

H. T. Mattern "D" #15  
Section 7-T22S-R37E  
Lea County, New Mexico

Approval is requested for an exception to Rule 303-C to permit down-hole commingling of the Drinkard and Tubb in the subject well.

The fluids show no evidence of incompatibility; therefore, down-hole commingling is not expected to result in reservoir damage. Ownership in the two pools is common and correlative rights will not be violated.

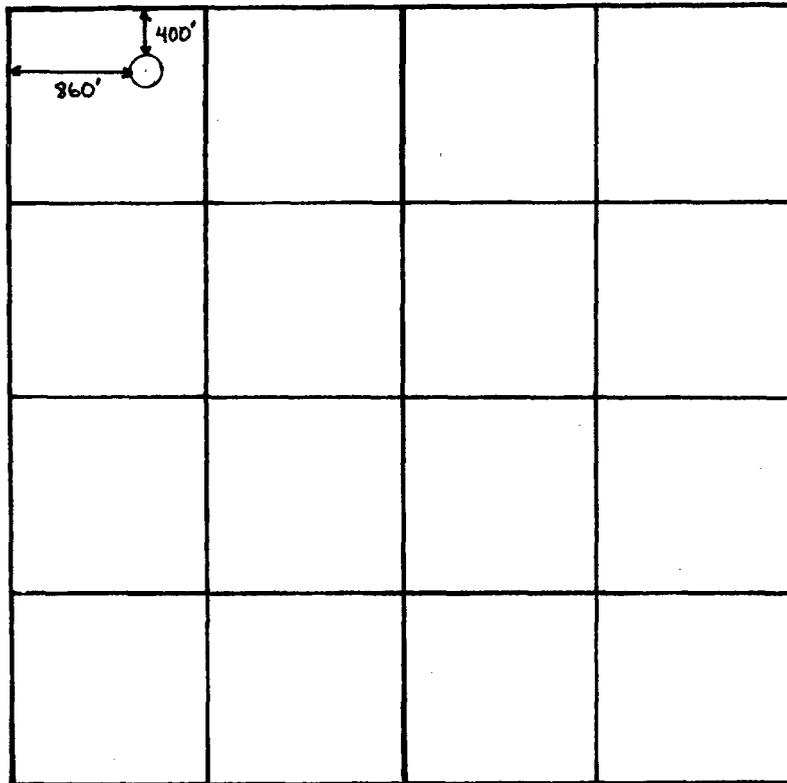
Currently, the Tubb is pumping and the Drinkard is TA'd. After down-hole commingling, existing pumping equipment will be used to produce both zones.

Should secondary recovery operation become practical in the future, the two zones could be separated at such time without damaging either reservoir.

Offset operators are being notified of the intent to down-hole commingle subject well by copy of this application.

1. Operator: Gulf Oil Corporation, P. O. Box 670, Hobbs, NM 88240
2. Lease, Well and Location: H. T. Mattern "D" #15, 400' FNL and 860' FWL, Section 7-T22S-R37E, Lea County, New Mexico.
3. Producing Zones: Currently producing from a single completion in the Tubb Pool.
4. Decline Curve: See attached graphs.
5. Bottom Hole Pressure: The estimated BHP for the Tubb is 1313 psi. The estimated BHP for the Drinkard is 966 psi.
6. Fluid Characteristics: Gulf Oil has commingled these fluids at the surface and down-hole in offset wells and has encountered no incompatibility problems; therefore, no reservoir damage should result from down-hole commingling subject well.
7. Well History: The well was spudded 8-13-75 and drilled to a total depth of 6710'. Five and one half inch production casing was set at 6710'. The Drinkard was perforated at 6516-6658' with 48 holes. Perfs were acidized with 1240 gallons 15% NEA and fractured with 42,000 gallons gel water with 1 to 2 pounds sand per gallon. After stimulation, well was equipped to pump.  
  
8-5-76, well was chemical squeezed with 3000 gallons 15% NEFE HCL treated with 3 gallons Tretolite AR-25 and 220 gallons Tretolite SP-203 in the first 1000 gallons acid.  
  
11-9-82, Drinkard was TA'd with a CIBP set at 6430'. The Tubb was perforated at 6210-6340' with 32 holes. Perfs were acidized with 3000 gallons 15% NEFE HCL and fractured with 41,600- gallons and 44,000 pounds 20/40 sand.
8. Value of Commingled Fluids: The Tubb and Drinkard Zones are being commingled in surface storage facilities on the subject lease per order CTB-254. Therefore, down-hole commingling will not effect the price.
9. Current Production: See attached State Form C-116.

Section 7



H. T. Mattern "D" #15  
Section 7-T22S-R37E

Dedicated Acreage  
Drinkard: 40 acres  
Tubb: 40 acres

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SUGGESTED ALLOCATION

Drinkard: 5 BOPD, 10 BWPD, 20 MCFGPD

Average Prod. from Decline Curves

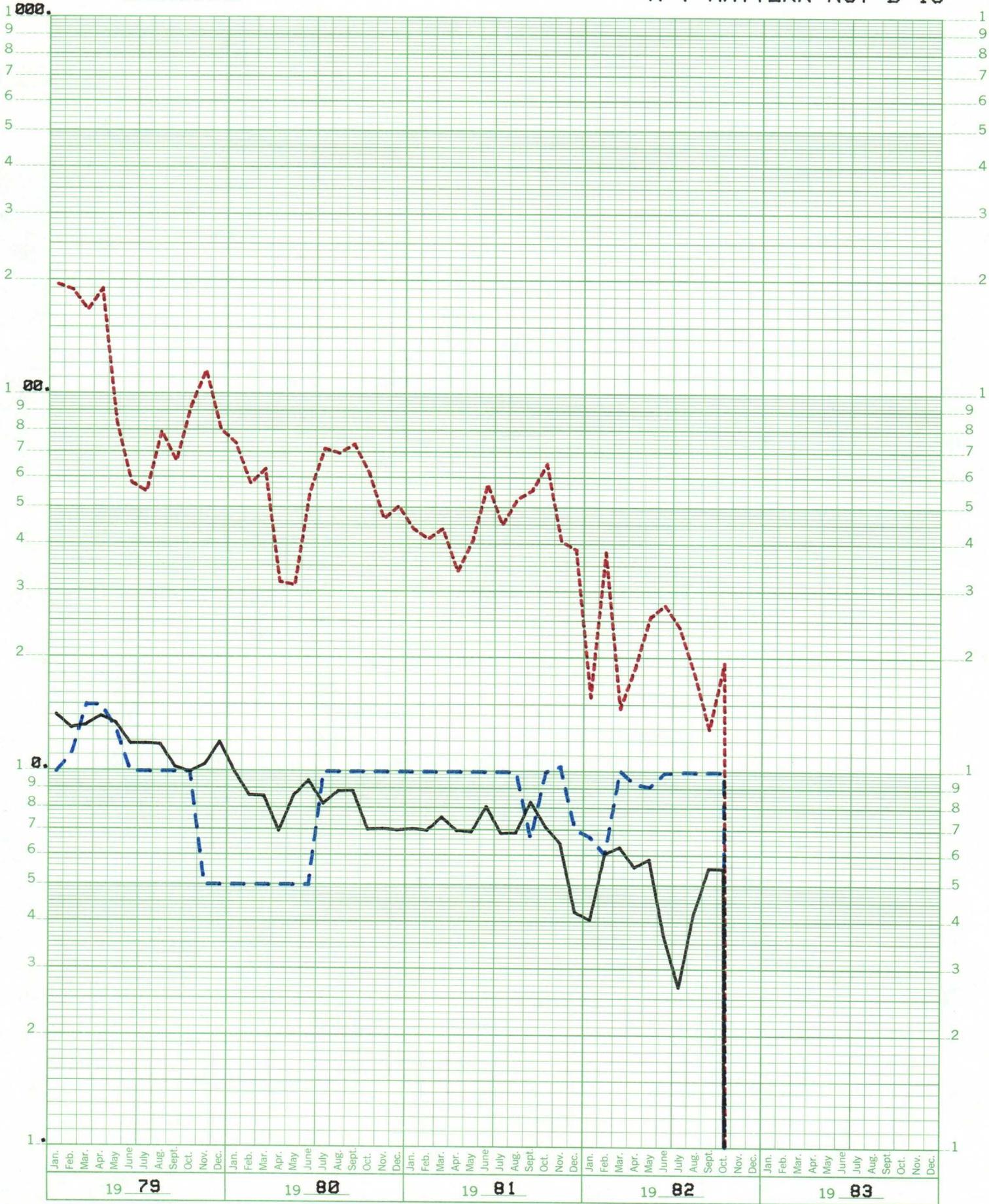
Tubb: 3 BOPD, 8 BWPD, 45 MCFGPD

The proposed allocation of oil and gas production per zone based on the attached decline curves is as follows:

	<u>Drinkard</u>	<u>Tubb</u>
Oil	63%	37%
Gas	31%	69%

46 6690

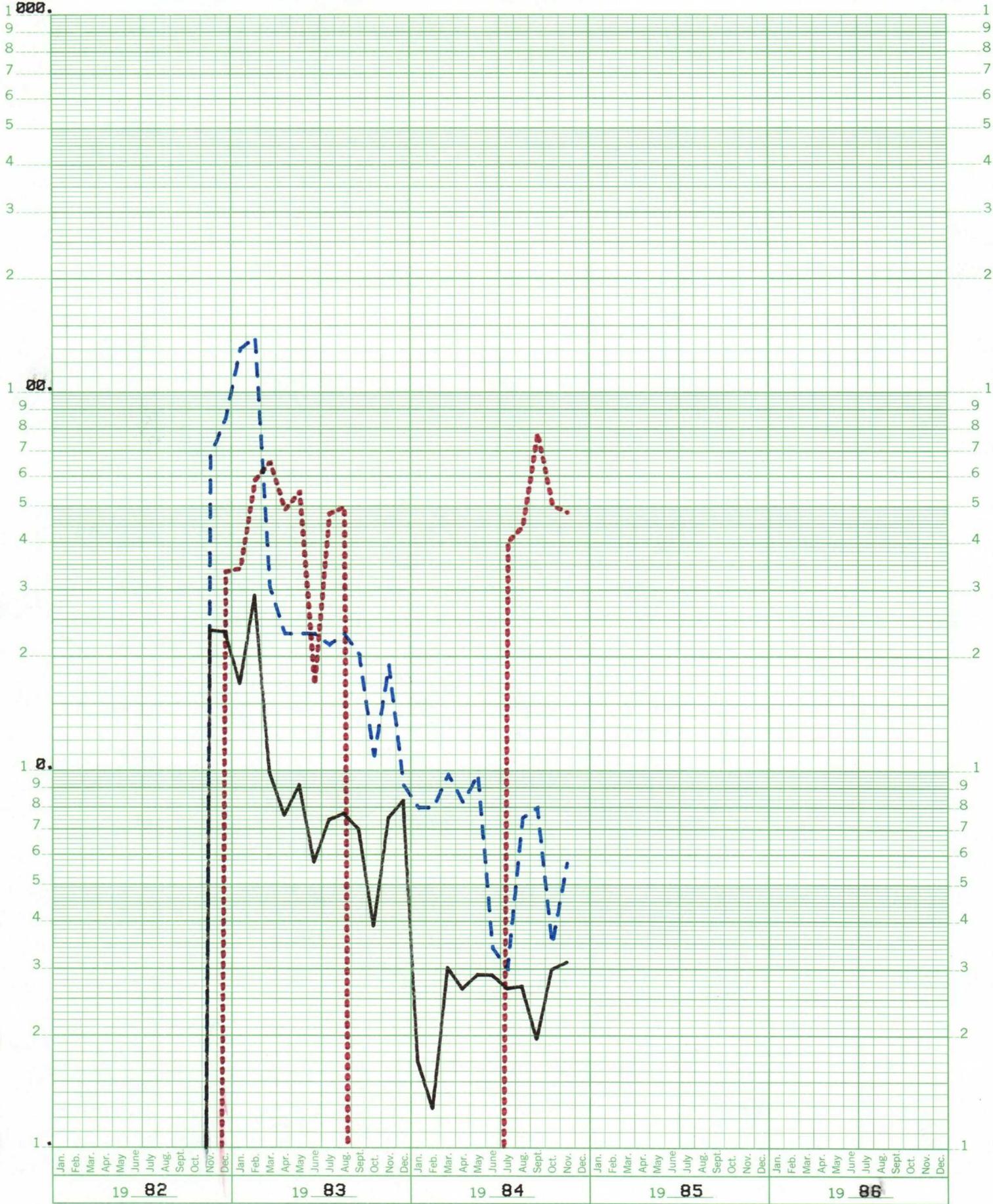
5 YEARS BY MONTHS X 3 LOG CYCLES  
KEUFFEL & ESSER CO. MADE IN U.S.A.



— OIL PROD. Bbls/Day. Mult. Scale X 1  
 - - - WATER PROD. Bbls/Day. Mult. Scale X 1  
 - - - - GAS PROD. MCF/Day. Mult. Scale X 1

46 6690

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



— OIL PROD.  
Bbls/Day,  
Mult. Scale X 1

- - - WATER PROD.  
Bbls/Day,  
Mult. Scale X 1

..... GAS PROD.  
MCF/Day,  
Mult. Scale X 1

GAS-OIL RATIO TESTS

Operator: **Gulf Oil Corp.** Pool: **Drinkard** County: **Lea**

Address: **Box 670, Hobbs, NM 88240** Type of Test: **(X) Scheduled** Completion:  General:

LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	TYPE OF TEST - (X)	CHOKE SIZE	TAG. PRESS.	DAILY ALLOW. ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU. FT./BBL.
		U	S	T	R							WATER BBL.	GRAV. OIL BBL.	GAS M.C.F.	GAS - OIL RATIO	
H.T. Mattern (NCT-D)	9		6	22	37	8-15-82					10	3	71	23,667		
	10		6	22	37	7-7-82					10	5	128	25,600		
	15		7	22	37	11-3-82					10	10	107	10,700		

No well will be assigned an allowable greater than the amount of oil produced on the official test.  
 During casing 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 Division.  
 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 Division in accordance with Rule 331 and appropriate pool rules.

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

*Alfred P. Kirk*  
 (Signature)  
 Engineer  
 10-22-84

Operator: Gulf Oil Corp Pool: Tubb Oil and Gas County: Lea  
 Address: P.O. Box 670, Hobbs, NM 88240

LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	TYPE OF TEST - (X)	SCHEDULED <input checked="" type="checkbox"/>	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU. FT./BBL.
		U	S	T	R						WATER BBL.S.	GRAV. OIL BBL.S.	GAS M.C.F.	
H.T. Mattern (NCT-D)	9		6	22	37	12/5/84				9	7	101	14,429	
	10		6	22	37	12/6/84				5	5	72	14,400	
	15		7	22	37	12/10/84				16	8	77	9,625	

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

Harold Ricks  
 Engineer (Title)  
 1-19-85

# Gulf Oil Exploration and Production Company

R. C. Anderson  
PRODUCTION MANAGER  
HOBBES AREA

February 14, 1985

P. O. Box 670  
Hobbs, NM 88240

Re: Mattern (NCT-D) Lease Map

Mr. David Catanach  
New Mexico Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Dear Sir:

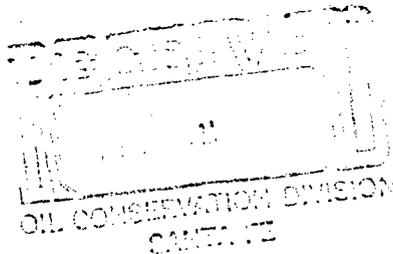
Please find enclosed the Mattern (NCT-D) lease map requested as per telephone conversation with David Ricks of this office.

Yours very truly,



R. C. ANDERSON

DR/skc  
Enclosure



16034 Ac. (NCT-A)

S.P. Feilon

New Mexico State

J.M. Brown

W.H. Turner

W.H. Turner

W.H. Turner

William A. Ramsey  
640 Ac.  
34 640 Ac. 32 23 19 10 5 5

H.M. Matern  
400 Ac.  
1700 (NCT-B)

Central Brinkard Unit  
320 319 318 317 316 315 314 313 312 311 310 309 308 307 306 305 304 303 302 301 300 299 298 297 296 295 294 293 292 291 290 289 288 287 286 285 284 283 282 281 280 279 278 277 276 275 274 273 272 271 270 269 268 267 266 265 264 263 262 261 260 259 258 257 256 255 254 253 252 251 250 249 248 247 246 245 244 243 242 241 240 239 238 237 236 235 234 233 232 231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 216 215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 200 199 198 197 196 195 194 193 192 191 190 189 188 187 186 185 184 183 182 181 180 179 178 177 176 175 174 173 172 171 170 169 168 167 166 165 164 163 162 161 160 159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144 143 142 141 140 139 138 137 136 135 134 133 132 131 130 129 128 127 126 125 124 123 122 121 120 119 118 117 116 115 114 113 112 111 110 109 108 107 106 105 104 103 102 101 100 99 98 97 96 95 94 93 92 91 90 89 88 87 86 85 84 83 82 81 80 79 78 77 76 75 74 73 72 71 70 69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

W.H. Turner

W.H. Turner

Harry Leonard  
640 Ac.  
32 23 19 10 5 5

H.M. Matern  
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OFFSET OPERATORS

H. T. MATTERN (NCT-D) LEASE

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

Getty Oil Co.  
P. O. Box 249  
Hobbs, New Mexico 88240

Yarborough Oil Co.  
P. O. Box 1001  
Eunice, New Mexico 88231

Petro Lewis  
P. O. Box 509  
Levelland, Texas 79336

ARCO Oil & Gas  
P. O. Box 1610  
Midland, Texas 79701

Amerada Hess Corporation  
P. O. Drawer 817  
Seminole, Texas 79360

Sun Oil Co.  
P. O. Box 1861  
Midland, Texas 79701

Sohio Petroleum Co.  
P. O. Box 3000  
Midland, Texas 79701

Shell Oil Co.  
P. O. Box 1509  
Midland, Texas 79701

El Paso Natural Gas Co.  
600 Building of the Southwest  
Midland, Texas 79701



STATE OF NEW MEXICO  
**ENERGY AND MINERALS DEPARTMENT**  
 OIL CONSERVATION DIVISION  
 HOBBS DISTRICT OFFICE

January 28, 1985

TONEY ANAYA  
 GOVERNOR

POST OFFICE BOX 1980  
 HOBBS, NEW MEXICO 88240  
 (505) 393-6161

OIL CONSERVATION DIVISION  
 P. O. BOX 2088  
 SANTA FE, NEW MEXICO 87501

RECEIVED  
 JAN 31 1985  
 OIL CONSERVATION DIVISION  
 HOBBS, NEW MEXICO

RE: Proposed:

- MC \_\_\_\_\_
- DHC \_\_\_\_\_ X \_\_\_\_\_
- NSL \_\_\_\_\_
- NSP \_\_\_\_\_
- SWD \_\_\_\_\_
- WFX \_\_\_\_\_
- PMX \_\_\_\_\_

Gentlemen:

I have examined the application for the:

Gulf Oil Corp.	Nattern (NCT-D) #9, #10, #15	6 & 7-22-37
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

O.K.---J.S.

Yours very truly,

Jerry Sexton  
 Supervisor, District 1

/mc