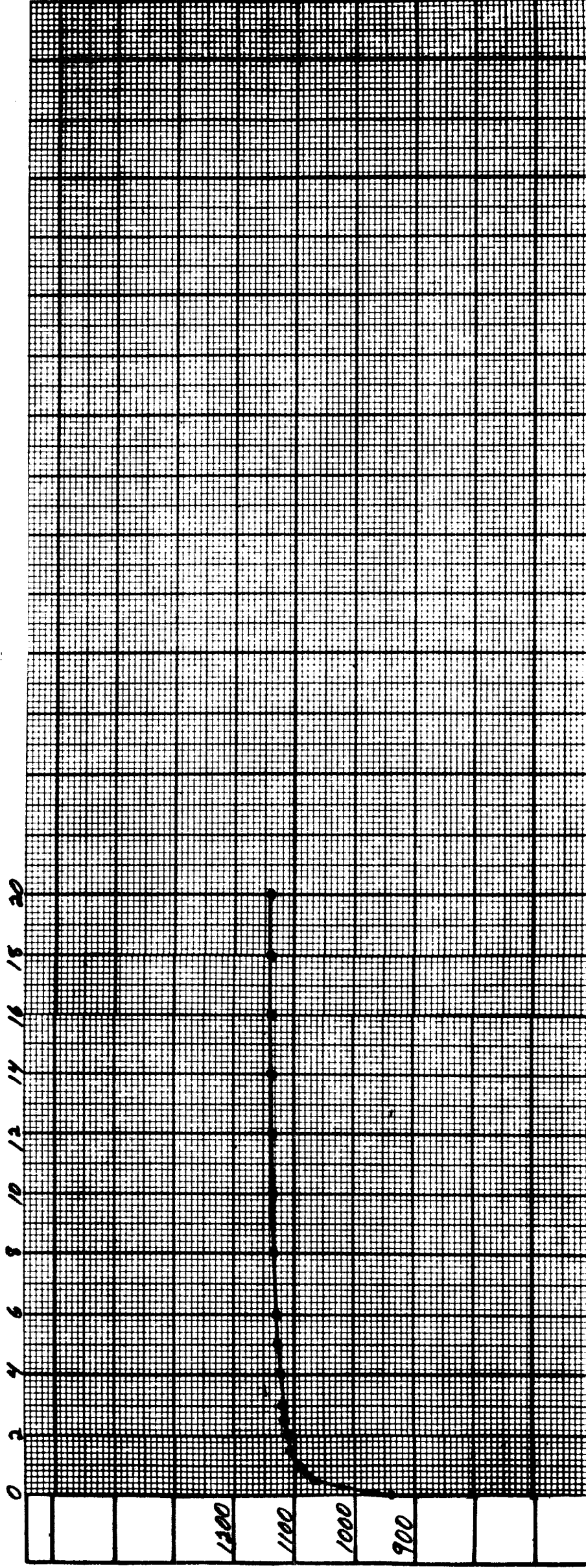
Note: See Attached Sheet for Tabulation of Pressure
And Time.

20 HOUR BUILD UP TEST

CHARLES SANDERS
SANDERS PETROLEUM
MCKAY SAMEDAN # 1
BENNETT-CATHEY WIRE LINE SERVICE Box 787 Artesia, N.M. 88210 505/746-3281
Drawn By Scale: As Shown



TIME IN HOURS





DENVER CATHET WIRE LINE SERVICE

P. O. BOX 787

ARTESIA, NEW MEXICO 88210

Phone (505) 746-3281



BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR SANDERS PETROLEUM CORP.
LEASE MCKAY SAMEDAN
WELL NO. # 1
POOL FORMATION
DATE 3-11-83 TIME 1533 HOUR
CO. MAN CHARLES SANDERS
STATUS SHUT IN TEST DEPTH 4040 FEET
TIME S.I. 1500 HOUR LAST TEST DATE 1ST TEST
3-9-83 BHP LAST TEST
TUB. PRES. 991 # BHP CHANGE
CAS. PRES. FLUID TOP
DATUM PLANE WATER TOP
DATUM PSIA 1125# RUN BY BOB HERREN
TEMP 91 ° CLOCK # 27744
PRESSURE RANGE 5025 LBS.
ELEMENT NO. RPG3# 23914

DEPTH	PRESSURE	GRADIENT
0	991	
1000	1022	3.1
2000	1055	3.3
3000	1088	3.3
3890	1118	3.4
4040	1125	4.6

TIME B.H.P. MEASURED 1617 HOUR.
LENGTH OF TIME WELL SHUT IN 25 HR 17 MIN.

