

SHELL OIL COMPANY

P.O. BOX 991
HOUSTON, TEXAS 77001

MAY 10 1975
OIL CONSERVATION COMM.
Santa Fe

May 15, 1975

Subject: Application for Downhole Commingling
for State Section 2 Lease, Well No. 16,
Unit Letter K, Located 3546' FNL &
1700' 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. 16 located in Lot 11 (Unit Letter K), Sec. 2, T-21-S, R-37-E, Lea County, New Mexico, according to Rule 303C.

The subject well is presently a Blinebry producer cased through the Drinkard pool. A completion in the Drinkard was attempted in 1963 but economical production was not obtained, however, it is believed that this zone can be made to produce economically by this downhole commingling operation.

After commingling, the energy of the Blinebry gas will be utilized to gas lift the Drinkard and flow the Blinebry production by the use of a packer, check valve, and side door choke, according to the attached drawing. This will allow the Drinkard pool to be economically produced as well as recover 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,

C. D. Fairbank
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

*no Dr. prod. data
(Use that submitted w/ Well #2)*

*DHC - 165
Due - 6/15/75*

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
Revised 1-1-65

Operator		Pool		County		TYPE OF TEST - (X)		Completion		Special													
Shell Oil Company		Blaineby Oil		Lea		SCHEDULED		COMPLETION		SPECIAL													
Address		WELL NO.		DATE OF TEST		CHOKES SIZE		T.B.G. PRESS.		DAILY ALLOWABLE		LENGTH OF TEST HOURS		WATER BBLs.		OIL GRAV. OIL BBLs.		OIL M.C.F.		GAS - OIL RATIO CU.FT./BBL			
P. O. Box 1509, Midland, Texas 79701		16		4-21-75		PL		240		5		24		0		35.6		4		105		26,250	
LEASE NAME		U		T		R																	
State Section 2		K		2		21		37															

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

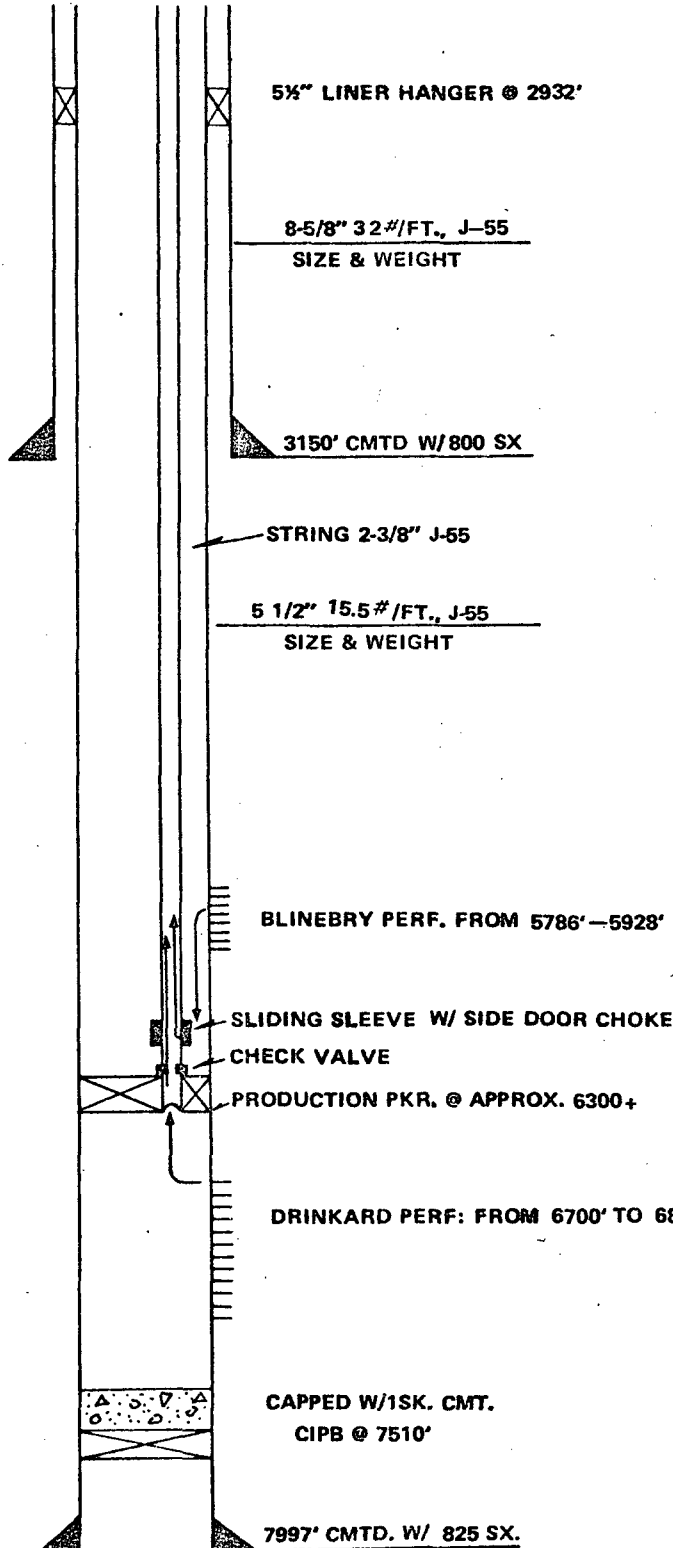
No well will be assigned an allowable greater than the amount of oil produced on the official test.
 During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables 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.

N. W. Harrison
(Signature)
N. W. Harrison
(Name)

Staff Production Engineer
(Title)
5-15-75
(Date)

SHELL OIL COMPANY
 DOWN-HOLE COMMINGLING BLINEBRY & DRINKARD POOLS
 STATE SEC. 2 WELL NO. 16
 3546' FNL & 1700' FWL, SEC. 2, T-21-S, R-37-E
 LEA COUNTY, NEW MEXICO

**DOWN HOLE DRAWING
 OF PROPOSED COMPLETION**



ELEVATION 3502' DF
 TD 8000'

PERF: BLINEBRY : 5786', 91', 99', 5801', 04', 07', 12',
 13', 52', 63', 66', 72', 74', 81', 82', 5901', 12',
 17', 22', 28', W 1-3/8" JSPF (20 HOLES)

DRINKARD:
 PROPOSED TO PERF AT 6700' - 6825'

BLINEBRY PERF. FROM 5786' - 5928'

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

SLIDING SLEEVE W/ SIDE DOOR CHOKE
 CHECK VALVE
 PRODUCTION PKR. @ APPROX. 6300+

LINER 5-1/2" CALCULATED CEMENT TOP
 AT 2931' (CIRCULATED)

DRINKARD PERF: FROM 6700' TO 6825'

CAPPED W/1SK. CMT.
 CIPB @ 7510'

7997' CMTD. W/ 825 SX.

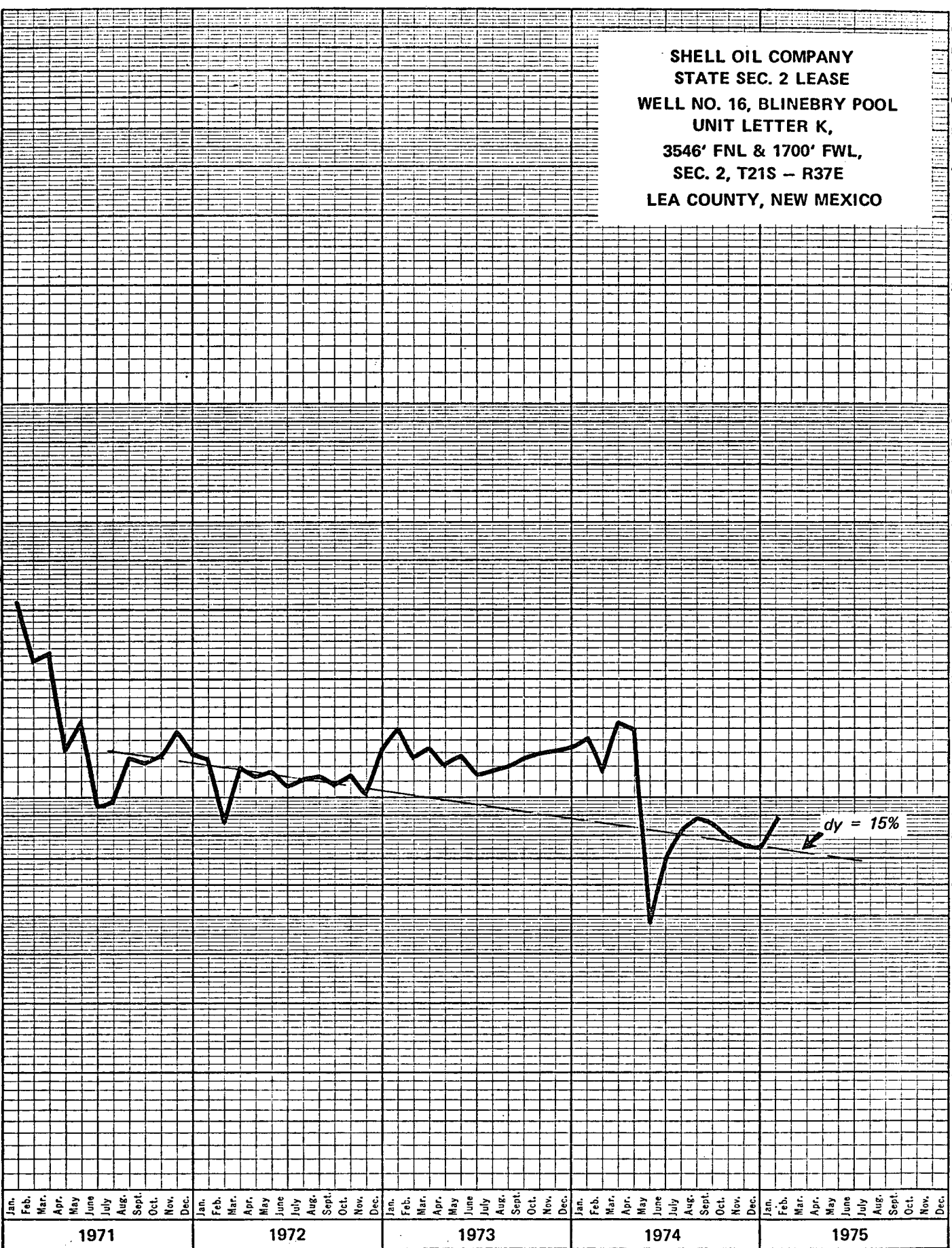
SHELL OIL COMPANY
STATE SEC. 2 LEASE
WELL NO. 16, BLINEBRY POOL
UNIT LETTER K,
3546' FNL & 1700' FWL,
SEC. 2, T21S - R37E
LEA COUNTY, NEW MEXICO

1000

BOPM

100

10



dy = 15%

K&E 5 YEARS BY MONTHS 46 6690
 MADE IN U.S.A.
 KEUFFEL & ESSER CO.

SHELL OIL COMPANY
Subsurface Pressure Survey

Producing Formation Blimeberry
 Elevation (CHF, DF, KB, etc.) 3477 CHF
 Datum -2250 subsea, or 5727 VHP
 Tubing Obstruction at SN 5907
 Production Packer at _____
 Perforations _____

Company Shell Oil Co
 Lease State Sen 2 Well No. 16
 Field ORIN HARO State N Mex
 Test Date 5/6/25

Instrument Data

Company Running Survey shell unit #1967
 Element - Range & No. 3500 # 5583
 Clock - Range & No. 3hr - 19133
 Calibration Date 4/14/25

Static Pressure Data

Pressure at Datum () * 253.5 psig
 Shut-in Time () 49 hrs
 P_i at Datum _____ psig
 Shut-in Tubing Pressure 217 psig
 Shut-in Casing Pressure NO CONN psig
 Top of Oil _____
 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

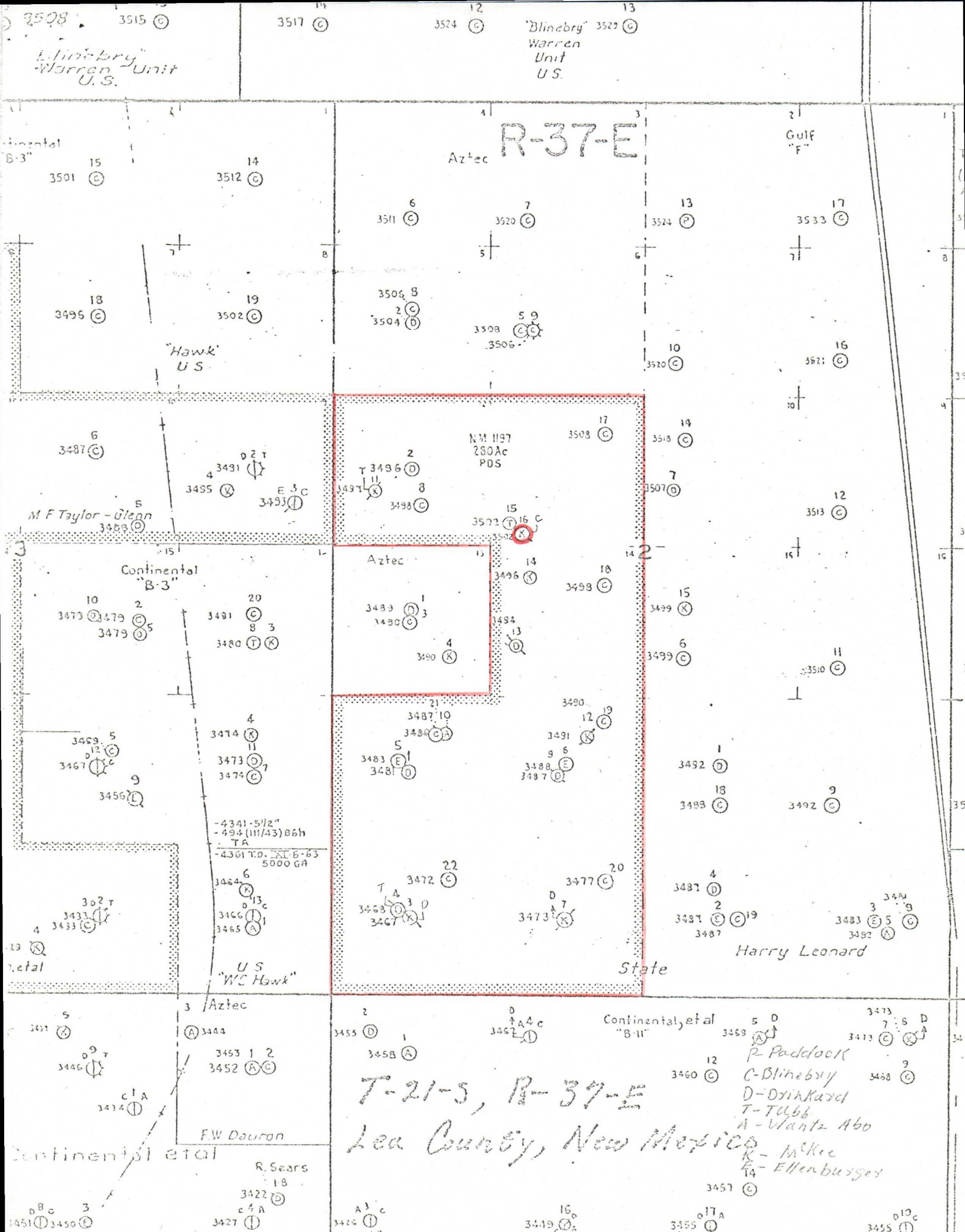
Remarks:

Depth D	Time	Press., P, psig	ΔP	Static Test		
				ΔD	Gradient	
0	19hr	216.9				
1000	"	223.9	7	1000	.7	
2000	"	229.2	5.3	1000	.53	
3000	"	236.2	7	1000	.7	
4000	"	241.4	5.2	1000	.52	
5000	"	248.4	7	1000	.7	
5500	"	251.9	3.5	500	.7	
5850	"	295.6	43.7	250	12.49	
Time	Press. Q ft	Build-up Test		Tubing Press.	Casing Press.	Height of Fluid
		Δt hrs	$\frac{t}{t+1}$			

Operator J. K. Braswell

State Section 2 No. 16

Drinkard - Estimated BHP 850 psi



R-37-E

Aztec

Gulf "F"

Blinebry Warren Unit U.S.

Blinebry Warren Unit U.S.

Hawk U.S.

M F Taylor - Glenn

Continental B-3

U.S. W.C. Hawk

Harry Leonard

NM 1197
280Ac
PDS

Aztec

T-21-S, R-37-E

Lea County, New Mexico

- P-Paddock
- C-Blinebry
- D-Drinkard
- T-Tubb
- A-Wantz Abo
- K-M'Kee
- EA-Elfenburger

F.W. Dauron

R. Sears

Continental et al

Continental, et al "B-11"

Continental et al

Continental et al

Continental et al

Continental et al

Continental et al

Continental et al

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

OIL CONSERVATION COMMISSION
Hobbs DISTRICT

RECEIVED
JUN - 9 1975
OIL CONSERVATION COMM.
Santa Fe

OIL CONSERVATION COMMISSION
BOX 2088
SANTA FE, NEW MEXICO

DATE June 5, 1975

RE: Proposed MC _____
Proposed DHC X
Proposed NSL _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

I have examined the application dated _____
for the Shell Oil Co. State Sec. 2 #16-K 2-21-37
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

O.K.---J.W.R.

Yours very truly,

John W. Runyan