

SHELL OIL COMPANY

P.O. BOX 991

HOUSTON, TEXAS 77001

May 15, 1975

Subject: Application for Downhole Commingling
for State Section 2 Lease, Well No. 5,
Unit Letter T, Located 1880' FSL &
560' FWL Sec. 2, T-21-S, R-37-E,
Lea County, New Mexico

New Mexico Oil Conservation Commission (3)
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention Mr. A. L. Porter, Jr.

Gentlemen:

Shell Oil Company requests administrative approval to commingle in the wellbore oil produced from the Blinebry and Drinkard Pools on their State Section 2 Lease in Well No. 5 located in Lot 20 (Unit Letter T), Sec. 2, T-21-S, R-37-E, Lea County, New Mexico, according to Rule 303C.

The subject well is presently an abandoned Brunson Ellenburger well, cased through the Blinebry and Drinkard pools. The Blinebry, under Unit Letter T, is presently being produced by natural flow from Well No. 21 and the Drinkard (by natural flow) in Well No. 1.

Two zones produced as one is a more economical operation than two separate well zones or wells. Therefore, this operation will promote the recovery of additional reserves. The fluids from these zones are known to be compatible and are presently being commingled at the battery by Order R-2100; therefore, the price of the product will not be affected. Ownership of both zones is common. Secondary operations will not be jeopardized by approval of this application.

The offset operators are being notified by copy of this application.

Yours very truly,

For: Jack L. Mahaffey
Division Production Manager
Mid-Continent Division

BWB:NPK

Attachments

cc - Offset Operators

New Mexico Oil Conservation Commission
P. O. Box 1980
Hobbs, New Mexico 88240

OFFSET OPERATORS

STATE SECTION 2 LEASE

Continental Oil Company
P. O. Box 460
Hobbs, New Mexico 88240

Aztec Oil & Gas Company
P. O. Box 337
Hobbs, New Mexico 88240

Gulf Oil Company - U. S.
P. O. Box 670
Hobbs, New Mexico 88240

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
Revised 1-1-65

Operator		Pool		County		Lea									
Shell Oil Company		Drinkard													
Address		TYPE OF TEST - (X)		SCHEDULED		COMPLETION									
P. O. Box 1509, Midland, Texas 79701						Special ☒									
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT./BBL.		
		U	S	T						R	WATER BBLs.	GRAV. OIL		OIL BBLs.	GAS M.C.F.
State Section 2	1	T	2	21	37	4-14-75 PL	-	310	6	24	0	36.3	5	47	9,400

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowable when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15,025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

Nutman N. W. Harrison
(Signature)
Staff Production Engineer

(Title)
5-15-75
(Date)

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

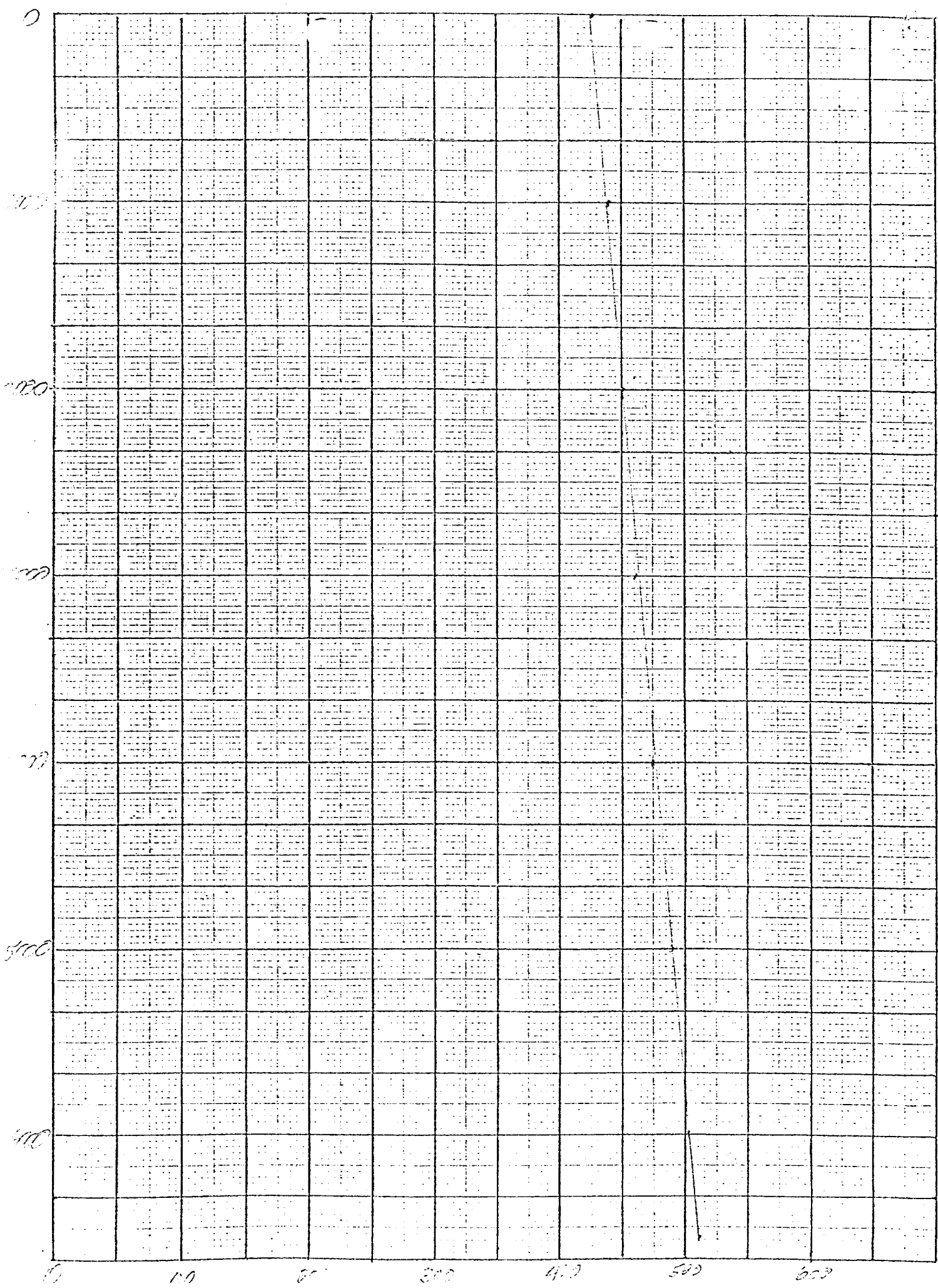
C-116
Revised 1-1-65

Operator		Pool		County		Completion		Special							
Shell Oil Company		Blinebry		Lea											
Address		TYPE OF TEST - (X)		SCHEDULED		DAILY ALLOWABLE		LENGTH OF TEST HOURS							
P. O. Box 1509, Midland, Texas 79701															
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	WATER BBLs.	OIL BBLs.	GAS M.C.F.	GAS - OIL RATIO CU.FT/BB			
		U	S	T									R		
State Section 2	21	T	2	21	37	4-22-75 PL	2	260	8	24	1	35.6	8	116	14,500

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N. W. Harrison
 (Signature)
 Staff Production Engineer
 (Title)
 5-15-75
 (Date)



SHELL OIL COMPANY
Subsurface Pressure Survey

Producing Formation Blimberry
Elevation (CHP, DF, KB, etc.) 3474 (CHP)
Datum -2250 subsea, or 5729 ()
Tubing Obstruction at SN 5891
Production Packer at _____
Perforations _____

Company Shell oil Co.
Lease STATE SEC #2 Well No. 21
Field ORINKARO State N. MEY
Test Date 5/6/75

Instrument Data

Company Running Survey Shell unit 1967
Element - Range & No. 3500 # 5583
Clock - Range & No. 3 hr - 19133
Calibration Date 4/4/75

Static Pressure Data

Pressure at Datum @) * 445.8 psig
Shut-in Time) 50 hrs
P_i at Datum _____ psig
Shut-in Tubing Pressure 383 psig
Shut-in Casing Pressure 460 psig
Top of Oil 5614
Top of Water _____
Temperature at Datum feet 108 °F
Date of Last Test _____
Pressure @ Datum, Last Test _____ psig
Shut-in Time, Last Test _____

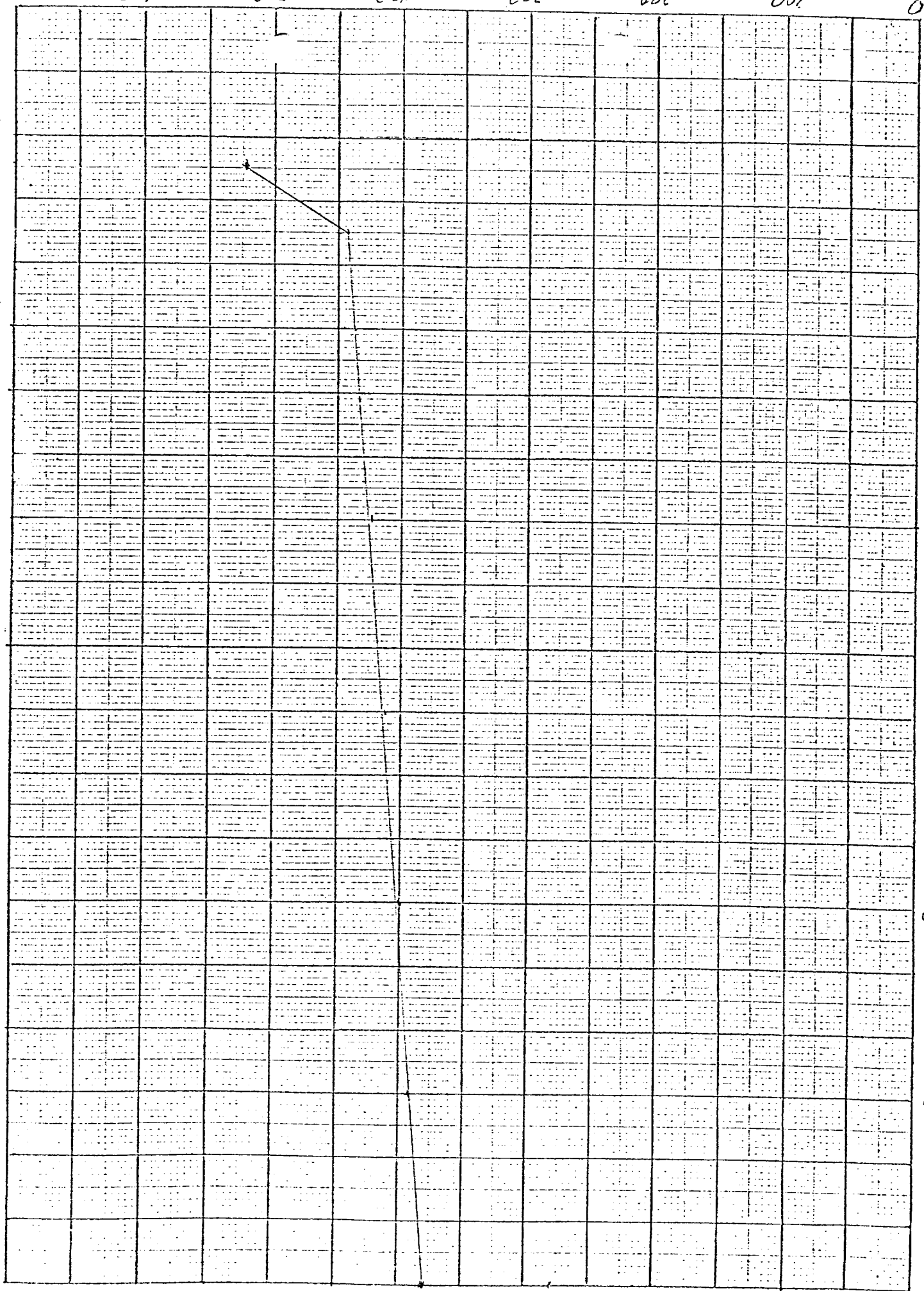
Flow Test Data

Choke Size _____ in
Period of Stabilized Flow _____ hrs
Stabilized Production (q) _____
Oil _____ bbls/day
Gas _____ MCF/day
Water _____ bbls/day
Flowing Tubing Pressure _____ psig
Flowing Casing Pressure _____ psig
Cumulative Production (Q) _____
Oil _____ bbls
Gas _____ MCF
Water _____ bbls
Effect. Prod. Life, $t = 24 Q/q$ _____ hrs

Remarks:

Operator L. H. Brownell

Depth D	Time	Press., P, psig	ΔP	Static Test		
				ΔD	Gradient	
0	50m	323.1				
1000	"	391.8	8.7	1000	.87	
2000	"	400.6	8.8	1000	.88	
3000	"	412.8	12.2	1000	1.22	
4000	"	423.3	10.5	1000	1.05	
5000	"	425.6	12.3	1000	1.23	
5500	"	442.6	7	500	1.4	
5850	"	501.3	78.7	350	22.49	
Time	Press. Q ft	Build-up Test		Tubing Press.	Casing Press.	Height of Fluid
		Δt hrs	$\frac{t}{\Delta t} + 1$			



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SHELL OIL COMPANY
WELL NO. 1, DRINKARD POOL
UNIT LETTER T,
1980' FSL & 660' FWL,
SEC. 2 T21S R37E
LEA COUNTY, NEW MEXICO

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BOPM

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Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.												
1971												1972												1973												1974												1975											

$dy = 15\%$

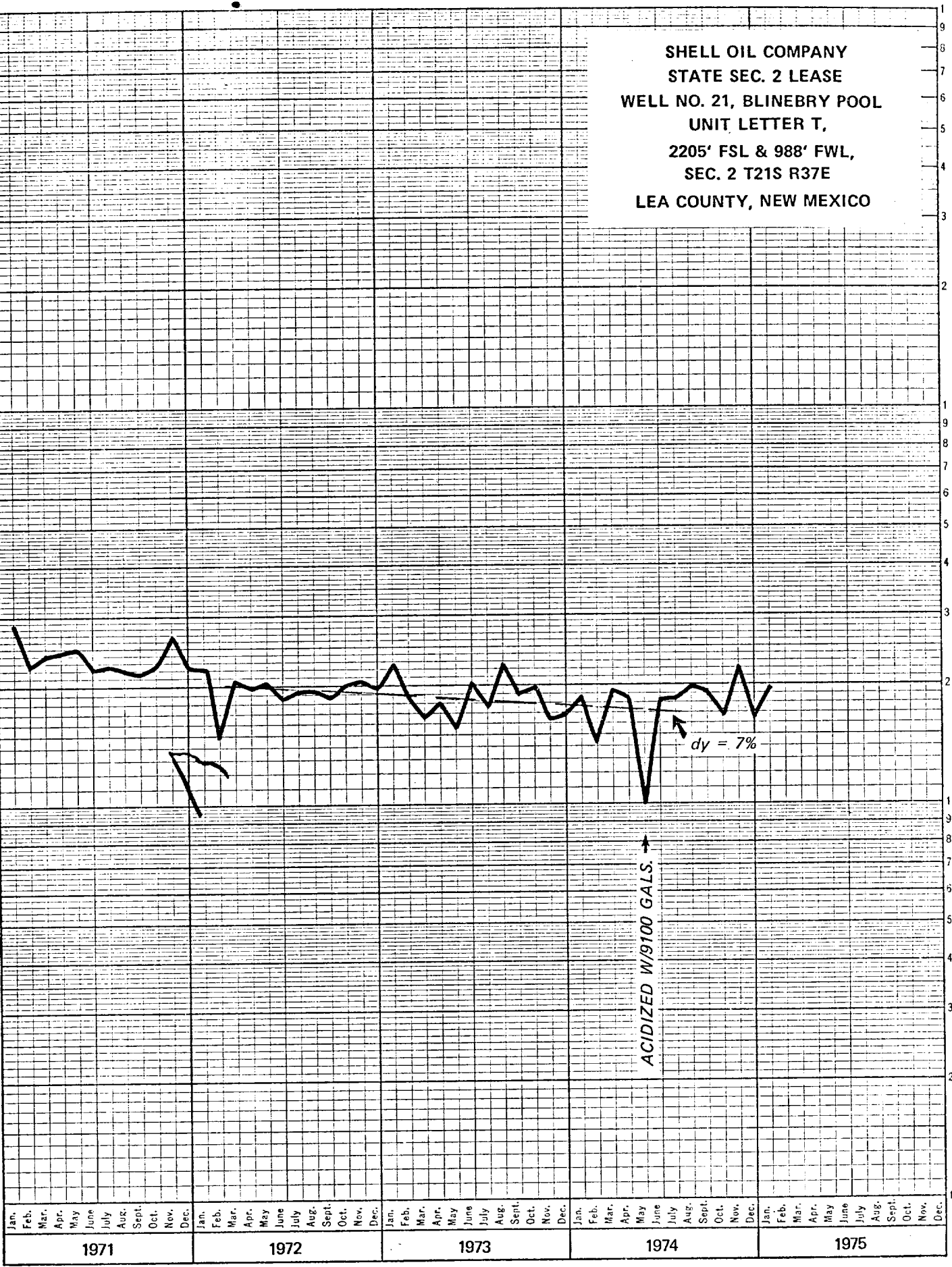
5 YEARS BY MONTHS 46 6690
X 3 LOG CYCLES
MADE IN U.S.A.
KEUFFEL & ESSER CO.

SHELL OIL COMPANY
STATE SEC. 2 LEASE
WELL NO. 21, BLINEBRY POOL
UNIT LETTER T,
2205' FSL & 988' FWL,
SEC. 2 T21S R37E
LEA COUNTY, NEW MEXICO

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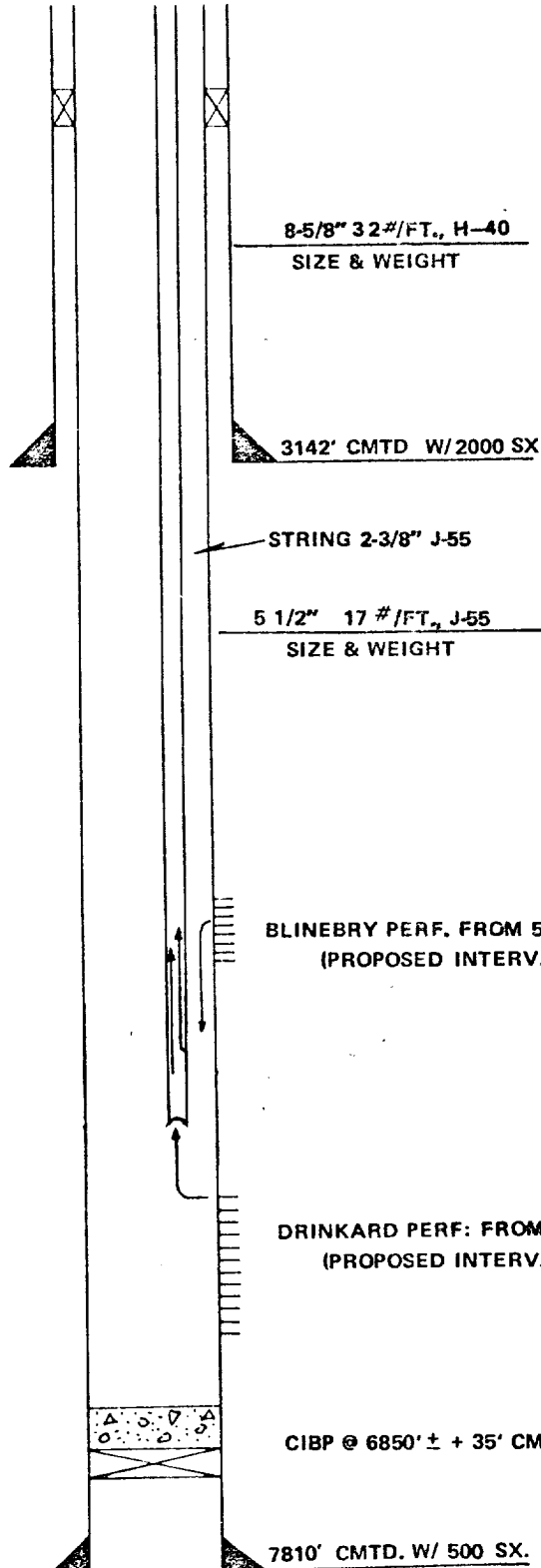
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SHELL OIL COMPANY
DOWN-HOLE COMMINGLING BLINEBRY & DRINKARD POOLS
STATE SEC. 2 WELL NO. 5
1880' FSL & 560' FWL, SEC. 2, T-21-S, R-37-E
LEA COUNTY, NEW MEXICO

DOWN HOLE DRAWING
OF PROPOSED COMPLETION



ELEVATION 3483' DF
TD 7956'

PERF: BLINEBRY : PROPOSE TO PERF, AT
INTERVAL: 5640'-6040'

DRINKARD: PROPOSED TO PERF. AT
INTERVAL: 6580'-6850'

BLINEBRY PERF. FROM 5640 TO 6040'
(PROPOSED INTERVAL)

CSG: 8-5/8" CEMENT CIRCULATED TO SURFACE

5-1/2" CEMENT TOP BY FREEZE POINT
AT 4550'

DRINKARD PERF: FROM 6580, TO 6850'
(PROPOSED INTERVAL)

CIBP @ 6850' ± + 35' CMT

7810' CMTD. W/ 500 SX.

Blindberg
Warren
Unit
U.S.

Blindberg 3523 (C)
Warren
Unit
U.S.

R-37-E

Aztec

Gulf
"F"

"Hawk"
U.S.

NM 1197
280Ac
PDS

Continental
"B-3"

Aztec

State

Harry Leonard

T-21-S, R-37-E

Lee County, New Mexico

Continental, atal
"B-11"

FW Dorian

R. Sears

P. A. Dorian
C. Blindberg
D. Dorian
T. Dorian
A. Dorian
R. Dorian
U.S.

