

CARTER FOUNDATION PRODUCTION COMPANY  
WATERFLOOD AND UNORTHODOX LOCATION HEARING  
BLINEBRY, CADE, HUNT AND MATTIX LEASES  
HEARING DATE: JANUARY 5, 1966

ENTIRE RESERVOIR

Name of Field: Langlie Mattix

Location: Township 23-S through 26-S, Range 36-E through 38-E,  
Lea County, New Mexico

Name of Formation: Queen (Penrose)

Composition of Pay: Sand and Sandy Limestone

Type of Structure: Anticlinal - Stratigraphic Trap


Type of Drive: Solution Gas

Original Bottom Hole Pressure: 1450 PSI @ -200'

Current Bottom Hole Pressure: 200 PSI (Est.)

Depletion Status of Reservoir: Near Total Primary Depletion

PROJECT AREA

- Leases:  (A) Blinebry - E/2 of Section 34, the NW/4 and the SW/4 of the SW/4 of Section 35, T-23-S, R-37-E (520 acres)
- (B) Cade - E/2 and the NW/4 of the SW/4 of Section 35, T-23-S, R-37-E (120 acres)
- (C) Elma May Hunt - SE/4 of the SW/4 of Section 26, T-23-S, R-37-E (40 acres)
- (D) Mattix - NW/4 and the E/2 of the SW/4 and the W/2 of the SE/4 of Section 3, T-24-S, R-37-E (640 acres)

Total Acres - 1320

Local Structure - See Map

Average Depth to Top of Pay: 3500'

Net Effective Pay Thickness: 80'

Estimated Average Porosity: 12%

Estimated Average Permeability: 15 md.

Estimated Connate Water Content: 35%

Gravity of Crude: 35°

Primary Production History:

1. Date First Well Completed & Number of Present Wells

Ⓐ Blinebry - March 1950	11 Wells
Ⓑ Cade - June 1950	3 Wells
Ⓒ Hunt - September 1954	1 Well
Ⓓ Mattix - July 1935	<u>6 Wells</u>
Total -	21 Wells

2. See Tabulated Production History and Production Decline Graphs

3. Average Current Daily Per Well Production

Oil: 3 Barrels

Water: Nil

Gas: 15 MCF

Monthly Average Gas-Oil Ratio: 4510

4. Stage of Primary Depletion of Project Area: 86 Per Cent

Planned Injection:

1. Type of Injection Fluid: Water

2. Source of Injected Water: Santa Rosa Water Well on Blinebry Lease

3. Injection Pattern: Probably a 5-Spot Pattern, depending on Pilot Waterflood Results

4. Maximum Injection Pressure: 2000 PSI

5. Estimated Maximum Per Well Rate of Injection: 300 Barrels

6. All Injection Wells to be drilled, cased through pay section, cement circulated to surface and tubing plastic coated (See Plat).

Results Expected:

1. Estimated Original Oil in Place: 5,190,000 Barrels  
*Cade & Blinebry 3,500,000 Bbls*

2. Estimated Additional Oil Recovery by Waterflood: 1,038,000 Barrels  
*Blinebry 550,000 Bbls*  
*Cade 50,000 Bbls*  
*Total 1,038,000 Bbls*

PRODUCTION HISTORY  
CARTER FOUNDATION PRODUCTION COMPANY  
LANGLIE-MATTIX FIELD  
LEA COUNTY, NEW MEXICO

Blinebry Federal

<u>Year</u>	<u>No. Wells End of Year</u>	<u>Yearly Oil Production</u>
1950	6	37173
1951	7	74240
1952	8	41282
1953	9	44307
1954	9	25640
1955	10	32246
1956	10	26929
1957	10	43661
1958	10	33220
1959	10	23721
1960	10	16843
1961	11	20785
1962	11	20878
1963	11	15674
1964	11	14139
1965	11	7498*

Cade Federal

<u>Year</u>	<u>No. Wells End of Year</u>	<u>Yearly Oil Production</u>
1950	1	15970
1951	3	17843
1952	3	16806
1953	3	11731
1954	3	8603
1955	3	6866
1956	3	6173
1957	3	12320
1958	3	8595
1959	3	8123
1960	3	5607
1961	3	5694
1962	3	5838
1963	3	4399
1964	3	4321
1965	3	2573*

Elma May Hunt

1954	1	2674
1955	1	11309
1956	1	5369
1957	1	3485
1958	1	1937
1959	1	1909
1960	1	1392
1961	1	892
1962	1	807
1963	1	757
1964	1	707
1965	1	667*

Mattix Federal

1950	1	5692
1951	2	10448
1952	3	11088
1953	3	9400
1954	3	7230
1955	3	6224
1956	3	5441
1957	3	9045
1958	3	8737
1959	3	7435
1960	3	5554
1961	5	8350
1962	6	19474
1963	6	11554
1964	6	9341
1965	6	4577*

\*Production to 11-1-65

PRODUCTION HISTORY

OPERATOR: Carter Foundation Production  
                            Company

FIELD: Langlie-Mattix

LEASE: Blinebry Federal

COUNTY: Lea

	<u>No.</u> <u>Wells</u>	<u>Oil</u> <u>Allow.</u> <u>Bbls.</u>	<u>Oil</u> <u>Prodn.</u> <u>Bbls.</u>	<u>Per</u> <u>Well</u> <u>Prodn.</u>	<u>Gas</u> <u>Prodn.</u> <u>MCF</u>	<u>Per</u> <u>Well</u> <u>Prodn.</u>	<u>Gas-Oil</u> <u>Ratio</u>
Year: <u>1964</u>							
Jan.	11	1457	1277	116	2991	272	2342
Feb.	11	1363	867	79	2802	255	3232
Mar.	11	1457	1223	111	2790	254	2281
April	11	1410	1268	115	3686	335	2907
May	11	1271	1382	126	3290	299	2381
June	11	1230	1415	129	2693	245	1903
July	11	1271	1213	110	3416	311	2816
Aug.	11	1271	1227	112	2209	201	1800
Sept.	11	1230	1219	111	4452	405	3652
Oct.	11	1271	1014	92	3783	344	3731
Nov.	11	1230	912	83	3638	331	3989
Dec.	11	1271	1122	102	3585	326	3195

Year Total:

14,139

39,335

Cum. Total:

470,738

Year: 1965

Jan.	11	1271	1166	106	2977	271	2553
Feb.	11	1148	837	76	3175	289	3793
Mar.	11	1271	756	69	3786	344	5008
April	11	1230	767	69	3135	285	4074
May	11	1426	816	74	2273	207	2786
June	11	1380	807	72	2076	189	2572
July	11	1426	705	64	1068	97	1515
Aug.	11	1271	675	61	768	70	1138
Sept.	11	1230	358	33	1166	106	3257
Oct.	11	1271	611	56	880	80	1440
Nov.							
Dec.							

Year Total to 11-1-65:

7,498

21,304

Cum. Total to 11-1-65:

478,236

PRODUCTION HISTORY

OPERATOR: Carter Foundation Production  
Company

FIELD: Langlie-Mattix

LEASE: Cade Federal

COUNTY: Lea

	<u>No. Wells</u>	<u>Oil Allow. Bbls.</u>	<u>Oil Prod. Bbls.</u>	<u>Per Well Prod.</u>	<u>Gas Prod. MCF</u>	<u>Per Well Prod.</u>	<u>Gas-Oil Ratio</u>
Year: <u>1964</u>							
Jan.	3	403	345	115	1516	505	4394
Feb.	3	377	355	118	1149	383	3237
Mar.	3	403	386	129	2346	782	6078
April	3	390	403	134	2065	688	5124
May	3	403	422	141	2549	850	6040
June	3	390	391	130	2657	886	6795
July	3	403	399	133	2544	848	6376
Aug.	3	403	367	122	2676	892	7292
Sept.	3	390	382	127	2513	838	6579
Oct.	3	403	350	117	1600	533	4571
Nov.	3	390	318	106	1395	465	4387
Dec.	3	403	203	68	697	232	3433

Year Total:			4,321		23,707		
Cum. Total:			138,889				

Year: 1965

Jan.	3	403	310	103	1267	421	4077
Feb.	3	364	250	83	1458	486	5832
Mar.	3	403	271	90	1636	545	6037
April	3	390	310	103	2216	739	7148
May	3	434	171	57	1450	483	8480
June	3	420	215	72	1166	389	5423
July	3	434	229	76	1203	401	5253
Aug.	3	341	296	99	1280	427	4324
Sept.	3	330	245	82	1145	382	4673
Oct.	3	341	276	92	1207	402	4373
Nov.							
Dec.							

Year Total to 11-1-65:			2,573		14,025		
Cum. Total to 11-1-65:			141,462				

PRODUCTION HISTORY

OPERATOR: Carter Foundation Production  
Company

FIELD: Langlie-Mattix

LEASE: Elma May Hunt

COUNTY: Lea

	<u>No. Wells</u>	<u>Oil Allow. Bbls.</u>	<u>Oil Prodn. Bbls.</u>	<u>Per Well Prodn.</u>	<u>Gas Prodn. MCF</u>	<u>Per Well Prodn.</u>	<u>Gas-Oil Ratio</u>
Year: <u>1964</u>							
Jan.	1	124	94	94	431	431	4585
Feb.	1	116	83	83	334	334	4024
Mar.	1	124	87	87	317	317	3644
April	1	120	-	-	380	380	-
May	1	93	-	-	425	425	-
June	1	90	-	-	-	-	-
July	1	93	66	66	-	-	-
Aug.	1	-	69	69	143	143	2072
Sept.	1	81	71	71	204	204	2873
Oct.	1	93	87	87	177	177	2034
Nov.	1	90	68	68	169	169	2485
Dec.	1	93	82	82	177	177	2213
Year Total:			707		2,757		
Cum. Total:			31,238				
Year: <u>1965</u>							
Jan.	1	80	63	63	177	177	2810
Feb.	1	84	66	66	155	155	2348
Mar.	1	93	57	57	165	165	2895
April	1	90	74	74	105	105	1419
May	1	93	64	64	27	27	422
June	1	90	58	58	93	93	1603
July	1	93	59	59	20	20	339
Aug.	1	93	88	88	125	125	1420
Sept.	1	90	58	58	149	149	2569
Oct.	1	93	80	80	117	117	1463
Nov.							
Dec.							
Year Total to 11-1-65:			667		1,133		
Cum. Total to 11-1-65:			31,905				

PRODUCTION HISTORY

OPERATOR: Carter Foundation Production                  FIELD: Langlie-Mattix  
   Company

LEASE:             Mattix Federal                                 COUNTY: Lea

	<u>No.</u>	<u>Oil</u>	<u>Oil</u>	<u>Per</u>	<u>Gas</u>	<u>Per</u>	<u>Gas-Oil</u>
	<u>Wells</u>	<u>Allow.</u>	<u>Prod.</u>	<u>Well</u>	<u>Prod.</u>	<u>Well</u>	<u>Ratio</u>
		<u>Bbls.</u>	<u>Bbls.</u>	<u>Prod.</u>	<u>MCF</u>	<u>Prod.</u>	
Year: <u>1964</u>							
Jan.	6	1178	798	133	4198	700	5261
Feb.	6	1102	766	128	3901	650	5093
Mar.	6	1178	840	140	4747	791	5651
April	6	1140	864	144	5632	939	6519
May	6	992	820	137	4728	788	5766
June	6	960	807	135	5196	866	6439
July	6	992	764	127	5025	838	6577
Aug.	6	992	768	128	5261	877	6850
Sept.	6	960	767	128	4708	785	6138
Oct.	6	992	843	141	6829	1138	8101
Nov.	6	960	556	93	5324	887	9576
Dec.	6	992	748	125	5044	841	6743
Year Total:			9,341		60,593		
Cum. Total:			236,255				

Year: 1965

Jan.	6	992	859	143	6132	1022	7139
Feb.	6	896	673	112	3706	618	5507
Mar.	6	992	637	106	4073	679	6394
April	6	960	667	111	3988	665	5979
May	6	930	499	83	3850	642	7715
June	6	900	599	99	3115	519	5200
July	6	930	643	107	2866	478	4457
Aug.	6	930	609	102	3328	555	5465
Sept.	6	900	580	97	3232	539	5572
Oct.	6	930	632	105	3864	644	6114
Nov.							
Dec.							
Year Total to 11-1-65:			6,398		38,154		
Cum. Total to 11-1-65:			242,653				