

WINCHESTER WOLFCAMP FIELD
Eddy County, New Mexico
October, 1973

BOTTOM-HOLE PRESSURE DATA

<u>Well</u>	<u>Date</u>	<u>Datum</u>	<u>Depth</u>	<u>BHP</u>
<u>Robinson Bros., State "A" #1</u>				
C SW/4 SW/4, Sec. 36-19S-28E				
	1/14/66		DST 9152 - 9214'	SIP 4500 - 4250#
	2/11/66	9150'	Perfs 9112 - 9188'	4292#
	2/15/66	9150'	"	4364#
	3/ 7/66	9150'	"	3508#
	4/12/71	9000'	Perfs 9064 - 9188'	1800#

Dorchester Expl., DWU-Fed. #2
C SE/4 NW/4, Sec. 35-19S-28E

8/ 6/73	SPDST 9040 - 9180'	4500#
October, 1973 *	Perfs 9063 - 9128'	4042#

*Verbal discussion between John Castle, Penroc Oil Corporation, and Bob Winkler, Dorchester Exploration Company. Mr. Winkler said the DWU-Federal #2 had produced 28,000,000 CFG with a pressure drop of 458# from 4500# to 4042#.

Penroc Oil Corp., Dero-Federal "A" Comm. #1
C SE/4 SW/4, Sec. 35-19S-28E

10/23/73	DST 9064 - 9204	SIP 4450 - 4450#
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*Shows separation
from Dorchester*

GEORE EXAMINER STAMETS
U. S. CONSERVATION COMMISSION

5097

Reusoe

W. T. HAGLER
H. L. HAGLER
W. M. CATES
R. W. HARRINGTON
J. N. CASPARIS
D. F. JONES

WEST TEXAS SERVICE INC.

P. O. BOX 4456
TELEPHONE MU 2 5361

2209 W. INDUSTRIAL AVE.
MIDLAND, TEXAS

FULL INSURANCE
COVERAGE

INDIVIDUAL WELL DATA SHEET

Company J. C. Williamson & Robinson Bros. Lease _____ State "A" Well No. 1
Field Wildcat County Eddy State New Mexico
Test Date 2-11-66 Time 9:58 AM Status of Well Shut In
Top of Pay _____ Total Depth 9700 PB Producing Formation Wolfcamp Reef
Guib. L30
Tubing 2 " Depth 9020 OE B.H.C. _____ Packer 8700 Pressure Datum MPP
9112-9132
Casing 5 1/2 " Depth 9700 Perf. 9168-9188 Liner _____ Packer _____

Depth Feet	Δ Depth	Pressure Lbs. Sq. In.	Δ Pressure	*Gradient Lbs./Ft.	
Surface		2038			
	4000		896	.223	Tubing Press. 2039 DWG
4000		2934			Top of Fluid 995
	4000		1062	.265	Top of Water None
8000		3996			Hrs. - Shut In 25.5
	1150		296	.257	Temp. @ 9150' = 158°F
9150 Datum		4292			Elevation 3295 DF 3283 Gr
					Last Test Date Initial Test
					Press. Last Test
					B.H.P. Change
					Gain - Loss/Day
					RPG 2137
					Calibration No. 211
					Run By D. E. Jones
					Calculated By R. W. Harrington

* Pressure and Gradients are calculated in decimals. Pressure and Δ pressure are shown to the nearest pound.

Calculations and Remarks: All Pressure Instruments are Temperature Compensated

Distribution 5 - 802 V & J Tower - Midland, Texas
2-16-66 1 - Our File

W. T. HAGLER
H. L. HAGLER
W. M. CATES
R. W. HARRINGTON
J. N. CASPARIS
D. F. JONES

WEST TEXAS ENGINEERING SERVICE INC.

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2209 W. INDUSTRIAL AVE.
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FULL INSURANCE
COVERAGE

J. C. WILLIAMSON & ROBINSON BROS.
State "A" Well No. 1
Wildcat, Eddy County, New Mexico

Sub-Surface Pressure Recorded @ 9150' in Psig
"0" Hour = Time Opened = 11:15 AM on 2-11-66

HOURS	PRESSURE	choke SIZE	BBLS.OIL PER DAY	GOR	P.I.
-1.28	4292	0/64"			
-1	4295	0/64"			
0	4301	0/64"	0		
.02	3954	16/64"			
.03	3659	16/64"			
.08	3571	16/64"	Oil	Gas	
.17	3478	16/64"	Gravity =	Gravity =	
.25	3425	16/64"	49° @ 60°F	.790	
.5	3332	16/64"			
1	3276	16/64"			
2	3225	16/64"			
3	3219	16/64"			
4	3208	16/64"	434.7	1753	.376
4.08	3490	12/64"			
4.17	3535	16/64"			
4.25	3569	12/64"			
4.5	3614	12/64"			
5	3619	12/64"			
6	3622	12/64"			
6.05	3622	12/64"	273.0	1804	.368
6.08	3695	0/64"			
6.25	4028	0/64"			
6.5	4098	0/64"			
7	4104	0/64"			
8	4115	0/64"			
9	4123	0/64"			
10	4137	0/64"			
10.25	4140	0/64"			
90.62*	4364				

*Shut-In Hours

NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-124
(Rev. 9-53)

COMPANY J. C. Williamson &
Robinson Bros.

BOTTOM HOLE PRESSURES

Wildcat (Eddy County) POOL

POOL DATUM Mid-Point of Perfs. NOMINAL SHUT-IN TIME HRS: AVERAGE POOL TEMPERATURE 158 °F

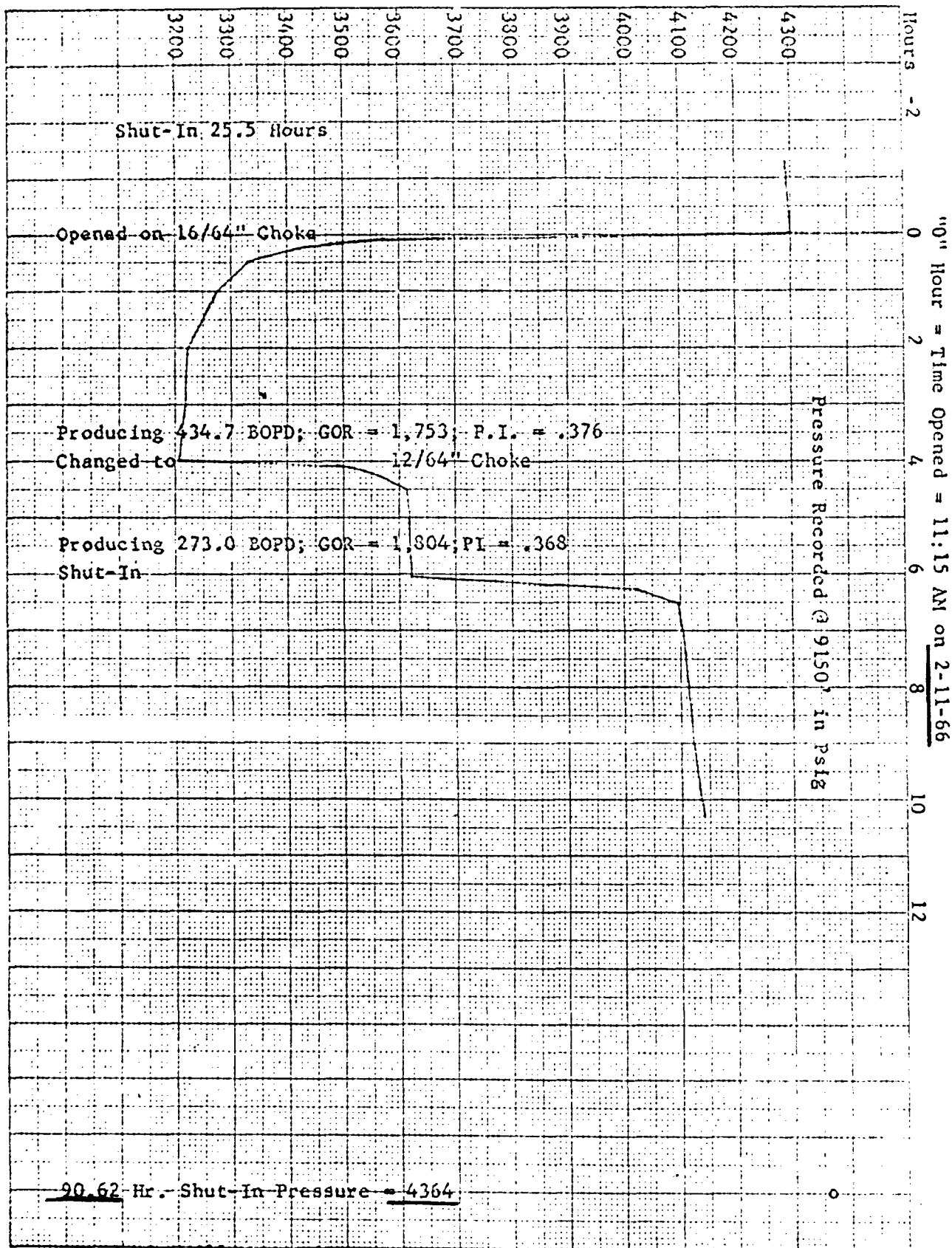
LEASE	WELL NO.	UNIT	S-T-R	DATE		D.F. GAUGE DEPTH	GRADIENT TBG.	B.H.P. @ GAUGE DEPTH	B.H.P. @ POOL DATUM	PREVIOUS TEST @ DATUM	DATE
				DATE	TIME						
				PRESS.	S.I. HRS./MINS.	ELEV.					

State "A"	1		36-19S-28E	2-11-66	25:15	3295	-5855	0.233	-5855	4315	Initial Test	-
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WEST TEXAS ENGINEERING SERVICE, INC.

PHONE MU 2-5361

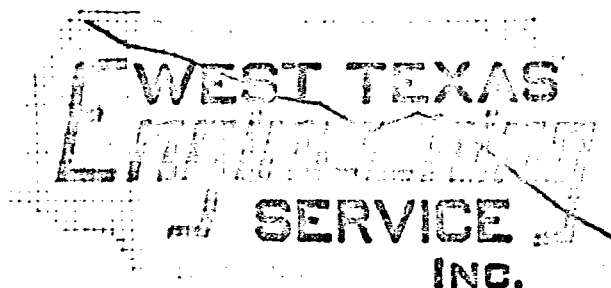
BOX 4456



J. C. Williamson &
 OPERATOR Robinson Bros. LEASE State "A" WELL NO. 1
 POOL Wildcat COUNTY Eddy DATE 2-11-66

STAPLETON PTO. CO., MIDLAND

W. T. HAGLER
H. L. HAGLER
W. M. CATES
R. W. HARRINGTON
J. N. CASPARIS
D. F. JONES



P. O. BOX 4456
TELEPHONE MU 2-5361

2209 W. INDUSTRIAL AVE.
MIDLAND, TEXAS

FULL INSURANCE
COVERAGE

INDIVIDUAL WELL DATA SHEET

Company J. C. Williamson & Robinson Bros. Lease State "A" Well No. 1
Field Wildcat County Eddy State New Mexico
Test Date 2-15-66 Time 11:52 AM Status of Well Shut In
Top of Pay Total Depth 9700 PB Producing Formation Wolfcamp Reef
Guib. L30
Tubing 2 " Depth 9020 OE B.H.C. 9112-9132 Packer 8700 Pressure Datum MPP
Casing 5 1/2 " Depth 9700 Perf. 9168-9188 Liner Packer

Depth Feet	Δ Depth	Pressure Lbs. Sq. In.	Δ Pressure	*Gradient Lbs./Ft.		
Surface		2127				
	4000		911	.227	Tubing Press.	2122 DWG
4000		3038			Top of Fluid	1055
	4000		1046	.261	Top of Water	No
8000		4084			Hrs. - Shut In	90.62*
	1150		280	.243		
9150 Run Depth & Datum		4364			Elevation	3295 DF 3283 Gr
					Last Test Date	2-11-66
					Press. Last Test	4292 @ Datum
					B.H.P. Change	+72/4 days
					Gain - xxx /Day	18.000
					RPG	2602
					Calibration No.	930
					Run By	D. F. Jones
					Calculated By	R. W. Harrington

* Pressure and Gradients are calculated in decimals. Pressure and Δ pressure are shown to the nearest pound.

Calculations and Remarks: All Pressure Instruments are Temperature Compensated

Distribution *Clock Stopped, unable to observe any pressure change
during 3 Hours @ Run Depth

W. T. HAGLER
H. L. HAGLER
W. M. CATES
R. W. HARRINGTON
J. N. CASPARIS
D. F. JONES
FIELD PETROLEUM ENGINEERS



P. O. BOX 4456
TELEPHONE MU 2-5361

2209 W. INDUSTRIAL AVE.
MIDLAND, TEXAS

FULL INSURANCE
COVERAGE

INDIVIDUAL WELL DATA SHEET

Company J. C. Williamson & Robinson Bros. Lease _____ State "A" Well No. 1
Field Wildcat County Eddy State New Mexico
Test Date 3-7-66 Time 8:10 AM CST Status of Well _____ Shut In _____
Top of Pay _____ Total Depth 9700 PB Producing Formation Wolfcamp Reef
Guib. L 30
Tubing 2 " Depth 9020 OE B.H.C. _____ Packer 8700 Pressure Datum MPP
9112-9132
Casing 5 1/2 " Depth 9700 Perf. 9168-9188 Liner _____ Packer _____

Depth Feet	Δ Depth	Pressure Lbs. Sq. In.	Δ Pressure	*Gradient Lbs./Ft.		
Surface		1730				
	2500		151	.061	Tubing Press.	1727 DWG
2500		1881			Top of Fluid	3120
	2500		555	.222	Top of Water	None
5000		2436			Hrs.- Shut In	72
	2500		659	.264		
7500		3095			Elevation	3283 GL
	1050		261	.248	Last Test Date	2-15-66
8550		3356			Press. Last Test	4364 @ Datum
	400		101	.252	B.H.P. Change	-856/20 days
8950		3457			Gross - Loss/Day	42,800
	200		51	.252	RPG	2602
<u>9150 Run Depth & Datum (3508)</u>					Calibration No.	930
					Run By	D. F. Jones
					Calculated By	D. F. Jones

* Pressure and Gradients are calculated in decimals. Pressure and Δ pressure are shown to the nearest pound.

Calculations and Remarks: All Pressure Instruments are Temperature Compensated

Distribution 5 - 802 V & J Tower - Midland, Texas
3-8-66 1 - Our File

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

Form C-122
Revised 9-1-65

(FOR COMPANY INFORMATION ONLY)

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 4/9/71	
Company Robinson Bros. Oil Producers				Connection		
Pool Winchester				Formation Wolfcamp		Unit
Completion Date		Total Depth 10,380		Plug Back TD 9390		Elevation 3296 KB
Farm or Lease Name State A						
Csg. Size 5 1/2	Wt. 4.7	d 1.995	Set At 9700	Perforations: 9064 to 9087 From 9112 To 9188		Well No. 1
Thq. Size 2 3/8	Wt. 4.7	d 1.995	Set At 9100	Perforations: 8993 by Otis From To		Unit Sec. Twp. Rge. M 36 19S 28E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 9100		County Eddy
Producing Thru Casing		Reservoir Temp. °F 148 @ 9150		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2
State New Mexico						
L 9100	H 9100	G _g .675	% CO ₂ -	% N ₂ -	% H ₂ S -	Prover X
Meter Run		Taps				

FLOW DATA							TUBING DATA		CASING 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									1352	78	72
1.	2		3/4	25		57			1140	78	1
2.	2	1		23		47			1026	78	1
3.	2	1 1/4		25		42			759	78	1
4.	2	1 1/2		25		50			180	78	1
5.	2	1 1/4		16		70			65	78	17

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, Mcfd
1	9.453		38.2	1.003	1.217	1.000	441
2.	17.09		36.2	1.013	1.217	1.000	763
3.	27.63		38.2	1.018	1.217	1.000	1308
4.	42.11		38.2	1.010	1.217	1.000	1977
5.	27.63		29.2	0.9905	1.217	1.000	973

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1.	0.06	517	1.35	*	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.		
2.	0.05	507	1.35	*	Specific Gravity Separator Gas .675 X X X X X X X X		
3.	0.06	502	1.31	*	Specific Gravity Flowing Fluid X X X X X		
4.	0.06	510	1.34	*	Critical Pressure 669 P.S.I.A. P.S.I.A.		
5.	0.04	530	1.39	*	Critical Temperature 382 R R		

NO.	P _t ²	P _w ²	P _r ²	P _c ² - P _w ²
1	1720.2	2959.1	475.3	
2	1585.2	2512.9	921.5	
3	1272.2	1618.5	1815.9	
4	629.2	395.9	3038.5	
5	274.2	75.2	3359.2	

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \underline{1.130}$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{1.102}$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{2179}$

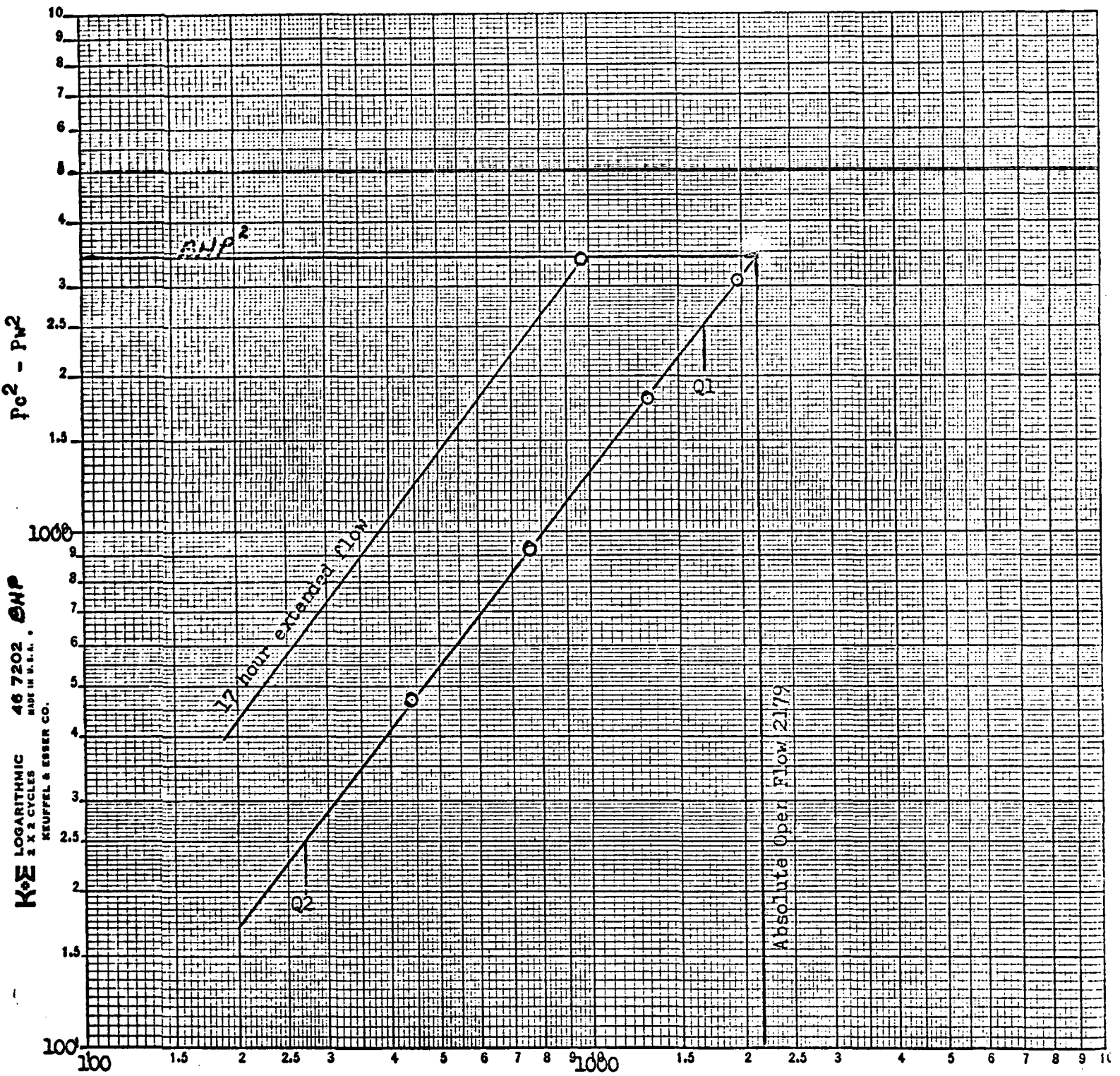
Absolute Open Flow **2179** Mcfd @ 15.025

Angle of Slope θ _____ Slope, n **.793**

Remarks: *** Pr below limits of table**
**** from BHP bomb @ 9000'**

Approved By Commission:	Conducted By: <i>H. L. Smith</i>	Calculated By: <i>Kenneth Keller</i>	Checked By:
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Ro: son Bros. Oil Producers
 State "A" No. 1
 Unit M, Sec. 36, T19S, R28E
 Eddy County, New Mexico
 April 9, 1971



Q MCFPD

Log Q1 = 3.224015
 Log Q2 = 2.431364
 n = 0.792651

Forty Six Hour Buildup

Operator: Robinson Bros. Oil Producers

Well: State Nat No. 1

Location: Sec. 36, T19S, R28E

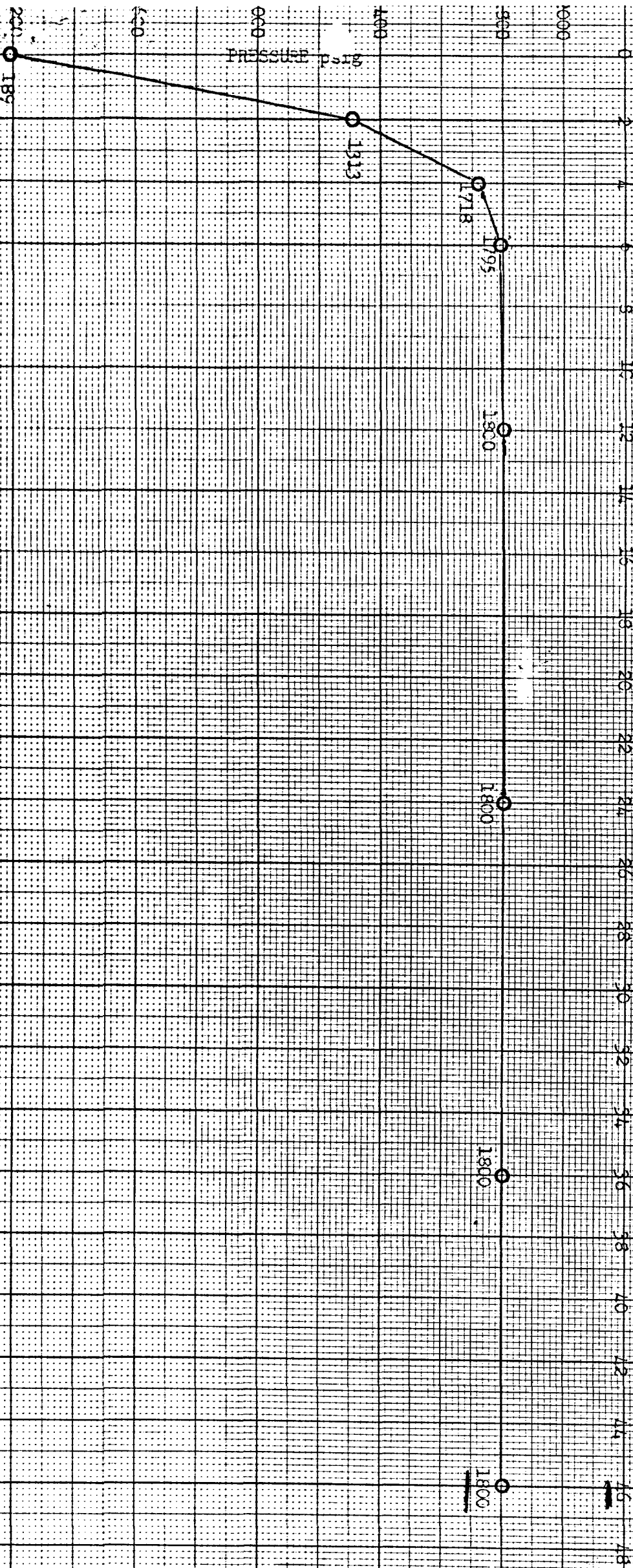
Mokey County, New Mexico

Date: April 10 to April 12, 1971

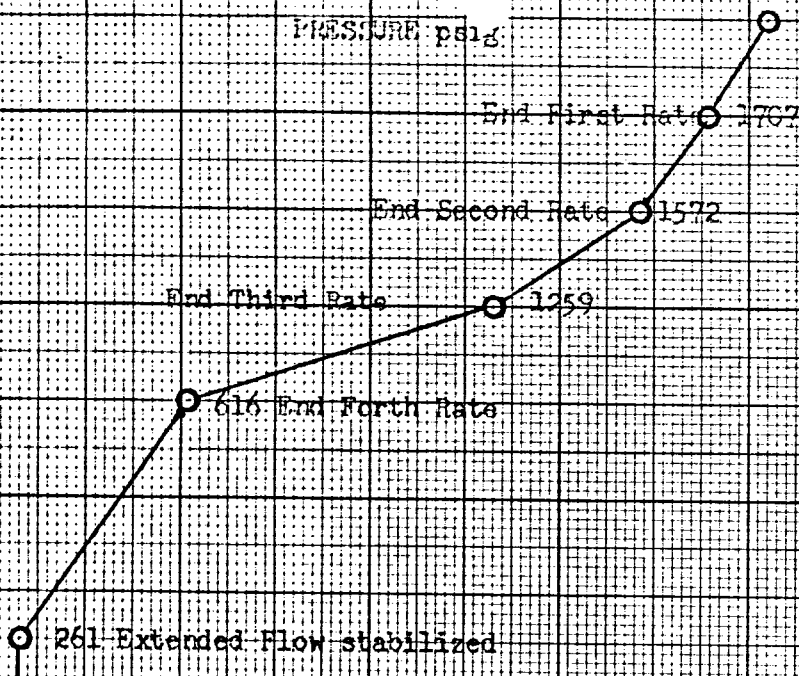
Oil Reports & Gas Services, Inc.
Box 763
Robbs, New Mexico

HOURS

Pressure psi



4B



Four Point Back Pressure Test
and 17 hour Extended Flow

Operator: Robinson Bros. Oil Producers

Well: State 744 No. 1

Location: Sec. 36, T19S, R28E

Edley County, New Mexico

Dates: April 9 to April 10, 1977

Hours Shut in: 72

OIL Sports & Gas Services, Inc.
P. O. Box 763
Hobbs, New Mexico 88240

261 End 17 hour Extended Flow Rate

4 C

Robinson Bros. Oil Producers
State "A" No. 1

Four Point Back Pressure Test

April 6, 1971 1:00 PM Shut in

April 9, 1971 12:20 PM Started in hole with bomb

1:00 PM Bomb @ 9000'. Casing pressure 1352. WH Temp 78°. Tubing pressure 600#.

1:20 PM Start No. 1 flow rate. 2" prover x 3/4" plate. Casing pressure 1140#. Flowing Temp 57°.

2:20 PM Start No. 2 flow rate. 2" x 1" prover. Casing pressure 1026. Flowing Temp 47°.

3:20 PM Start No. 3 flow rate. 2" x 1 1/4" prover. Casing pressure 759. Flowing Temp 42°.

4:20 PM Start No. 4 flow rate. 2" x 1 1/2" prover. Casing pressure 130#. Flowing Temp 50°.

5:20 PM Start opening choke for extended flow. Flowing Temp 70°.

5:30 PM Choke wide open. Flowing Temp 70°.

5:45 PM Shut in & reconnected prover. 2" x 1 1/4" prover. Tubing pressure 135#, casing pressure 65#.

April 10, 1971 10:30 AM Pull BHP gauge. Casing pressure 75#, tubing pressure 200#.

11:10 AM Back on bottom with BHP gauge.

11:12 AM Shut in casing.

April 12, 1971 8:20 AM Pulled BHP gauge.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form Approved,
Budget Bureau No. 42-11424.

6. TRACT ORIGINATOR AND SERIAL NO.

NM-0473362

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER ☐

2. NAME OF OPERATOR
Dorchester Exploration, Inc.

3. ADDRESS OF OPERATOR
1204 Vaughn Bldg., Midland, Texas 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
1980 from north line and 1980 from west line of Sec. 35,
T-19-S, R-28-E

7. UNIT AGREEMENT NAME
None

8. FARM OR LEASE NAME
DWU-Federal

9. WELL NO.
2

10. FIELD AND POOL, OR WILDCAT
Winchester-Morrow

11. SEC., T., R., M., OR BLM. AND
SURVEY OR AREA
Unit F
Sec. 35-T19S-R28E

14. PERMIT NO.
15. ELEVATIONS (Show whether DF, RT, OR, etc.)
3307 GR

12. COUNTY OR PARISH
Eddy
13. STATE
New Mexico

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐
FRACTURE TREAT ☐
SHOOT OR ACIDIZE ☐
REPAIR WELL ☐
(Other) ☐

PULL OR ALTER CASING ☐
MULTIPLE COMPLETS ☐
ABANDON* ☐
CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐
FRACTURE TREATMENT ☐
SHOOTING OR ACIDIZING ☐
(Other) ☒ Drill Stem Test

REPAIRING WELL ☐
ALTERING CASING ☐
ABANDONMENT* ☐

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting, any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Drill stem test #3 9,040 - 9,180 (Straddle Test)

Open 30 min. Good blow gas in 6 min. Fluid in 15 min.

Flow pressure 2292#-3481#

Shut-in 60 min. Shut-in pressure 4500#

Open 60 min. Gas flowing. Fluid to surface in 5 min. Rate 11 MMCF/D

Flow pressure 2205#-3538#

Shut-in 120 min. Shut-in pressure 4500#

Open 140 min. Flowing wet gas. Rate 4,190 MCF/D

Flow pressure 2182#-4112#

Shut-in 240 min. Shut-in pressure 4500#

Recovered 558 ft. of distillate 324 ft. salt water

Hydrostatic pressure In - 4683# Out - 4683#

Sample Chamber

Pressure 2800#

Recovered 25.4 cu. ft. gas 400 cc oil 200 cc water

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE Engineer

DATE August 16, 1973

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE



WEST TEXAS OFFICE SUPPLY

THE BUSINESSMAN'S DEPARTMENT STORE

204 W TEXAS MIDLAND

PHONE 683-5541

Dorchester, No. 2 DWU Fed.
1980 FWHUL's, 35-19-28
as told to John Castle
by Bob Winter
Original BHP 4500[#]
Produced 28,000,000
Pressure Drop 458[#]
Current BHP 4042[#]

Solving tomorrow's business problems . . . Today

DAILY DRILLING REPORT

Date 10/24/73 Lease Dero-Federal A Well No. 1

TD 9260' Formation Lime

Brine Wtr.

Mud Weight 9.7 Vis. _____ Water Loss _____ F.C. _____

Slope Test _____ Depth _____ Bit No. in Hole 9

Bit Size _____ Min. Per Ft. _____

Footage Drilled Past 24 Hrs. 56'

Core No. _____ From _____ To _____

DST No. 1 From 9064 To 9204

Remarks:

10/24: 20.50 hrs drill stem test #1
3.50 hrs drilling.
DST #1 9064-9204 (Wolfcamp)
15 min Pre Flow, GTS 5"
Tool open 2 hrs, Flow 6,200,000 CFGPD
1/2" choke, Surface Flow Press. 1000#
Reversed out 20 bbls distillate
HMPI 4450#
I 15" PFP 422#, F 15" PFP 592#
90" ISIP 4450#
IFP 592#, FFP 1860#
180" FSIP 4450#
HMPO 4450#

PENROC OIL CORPORATION