

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

Form C-122
Revised 9-1-65

c/sf file

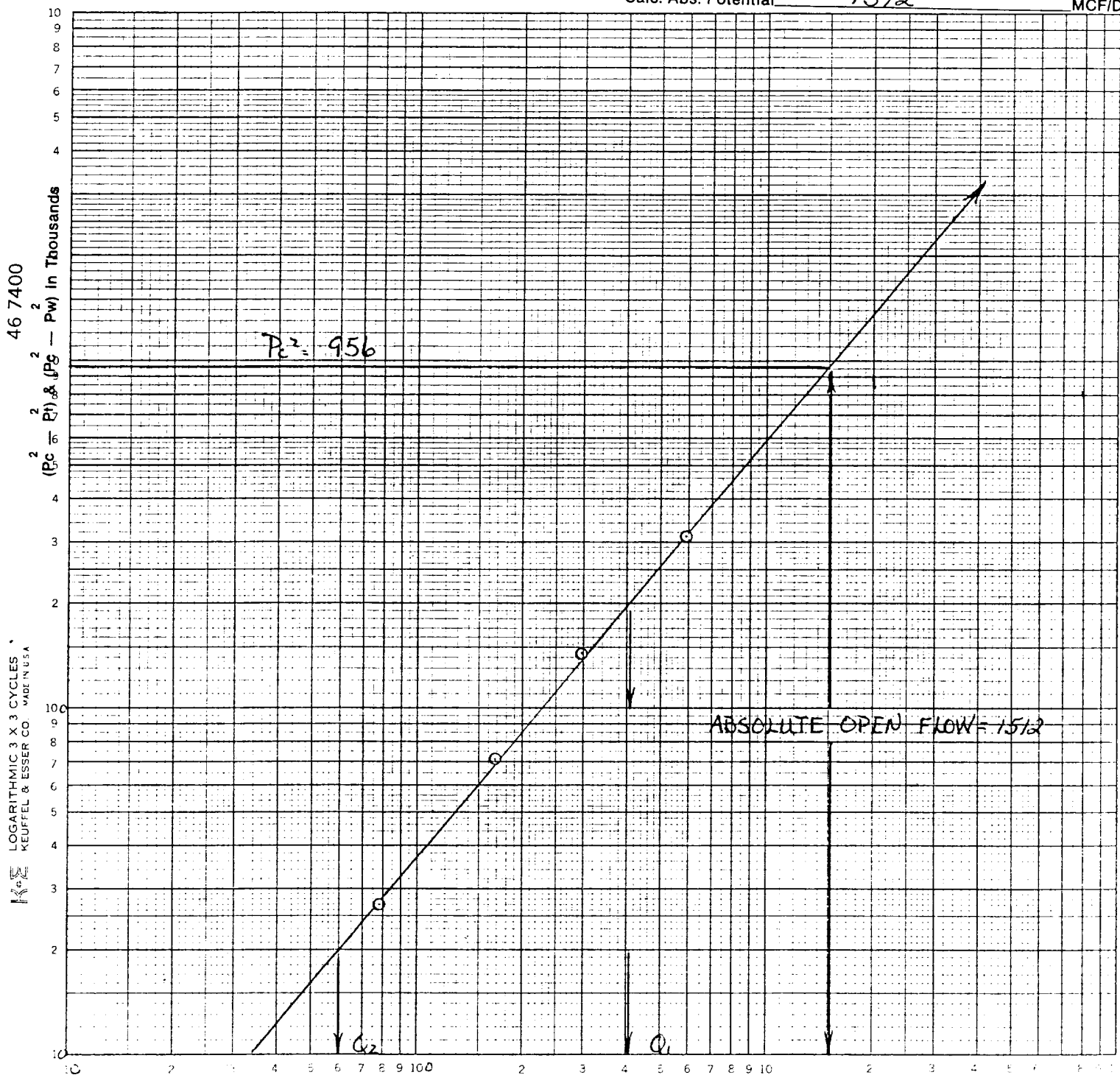
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Unit ARTESIA, OFFICE

Type Test 4 POINT ☒ Initial ☐ Annual ☐ Special						Test Date 11-29-83					
Company CARL A. SCHELLINGER				Connection TO AIR							
Pool PECOS SLOPE <i>Und. Abo</i>				Formation ABO							
Completion Date 11-26-83		Total Depth 6700		Plug Back To 5500		Elevation 3862					
Casing Size 5.500		ID 4.950		Set At 6700		Perforations: From 5148 To 5195					
Tubing Size 2.375		ID 4.7		Set At 5210		Perforations: From 0 To 0					
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE						Packoff Set At 0					
Producing Thru TUBING		Reservoir Temp. °F 120 @ 5171		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2					
L 5171		H 5171		G _g 0.664		% CO ₂ 0.07					
				% N ₂ 9.78		% H ₂ S 0					
				Prover 2.0		Motor Run 0					
				Taps 0							
FLOW DATA											
NO.	Prover Line Size	X	Orifice Size	Pres. p.s.i.g.	Diff. h _w	Temp. °F	TUBING DATA		B.H.P. DATA		Duration of Flow
							Pres. p.s.i.g.	Temp. °F	Pres. p.s.i.g.	CHOKE	
51							956		1105		144.0
1.	2.00 X 0.063			907.	0	60	907	0	1089	20/64	1.0
2.	2.00 X 0.094			885.	0	62	885	0	1062	20/64	1.0
3.	2.00 X 0.125			845.	0	64	845	0	1016	20/64	1.0
4.	2.00 X 0.188			735.	0	64	735	0	904	20/64	1.0
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, Mcfd				
1	0.06	0	920.2	1.0000	1.2272	1.0788	78.				
2	0.14	0	898.2	0.9981	1.2272	1.0757	167.				
3	0.26	0	858.2	0.9962	1.2272	1.0712	297.				
4	0.61	0	748.2	0.9962	1.2272	1.0621	590.				
5											
NO.	P _t	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	1.41	520.	1.48	0.859	0	0	0.664	XXXXXX	653.	352.	
2	1.38	522.	1.48	0.864				0.664			
3	1.31	524.	1.49	0.872							
4	1.15	524.	1.49	0.886							
5											
NO.	P ₁ ²	P _w	P _w ²	P _c ² - P _w ²							
1	1215.	964.	929.	27.							
2	1156.	941.	885.	71.							
3	1059.	901.	812.	144.							
4	841.	804.	647.	309.							
5											
Absolute Open Flow	1512.	Mcfd @ 15.025	Angle of Slope @	50.2	Slope, n	0.833					
Approved by Commission	Conducted By RICHARD TOWNLEY	Calculated By BENNETT & CATHEY	Checked By								

BENNETT & CATHEY PRODUCTION TESTING BACK PRESSURE CURVE

Operator Carl Schellinger Lease Campbell Station Well No. 1
 County Chaves Field Pecos Slope Location 33 8S 27E
 Date of Test 11-29-83 Slope "n" 0.833 Angle of Slope 50.2

Calc. Abs. Potential 1512 MCF/D



$$\frac{\Delta P_1}{\Delta P_2} = \frac{P_c^2 - P_w^2}{P_c^2 - P_w^2} = \frac{200}{20}$$

$$Q_1 = 468.46$$

$$Q_2 = 60$$

Q in MCF/Day

$$\text{LOG } Q_1 = 2.6111$$

$$\text{LOG } Q_2 = 1.7781$$

$$n = 0.833$$

6 AM

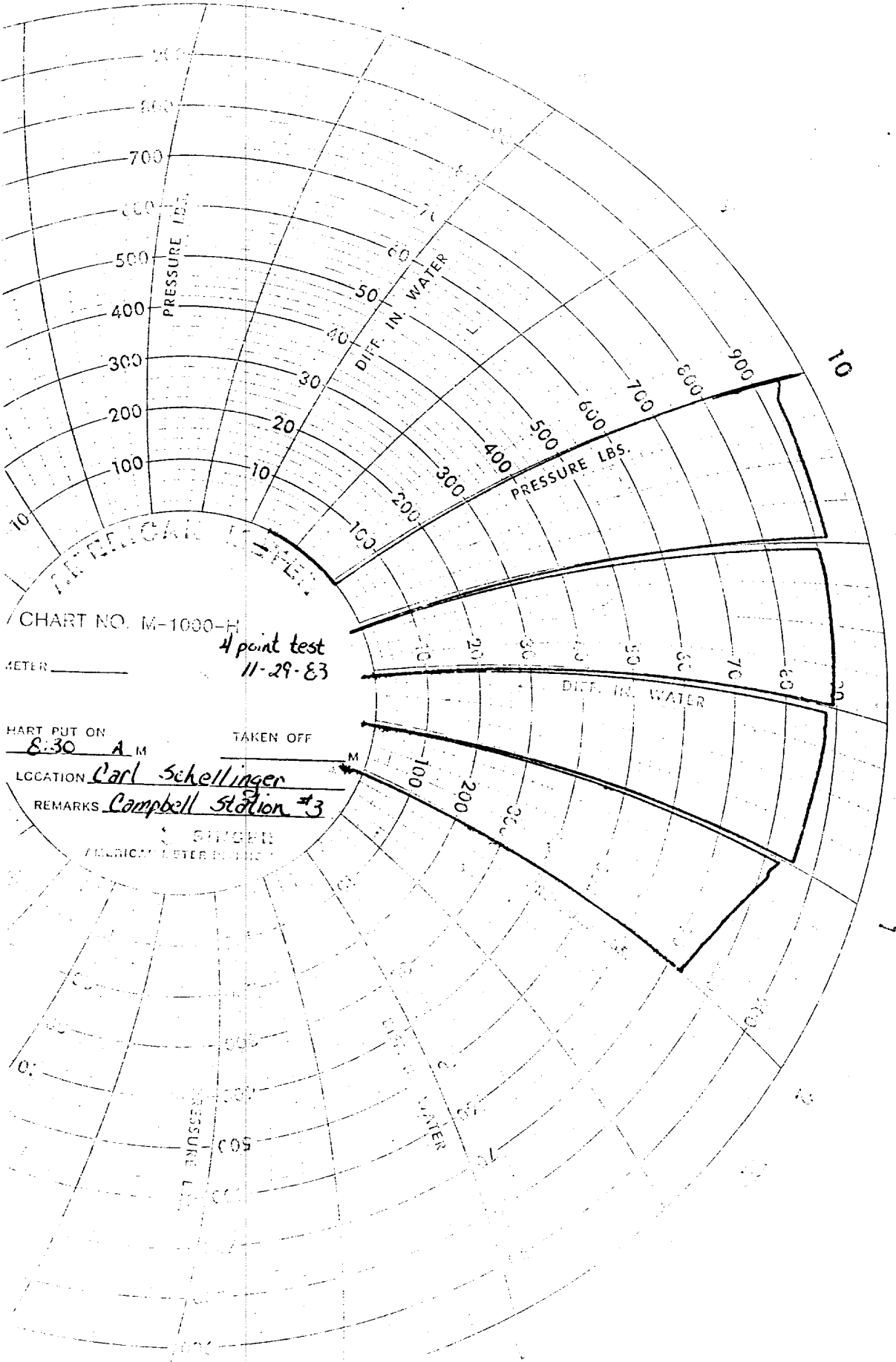


CHART NO. M-1000-H

METER _____

CHART PUT ON 8:30 A.M.

TAKEN OFF _____

LOCATION Carl Schellinger

REMARKS Campbell Station #3

SAFETY
FEDERAL BUREAU OF INVESTIGATION



PRECISION SERVICE INC.

Flow Measurement Engineers

Analysis Results Summary

Casper, WY 82601

Run No. 1130-3
Date Run 11/30/83
Date Sampled 11/29/83

Analysis For: BENNETT & CATHEY URLN.

Lease: Campbell Station #3

Location Campbell Station

Purpose Well Test

Sampling Temp. 64 °F

Volume/day 550 MCF

Pressure on Bomb 720

Producer Carl A. Schellinger

County Chaves State New Mexico

Sampled By B & C URLN.

Atmos Temp. 64 °F

Formation ABO

PSIG: Line Pressure 720 PSIG

Gas Component

Analysis

Press. Base: 14.73

Mol. %

Liq. %

GPM
Per MCF

Carbon Dioxide CO ₂	.068		
Oxygen O ₂	.084		
Nitrogen N ₂	9.784		
Hydrogen Sulfide H ₂ S			

BTU Dry	1019
BTU Wet	1018
Calc. Specific Gravity	.664

Methane C ₁	82.173		13.896
Ethane C ₂	4.448		1.187
Propane C ₃	1.850		.508
Iso-Butane IC ₄	.304		.099
Nor-Butane NC ₄	.630		.198

@ Std. Press. 14.696

BTU Dry	1017
BTU Wet	1016

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

Reid Vap. Press. #/Sq.In.

Iso-Pentane IC ₅	.204		.075
Nor-Pentane NC ₅	.223		.081
Hexanes plus	.230		.100
Hexanes C ₆			
Heptanes			
Heptanes Plus C ₇ +			

Z Factor	.9978
N Value	1.3084
Ave Mol Wt	19.2004
Ave Cu Ft/Gal	

Total	100.000		16.144
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Run by Jeffrey A. Propp

Calculated By Jeffrey A. Propp

Pentane + G.P.M.	.255
Propane + GPM	1.031
6-lb Gasoline	.841

Ethane + GPM 2.243

Remarks: BTU Wet adjusted to flowing conditions as established by FERC Order #93/93-A and calculated per GPA Reference Bulletin 181-82.

Distribution:

BENNET - CATHEY

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

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY CARL A. SCHELLINGER WELL NAME CAMPBELL STATION #3
 DATE OF TEST 11-29-83 TO 11-30-83 FORMATION _____ PAGE 1 OF 2
 COMPANY MAN. CARL A. SCHELLINGER

CHART READINGS AND CALCULATIONS FOR BUILDUP OR DRAWDOWN TEST

ELEMENT NUMBER RPG3#16150N RANGE 2000 LBS.
 CLOCK NUMBER 28658 RANGE 120 HOUR
 TIME WELL SHUT IN 11-23-83
 TIME CLOCK STARTED 0744 HOUR 11-29-83
 DEAD WEIGHT ELEMENT ON SURFACE 972.2 PSIA SHUT IN _____ LBS.
 TIME ELEMENT REACHED BOTTOM 0935 HOUR 11-29-83
 DEAD WEIGHT ELEMENT ON BOTTOM 972.2 PSIA SHUT IN _____ LBS.
 ELEMENT SET AT 5171 FEET.
 TEMPERATURE 5171 FT. 120 °F.
 972.2 PSIA DEAD WEIGHT AT THE END OF 144 HOURS _____ MINUTES.

DATE	HOUR	TIME	DEFLECTION in/inches	CALCULATED PRESSURE psig	CORRECTION P ± PC psig	CORRECTED PRESSURE psia	PRESSURE AT MID-POINT OF PERFORATIONS psia
11-29-83	SIP	0935		1105	13.2		1118.2
START TEST	0	1005		1105	13.2		1118.2
	1/4	1020		1094	13.2		1107.2
	1/2	1035		1092	13.2		1105.2
	3/4	1050		1090	13.2		1103.2
END RATE 1	1	1105		1089	13.2		1102.2
	1 1/4	1120		1077	13.2		1090.2
	1 1/2	1135		1069	13.2		1082.2
	1 3/4	1150		1065	13.2		1078.2
END RATE 2	2	1205		1062	13.2		1075.2
	2 1/4	1220		1040	13.2		1053.2
	2 1/2	1235		1027	13.2		1040.2
	2 3/4	1250		1021	13.2		1034.2
END RATE 3	3	1305		1016	13.2		1029.2
	3 1/4	1320		975	13.2		988.2
	3 1/2	1335		933	13.2		946.2
	3 3/4	1350		913	13.2		926.2
END RATE 4	4	1405		904	13.2		917.2
START BUILD UP	0	1405		904	13.2		917.2
	1/4	1420		943	13.2		956.2
	1/2	1435		974	13.2		987.2
	3/4	1450		999	13.2		1012.2
	1	1505		1012	13.2		1025.2
	1 1/4	1520		1024	13.2		1037.2
	1 1/2	1535		1032	13.2		1045.2
	1 3/4	1550		1036	13.2		1049.2
	2	1605		1041	13.2		1054.2
	2 1/2	1635		1048	13.2		1061.2
	3	1705		1054	13.2		1067.2
	3 1/2	1735		1057	13.2		1070.2
	4	1805		1061	13.2		1074.2
	4 1/2	1835		1062	13.2		1075.2

SUBSURFACE PRESSURE MEASUREMENTS

CHART READINGS AND CALCULATIONS FOR BUILDUP OR DRAWDOWN TEST

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BENNETT-CATHEY WIRE LINE SERVICE

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



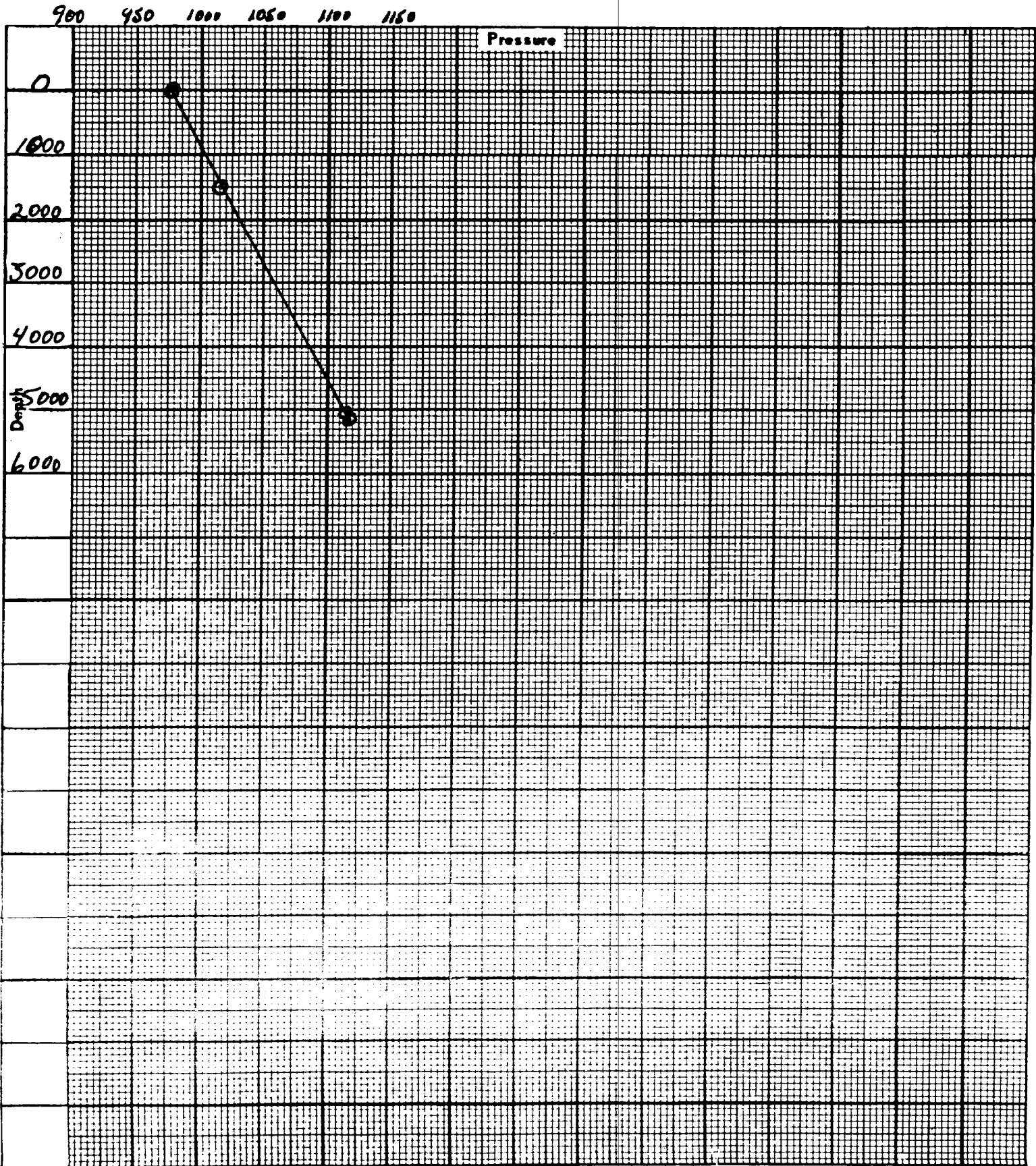
BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR CARL A. SCHELLINGER
LEASE CAMPBELL STATION
WELL NO. #3
POOL FORMATION
DATE 11-29-83 TIME 0935 HOUR
CO. MAN CARL A. SCHELLINGER
STATUS SHUT IN TEST DEPTH 5171 FEET
TIME S.I. 11-23-83 LAST TEST DATE 1ST TEST
BHP LAST TEST
TUB. PRES. 972.2# BHP CHANGE
CAS. PRES. FLUID TOP
DATUM PLANE WATER TOP
DATUM PSIA 1118.2# RUN BY BO FAULKENBERRY
TEMP 120° CLOCK # B-3443
PRESSURE RANGE 2000 LBS. 3200 LBS.
ELEMENT NO. RPG3#16150N RPG3#7201

DEPTH	PRESSURE	GRADIENT
0	972.2	
1500	1015.2	2.87
5021	1114.2	2.81
5171	1118.2	2.67

TIME B.H.P. MEASURED 0935 HOUR.
LENGTH OF TIME WELL SHUT IN 144 HOURS.

PERFORATIONS FROM 5148 TO 5195 FEET.



TEST DATE: 11-29-83 TO 11-30-83
TEST DEPTH: 5171 FEET

ELEMENT NO.: RPG3#7201
RANGE: 2000 LBS.

CLOCKS: 28658
RANGE: 120 HOUR

OPERATOR: BO FAULKENBERRY

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

CARL A. SCHELLINGER

CARL A. SCHELLINGER

CAMPBELL STATION #3

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

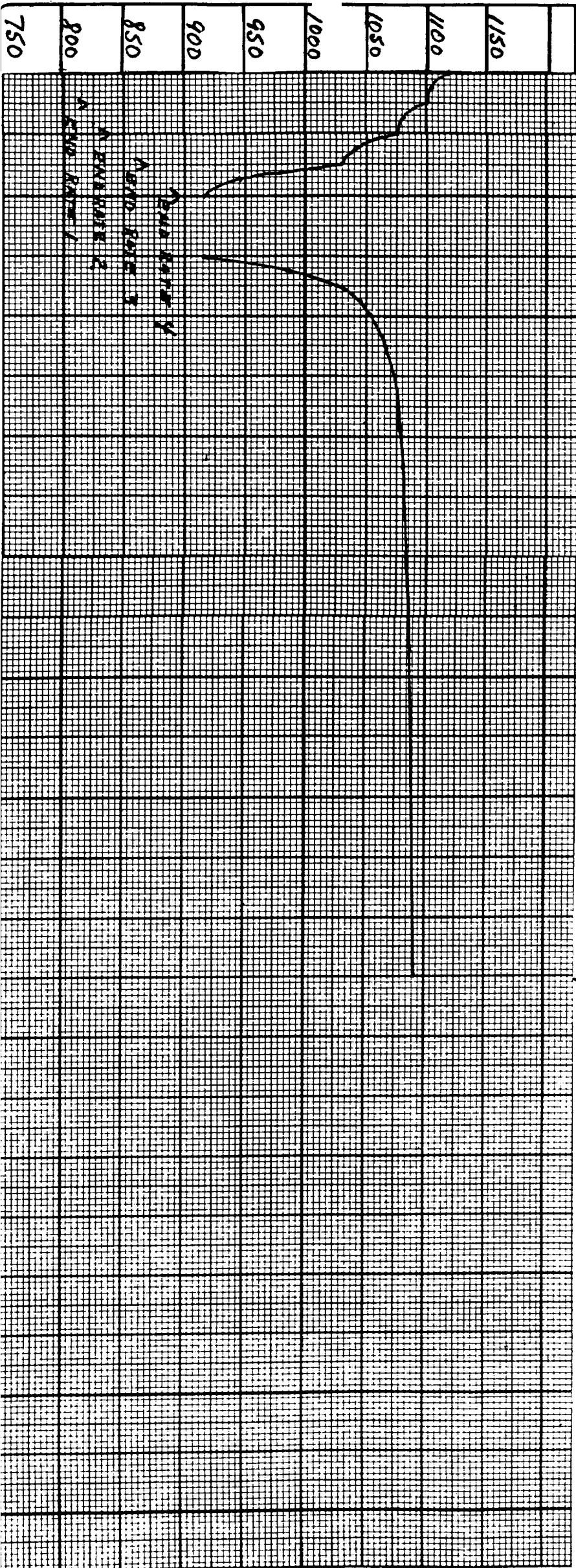
Drawn By

Scale: As Shown

BENNETT-
CATHEY
WELL SERVICES

Start Time Up

TIME IN HOURS



PRESSURE