

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

Revised 9-1-83

RECEIVED

C/SF
C-122

Type Test ☒ Initial FOUR POINT ☐ Annual ☐ Special		Test Date 3-10-82		MAR 17 1982	
Company SANDERS PETROLEUM CORP.		Connection AIR NEW WELL		O. C. D.	
Field UNDESIGNATED		Formation ABO		Unit B	
Completion Date 3-8-82		Total Depth 4700		Plug Back TD 4642	
Elevation 3733 KB		Farm or Lease Name ISLER FEE		Well No. 2	
Coq. Size 4.5	Wt. 10.5	d 4.052	Set At 4700	Perforations: From 4247 To 4532	
Tiq. Size 2.375	Wt. 4.7	d 1.995	Set At 4209	Perforations: From OPEN To ENDED	
Type Well - Single - Bradenhead - C.G. or G.O. Multiple SINGLE				Packer Set At NONE	
Producing Thru TUBING		Reservoir Temp. °F 97 4200		Mean Annual Temp. °F 60°	
Baro. Press. - P _a 13.2		State NEW MEXICO		County CHAVES	
L 4390	H 4390	G _q .665	% CO ₂ 2.88	% N ₂ 6.17	% H ₂ S Prover
Meter Run 3.068		Flaps FLANGE			

FLOW DATA							TUBING DATA		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							887		887		233 HRS.
1.	3.068	X	1.000	405	13.5	63	828	73	948	11/64	1
2.	3.068	X	1.000	415	25.0	66	781	79	897	13/64	1
3.	3.068	X	1.000	420	51.5	65	695	79	807	15/64	1
4.	3.068	X	1.000	420	69.0	66	604	83	707	17/64	1

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, Mc/d
1	4.9120	75.14	418.2	.9971	1.2263	1.0353	467
2	4.9120	103.46	428.2	.9943	1.2263	1.0358	642
3	4.9120	149.36	433.2	.9957	1.2263	1.0358	927
4	4.9120	159.87	433.2	.9943	1.2263	1.0358	992

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/Lbl.
1	.62	523	1.47	.933	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	.64	526	1.48	.932	Specific Gravity Separator Gas .6650 XXXXX
3	.64	525	1.48	.932	Specific Gravity Flowing Fluid XXXXX
4	.64	526	1.48	.932	Critical Pressure 672 P.S.I.A. _____ P.S.I.A.
5					Critical Temperature 355 R _____ R

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	$(1) \frac{P_r^2}{P_r^2 - P_w^2} = 2.8382$ $(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.8371$ $AOF = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1,702.9$
1	981.2	923.9	115.0		
2	910.2	828.5	210.0		
3	820.2	672.7	366.0		
4	720.2	518.7	520.0		
5					

Absolute Open Flow 1,702.9		Mold # 15.025	Angle of Slope 59.75	Slope, n .583
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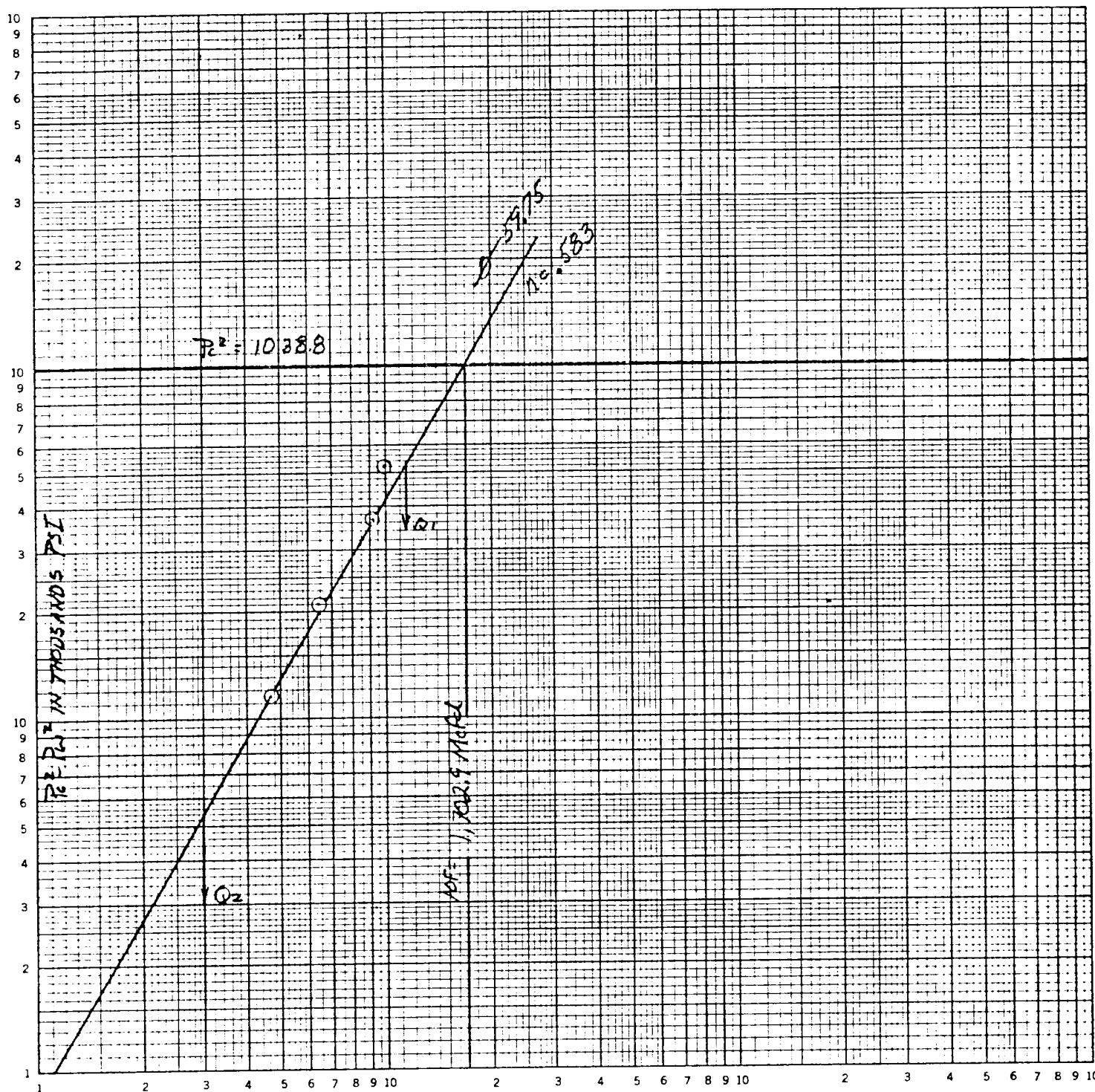
Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS.

Approved By Commission:	Conducted By: RICHARD TOWNLEY	Calculated By: BENNETT-CATHEY	Checked By: <i>[Signature]</i>
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ISSUER FEE #2
B 15 75 26E
CHAVES COUNTY
3-10-82

46 7400

K-E LOGARITHMIC 3 X 3 CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.



$$\Delta P_1 P_c^2 - P_w^2 = 5400$$

$$\Delta P_2 P_c^2 - P_w^2 = 540$$

$$Q_1 = 1148.5$$

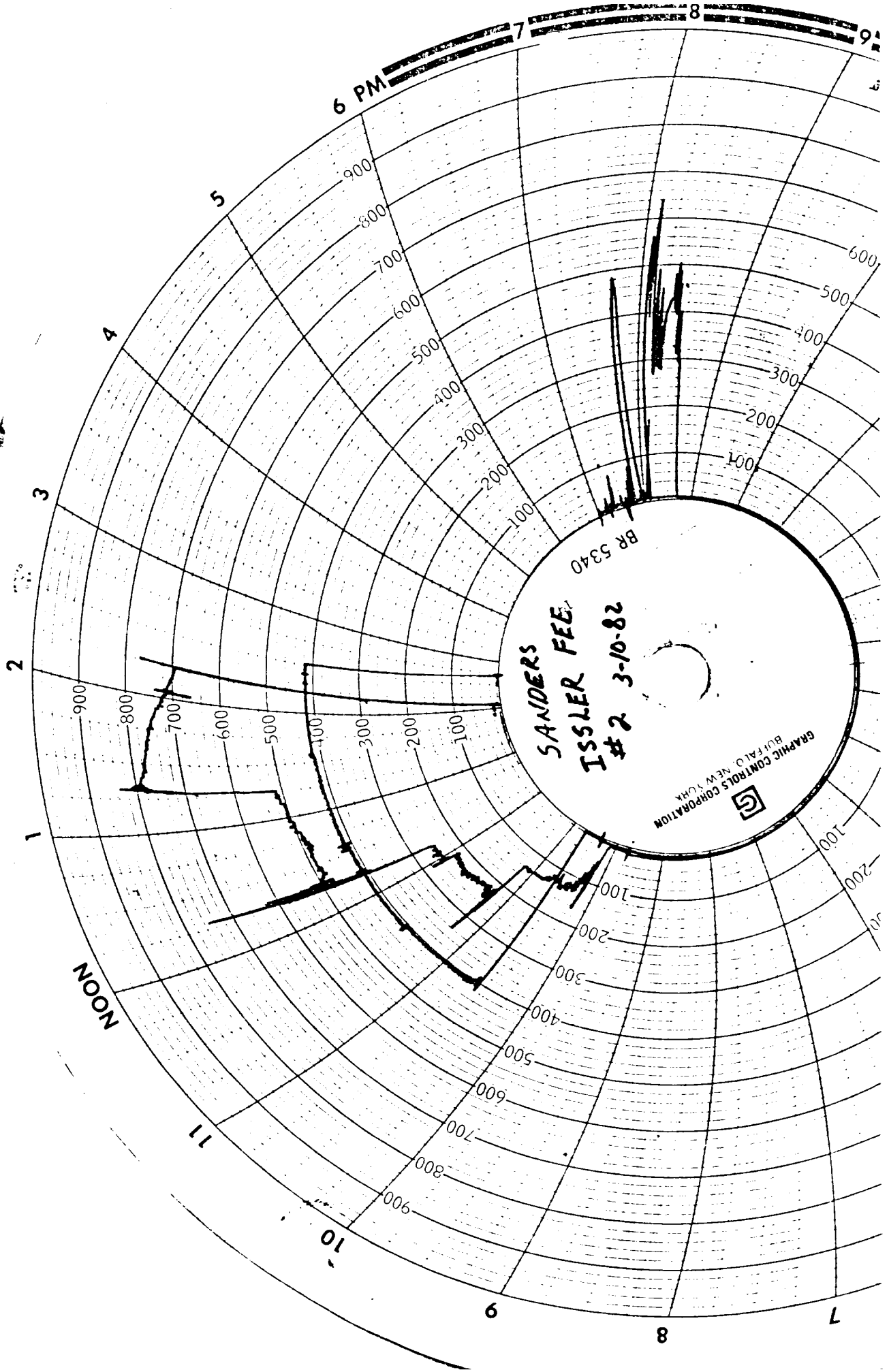
$$Q_2 = 300$$

Q , Mcfd

$$\log Q_1 = 3.0601$$

$$\log Q_2 = 2.4771$$

$$n = .583$$



SANDERS
ISSLER FEE
#2 3-10-82

BR 5340

GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK

COMPANY SANDERS PETROLEUM CORP. WELL NAME ISLER FEE WELL NO. 2
DATE OF TEST 3-9-82 TO 3-11-82 FORMATION _____ PAGE 1 OF 1

ELEMENT NUMBER RPG3 #16150N RANGE 2,000 LBS.
CLOCK NUMBER G2522 RANGE 72 HOURS
TIME WELL SHUT IN 3-1-82 1800 HOURS
TIME CLOCK STARTED 1845 HOURS 3-9-82
DEAD WEIGHT ELEMENT ON SURFACE 898 PSIA SHUT IN LBS.
TIME ELEMENT REACHED BOTTOM 1940 HOURS 3-9-82
DEAD WEIGHT ELEMENT ON BOTTOM 898 PSIA SHUT IN LBS.
ELEMENT SET AT 4,200 FEET.
TEMPERATURE 4,200 FT. 97 °F.
DEAD WEIGHT AT THE END OF N.A. HOURS N.A. MINUTES.

Bryan Printers & Stationers, Inc.

TEST DATE: 3-9-82 TO 3-11-82
TEST DEPTH: 4,200 FEET

ELEMENT NO.: RPG3 #16150N
RANGE: 2,000 LBS.

CLOCKS: G2522
RANGE: 72 HOURS

OPERATOR: RICHARD TOWNLEY

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

FOUR POINT BACK PRESSURE TEST

CHARLES SANDERS

ISLER FEE WELL NO. 2

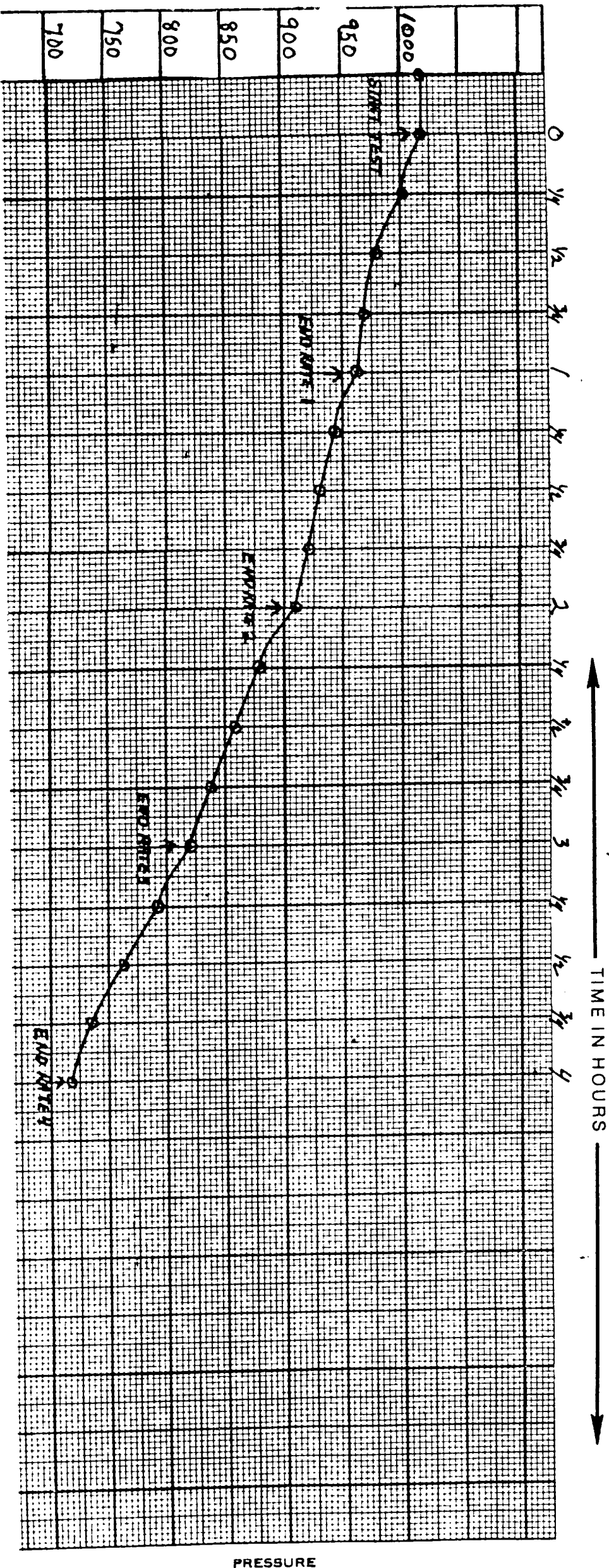
SANDERS PETROLEUM CORP.

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

Drawn By

Scale: As Shown

BENNETT-
CATHEY
WELL SERVICES



BENNETT - CATHEY
 Artesia, New Mexico 88210
SUBSURFACE PRESSURE MEASUREMENTS

COMPANY SANDERS PETROLEUM CORP. WELL NAME ISLER FEE WELL NO. 2
 DATE OF TEST 3-9-82 TO 3-11-82 FORMATION _____ PAGE 1 OF 1

CHART READINGS AND CALCULATIONS FOR BUILDUP OR DRAWDOWN TEST

ELEMENT NUMBER RPG3 #16150N RANGE 2,000 LBS.
 CLOCK NUMBER G2522 RANGE 72 HOURS
 TIME WELL SHUT IN 1445 HOURS
 TIME CLOCK STARTED 1845 HOURS 3-9-82
 DEAD WEIGHT ELEMENT ON SURFACE 898 PSIA SHUT IN LBS.
 TIME ELEMENT REACHED BOTTOM 1940 HOURS
 DEAD WEIGHT ELEMENT ON BOTTOM 898 PSIA SHUT IN LBS.
 ELEMENT SET AT 4,200 FEET.
 TEMPERATURE 4,200 FT. 97 °F.
 882 PSIA DEAD WEIGHT AT THE END OF 26 HOURS 30 MIN. MINUTES.

DATE	HOUR	TIME	DEFLECTION in/inches	CALCULATED PRESSURE psig	CORRECTION P ± PC psig	CORRECTED PRESSURE psia	PRESSURE AT MID-POINT OF PERFORATIONS psia
3-10-82	0	1445		702	13.2	715	720
	1/4	1500		774	13.2	787	792
	1/2	1515		830	13.2	843	848
	3/4	1530		862	13.2	875	882
	1	1545		878	13.2	891	896
	1-1/4	1600		888	13.2	901	906
	1-1/2	1615		900	13.2	913	918
	1-3/4	1630		909	13.2	922	927
	2	1645		914	13.2	927	932
	2-1/2	1715		925	13.2	938	943
	3	1745		931	13.2	944	949
	3-1/2	1815		937	13.2	950	953
	4	1845		941	13.2	954	957
	4-1/2	1915		945	13.2	958	963
	5	1945		948	13.2	961	966
	6	2045		953	13.2	966	971
	7	2145		956	13.2	969	974
	8	2245		959	13.2	972	977
	9	2345		962	13.2	975	980
	10	2445		964	13.2	977	982
3-11-82	12	0245		968	13.2	981	986
	14	0445		971	13.2	984	989
	16	0645		974	13.2	987	992
	18	0845		976	13.2	989	994
	20	1045		978	13.2	991	996
	22	1245		980	13.2	993	998
	24	1445		981	13.2	994	999
	26-1/2	1715		982	13.2	995	1000

TEST DATE: 3-9-82 TO 3-11-82
TEST DEPTH: 4,200 FEET

ELEMENT NO.: RPG3 #16150N

RANGE: 2,000 LBS.

CLOCKS: G2522

RANGE: 72 HOURS

OPERATOR: BO FAULKENBERRY

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

CHARLES SANDERS

SANDERS PETROLEUM CORP.

ISLER FEE WELL NO. 2

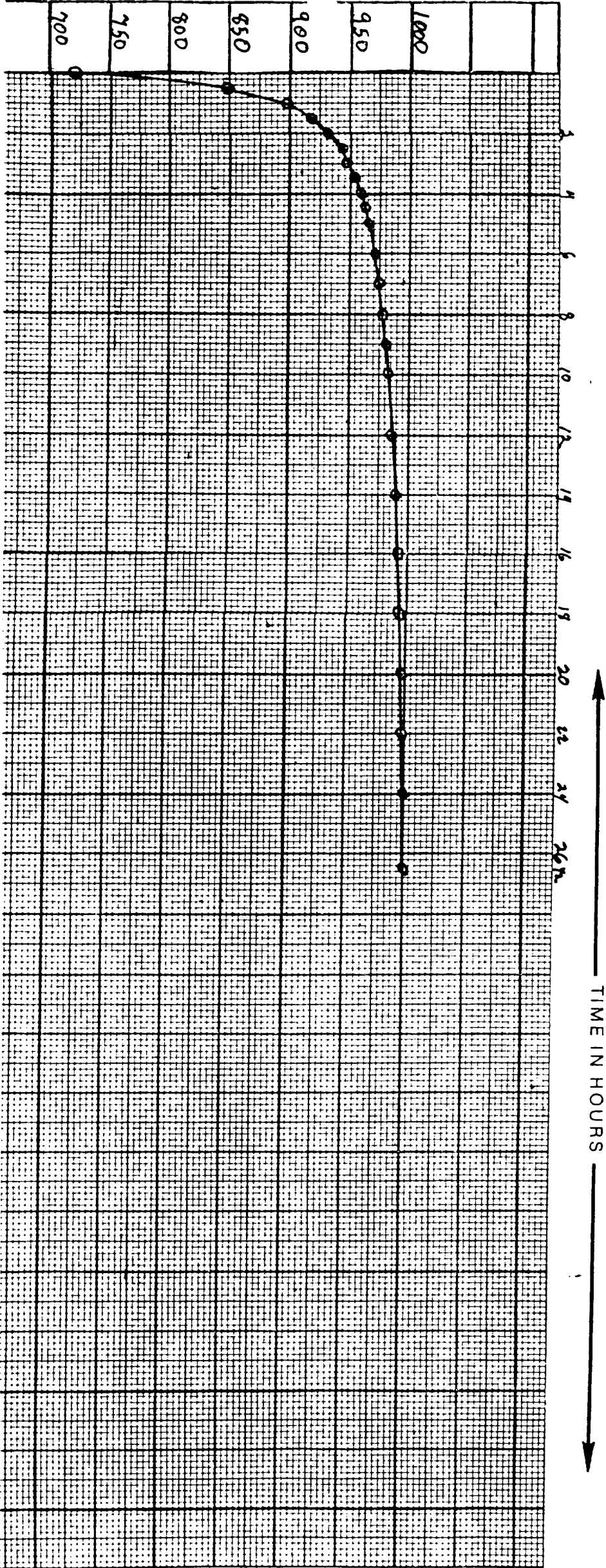
BENNETT-CATHEY WIRE LINE SERVICE

Box 787 Artesia, N.M. 88210 505/746-3281

Drawn By

Scale: As Shown

BENNETT-
CATHEY
WELL SERVICES



PRESSURE



BENNETT-CATHEY WIRE LINE SERVICE

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



BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR SANDERS PETROLEUM CORP.
LEASE ISLER FEE
WELL NO. 2
POOL FORMATION ABO
DATE 3-11-82 TIME 1756 HOURS

STATUS SHUT IN TEST DEPTH 4,200 HOURS
TIME S.I. 1445 HOURS LAST TEST DATE 1ST TEST
CAS. PRES. 3-10-82 BHP LAST TEST
TUB. PRES. 882 BHP CHANGE
ELE. FLUID TOP
DATUM PLANE WATER TOP
DATUM PSIA 999 RUN BY STEVE HARWELL
TEMP 97° PRESSURE RANGE 2,000 LBS.
CLOCK NO.

ELEMENT NO. RPC3 #16150N

DEPTH	PRESSURE	GRADIENT
0	882	
1,000	914	3.2
2,000	938	2.4
3,000	964	2.6
4,050	990	2.5
4,200	994	2.7
4,390	999	3.0

TIME B.H.P. MEASURED: 1756 HOURS

LENGTH OF TIME WELL SHUT IN: 26 H
30 M

800 900 1000

NOTE: EXTRAPOLATED TO 4,390.

