

9 file

Type Test ☒ Initial FOUR POINT ☐ Annual ☐ Special		Test Date 7-9-82		RECEIVED	
Company DEPCO, INC.		Connection AIR NEW WELL		JUL 16 1982	
Well PECOS SLOPE V.D. <i>Ad</i>		Formation ABO		Unit O. C. D.	
Completion Date 7-6-82 6-25-82		Total Depth 4820		Plug Back TD 4725	
Elevation ARTESIAN OFFICE		VANCE FEDERAL		Well No. 3	
Perforations: From 4381 To 4556		Perforations: From OPEN To ENDED		Unit Sec. Twp. Rge. 17 26 7S 26E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE		Packer Set At 4316		County CHAVES	
Producing thru TUBING		Reservoir Temp. °F 100 4468		Mean Annual Temp. °F 60°	
Baro. Press. - P _a 13.2		State N.M.		Meter Run 4.028	
Prover 4468		H 4468		Cg .639	
% CO ₂ 1.36		% N ₂ 4.80		% H ₂ S	
Prover		Meter Run		Taps 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. h _w
1	4.026	X	1.50	360	6.0
2	4.026	X	1.50	360	12.0
3	4.026	X	1.50	365	22.0
4	4.026	X	1.50	370	44.0
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
1	11.1200	47.32	373.2	.9706	1.2510
2	11.1200	66.92	373.2	.9759	1.2510
3	11.1200	91.22	378.2	.9813	1.2510
4	11.1200	123.81	383.2	.9887	1.2510
5					
NO	W	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio
1	.56	552	1.56	.951	A.P.I. Gravity of Liquid Hydrocarbons
2	.56	546	1.55	.949	Specific Gravity Separator Gas .6390
3	.57	540	1.53	.946	Specific Gravity Flowing Fluid
4	.57	532	1.51	.944	Critical Pressure 668 P.S.I.A.
5					Critical Temperature 353 °R
978.2 P _c ² 956.9					
NO	P _w	P _c	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.6287$	
1	964.2	929.7	27.0	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.0933$	
2	944.2	891.5	65.0		
3	920.2	846.8	110.0		
4	887.2	787.1	170.0		
5					
Absolute Open Flow 5,419.4 Mscf @ 15.025 Angle of Slope 56.8 Slope, n 6535					
Remarks: BOTTOM HOLE PRESSURED WITH AMERADA PRESSURE ELEMENTS.					
Approved By Commission:		Conducted By: RICHARD TOWNLEY		Calculated By: BENNETT - CATHEY	
				Checked By:	

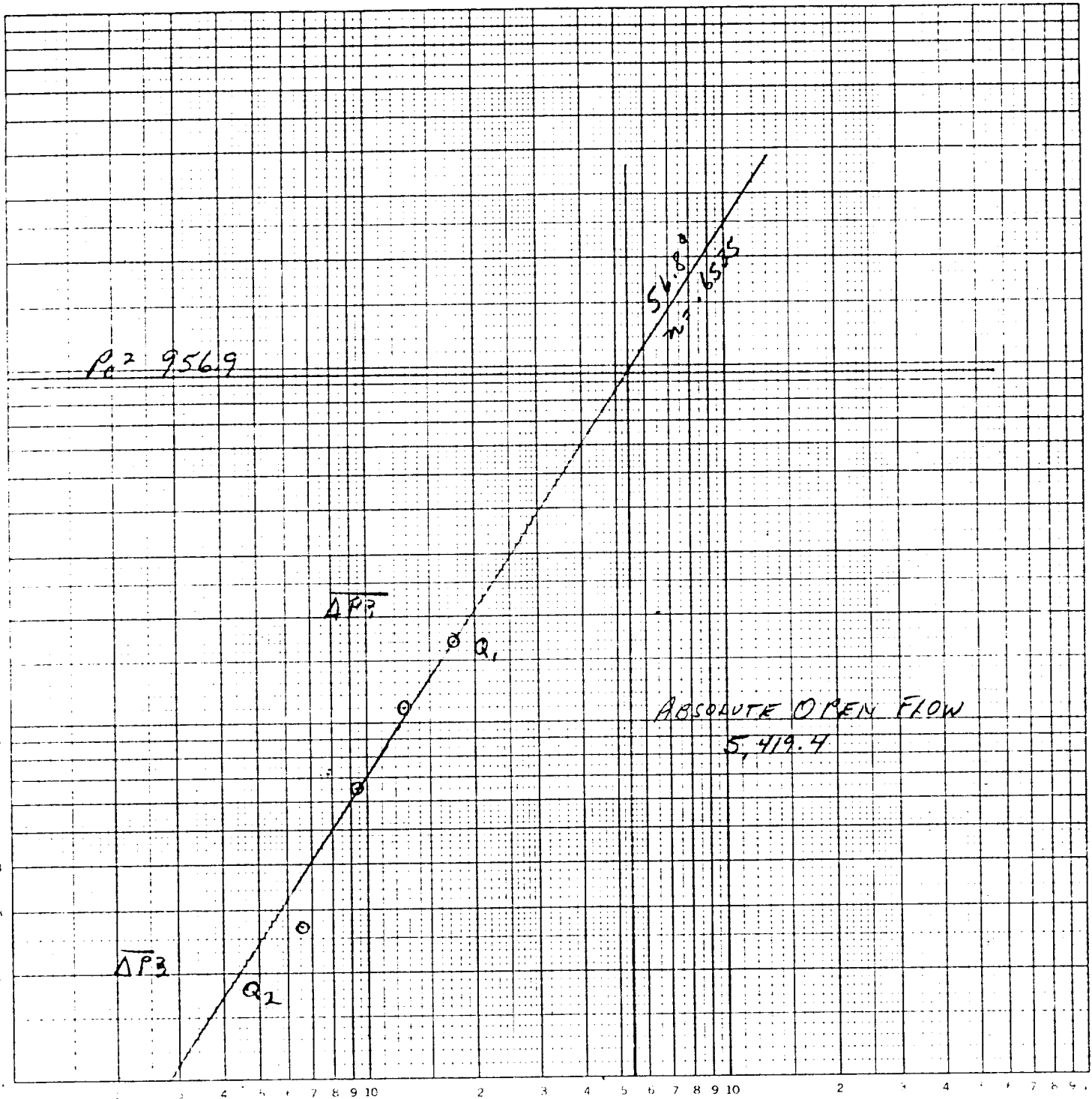
Pist FD-2
7-23-82
Comp + BK

VANDER BEEKEN
26 Sec, 75 Twp, 26E R₆
Chas. County

July 9, 1932

46 7400

LOGARITHMIC CYCLES
WHEELER & WHEELER CO. CHICAGO, ILL.



ΔP_1 $P_1 - P_2 = 200$
 ΔT_2 $P_2 - P_3 = 20$
 $Q_1 = 1451.5$ mld
 $Q_2 = 4400$ mld
 Q mld

$n = 2.32970$
 $n = 2.6435$
 $n = .6535$

AMERICAN METER

CHART NO. M-1500-H

1.50" P/NTC X 4.0281 METER

7-9-12

DePCO

REMARKS

Under Federal #3

SINGER

AMERICAN METER DIVISION

TAKEN OFF

DIFF. IN WATER

DIFF. IN WATER

DIFF. IN WATER

PRESSURE LBS.

PRESSURE LBS.

DIFF. IN WATER

NOON

6 PM

CHART READINGS AND CALCULATIONS FOR BUILDUP OR DRAWDOWN TEST

[illegible]

TEST DEPTH: 4,468

ELEMENT NO.: RFG3 #7201

RANGE: 3,200 LBS.

CLOCKS: 83443

RANGE: 12 HOURS

OPERATOR: BO FAULKENBERRY

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

RECEIVED

JUL 16 1982

O. C. D.

ARTESIA, OFFICE

GENE SIMER

DEPCO INCORPORATED

VANCE FEDERAL WELL NO. 3

BENNETT-CATHEY WIRE LINE SERVICE
Box 787
Artesia, N.M. 88210

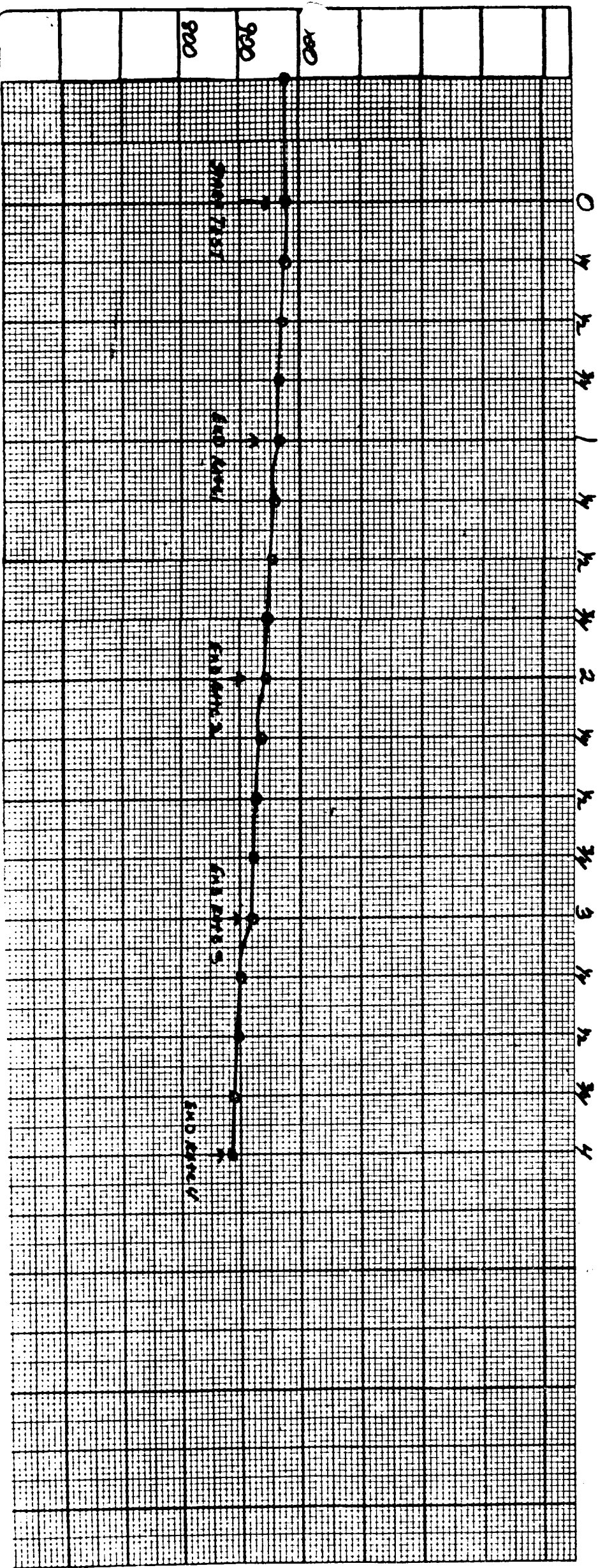
Drawn By

Scale: As Shown

BENNETT-
CATHEY
WELL SERVICES

FOUR POINT BACK PRESSURE TEST

TIME IN HOURS



PRESSURE

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY DEPCO, INC. WELL NAME VANCE FEDERAL WELL NO. 3
DATE OF TEST 7-6-82 - 7-9-82 FORMATION ABO PAGE 1 OF 1
COMPANY MAN GENE SIMER

CHART READINGS AND CALCULATIONS FOR BUILDUP OR DRAWDOWN TEST

ELEMENT NUMBER RPG3 #7201 RANGE 3,200 LBS.
CLOCK NUMBER 27191 RANGE 72 HOURS
TIME WELL SHUT IN 0845 HOURS 7-6-82
TIME CLOCK STARTED 0750 HOURS 7-6-82
DEAD WEIGHT ELEMENT ON SURFACE 620 PSIA FLOWING LBS.
TIME ELEMENT REACHED BOTTOM 0813 HOURS 7-6-82
DEAD WEIGHT ELEMENT ON BOTTOM 616 PSIA FLOWING LBS.
ELEMENT SET AT 4,468 FEET.
TEMPERATURE 4,468 FT. 100 °F.
879 PSIA DEAD WEIGHT AT THE END OF 75 HOURS 11 MINUTES.

DATE	HOUR	TIME	DEFLECTION in/inches	CALCULATED PRESSURE psig	CORRECTION P ± PC psig	CORRECTED PRESSURE psia	PRESSURE AT MID-POINT OF PERFORATIONS psia
7-6-82	0	0845		725	13.2		738
	1/4	0900		785	13.2		798
	1/2	0915		801	13.2		814
	3/4	0930		811	13.2		824
	1	0945		820	13.2		833
	1-1/4	1000		824	13.2		837
	1-1/2	1015		830	13.2		840
	1-3/4	1030		834	13.2		847
	2	1045		839	13.2		852
	2-1/4	1100		843	13.2		856
	2-1/2	1115		845	13.2		858
	2-3/4	1130		848	13.2		861
	3	1145		851	13.2		864
	3-1/2	1215		857	13.2		870
	4	1245		860	13.2		873
	4-1/2	1315		865	13.2		878
	5	1345		868	13.2		881
	5-1/2	1415		872	13.2		885
	6	1445		874	13.2		887
	7	1545		879	13.2		892
	8	1645		883	13.2		896
	9	1745		887	13.2		900
	10	1845		892	13.2		905
	12	2045		896	13.2		909
	14	2245		902	13.2		915
	16	2445		907	13.2		920
7-7-82	18	0245		911	13.2		924
	20	0445		915	13.2		928
	25	0945		924	13.2		937
	30	1445		930	13.2		943
	35	1945		935	13.2		948
	40	2445		940	13.2		953
7-8-82	45	0545		945	13.2		958
	50	1045		950	13.2		963
	55	1545		953	13.2		966
	60	2045		957	13.2		970
7-9-82	65	0145		960	13.2		973
	71	0745		964	13.2		977

TEST DEPTH: 4,468

ELEMENT NO.: RPG3 #7201

RANGE: 3,200 LBS.

CLOCKS: 27191

RANGE: 72 HOURS

OPERATOR: BO FAULKENBERRY

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

72 HOURS BUILD UP

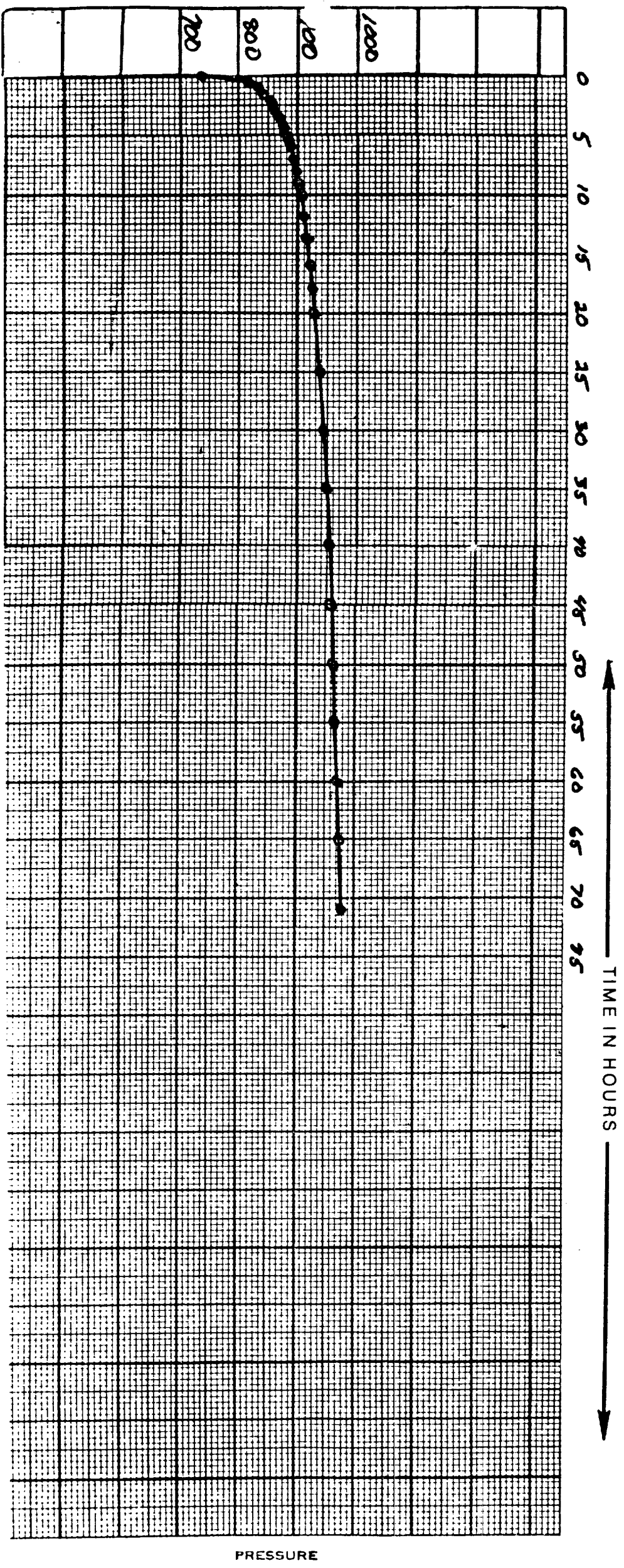
GENE SIMER

DEPCO CORPORATION

VANCE FEDERAL WELL NO. 3

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

Drawn By Scale: As Shown





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



BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR DEPCO, INC.
LEASE VANCE FEDERAL
WELL NO. 3
POOL FORMATION ABO
DATE 7-9-82 TIME 1154 HOURS
CO. MAN GENE SIMER
STATUS SHUT IN TEST DEPTH 4,468
TIME S.I. LAST TEST DATE 1ST TEST
7-6-82 BHP LAST TEST
TUB. PRES. 879 BHP CHANGE
CAS. PRES. FLUID TOP
DATUM PLANE WATER TOP
DATUM PSIA 979 RUN BY BO FAULKENBERRY
TEMP 108° CLOCK # B3443
PRESSURE RANGE 3,200 LBS.
ELEMENT NO. RPG3 #7201

DEPTH	PRESSURE	GRADIENT
0	879	
1,000	890	1.1
2,000	913	2.3
3,000	938	2.5
4,318	974	2.7
4,468	978	2.7

TIME B.H.P. MEASURED: 1154 H

LENGTH OF TIME WELL SHUT IN: 75 H
11 M

