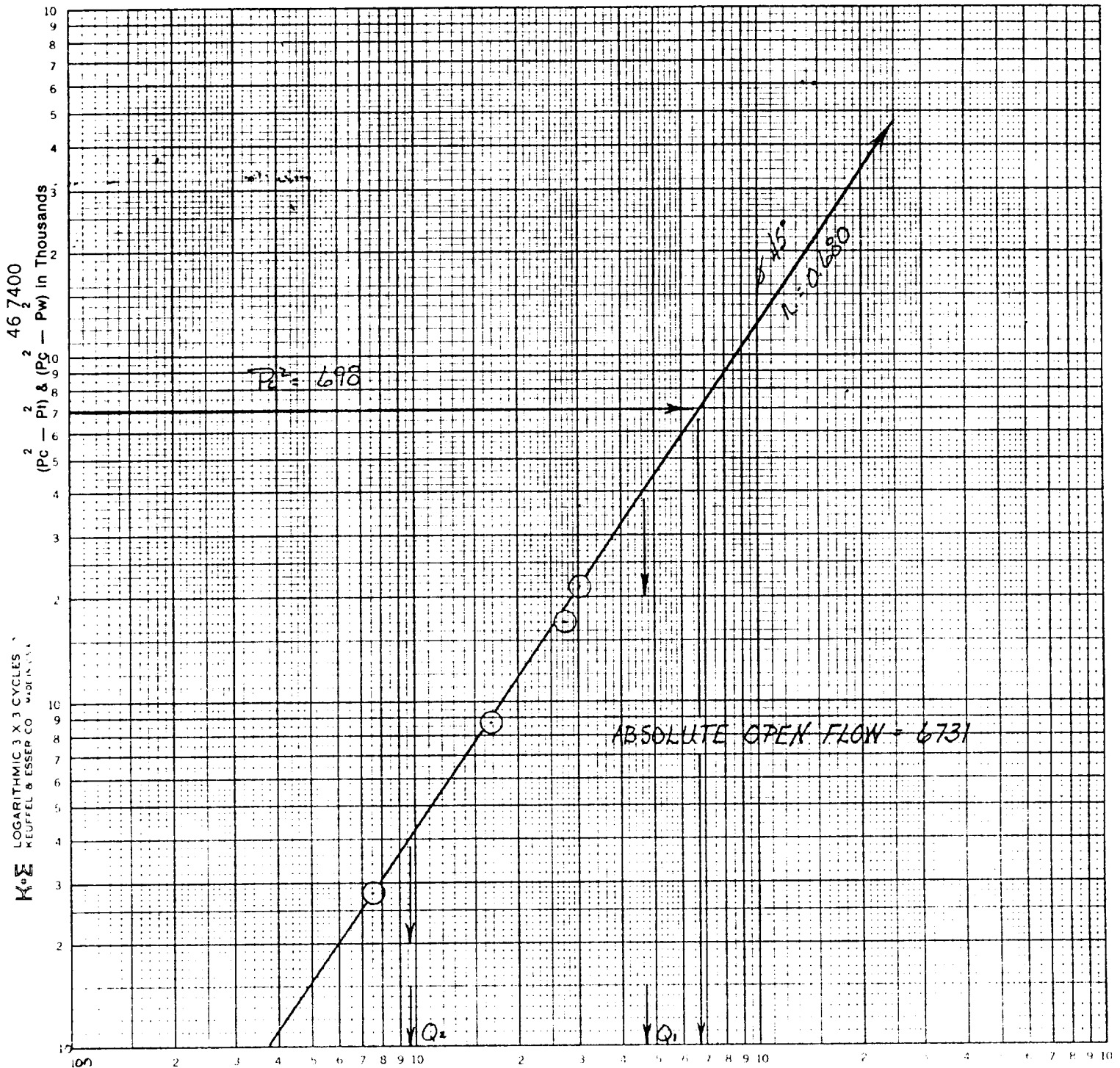


BACK PRESSURE CURVE

Operator Stevens Operating Lease Nicholes Dale Well No. 6
 County Chaves Field Pecos Slope Location N 33 75 26E
 Date of Test 11-5-83 Slope "n" .680 Angle of Slope 55.8

Calc. Abs. Potential 6731 MCF/D



$$\overline{\Delta P}_1^2 \quad p_c^2 - p_w^2 = 400$$

$$\overline{\Delta P}_2^2 \quad p_c^2 - p_w^2 = 40$$

$$Q_1 = 4619$$

$$Q_2 = 765$$

Q in MCF/Day

$$\text{LOG } Q_1 = 3.6645$$

$$\text{LOG } Q_2 = 2.9845$$

$$n = 0.6800$$



PRECISION SERVICE INC.
Flow Measurement Engineers
Analysis Results Summary
Casper, WY 82601

Run No. 1104-1
Date Run 11/04/83
Date Sampled 11/03/83

Analysis For: STEVENS OPERATING CORP

Lease: Nichols Dale #6 Producer: Stevens Operating Corp
Location: Pecos Slope County: Chaves State: New Mexico
Purpose: Well Test Sampled By: J. Dougherty
Sampling Temp. 60 °F Atmos Temp. 60 °F
Volume/day: 200 Formation:
Pressure on Bomb: 200 PSIG; Line Pressure 200 PSIG

Gas Component

Analysis

Press. Base: 14.73

	Mol. %	Liq. %	GPM Per MCF
Carbon Dioxide CO ₂	1.512		
Oxygen O ₂	.092		
Nitrogen N ₂	5.187		
Hydrogen Sulfide H ₂ S			
Methane C ₁	85.151		14.399
Ethane C ₂	4.591		1.225
Propane C ₃	1.763		.484
iso-Butane IC ₄	.279		.091
nor-Butane NC ₄	.580		.182
iso-Pentane IC ₅	.240		.087
nor-Pentane NC ₅	.234		.084
hexanes plus	.372		.161
hexanes C ₆			
heptanes			
heptanes Plus C ₇ +			
Total	100.000		16.715
Pentane + G.P.M.			.333
Propane + GPM			1.091
1-lb Gasoline			.899

BTU Dry 1056
BTU Wet 1055
Calc. Specific Gravity .663

@ Std. Press. 14.696

BTU Dry 1054
BTU Wet 1052

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

Z Factor .9974
N Value 1.3930
Avg Mol Wt 12.1530
Avg Cu Ft/Gal

Run by Jeffrey A. Propp

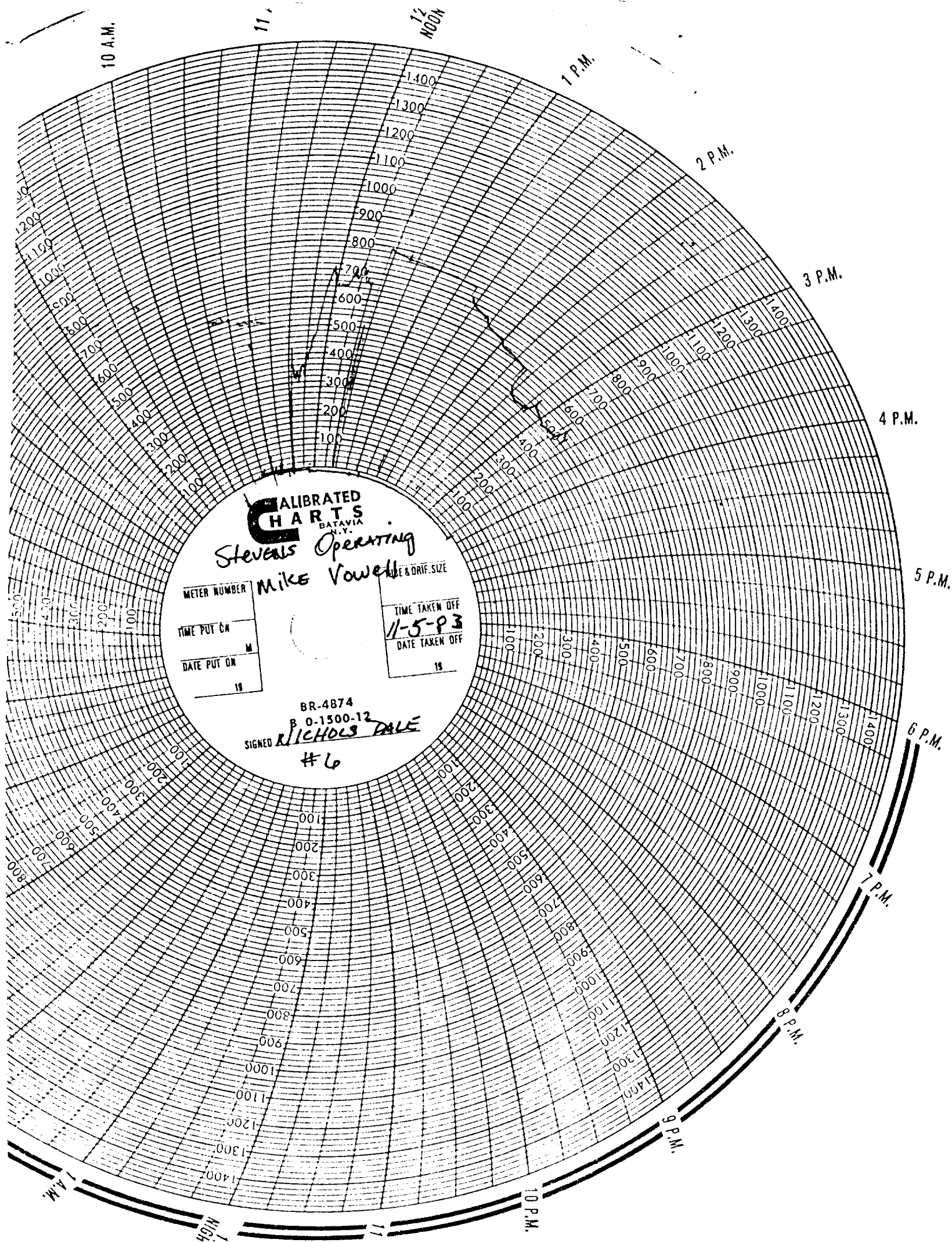
Calculated By Jeffrey A. Propp

Ethane + GPM 2.316

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

ELD GRAV.: 0.665

Distribution:



(505) 746-3354 / Artesia, New Mexico 88210

SUBSURFACE PRESSURE MEASUREMENTS

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O. C. D.
ARTESIA, OFFICE

CCOMPANY STEVENS OPERATING WELL NAME NICHOLS DALE #6
DATE OF TEST 11-5-83 FORMATION ABO PAGE 1 OF 1
CCOMPANY MAN MIKE VOWELL

CHART READINGS AND CALCULATIONS FOR BUILDUP OR DRAWDOWN TEST

ELEMENT NUMBER	RPG3#7201	RANGE	3200 LBS.
CLOCK NUMBER	B-3443	RANGE	12 HOUR
ELEMENT NUMBER	RPG3#37882	RANGE	3500 LBS.
CLOCK NUMBER	1935	RANGE	12 HOUR
TIME WELL SHUT IN	1700 HOUR	10-3-83	
TIME CLOCK STARTED	0849 HOUR	11-5-83	
DEAD WEIGHT-ELEMENT ON SURFACE	840.2	PSIA	SHUT IN LBS.
TIME ELEMENT REACHED BOTTOM	1000 HOUR	11-5-83	
DEAD WEIGHT ELEMENT ON BOTTOM	840.2	PSIA	SHUT IN LBS.
ELEMENT SET AT	4160		FEET
TEMPERATURE	4160	FT.	104° °F.
840.2 PSIA	DEAD WEIGHT AT THE END OF	42	HOURS 25 MINUTES

[illegible]

TEST DATE: 11-5-83
TEST DEPTH: 4160 FEET

ELEMENT NO.: RFG3#7201
RANGE: 3200 LBS.

CLOCKS: B-3443
RANGE: 12 HOUR

OPERATOR: RICHARD TOWNLEY

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

RPG3#37882
3500 LBS.
1935
12 HOUR

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ARTESIA, OFFICE

MIKE VOWELL

STEVENS OPERATING

NICHOLS DALE #6

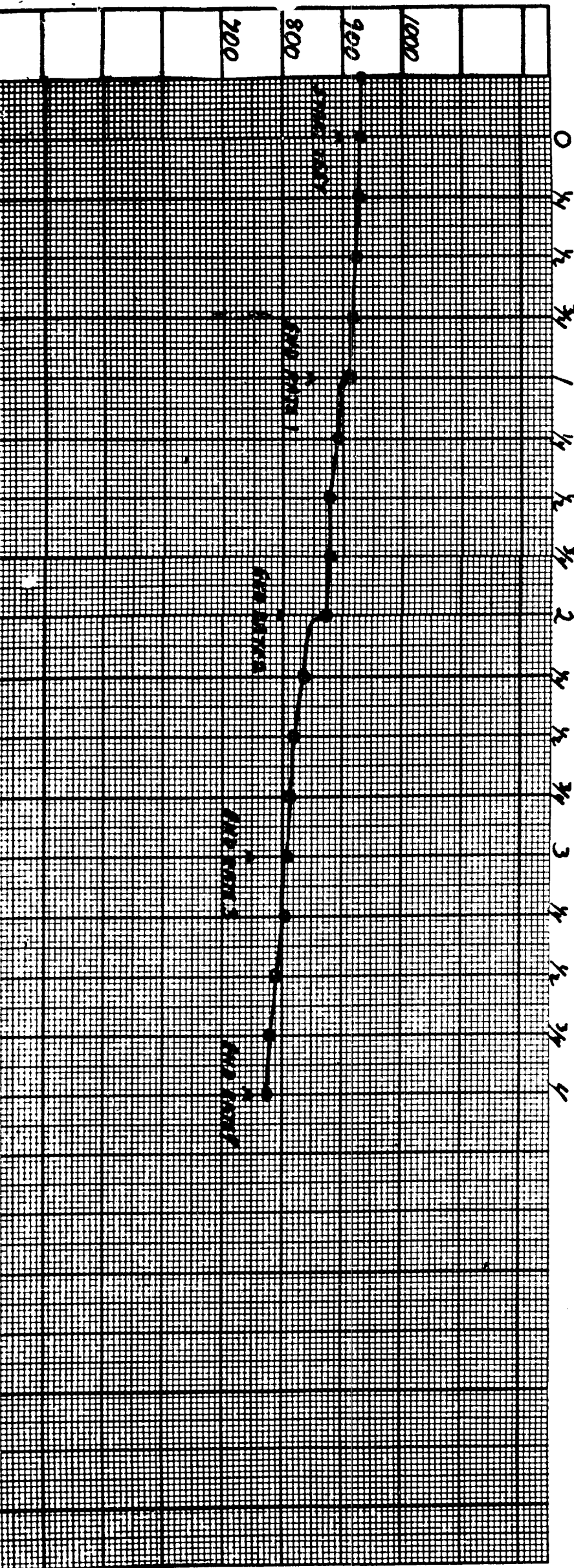
BENNETT-CATHEY WIRE LINE SERVICE
Box 787
Artesia, N.M. 88210
505/746-3281

Drawn By

Scale: As Shown

4 POINT BACK PRESSURE TEST

TIME IN HOURS



BENNETT-
CATHEY
WELL SERVICES



BENNETT-CATHEY WIRE LINE SERVICE

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

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NOV 06 1983

O. C. D.

ARTESIA, OFFICE

BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR STEVENS OPERATING
LEASE NICHOLS DALE
WELL NO. #6
POOL FORMATION
DATE 11-5-83 TIME 1000 HR.
CO. MAN MIKE VOWELL
STATUS SHUT IN TEST DEPTH 4160 FEET
TIME S.I. 1700 HR LAST TEST DATE 6-23-83
10-3-83 BHP LAST TEST 1130 #
TUB. PRES. 832.2# BHP CHANGE 198#
CAS. PRES. FLUID TOP
DATUM PLANE WATER TOP
DATUM PSIA 932.2# RUN BY MARK RING
TEMP 104° CLOCK # 8-3443
PRESSURE RANGE 3500 LBS. 3200 LBS.
ELEMENT NO. RPG3#37882 RPG3#7201

DEPTH	PRESSURE	GRADIENT
0	832.2	
1000	856.2	2.4
2000	880.2	2.4
3000	903.2	2.3
4000	928.2	2.5
4160	932.2	2.5

TIME B.H.P. MEASURED 1000 HOUR.
LENGTH OF TIME WELL SHUT IN 41HR 0MIN.

PERFORATIONS FROM 4001 TO 4319 FEET.

