

SHELL OIL COMPANY

P. O. BOX 1810
MIDLAND, TEXAS 79701

July 10, 1970

Subject: Application for Downhole Commingling
Sarkeys No. 3
Unit L, Section 23, T-21-S, R-37-E
Lea County, New Mexico

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

Attention Mr. A. L. Porter, Jr. Secretary Director

Gentlemen:

Shell Oil Company respectfully requests administrative approval under provisions of Order No. R-3845 to commingle in the wellbore production from the Blinebry and Drinkard pools in its Sarkeys No. 3, located in Unit L of Section 23, T-21-S, R-37-E, Lea County, New Mexico. This dual completion was authorized by Administrative Order No. MC-1451. The attached plat shows the Sarkeys lease outlined in red and the No. 3 well by the red circle.

Attached hereto are Forms C-116 showing the results of tests taken within the last 30 days on both the Blinebry and Drinkard zones. Both zones are produced by intermittent flow through 2-1/16" OD tubing. Static bottom hole pressure for the Drinkard zone is estimated at 500 psi based on the Cumulative versus BHP curve attached. The Blinebry Static BHP is estimated at 900 psi based on recent pressure observations in the Sarkeys #4 well which is diagonally offset to the subject well.

Attached is a production curve for each zone with future production estimated by curve extension. We propose to allocate each zone's production on the curve extension.

The fluid from these two pools has been commingled at the tank battery for a number of years with no indication of incompatibility. Both zones produce typical Permian high gravity crude. Since the crudes have been commingled at the tank battery before being sold to the pipeline, there should be no difference between the value of the commingled stream at the sources and that commingled within the well bore.

DHC-53

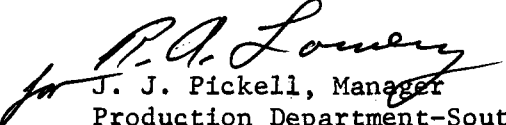
Blue Aug. 7

000
15 AM 8 14
JUL 1970

Bl 6,000 - 1
Dr. 2,000 - 1

A copy of this application is being furnished to all offset operators. Your further handling and approval of this application will sincerely be appreciated.

Yours very truly,


for J. J. Pickell, Manager
Production Department-South
Mid-Continent Division

JWK:DRP

Attachments

cc - Offset Operators (per attached list)

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

OFFSET OPERATORS TO
SARKEYS LEASE
LEA COUNTY, NEW MEXICO

Atlantic Richfield Company
P. O. Box 1610
Midland, Texas 79701

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

Getty Oil Company
P. O. Box 1231
Midland, Texas 79701

Gulf Oil Corporation
P. O. Box Drawer 1938
Roswell, New Mexico 88201

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
Revised 1-1-65

Operator		Pool		County												
Shell Oil Company		Blinebry		Lea												
Address		WELL NO.		DATE OF TEST		TYPE OF TEST - (X)		SCHEDULED		COMPLETION		SPECIAL				
P.O. Box 1509, Midland, Texas 79701																
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.F.T./BBL.			
		U	S	T						R	WATER BBL.S.	GRAV. OIL		OIL BBL.S.	GAS M.C.F.	
Sarkeys	3	L	23	21	37	7-6-70	F	-	-	10	24	0	36.5	9	125	13,889

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

R. A. Lowery
(Signature)
R. A. Lowery
Division Production Supt.

7-10-70
(Title)
(Date)

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.

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
Revised 1-1-65

Operator Shell Oil Company		Pool Drinkard		County Lea											
Address P.O. Box 1509, Midland, Texas 79701		TYPE OF TEST - (X) <input checked="" type="checkbox"/> Scheduled <input type="checkbox"/> Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/>													
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	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.
Sarkeys	3	L	23	21	37	7-6-70	F	-	5	24	0	36.8	4	115	28,750

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.

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

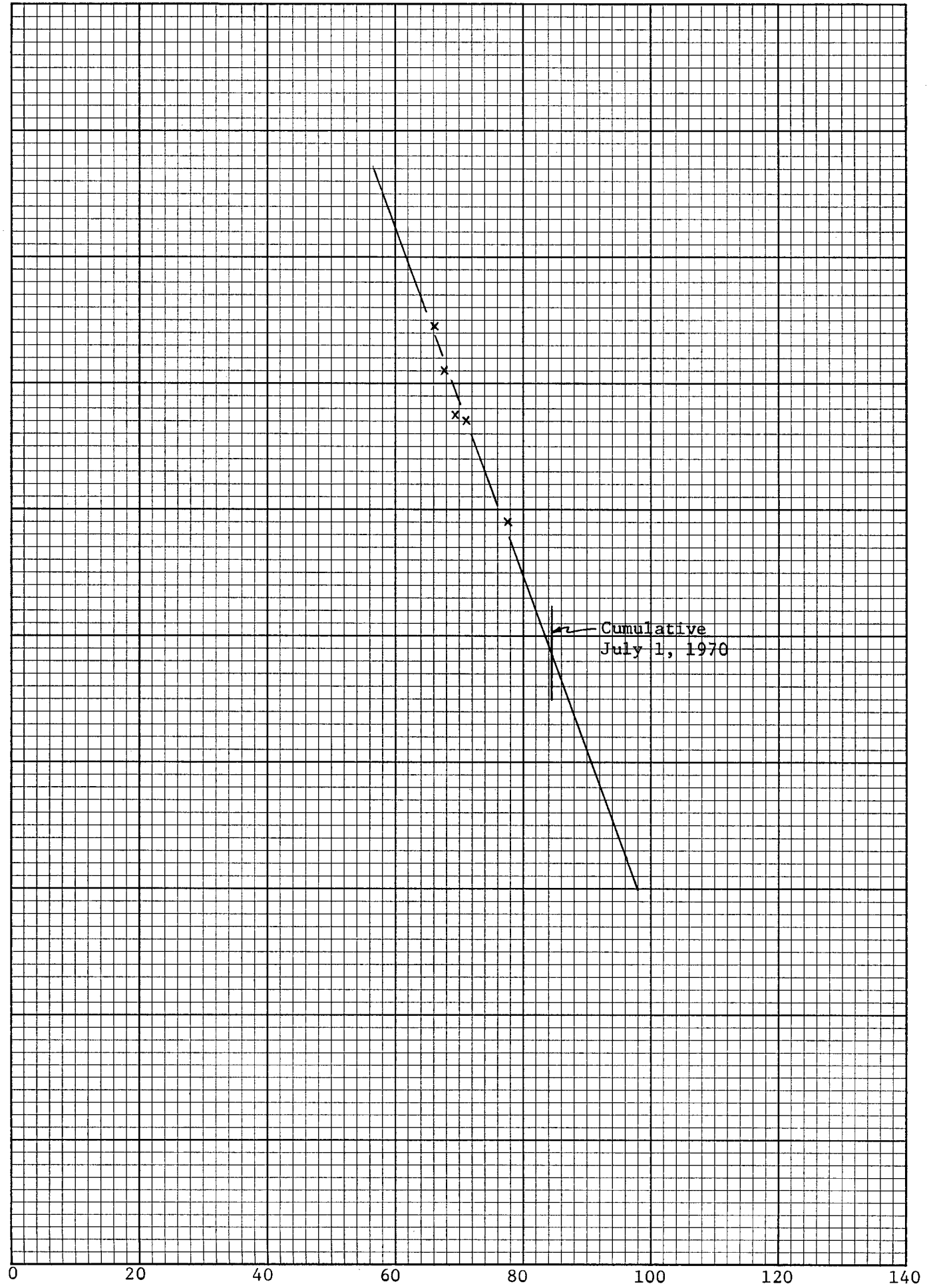
R.A. Lowery
R. A. Lowery
Division Production Supt.

7-10-70
(Date)

KE 10 X 10 TO THE INCH 46 0700
7 X 10 INCHES
MADE IN U.S.A.
KEUFFEL & ESSER CO.

1000
900
800
700
600
500
400
300
200
100
0

Static BHP (psi)



Cumulative Production (1000BF) Drinkard Zone

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

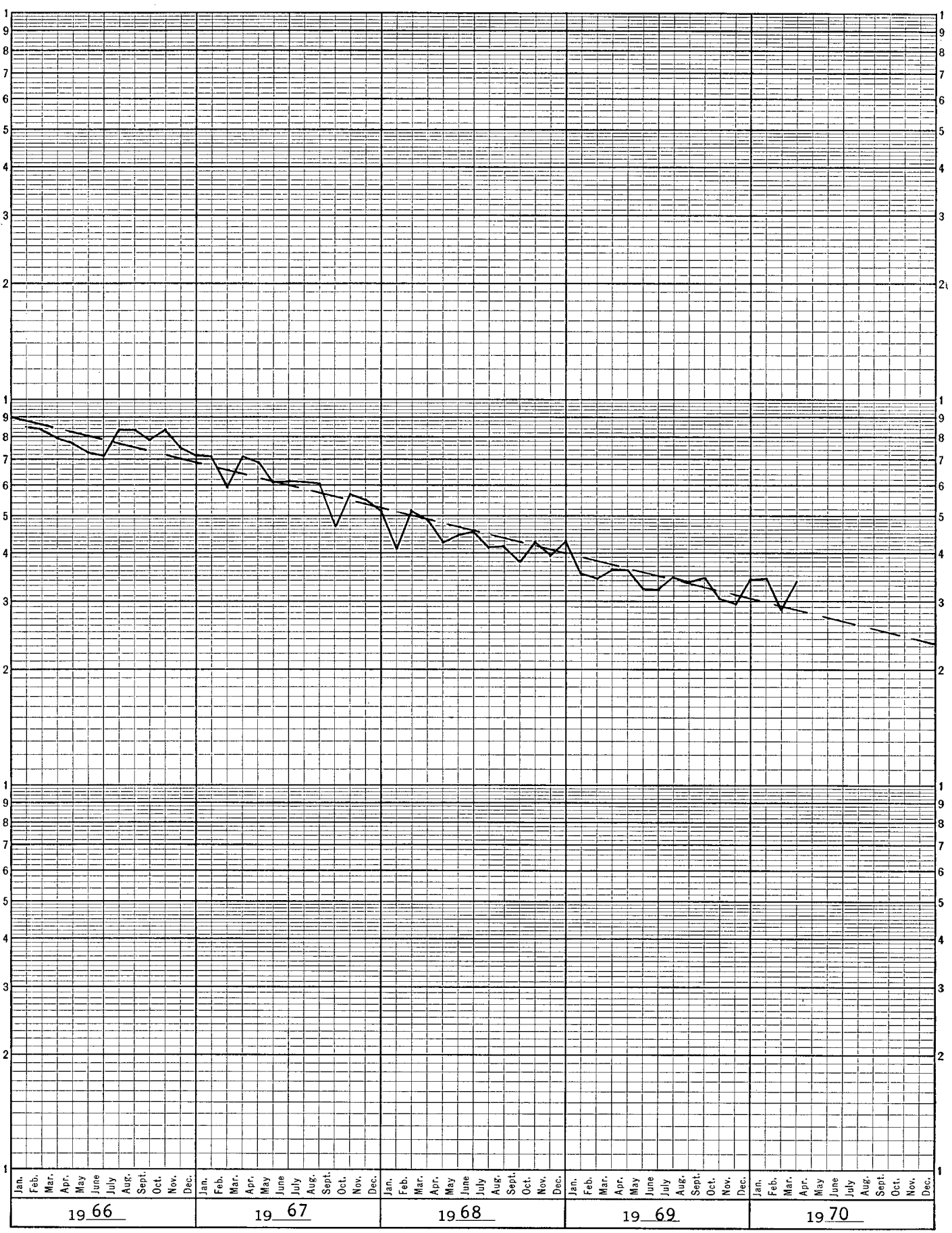
BOPM

10000

1000

100

10



Blinebry Zone

10000

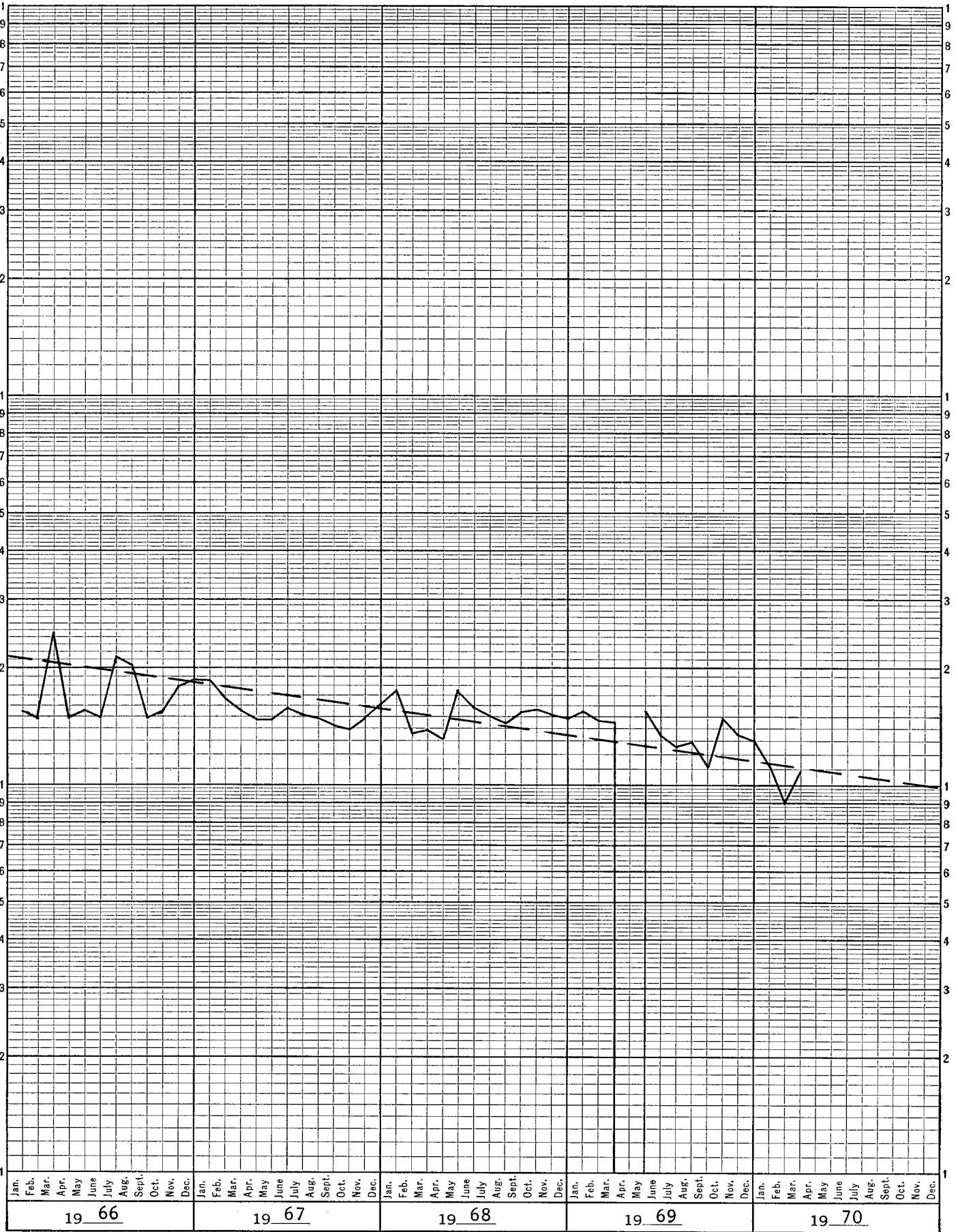
BOPM

1000

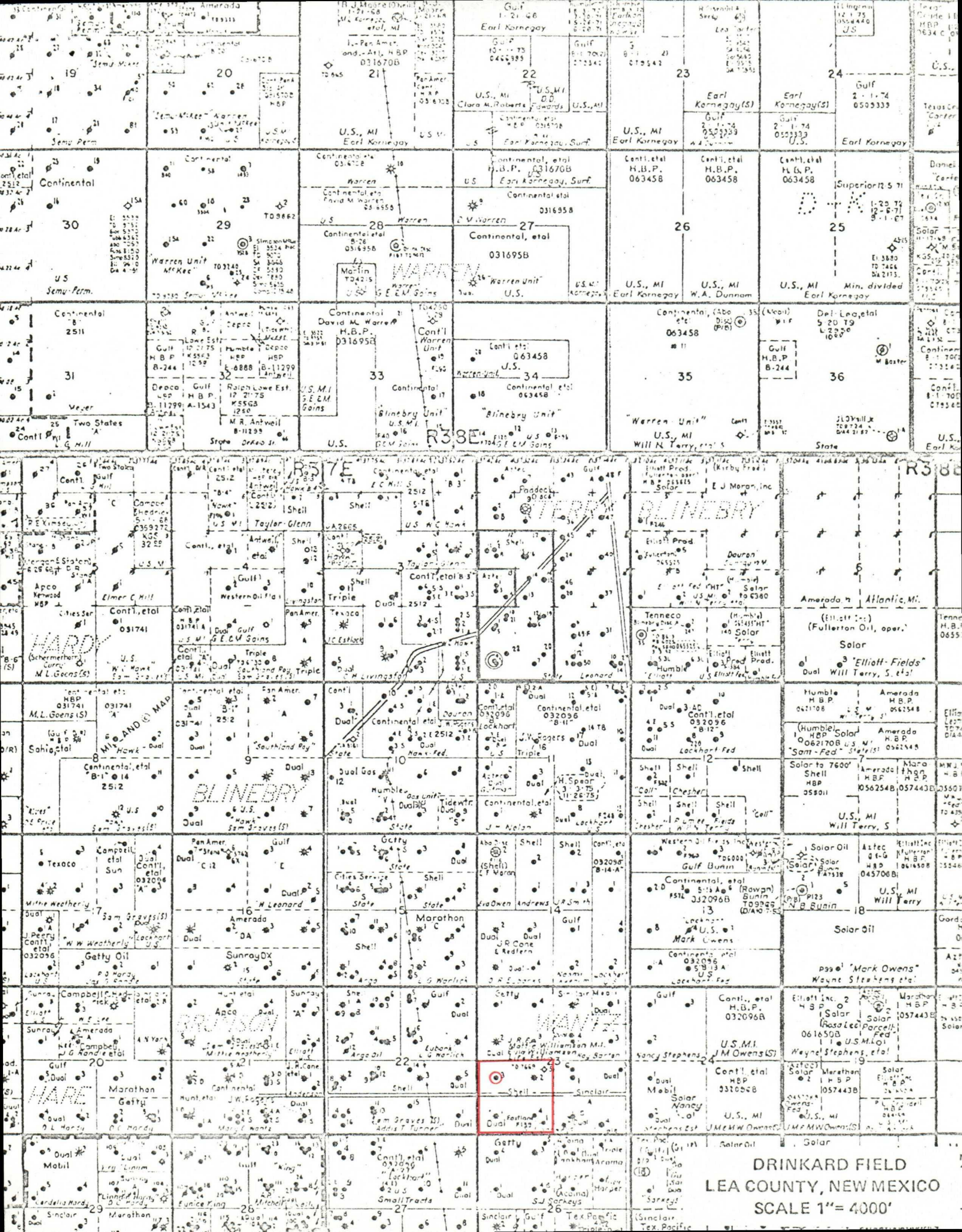
100

10

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



Drinkard Zone



DRINKARD FIELD
LEA COUNTY, NEW MEXICO
SCALE 1" = 4000'

19
Sema Perm
20
Sema Perm
21
U.S. MI Earl Kornegoy
22
U.S. MI Clara M. Roberts
23
Earl Kornegoy (S)
24
Earl Kornegoy (S)

25
Superior 12-57
26
Earl Kornegoy
27
Earl Kornegoy
28
Warren
29
Warren Unit McKee
30
Continental
31
Veyer
32
Ralph Lowe Est.
33
Blindbry Unit
34
Blindbry Unit
35
Warren Unit
36
Min. divided Earl Kornegoy

37
Continental et al
38
Continental et al
39
Continental et al
40
Continental et al
41
Continental et al
42
Continental et al
43
Continental et al
44
Continental et al
45
Continental et al
46
Continental et al
47
Continental et al
48
Continental et al
49
Continental et al
50
Continental et al

51
Continental et al
52
Continental et al
53
Continental et al
54
Continental et al
55
Continental et al
56
Continental et al
57
Continental et al
58
Continental et al
59
Continental et al
60
Continental et al
61
Continental et al
62
Continental et al
63
Continental et al
64
Continental et al
65
Continental et al
66
Continental et al
67
Continental et al
68
Continental et al
69
Continental et al
70
Continental et al

71
Continental et al
72
Continental et al
73
Continental et al
74
Continental et al
75
Continental et al
76
Continental et al
77
Continental et al
78
Continental et al
79
Continental et al
80
Continental et al
81
Continental et al
82
Continental et al
83
Continental et al
84
Continental et al
85
Continental et al
86
Continental et al
87
Continental et al
88
Continental et al
89
Continental et al
90
Continental et al

91
Continental et al
92
Continental et al
93
Continental et al
94
Continental et al
95
Continental et al
96
Continental et al
97
Continental et al
98
Continental et al
99
Continental et al
100
Continental et al
101
Continental et al
102
Continental et al
103
Continental et al
104
Continental et al
105
Continental et al
106
Continental et al
107
Continental et al
108
Continental et al
109
Continental et al
110
Continental et al

111
Continental et al
112
Continental et al
113
Continental et al
114
Continental et al
115
Continental et al
116
Continental et al
117
Continental et al
118
Continental et al
119
Continental et al
120
Continental et al
121
Continental et al
122
Continental et al
123
Continental et al
124
Continental et al
125
Continental et al
126
Continental et al
127
Continental et al
128
Continental et al
129
Continental et al
130
Continental et al

131
Continental et al
132
Continental et al
133
Continental et al
134
Continental et al
135
Continental et al
136
Continental et al
137
Continental et al
138
Continental et al
139
Continental et al
140
Continental et al
141
Continental et al
142
Continental et al
143
Continental et al
144
Continental et al
145
Continental et al
146
Continental et al
147
Continental et al
148
Continental et al
149
Continental et al
150
Continental et al

151
Continental et al
152
Continental et al
153
Continental et al
154
Continental et al
155
Continental et al
156
Continental et al
157
Continental et al
158
Continental et al
159
Continental et al
160
Continental et al
161
Continental et al
162
Continental et al
163
Continental et al
164
Continental et al
165
Continental et al
166
Continental et al
167
Continental et al
168
Continental et al
169
Continental et al
170
Continental et al