

CHALK BLUFF DRAW UNIT AREA

EDDY COUNTY, NEW MEXICO

TO: Executive Secretary  
New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

Commissioner of Public Lands of the  
State of New Mexico  
Santa Fe, New Mexico

Supervisor  
United States Geological Survey  
Roswell, New Mexico

APPLICATION FOR APPROVAL OF PLAN OF DEVELOPMENT FOR  
CHALK BLUFF DRAW UNIT AREA FOR CALENDAR YEAR 1960

Comes the undersigned, Humble Oil & Refining Company, the Unit Operator under the Chalk Bluff Draw Unit Agreement heretofore approved by the New Mexico Oil Conservation Commission, the Commissioner of Public Lands of the State of New Mexico and the Director of the United States Geological Survey, and submits for approval of the New Mexico Oil Conservation Commission, the Commissioner of Public Lands and the Supervisor of the United States Geological Survey a plan hereinafter set forth for the further development and operation of the Chalk Bluff Draw Unit Area for the calendar year 1960 and with respect thereto respectfully shows:

1. The latter part of January, 1959, applicant submitted for approval, in accordance with Section 10 of the unit agreement, a plan of development for the Chalk Bluff Draw Unit Area for the calendar year 1959 which was approved by the New Mexico Oil Conservation Commission on January 30, by the Commissioner of Public Lands on February 3, and by the Regional Supervisor of the United States Geological Survey on April 3, 1959.

That in accordance with the plan, as submitted, applicant as Unit Operator has caused to be drilled a fourth well on the unit area, known as the Chalk Bluff Draw Unit Well No. "C"-1, located 1980' from the East line and 1980' from the North line of Section 17, Township 18 South, Range 27 East. Said well was commenced on or about April 6, 1959, and completed on July 23, 1959, the same being drilled to a total depth of 9,850' and plugged back to a depth of 9,577'. The well was completed

in the Pennsylvanian (Bend) formation with a potential of 14,800 MCFD based on calculated open flow through perforations between 9,446' and 9,488'.

The above mentioned well, No. "C"-1, has been shut in since completion due to the lack of an existing market. The gas being produced from the participating area heretofore established has been sold to the Continental Artesia Refinery and periodically to drilling contractors since January 1, 1959, and Continental has thus far been unable to take any additional gas which might be produced from the No. "C"-1. Applicant is advised that the Trans Western Pipeline Company is to construct a gas pipeline which will run through the Chalk Bluff Draw Unit and probably within a distance of two to three miles from Well "C"-1; the date of the probable completion of this line is not known at the present time but undoubtedly will afford a favorable market for the production of gas from said well.

Due to the above market situation, no additional wells are contemplated to be drilled to the Pennsylvanian (Bend) formation, in which the above gas wells have been completed, for the year 1960 and it is anticipated that Well No. "C"-1 will remain shut in until such time as the Trans Western pipe line is completed.

2. Within the last several months a number of wells have been drilled along an Abo formation trend resulting in the completion of several oil wells producing from the Abo formation near the center of the East boundary line of the unit. The extent to which the Abo formation may be productive as to the lands included in the unit area is unknown at this time. The Chalk Bluff Draw Unit Well No. 1, located in the  $NE\frac{1}{4}SW\frac{1}{4}$  of Section 5, and the No. 3 unit well, located in the  $SE\frac{1}{4}NE\frac{1}{4}$  of Section 8, penetrated the Abo zone but did not encounter oil in paying quantities. The unit well No. "C"-1 also penetrated the Abo zone and encountered a slight gas show in the Abo formation.

The Unit Operator proposes to drill eight (8) wells for the purpose of meeting offsets to wells producing from the Abo formation and to further develop the unit area on or before July 1, 1960. One of the wells has already been completed as a producing well in the Abo formation and is located upon the  $NE\frac{1}{4}SW\frac{1}{4}$  of Section 9, Township 18 South, Range 27 East, and the second well is now in the process of being drilled upon the  $SE\frac{1}{4}NW\frac{1}{4}$  of Section 9, Township 18 South, Range 27 East. It is proposed to locate the additional six (6) wells as follows:

Township 18 South, Range 27 East

1. SE<sub>1</sub>SW<sub>1</sub> Section 9
2. SE<sub>1</sub>SW<sub>1</sub> Section 4
3. NE<sub>1</sub>NW<sub>1</sub> Section 9
4. SW<sub>1</sub>NW<sub>1</sub> Section 9
5. NW<sub>1</sub>SW<sub>1</sub> Section 9
6. SW<sub>1</sub>SW<sub>1</sub> Section 9

It is contemplated that a Supplemental Plan of Development will be filed after the above mentioned wells have been completed, to cover further development for the last half of 1960.

For the purpose of carrying out this Plan of Development, the Unit Operator purposes to use two rigs, moving from one location to another without more than thirty days lapse of time between the completion of one well and the commencement of another.

In the event it is determined that any of the above mentioned wells should not be drilled, the Unit Operator will file an amended Plan of Development.

Dated as of January 1, 1960.

Respectfully submitted,

HUMBLE OIL & REFINING COMPANY

By R.M. Richardson

Approved

Alf Gitter

Secretary-Director  
New Mexico Oil Conservation Commission

Approved

Commissioner of Public Lands

Approved

Regional Oil and Gas Supervisor  
United States Geological Survey

## REVISED EXHIBIT "B"

CHALK BLUFF DRAW UNIT AREA  
TOWNSHIPS 17 AND 18 SOUTH, RANGE 27 EASTSCHEDULE SHOWING THE PERCENTAGE AND KIND OF OWNERSHIP OF OIL AND GAS  
INTERESTS IN ALL LANDS IN THE UNIT AREA  
(BELOW SAN ANDRES OR 3000 FEET)

tract No.	Description of Land	No. of Acres	Lease No. and Date	Basic Royalty & Percentage	Lessee of Record	Overriding Royalty & Percentage	Working Interest Owner
<u>FEDERAL LAND</u>							
1.	T-18-S, R-27-E Sec. 6: $\text{SE}\frac{1}{4}$ $\text{SW}\frac{1}{4}$	40.00	LC-026874(a) 5-1-51	USA Schedule "C"	Hondo Oil & Gas Co. Mildred Crane Hudson Lois Burnett A. W. Adkisson	.005000 .010000 .018750	Hondo Oil & Gas Co.
2.	T-17-S, R-27-E Sec. 33: $\text{SE}\frac{1}{4}$ $\text{SW}\frac{1}{4}$ T-18-S, R-27-E Sec. 6: $\text{SW}\frac{1}{4}$ $\text{NE}\frac{1}{4}$ , Lot 2	120.69	LC-026874(b) 4-16-35	USA Sliding Scale	Hondo Oil & Gas Co. None		Hondo Oil & Gas Co.
3.	T-18-S, R-27-E Sec. 6: $\text{NW}\frac{1}{4}$ $\text{SE}\frac{1}{4}$	40.00	LC-026874(b) 4-16-35	USA Sliding Scale	Hondo Oil & Gas Co. Mildred Crane Hudson	.005000	Hondo Oil & Gas Co.
4.	T-18-S, R-27-E Sec. 5: Lot 3, $\text{SE}\frac{1}{4}$ $\text{NW}\frac{1}{4}$ , $\text{NE}\frac{1}{4}$ $\text{SW}\frac{1}{4}$	121.00	LC-026874(e) 2-1-60	USA Schedule "C"	Humble Oil & Ref. Co. Higgins Trust, Inc. Nora B. Clayton Winnie Ruth Clayton Eula Bee Stoldt Vernon E. Clayton J. A. Clayton, Jr. Leon J. Clayton Pauline J. Peoples	.013750 .002500 .000625 .000375 .000375 .000375 .000375	Humble Oil & Ref. Co.

## 4. Continued

H. G. Watson .005157  
 A. W. Adkisson .018750  
 Lois Burnett .010000  
 Childress Royalty Company .017188  
 Fred Brainard Estate .005157  
 Fred Brainard Estate .010763  
 Clyde Guy & Sons, Inc. .010764  
 V. S. Welch .017767  
 Harvey Yates .000940  
 S. P. Yates .000940  
 Martin Yates .000940  
 John Ashby Yates .000940  
 James R. Everts .001388  
 Gladys Everts, Gdn. .001388  
 Berda Montgomery .001388  
 Beatrice Caywood .001388  
 Anita Britain .000464  
 Irene Everts .000464  
 Robert Everts .000464

5. T-17-S, R-27-E  
 Sec. 29:  $\frac{1}{4} \text{SW}_1^1$   
 Sec. 30:  $\frac{1}{4} \text{SE}_1^1$   
 Sec. 31:  $\frac{1}{4} \text{SW}_2^1$   
 Sec. 33:  $\text{NW}_1^1, \text{NW}_4^1, \text{SW}_4^1$   
 T-18-S, R-27-L  
 Sec. 6: Lot 1,  $\text{SR}_4^1 \text{NE}_4^1$

LC-026874(f) USA Schedule "D"  
 520.96 6-1-52

Humble Oil & Ref. Co.  
 Fred Brainard Estate  
 Clyde Guy & Sons, Inc.  
 V. S. Welch  
 Harvey E. Yates  
 Martin Yates III  
 S. P. Yates  
 John Ashby Yates  
 S. P. Yates Trustee  
 James R. Everts  
 Gladys Everts, Gdn.  
 Berda Montgomery  
 Beatrice Caywood  
 Anita Ann E. Burkeholder  
 Irene Hardie  
 Robert Everts

Humble Oil & Ref. Co.  
 .026909  
 .026909  
 .04415  
 .002351  
 .002351  
 .001175  
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6.	<u>T-18-S, R-27-E</u> Sec. 8: <u>SW<math>\frac{1}{4}</math>NE<math>\frac{1}{4}</math></u>	40.00	LC-043894 9-1-51	USA Schedule "D"	Humble Oil & Ref. Co.	.10500 .002500 .002500 .002500 .002500 .002500 .002500 .00500 .00500	Humble Oil & Ref. Co.	.10500 .002500 .002500 .002500 .002500 .002500 .002500 .00500 .00500	
	Kenneth Compton				William O. Compton				
	Louise Compton Duffield				Stewart O. Compton				
	Lillie Mae Yates								
	Mary Ann Berliner								
7.	<u>T-17-S, R-27-E</u> Sec. 28: <u>E<math>\frac{1}{2}</math>SW<math>\frac{1}{4}</math>, SE<math>\frac{1}{4}</math>NW<math>\frac{1}{4}</math></u>	120.00	LC-048679 1-1-40	USA Step Scale	Pan American Pet. Corp.	Emma Berry, a widow Cliff L. Dean - 25/90 of \$500 per acre out of 5%	.062500	Pan American Pet. Corp.	
	C. Alvin White - 25/90 of \$500 per acre out of 5%								
	Robert H. Bean - 10/90 of \$500 per acre out of 5%								
	W. C. McManus - 10/90 of \$500 per acre out of 5%								
	Leonard Latch - 10/90 of \$500 per acre out of 5%								
	Frank Bass - 5/90 of \$500 per acre out of 5%								
	W. M. Ryan - 5/90 of \$500 per acre out of 5%								
8.	<u>T-18-S, R-27-E</u> Sec. 5: <u>Lot 4, SW<math>\frac{1}{4}</math>NW<math>\frac{1}{4}</math>, NW<math>\frac{1}{4}</math>SE<math>\frac{1}{4}</math></u>	121.07	LC-049648(a) 5-1-51	USA Schedule "C"	Humble Oil & Ref. Co.	Childress Royalty Co. H. G. Watson Higgins Trust, Inc. Fred Brainard Estate Winnie Ruth Clayton Nora B. Clayton	.017188 .005154 .013751 .083907 .000625 .002500	Humble Oil & Ref. Co.	.017188 .005154 .013751 .083907 .000625 .002500

## 8. Continued

	Eula Bee Stoldt Vernon E. Clayton J. A. Clayton, Jr. Leon J. Clayton Pauline J. Peoples	•000375 •000375 •000375 •000375 •000375
9.	T-17-S, R-27-I Sec. 29: SE $\frac{1}{4}$ E $\frac{1}{4}$ Sec. 33: NE $\frac{1}{4}$ NW $\frac{1}{4}$ T-18-S, R-27-I Sec. 6: NE $\frac{1}{4}$ SW $\frac{1}{4}$	120.00 LC-049648(b) 4-16-35 USA Sliding Scale Humble Oil & Ref. Co.
9-A.	T-18-S, R-27-I Sec. 6: SW $\frac{1}{4}$ SI $\frac{1}{4}$	40.00 LC-049648(b) 4-16-35 USA Sliding Scale Humble Oil & Ref. Co.
10.	T-18-S, R-27-I Sec. 8: N $\frac{1}{2}$ NE $\frac{1}{4}$ , NE $\frac{1}{4}$ NW $\frac{1}{4}$	160.00 LC-054205 9-1-51 USA Schedule "D" Hondo Oil & Gas Co.
11.	T-18-S, R-27-E Sec. 5: E $\frac{1}{2}$ SE $\frac{1}{4}$ , S $\frac{1}{2}$ SW $\frac{1}{4}$	160.00 LC-055383(a) 5-1-51 USA Schedule "C" Hondo Oil & Gas Co.

12.	T-17-S, R-27-E Sec. 29: $\frac{1}{2}SEW_4^1$ Sec. 33: $SW_4^1SW_4^1$ Sec. 31: $N\frac{1}{2}NE\frac{1}{4}$	200.00 LC-055383 (b) 4-16-35	USA Sliding Scale	Hondo Oil & Gas Co.	Hondo Oil & Gas Co.
13.	T-18-S, R-27-E Sec. 4: Lots 9, 10	77.36 LC-055465 (a) 3-8-52	USA Schedule "C"	Humble Oil & Ref. Co.	Humble Oil & Ref. Co. •028125 •004687 •004688 •009375 •009375 •009375 •009375 •050000
				Estates of Charles E. Mann F. G. Keyes J. D. Atwood Harry Thorne Laura G. Ballard Carl McNally Jaffa Miller Mildred Crane Hudson	Humble Oil & Ref. Co. •009375 •009375 •009375 •009375 •050000
14.	None - See Tract No. 37				
15.	T-18-S, R-27-E Sec. 21: $SE\frac{1}{2}W_4^1$ , $SE\frac{1}{4}$	240.00 LC-056928 7-1-49	USA 12½%	Humble Oil & Ref. Co.	Humble Oil & Ref. Co. •020000 •006250 •011825
				Harvey E. Roelofs Trustee R. R. Rutledge Estate of Roy S. Watkins Florence M. Watkins \$66,500 out of 1.1825%	
16.	T-17-S, R-27-E Sec. 31: Lots 2, 3, 4, $SE\frac{1}{4}NW_4^1$ , $E\frac{1}{2}SW_4^1$ T-18-S, R-27-E Sec. 6: $SE\frac{1}{4}W_4^1$ , $E\frac{1}{2}SW_4^1$	357.27 LC-060894 3-3-43	USA Step Scale	Humble Oil & Ref. Co.	Humble Oil & Ref. Co. •006250 •006250 •006250 Anna G. Hill 1/3 of \$5.00 per acre out of 6.25% Olen F. Featherstone 1/3 of \$5.00 per acre out of 6.25% Estate of Mae McDonald Hawley 1/3 of \$5.00 per acre out of 6.25% Fred Brainard Estate E. A. Paton & H. R. Paton T. J. Sively Dorothy B. Lind Clyde Guy & Sons, Inc. Kate G. Lowrey •026562 •013281 •013281 •013281 •013281

17.	T-17-S, R-27-E Sec. 29: $\frac{N}{2}SE\frac{1}{4}$ , $SW\frac{1}{4}SE\frac{1}{4}$ Sec. 30: $N\frac{1}{2}SE\frac{1}{4}$	200.00	LC-064050 1-1-51	USA $12\frac{1}{2}\%$	John Trigg None
18.	T-18-S, R-27-E Sec. 5: Lots 1, 2, $S\frac{1}{2}NE\frac{1}{4}$	161.81	LC-064384 2-1-46	USA Step Scale	Hondo Oil & Gas Co.
19.	T-18-S, R-27-E Sec. 4: Lots 7, 8	79.29	LC-065478(a) 3-1-52	USA Schedule "C"	Hondo Oil & Gas Co.
					Estate of Charles E. Mann F. G. Keyes & J. D. Atwood Harry Thorne, Laura C. Ballard, Carl McNally, & Jaffa Miller
20.	T-18-S, R-27-E Sec. 5: $\frac{W}{2}SE\frac{1}{4}$	80.00	LC-065600 9-1-47	USA Step Scale	Humble Oil & Ref. Co.
					Lillie Mae Yates William Hudson Don Angle Frances Nix
21.	T-18-S, R-27-E Sec. 21: $\frac{N}{2}NW\frac{1}{4}$ , $SW\frac{1}{4}NW\frac{1}{4}$	120.00	LC-065616 9-1-48	USA $12\frac{1}{2}\%$	Hondo Oil & Gas Co.
22.	T-18-S, R-27-E Sec. 7: $\frac{SW}{4}NE\frac{1}{4}$ , $NE\frac{1}{4}SE\frac{1}{4}$ Sec. 8: $SW\frac{1}{4}SW\frac{1}{4}$	120.00	LC-067981(a) 1-1-60	USA Schedule "C"	Hondo Oil & Gas Co.
23.	T-18-S, R-27-E Sec. 7: $SE\frac{1}{4}NE\frac{1}{4}$	40.00	LC-067981(b) 1-1-60	USA Sliding Scale	Hondo Oil & Gas Co.
24.	T-17-S, R-27-E Sec. 28: $\frac{W}{2}SW\frac{1}{4}$ Sec. 31: $NE\frac{1}{4}NW\frac{1}{4}$	120.00	LC-068361 12-1-49	USA $12\frac{1}{2}\%$	Humble Oil & Ref. Co. Olen F. Featherstone Hartman Brooks Travis Anne G. Hill
					Humble Oil & Ref. Co. •052500 •052500 •020000

25.	<u>T-18-S, R-27-E</u> Sec. 6: Lots 3, 4, 5, 6	158.87 7-1-49	LC-069274 USA 12½%	Humble Oil & Ref. Co.	Anna G. Hill Estate of Mae McDonald Hawley Olen F. Featherstone Fred Brainard Estate Clyde Guy & Sons, Inc. Kate G. Lowrey	.006250 .006250 .006250 .053125 .026562 .026563
26.	<u>T-18-S, R-27-E</u> Sec. 8: $\frac{N_1}{2}SW\frac{1}{4}$ , $S\frac{1}{2}NW\frac{1}{4}$ , $S\frac{1}{2}SE\frac{1}{4}$ , $NW\frac{1}{2}NW\frac{1}{4}$	280.00	LC-070678 (a) USA 1-1-60	Hondo Oil & Gas Co.	Hondo Oil & Gas Co. Mildred Crane Hudson Higgins Trust, Inc.	.050000 .060937 .014063
27.	<u>T-18-S, R-27-E</u> Sec. 4: Lots 15, 16, 17	116.13	LC-070937 3-1-52	USA 12½%	Hondo Oil & Gas Co. J. D. Atwood F. G. Keyes Estate of Charles E. Mann Harry Thorne Carl McNally Jaffa Miller Laura Ballard	.020000 .001875 .001875 .011250 .003750 .003750 .003750 .003750
28.	<u>T-18-S, R-27-E</u> Sec. 9: $SE\frac{1}{4}$	160.00	LC-070938 7-11-34	USA Sliding Scale	Hondo Oil & Gas Co.	.050000 .050000
29.	<u>T-18-S, R-27-E</u> Sec. 17: $E\frac{1}{2}NW\frac{1}{4}$ , $SW\frac{1}{4}SE\frac{1}{4}$ Sec. 20: $NW\frac{1}{4}NW\frac{1}{4}$ , $W\frac{1}{2}NE\frac{1}{4}$ , $SE\frac{1}{4}NE\frac{1}{4}$	280.00	NW-0758 1-1-40	USA Sliding Scale	Hondo Oil & Gas Co.	.050300 *Hondo Oil & Ref. Co. 81.25% *Hondo Oil & Gas Co. 18.75%
30.	<u>T-17-S, R-27-E</u> Sec. 28: $SW\frac{1}{4}NW\frac{1}{4}$	40.00	NW-01537 1-1-52	USA 12½%	Humble Oil & Ref. Co.	.125000
					*Note: As to Section 17 only by contract a- greement between parties	
					B. R. Gorman & Elsie G. Gorman	
					Humble Oil & Ref. Co.	

31.	T-17-S, R-27-E Sec. 31: $\frac{1}{2}$ NE $\frac{1}{4}$ , E $\frac{1}{2}$ SE $\frac{1}{4}$	160.00	NM-02775 2-1-51	USA $12\frac{1}{2}\%$	Humble Oil & Ref. Co.	Mildred Crane Hudson Fred Brainard Estate Clyde Guy & Sons, Inc. Kate G. Lowrey	.020000 .052500 .026250 .026250	Humble Oil & Ref. Co.
32.	T-18-S, R-27-E Sec. 7: E $\frac{1}{2}$ NE $\frac{1}{4}$ Sec. 8: SE $\frac{1}{4}$ SW $\frac{1}{4}$ , NW $\frac{1}{4}$ SE $\frac{1}{4}$	160.00	NM-04175 (c) 1-1-60	USA Schedule "C"	Humble Oil & Ref. Co.	Higgins Trust, Inc. Mildred Crane Hudson	.014063 .110937	Humble Oil & Ref. Co.
33.	T-18-S, R-27-E Sec. 7: NW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 8: NE $\frac{1}{4}$ SE $\frac{1}{4}$	80.00	NM-04175 (a) 1-1-60	USA Schedule "C"	Mildred Crane Hudson	Higgins Trust, Inc. Mildred Crane Hudson	.014063 .030000	Hondo Oil & Gas Co.
34.	- 34-A. - 34-B. None							
34-C.	T-18-S, R-27-E Sec. 17: NE $\frac{1}{4}$ NE $\frac{1}{4}$ , SW $\frac{1}{4}$ NW $\frac{1}{4}$ , E $\frac{1}{2}$ SW $\frac{1}{4}$ , SE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 20: E $\frac{1}{2}$ NW $\frac{1}{4}$	280.00	NM-04175 (b) 1-1-60	USA Schedule "D"	Humble Oil & Ref. Co.	Mildred Crane Hudson	.125000	Humble Oil & Ref. Co. *Humble Oil & Ref. Co. 81.25% *Hondo Oil & Gas Co. 18.75%
34-D.	T-18-S, R-27-E Sec. 17: NW $\frac{1}{4}$ NE $\frac{1}{4}$ , NW $\frac{1}{4}$ NW $\frac{1}{4}$ , W $\frac{1}{2}$ SW $\frac{1}{4}$ , SE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 20: NE $\frac{1}{4}$ NE $\frac{1}{4}$ , SE $\frac{1}{4}$ SE $\frac{1}{4}$	240.00	NM-04175 (b) 1-1-60	USA Schedule "D"	Humble Oil & Ref. Co.	Julian E. Simon	.125000	Humble Oil & Ref. Co. *Humble Oil & Ref. Co. 81.25% *Hondo Oil & Gas Co. 18.75%

\*Note: As to  
Section 17 only  
by contract a-  
greement between  
parties

\*Note: As to  
Section 17 only  
by contract a-  
greement between  
parties

34-E.	<u>T-18-S, R-27-E</u> Sec. 17: <u>S<math>\frac{1}{2}</math>NE<math>\frac{1}{4}</math></u>	80.00	NM-04175 (b) 1-1-60	USA Schedule "D"	Humble Oil & Ref. Co.	Julian E. Simon Nearburg & Ingram R. J. St. Germain Tela Corporation
					*Note: By con-tract agreement between parties	
34-F.	<u>T-18-S, R-27-E</u> Sec. 17: <u>N<math>\frac{1}{2}</math>SE<math>\frac{1}{4}</math></u>	80.00	NM-04175 (b) 1-1-60	USA Schedule "D"	Humble Oil & Ref. Co.	Mildred Crane Hudson Nearburg & Ingram R. J. St. Germain Tela Corporation
					*Note: By con-tract agreement between parties	
35.	<u>T-17-S, R-27-E</u> Sec. 28: <u>NE<math>\frac{1}{4}</math>NW<math>\frac{1}{4}</math></u> Sec. 29: <u>S<math>\frac{1}{2}</math>NE<math>\frac{1}{4}</math></u>	120.00	NM-015673-A 12-1-54	USA 12 $\frac{1}{2}$ %	Humble Oil & Ref. Co.	Roy L. Flood
36.	<u>T-18-S, R-27-E</u> Sec. 4: <u>Lot 18</u>	38.43	NM-029135 12-1-56	USA Schedule "B"	Humble Oil & Ref. Co.	None
37.	<u>T-18-S, R-27-E</u> Sec. 9: <u>NW<math>\frac{1}{4}</math></u>	160.00	NM-031186 7-11-34	USA Sliding Scale	Humble Oil & Ref. Co.	Mildred Crane Hudson
						.125000
						Humble Oil & Ref. Co.

STATE LAND

						Humble Oil & Ref. Co.		
37-A	T-18-S, R-27-E Sec. 16: NW <sub>1</sub> NW <sub>4</sub> <sup>1</sup> , N <sub>2</sub> SW <sub>4</sub> <sup>1</sup>	120.00	2029 12-17-24	State 12 $\frac{1}{2}$ %	W. R. Atkinson Nearburg & Ingram Tela Corporation	.015625 .007812 .011719	Humble Oil & Ref. Co.	Humble Oil & Ref. Co.
	R. J. St. Germain Rebel Oil Company				R. J. St. Germain Rebel Oil Company	.011719 .007812 .007815		
	J. Hiram Moore Blanche Widaman				J. Hiram Moore Blanche Widaman	.015625 .010418		
	Stanley Carper Marshall Rowley				Stanley Carper Marshall Rowley	.005208		
	Robert E. Boling Tracy Clark				Robert E. Boling Tracy Clark	.008333		
	Losee & Stewart				Losee & Stewart	.014583		
38.	T-17-S, R-27-E Sec. 32: SE <sub>1</sub> SW <sub>4</sub> <sup>1</sup>	40.00	B-6869 1-28-37	State 12 $\frac{1}{2}$ %	Rose F. Wilson Fred Brainard Estate H. A. Keinath	.062800 to .041666 .041666	Humble Oil & Ref. Co.	Humble Oil & Ref. Co.
	Howard Whitson (Less Sliding Scale Royalty of Rose F. Wilson)				Howard Whitson (Less Sliding Scale Royalty of Rose F. Wilson)			
39.	T-17-S, R-27-E Sec. 32: NW <sub>1</sub> SW <sub>4</sub> <sup>1</sup>	40.00	B-6869 1-28-37	State 12 $\frac{1}{2}$ %	C. F. Borton & Elva M. Borton	.125000	Humble Oil & Ref. Co.	Humble Oil & Ref. Co.
40.	T-17-S, R-27-E Sec. 32: NW <sub>1</sub> SE <sub>4</sub> <sup>1</sup>	40.00	B-8318 9-11-39	State 12 $\frac{1}{2}$ %	William Spurck & Vada Spurck	.125000	Humble Oil & Ref. Co.	Humble Oil & Ref. Co.
41.	T-17-S, R-27-E Sec. 32: NE <sub>1</sub> NW <sub>4</sub> <sup>1</sup> , NE <sub>4</sub> SE <sub>4</sub> <sup>1</sup>	80.00	B-8814 9-10-40	State 12 $\frac{1}{2}$ %	F. D. Shufflebarger & Leah Shufflebarger \$750 per acre out of 5% up to \$90,000.00	Humble Oil & Ref. Co.	Humble Oil & Ref. Co.	Humble Oil & Ref. Co.
42.	T-17-S, R-27-E Sec. 32: SW <sub>1</sub> SW <sub>4</sub> <sup>1</sup>	40.00	B-9391 11-10-41	State 12 $\frac{1}{2}$ %	Fred Turner, Jr.	.062500	Humble Oil & Ref. Co.	Humble Oil & Ref. Co.

43.	<u>T-17-S, R-27-E</u> Sec. 32: <u>SW<sub>1/4</sub>SE<sub>1/4</sub></u>	40.00 B-10288 5-10-43	State 12½%	Humble Oil & Ref. Co. Clyde Guy & Sons, Inc. Kate G. Lowrey	.062500 .031250 .031250
44.	<u>T-18-S, R-27-E</u> Sec. 16: <u>SW<sub>1/4</sub>NW<sub>1/4</sub></u>	40.00 B-10456 7-10-43	State 12½%	Hondo Oil & Gas Co.	
45.	<u>T-17-S, R-27-E</u> Sec. 32: <u>SE<sub>1/4</sub>NE<sub>1/4</sub></u>	40.00 B-11339 7-10-44	State 12½%	Humble Oil & Ref. Co. Robert E. McKee, General Contractor, Inc.	.050000 Humble Oil & Ref. Co.
46.	None			Continental Oil Co.	
47.	<u>T-18-S, R-27-E</u> Sec. 16: <u>SW<sub>1/4</sub>NW<sub>1/4</sub></u>	40.00 E-1049 10-10-46	State 12½%	Continental Oil Co.	
48.	<u>T-18-S, R-27-E</u> Sec. 16: <u>NE<sub>1/4</sub>NW<sub>1/4</sub></u> , SW <sub>1/4</sub> SW <sub>1/4</sub>	80.00 E-3635 6-10-50	State 12½%	Gulf Oil Corporation	
49.	<u>T-17-S, R-27-E</u> Sec. 32: <u>N<sub>2</sub>NE<sub>1/4</sub></u>	80.00 E-5313 6-11-51	State 12½%	Gulf Oil Corporation	
50.	<u>T-17-S, R-27-E</u> Sec. 32: <u>SW<sub>1/4</sub>NE<sub>1/4</sub></u> , SE <sub>1/4</sub> SE <sub>1/4</sub>	80.00 E-7663 12-15-53	State 12½%	Humble Oil & Ref. Co.	
51.	<u>T-18-S, R-27-E</u> Sec. 16: <u>SE<sub>1/4</sub>SW<sub>1/4</sub></u>	40.00 E-7879 3-16-54	State 12½%	Pan American Pet. Corp.	
52.	<u>T-17-S, R-27-E</u> Sec. 32: <u>NW<sub>1/4</sub>NW<sub>1/4</sub></u> , S <sub>1/2</sub> NW <sub>1/4</sub>	120.00 E-8271 6-15-54	State 12½%	Humble Oil & Ref. Co. John M. Kelly	.062500 Humble Oil & Ref. Co.

52-A. T-17-S, R-27-E  
Sec. 32: NE<sub>4</sub> SW<sub>4</sub><sup>1</sup>

40.00      E-9719  
1-17-56      State  
                12 $\frac{1}{2}$ %

Humble Oil  
& Ref. Co.

16 State of New Mexico Tracts, containing 960.00 acres, or 12.778% of Unit Area

<u>FEE LAND</u>								
53.	T-18-S, R-27-E Sec. 20: S $\frac{1}{2}$ SW $\frac{1}{4}$	80.00	Fee 1-19-54 5-16-55 1-19-54 (3 leases)	Arthur B. Kaiser & Erma Kaiser B. F. Kaiser, Jr. & Reatha Kaiser Clarence D. Kaiser & Joan Kaiser G. E. Kaiser & Vera L. Kaiser B. F. Kaiser J. R. Miller & Gertrude Miller Harvey E. Yates & Louis D. Yates Martin Yates III, & Lillie Yates S. P. Yates & Estelle H. Yates S. P. Yates, Trustee John Ashby Yates	1/10 1/10 1/10 1/10 1/10 1/4 1/16 1/16 1/16 1/32 1/32	Humble Oil & Ref. Co.	Oil & Ref. Co.	None
54.	T-18-S, R-27-E Sec. 20: E $\frac{1}{2}$ W $\frac{1}{4}$ NW $\frac{1}{4}$	20.00	Fee 1-19-54	Arthur B. Kaiser Ben F. Kaiser, Jr. & Reatha Kaiser Clarence D. Kaiser & Joan Kaiser G. E. Kaiser & Vera L. Kaiser B. F. Kaiser	1/5 1/5 1/5 1/5 1/5	Humble Oil & Ref. Co.	Oil & Ref. Co.	None
55.	T-18-S, R-27-E Sec. 20: N $\frac{1}{2}$ W $\frac{1}{4}$ NW $\frac{1}{4}$ of SE $\frac{1}{4}$	5.00	Fee 1-20-54	Erma R. White & C. L. White	All	Humble Oil & Ref. Co.	Oil & Ref. Co.	None
56.	T-18-S, R-27-E Sec. 20: S $\frac{1}{2}$ W $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$	5.00	Fee 1-20-54	Francis Wailes Wooldridge Mary M. Merchant Robert B. Culpepper Charles C. Culpepper A. L. Culpepper Letha Culpepper Johnnie Lee McCauley Sue C. Walden	1/2 1/10 1/10 1/10 1/40 3/80 3/80	Humble Oil & Ref. Co.	Oil & Ref. Co.	None

57.	T-18-S, R-27-E Sec. 20: $\frac{NW_4}{N_2} SW_4 NW_4$ , $\frac{NW_4}{N_2} SW_4 SW_4 NW_4$	15.00 Fee 1-20-54	J. Hiram Moore	All Humble Oil & Ref. Co.	Humble Oil & Ref. Co.
58.	T-18-S, R-27-E Sec. 20: $E_2^2 NW_4 SE_4^1$ , $SW_4^1 NW_4^1 SE_4^1$ , $S_2^1 NW_4^1 NW_4^1 SE_4^1$	35.00 Fee 1-19-54	B. F. Kaiser Arthur B. Kaiser & Erma Kaiser Clarence D. Kaiser & Joan Kaiser B. F. Kaiser, Jr. & Reatha Kaiser G. E. Kaiser & Vera L. Kaiser	1/5 1/5 1/5 1/5 1/5	Humble Oil & Ref. Co.
59.	T-18-S, R-27-E Sec. 20: $NE_4^1 SE_4^1$	40.00 Fee 9-21-54	Arthur B. Kaiser & Erma Kaiser B. F. Kaiser, Jr. & Reatha Kaiser Clarence D. Kaiser & Joan Kaiser G. E. Kaiser & Vera L. Kaiser B. F. Kaiser Len R. Ogden Lucky Wright Royalty Syndicate J. R. Miller	15/160 1/10 1/10 1/10 1/10 1/4 1/4 1/16	Humble Oil & Ref. Co.
60.	T-18-S, R-27-E Sec. 20: $SW_4^1 SE_4^1$	40.00 Fee	Ownership diverse - (Fairchild Farm Tracts)	Not under lease	
61.	T-18-S, R-27-E Sec. 20: $N_2^1 SW_4^1$	80.00 Fee 9-21-54	Arthur B. Kaiser et ux* (*Subject to 10 year term Royalty of 6/512 under $NE_4^1 SW_4^1$ & 5/512 under $NW_4^1 SW_4^1$ in W. R. Stickman & 16/512 under tract in J. Hiram Moore) B. F. Kaiser et ux G. E. Kaiser et ux*	1/5 1/5 1/5 1/5 1/5	Humble Oil & Ref. Co.

62.	<u>T-18-S, R-27-E</u> Sec. 7: <u>SW<math>\frac{1}{4}</math>SE<math>\frac{1}{4}</math>, W<math>\frac{1}{2}</math>NNW<math>\frac{1}{4}</math>SE<math>\frac{1}{4}</math>,</u> <u>SE<math>\frac{1}{4}</math>NNW<math>\frac{1}{4}</math>SE<math>\frac{1}{4}</math></u>	70.00	Fee 10-30-47	Birdie Kaiser Peterson, Admx. of the Estate of A.A. Kaiser, deceased	All	Humble Oil & Ref. Co.	Weier Drilling Company et al	.125000	Humble Oil & Ref. Co.
63.	<u>T-18-S, R-27-E</u> Sec. 7: <u>NE<math>\frac{1}{4}</math>NNW<math>\frac{1}{4}</math>SE<math>\frac{1}{4}</math></u>	10.00	Fee 10-30-47	Birdie Kaiser Peterson, Admx. of the Estate of A.A. Kaiser, deceased	All	Humble Oil & Ref. Co.	Humble Oil & Ref. Co.	None	Humble Oil & Ref. Co.
64.	<u>T-18-S, R-27-E</u> Sec. 6: <u>Lot 7</u>	40.43	Fee 4-11-57	Hondo Oil & Gas Co. William Stirling, Jr. & Valeria Stirling	7/8 1/8	Not under lease Hondo Oil & Gas Co.	Hondo Oil & Gas Co.	None	Hondo Oil & Gas Co.
65.	<u>T-17-S, R-27-E</u> Sec. 31: <u>Lot 1</u>	39.61	Fee	Hal Bogle Leon Williams	1/2 1/2	Not under lease			
66.	<u>T-17-S, R-27-E</u> Sec. 29: <u>W<math>\frac{1}{2}</math>NNW<math>\frac{1}{4}</math>NE<math>\frac{1}{4}</math></u>	10.00	Fee 12-14-55	B. R. Gorman	All	Humble Oil & Ref. Co.	Humble Oil & Ref. Co.	None	Humble Oil & Ref. Co.
67.	<u>T-17-S, R-27-E</u> Sec. 29: <u>E<math>\frac{1}{2}</math>NNW<math>\frac{1}{4}</math>NE<math>\frac{1}{4}</math></u>	10.00	Fee	Frank Watkins & Billie Watkins Marvin R. Jackson & Avis Jackson	1/2 1/2	Not under lease			
68.	<u>T-17-S, R-27-E</u> Sec. 29: <u>E<math>\frac{1}{2}</math>NNW<math>\frac{1}{4}</math>NE<math>\frac{1}{4}</math></u>	20.00	Fee 3-5-56	Frank Watkins & Billie Watkins	All	Humble Oil & Ref. Co.	Humble Oil & Ref. Co.	None	Humble Oil & Ref. Co.
69.	<u>T-17-S, R-27-E</u> Sec. 29: <u>NE<math>\frac{1}{4}</math>NE<math>\frac{1}{4}</math></u>	40.00	Fee 2-25-54	Eva Huffman Morris Ellen Huffman	3/4 1/4	Humble Oil & Ref. Co.	J. E. Bedingfield Bob Johnson	.050000 .050000	Humble Oil & Ref. Co.

70.	<u>T-17-S, R-27-E</u> Sec. 28: <u>SW<sub>1/4</sub>NW<sub>1/4</sub></u>	40.00	Fee <u>2-25-54</u>	Trustees of the Church of the Nazarene, Artesia, New Mexico	All	Humble Oil & Ref. Co.	J. E. Bedingfield Bob Johnson	.050000 .050000	Humble Oil & Ref. Co.
71.	<u>T-18-S, R-27-E</u> Sec. 21: <u>N<sub>2</sub>SW<sub>1/4</sub>, SE<sub>1/4</sub>NW<sub>1/4</sub></u>	120.00	Fee	Hal Bogle Leon Williams Midwest Investment Company	1/4 1/4 1/2	Not under lease			

19 Fee Tracts containing 720.04 acres, or 9.534% of Unit Area

Total 76 Tracts, containing 7,512.92 acres, Chalk Bluff Draw  
Unit Area, Eddy County, New Mexico

EXHIBIT "B"

PARTICIPATION - INITIAL PARTICIPATING AREA - PENNSYLVANIAN (BEND) GAS  
CHALK BLUFF DRAW UNIT  
EDDY COUNTY, NEW MEXICO  
FROM JULY 23, 1956 TO FEBRUARY 1, 1958

Tract No. Participating Acreage Description

Lease Number, Lessee of Record, and Date of Lease	Participating Acreage	Description
LC-026874 (e) Humble Oil & Ref. Co. 20 year - 5% ** Dated 5-16-31 (Exchange Lease No. LC-026874 (e) Dated 2-1-60 Schedule "C") ****	121	Sec. 5: Lot 3, SE 1/4 NWT, NE 1/4 SW 1/4

Tract No.	Participating Acreage	Description	Participation by Percentages (See Note 2.)		
			Ownership	Participation by Percentages (See Note 2.)	Area
4.	T-18-S, R-27-E		USA	.050000	.00933620
			Humble Oil & Ref. Co.	.825000	.15503730
			Higgins Trust, Inc.	.013750	.00258395
			Nora B. Clayton	.002500	.00046981
			Winnie Ruth Clayton	.000625	.00011746
			Eula Bee Stoldt	.000375	.00007047
			Vernon E. Clayton	.000375	.00007047
			J. A. Clayton, Jr.	.000375	.00007047
			Leon J. Clayton	.000375	.00007047
			Pauline J. Peoples	.000375	.00007047
			H. G. Watson	.005157	.00096893
			A. W. Adkisson	.018750	.00352356
			Lois Burnett	.010000	.00187924
			Childress Royalty Co.	.017188	.00323004
			Fred Brainard Estate	.005157	.00096893
			Clyde Guy & Sons, Inc.	.010763	.00202263
			V. S. Welch	.017767	.00333868
			Harvey Yates	.000940	.00017665
			S. P. Yates	.000940	.00017665
			Martin Yates	.000940	.00017665
			John Ashby Yates	.000940	.00017665
			James R. Evarts	.001388	.00026102
			Gladys Evarts, Gdn.	.001388	.00026102
			Berda Montgomery	.001388	.00026102
			Beatrice Caywood	.001388	.00026102
			Anita Britain	.000464	.00008719
			Irene Evarts	.000464	.00008719
			Robert Evarts	.000464	.00008719
			<b>Total</b>	<b>1.000000</b>	<b>.18792400</b>

8. T-18-S, R-27-E  
Sec. 5: Lot 4, SW $\frac{1}{4}$ NW $\frac{1}{4}$ ,  
SW $\frac{1}{4}$ SE $\frac{1}{4}$ , NW $\frac{1}{4}$ SW $\frac{1}{4}$

LC-049648 (a)  
Humble Oil & Ref. Co.  
Dated 5-1-51  
(10 year Renewal  
Schedule "C") \*

Basic Royalty  
Working Interest  
Overriding Royalty

USA	.125000
Humble Oil & Ref. Co.	.750000
Childress Royalty Co.	.017188
H. G. Watson	.005154
Higgins Trust, Inc.	.013751
Fred Brainard Estate	.083907
Nora B. Clayton	.002500
Winnie Ruth Clayton	.000625
Eula Bee Stoldt	.000375
Vernon E. Clayton	.000375
J. A. Clayton, Jr.	.000375
Leon J. Clayton	.000375
Pauline J. Peoples	.000375
Total	<u>.18803200</u>

Note: Overriding royalty suspension varies  
with production. Different amounts  
suspended on gas production.

11. T-18-S, R-27-E  
Sec. 5: E $\frac{1}{2}$ SE $\frac{1}{4}$ , S $\frac{1}{2}$ SW $\frac{1}{4}$

LC-055383 (a)  
Hondo Oil & Gas Co.  
Dated 5-1-51  
(10 year Renewal  
Schedule "C") \*

Basic Royalty  
Working Interest  
Overriding Royalty

USA	.125000
Hondo Oil & Gas Co.	.750000
Fred Brainard Estate	.005156
Childress Royalty Co.	.017188
Higgins Trust, Inc.	.013751
Hondo Oil and Gas Co.	.050000
H. G. Watson	.005156
Lois Burnett	.028750
Nora B. Clayton	.002500
Winnie Ruth Clayton	.000625
Eula Bee Stoldt	.000375
Vernon E. Clayton	.000375
J. A. Clayton, Jr.	.000375
Leon J. Clayton	.000375
Pauline J. Peoples	.000375
Total	<u>.24849300</u>

Note: Overriding royalty suspension varies  
with production. Different amounts  
suspended on gas production.

121.07

Basic Royalty  
Working Interest  
Overriding Royalty

18. T-18-S, R-27-E  
Sec. 5: Lots 1, 2,  
S<sub>2</sub>N<sub>4</sub>E<sub>4</sub>

161.81      LC-064384  
Hondo Oil & Gas Co.  
Dated 2-1-46  
(Non-competitive-  
Step Scale) \*\*\*

Basic Royalty  
Working Interest  
Overriding Royalty

Mildred Crane Hudson      Total  
.03141300      .125000  
.21235188      .845000  
.00502608      .020000  
.00251304      .010000  
**.25130400**      **1.000000**

20. T-18-S, R-27-E  
Sec. 5: W<sub>2</sub>S<sub>3</sub>E<sub>4</sub>

80      LC-065600  
Humble Oil & Ref. Co.  
Dated 9-1-47  
(5 year Competitive  
Schedule "B") \*\*\*

Basic Royalty  
Working Interest  
Overriding Royalty

Lillie Mae Yates      Total  
.01553087      .125000  
.09318526      .750000  
.00258856      .020834  
.00517687      .041666  
.00517687      .041666  
.00258857      .020834  
**.12424700**      **1.000000**

1. Note: \* Royalty on Pennsylvanian (Bend) production fixed at 12½% pursuant to 43 CFR 192.82 (3) III.  
\*\* 5% royalty effective until 2-1-60.  
\*\*\* Royalty not fixed at 12½%. Competitive lease, Schedule "B" effective.  
\*\*\*\* Royalty on all production fixed at 12½% pursuant to 43 CFR 192.82 (3) I.
2. Note: Overriding royalties may in certain instances be reduced pursuant to 43 CFR 192.83.

R E C A P I T U L A T I O N

<u>Tract No.</u>	<u>Participating</u>	<u>Acreage</u>	<u>Percentage of</u> <u>Participation</u>
4		121	.187924
8		121.07	.188032
11		160	.248493
18		161.81	.251304
20		80	.124247
<b>5 Tracts</b>	<b>643.88</b>		<b>1.00</b>



11. T-18-S, R-27-E  
Sec. 5: ~~E 1/2~~  
~~SW 1/4~~, S 1/2 SW 1/4

160

C-055383 (a)  
Hondo Oil & Gas Co.  
Dated 5-1-51  
(10 year renewal  
Schedule "C") (Note 2)

USA

	Basic Royalty	Working Interest	Overriding Royalty
Hondo Oil & Gas Company	.125000	.750000	
Fred Brainard Estate	.005156	.0064255	
Childress Royalty Company	.017188	.0214203	
Higgins Trust, Inc.	.013750	.00171456	
Hondo Oil & Gas Company	.050000	.00623116	
H. G. Watson	.005156	.0064255	
Lois Burnett	.028750	.00358290	
Nora B. Clayton	.002500	.000331156	
Winnie Ruth Clayton	.000625	.00007789	
Eula Bee Stoldt	.000375	.00004674	
Vernon E. Clayton	.000375	.00004674	
J. A. Clayton, Jr.	.000375	.00004673	
Leon J. Clayton	.000375	.00004673	
Pauline J. Peoples	.000375	.00004673	
Total	1.000000	.12462300	

	Basic Royalty	Working Interest	Overriding Royalty
Hondo Oil & Gas Company	.125000	.09346726	
Mildred Crane Hudson	.125000	.01557787	
Total	1.000000	.12462300	

	Basic Royalty	Working Interest	Overriding Royalty
Hondo Oil & Gas Company	.125000	.845000	
Carlos L. Carter	.020000	.00252066	
Mildred Crane Hudson	.010000	.00126034	
Total	1.000000	.12603300	

	Basic Royalty	Working Interest	Overriding Royalty
Humble Oil & Refining Co.	.125000	.01557787	
Mildred Crane Hudson	.125000	.09346726	
Total	1.000000	.12462300	

	Basic Royalty	Working Interest	Overriding Royalty
Hondo Oil & Gas Co.	.125000	.01557787	
Dated 2-1-46	.020000	.10649788	
(Non-Competitive Step Scale) (Note 5)	.010000	.00252066	
Total	1.000000	.12603300	

161

T-18-S, R-27-E  
Sec. 9: ~~NW 1/4~~

160

MM-031186  
Humble Oil & Refining  
Company  
Dated 7-11-34  
(20 year "B" - Sliding  
Scale)  
(Relief to 11-10-61)  
(Note 4)

	Basic Royalty	Working Interest	Overriding Royalty
Humble Oil & Refining Co.	.125000	.750000	
Mildred Crane Hudson	.125000	.01557787	
Total	1.000000	.12462300	

	Basic Royalty	Working Interest	Overriding Royalty
Hondo Oil & Gas Company	.125000	.845000	
Carlos L. Carter	.020000	.00252066	
Mildred Crane Hudson	.010000	.00126034	
Total	1.000000	.12603300	

	Basic Royalty	Working Interest	Overriding Royalty
Hondo Oil & Gas Company	.125000	.09346726	
Mildred Crane Hudson	.125000	.01557787	
Total	1.000000	.12462300	

	Basic Royalty	Working Interest	Overriding Royalty
Hondo Oil & Gas Company	.125000	.020000	
Mildred Crane Hudson	.010000	.00126034	
Total	1.000000	.12603300	

20.	T-18-S, R-27-E Sec. 5: NW <sub>4</sub> SE <sub>4</sub>	80	LC-065600 Humble Oil & Refining Company Dated 9-1-47 (5 year Competitive Schedule "B") (Note 6)	<u>Basic Royalty</u> <u>Working Interest</u> <u>Overriding Royalty</u>	USA Humble Oil & Refining Co. Lillie Mae Yates William Hudson Don Angle Francis Nix Total	.00778887 .04673326 .00129818 .020834 .00259625 .00259626 .00129818 .06231100
26.	T-18-S, R-27-E Sec. 8: SW <sub>4</sub> SE <sub>4</sub>	80	LC-070678 (a) Hondo Oil & Gas Co. Dated 1-1-40 (20 year - 5%) (Renewal Lease Dated 1-1-60 Schedule "C") (Note 7) (Note 2)	<u>Basic Royalty</u> <u>Working Interest</u> <u>Overriding Royalty</u>	USA Hondo Oil & Gas Company Hondo Oil & Gas Company Mildred Crane Hudson Higgins Trust, Inc. Total	.00311555 .050000 .825000 .050000 .060937 .00379706 .014063 .00087627 .06231100
28.	T-18-S, R-27-E Sec. 9: SW <sub>4</sub>	160	LC-070938 Hondo Oil & Gas Co. Dated 7-11-34 (20 year "B" - Sliding Scale - Relief to 11-10-61) (Note 5)	<u>Basic Royalty</u> <u>Working Interest</u> <u>Overriding Royalty</u>	USA Hondo Oil & Gas Company Hondo Oil & Gas Company Total	.125000 .825000 .050000 .12462300
32.	T-18-S, R-27-E Sec. 8: NW <sub>4</sub> SE <sub>4</sub>	40	NM-04175 (c) Humble Oil & Refining Company Dated 1-1-40 20 year - 5% (Exchange Lease No. NM-04175 (c) Dated 1-1-60 Schedule "C") (Note 7) (Note 5)	<u>Basic Royalty</u> <u>Working Interest</u> <u>Overriding Royalty</u>	USA Humble Oil & Refining Co. Higgins Trust, Inc. Mildred Crane Hudson Total	.050000 .750000 .014063 .185937 .00043813 .00579287 .03115500

33. T-18-S, R-27-E  
Sec. 8: NE<sub>1</sub>SE<sub>1</sub>

40

MM-04175 (a)  
Mildred Crane Hudson  
Dated 1-1-40  
(20 year - 5% - Re-  
newal Lease Dated  
1-1-60, Schedule "C")  
(Note 7) (Note 2)

Basic Royalty  
Working Interest  
Overriding Royalty

Total

USA	.050000	.00155775
Hondo Oil & Gas Company	.905937	.02822446
Higgins Trust, Inc.	.014063	.00043814
Mildred Crane Hudson	.030000	.00093465
Total	1.000000	.3315500

Note:

1. 5% royalty effective until 2-1-60.
2. Royalty on Pennsylvanian (Bend) gas production fixed at  $12\frac{1}{2}\%$  pursuant to 43 CFR 192.82 (3) III.
3. Royalty on production from NW<sub>1</sub>NE<sub>1</sub><sup>1</sup> and SE<sub>1</sub>NE<sub>1</sub><sup>1</sup> Section 8, fixed at  $12\frac{1}{2}\%$  (43 CFR 192.82 (3) I.  
Royalty on Pennsylvanian (Bend) gas production from NE<sub>1</sub>NE<sub>1</sub><sup>1</sup> Section 8, fixed at  $12\frac{1}{2}\%$  (43 CFR 192.82 (3) III.  
Royalty on other production from NE<sub>1</sub>NE<sub>1</sub><sup>1</sup> Section 8, on Schedule "D".
4. Royalty on Pennsylvanian (Bend) gas production fixed at  $12\frac{1}{2}\%$  (43 CFR 192.82 (3) III).  
Royalty on gas may be 5%, to be determined by the Department of the Interior.
5. Royalty on all production fixed at  $12\frac{1}{2}\%$  pursuant to 43 CFR 192.82 (3) I.
6. Competitive lease, royalty not fixed, Schedule "B" effective.
7. 5% royalty effective until 1-1-60.
8. Overriding royalties may in certain instances be reduced pursuant to 43 CFR 192.83.

<u>TRACT NO.</u>	<u>PARTICIPATING ACREAGE</u>	<u>PERCENTAGE OF PARTICIPATION</u>
4	121	.09424500
6	40	.03115500
8	121.07	.09430000
10	120	.09346600
11	160	.12462300
14	160	.12462300
18	161.81	.12603300
20	80	.06231100
26	80	.06231100
28	160	.12462300
32	40	.03115500
<b>TOTALS</b>	<b>33</b>	<b>.03115500</b>
	<b>12 Tracts</b>	<b>1.00</b>
		<b>1,283.88 acres</b>

**EXHIBIT "B-2"**

**PARTICIPATION - SECOND EXPANDED PARTICIPATING AREA - PENNSYLVANIAN (BEND) GAS**  
**CHALK BLUFF DRAW UNIT**  
**EDDY COUNTY, NEW MEXICO**  
**FROM JULY 1, 1959 UNTIL AGAIN REVISED**

Tract No.	Participating Acreage Description	Participating Acreage	Lease Number, Lessee of Record, and Date of Lease	Participation by Percentages (See Note 8.)	
				Ownership	Tract Area
4.	T-18-S, R-27-E Sec. 5: Lot 3, NE $\frac{1}{4}$ SW $\frac{1}{4}$ , SE $\frac{1}{4}$ NW $\frac{1}{4}$ ,	121	LC-026874 (e) Humble Oil & Ref. Co. 20 year - 5% Dated 5-16-31 (Note 1.) (Exchange Lease No. LC-026874 (e) Dated 2-1-60 Schedule "C") (Note 5.)	Basic Royalty Working Interest Overriding Royalty	USA Humble Oil & Ref. Co. Higgins Trust, Inc. Nora B. Clayton Winnie Ruth Clayton Eula Bee Stoldt Vernon E. Clayton J. A. Clayton, Jr. Leon J. Clayton Pauline J. Peoples H. G. Watson A. W. Adkisson Lois Burnett Childress Royalty Co. Fred Brainard Estate Fred Brainard Estate Clyde Guy & Sons, Inc. V. S. Welch Harvey Yates S. P. Yates Martin Yates John Ashby Yates James R. Everts Gladys Everts, Gdn. Berda Montgomery Beatrice Caywood Anita Britain

Irene Everts	.000464	.0000291826
Robert Everts	.000464	.0000291826
<b>Total</b>	<b>1.000000</b>	<b>.0628937300</b>

\* Effective on 2-1-60, 5% royalty increases to  
12½%, participation will become:

USA		
<u>Humble Oil &amp; Ref. Co.</u>		
	.125000	.0078617162
	.750000	.0471702975

USA		
<u>Humble Oil &amp; Ref. Co.</u>		
	.125000	.0025989150
	.750000	.0155934900
Julian E. Simon	.105000	.0021830886
William O. Compton	.002500	.0000519783
Stewart O. Compton	.002500	.0000519783
Kenneth Compton	.002500	.0000519783
Louise Compton Duffield	.002500	.0000519783
Lillie Mae Yates	.005000	.0001039566
Mary Ann Berliner	.005000	.0001039566
<b>Total</b>	<b>1.000000</b>	<b>.0207913200</b>

USA		
<u>Humble Oil &amp; Ref. Co.</u>		
	.125000	.0078662650
	.750000	.0471975900
Childress Royalty Co.	.017188	.0010816429
H. G. Watson	.005154	.0003243418
Higgins Trust, Inc.	.013751	.0008653520
Fred Brainard Estate	.083907	.0052802775
Nora B. Clayton	.002500	.0001573254
Winnie Ruth Clayton	.000625	.0000393314
Eula Bee Stoldt	.000375	.0000235988
Vernon E. Clayton	.000375	.0000235988
J. A. Clayton, Jr.	.000375	.0000235988
Leon J. Clayton	.000375	.0000235988
Pauline J. Peoples	.000375	.0000235988
<b>Total</b>	<b>1.000000</b>	<b>.0629301200</b>

40

<u>Basic Royalty</u>	<u>Working Interest</u>	<u>Overriding Royalty</u>
LC-043894		
Humble Oil & Ref. Co.		
Dated 9-1-51		
(10 year Renewal		
Schedule "D")		
(Note 2.)		

6.

<u>Basic Royalty</u>	<u>Working Interest</u>	<u>Overriding Royalty</u>
LC-049648 (a)		
Humble Oil & Ref. Co.		
Dated 5-1-51		
(10 year Renewal		
Schedule "C")		
(Note 2.)		

8.

<u>Basic Royalty</u>	<u>Working Interest</u>	<u>Overriding Royalty</u>
T-16-S, R-27-E		
Sec. 5: Lot 4	SW $\frac{1}{4}$ NW $\frac{1}{4}$ ,	
Sec. 8: SW $\frac{1}{4}$ NE $\frac{1}{4}$	SW $\frac{1}{4}$ NW $\frac{1}{4}$ ,	
	SW $\frac{1}{4}$ SW $\frac{1}{4}$	

121.07

<u>Basic Royalty</u>	<u>Working Interest</u>	<u>Overriding Royalty</u>
LC-049648 (a)		
Humble Oil & Ref. Co.		
Dated 5-1-51		
(10 year Renewal		
Schedule "C")		
(Note 2.)		

<u>Basic Royalty</u>	<u>Working Interest</u>	<u>Overriding Royalty</u>
T-16-S, R-27-E		
Sec. 5: Lot 4	SW $\frac{1}{4}$ NW $\frac{1}{4}$ ,	
Sec. 8: SW $\frac{1}{4}$ NE $\frac{1}{4}$	SW $\frac{1}{4}$ NW $\frac{1}{4}$ ,	
	SW $\frac{1}{4}$ SW $\frac{1}{4}$	

Note: Overriding royalty suspension varies.  
Different amount suspended on gas production.

10. T-18-S, R-27-E  
Sec. 8: SW<sub>1</sub>E<sub>1</sub>, SE<sub>1</sub>NE<sub>1</sub>

120      LC-054205  
Hondo Oil & Gas Co.  
Dated 9-1-51  
(10 year Renewal)  
(Note 3.)

11. T-18-S, R-27-E  
Sec. 5: E<sub>1</sub>SE<sub>1</sub>, S<sub>1</sub>SW<sub>1</sub>

160      LC-055383 (a)  
Hondo Oil & Gas Co.  
Dated 5-1-51  
(10 year Renewal  
Schedule "C")  
(Note 2.)

USA  
Hondo Oil & Gas Co.  
Lillie Mae Yates  
Mary Ann Berliner  
Total  
1.000000

USA  
Hondo Oil & Gas Co.  
Fred Brainard Estate  
Childress Royalty Co.  
Higgins Trust, Inc.  
Hondo Oil & Gas Co.  
H. G. Watson  
Lois Burnett  
Nora B. Clayton  
Winnie Ruth Clayton  
Eula Bee Stoldt  
Vernon E. Clayton  
J. A. Clayton, Jr.  
Leon J. Clayton  
Pauline J. Peoples  
Total  
1.000000

14. None - See Tract No. 37.

USA  
Hondo Oil & Gas Co.  
Carlos L. Carter  
Mildred Crane Hudson  
Total  
1.000000

USA  
Hondo Oil & Gas Co.  
Carlos L. Carter  
Mildred Crane Hudson  
Total  
1.000000

18. T-18-S, R-27-E  
Sec. 5: Lots 1, 2,  
S<sub>1</sub>NE<sub>1</sub>

161.81      LC-064384  
Hondo Oil & Gas Co.  
Dated 2-1-46  
(Non-competitive  
Step-Scale)  
(Note 5.)

USA  
Hondo Oil & Gas Co.  
Carlos L. Carter  
Mildred Crane Hudson  
Total  
1.000000

USA  
Hondo Oil & Gas Co.  
Carlos L. Carter  
Mildred Crane Hudson  
Total  
1.000000

20. T-18-S, R-27-E  
Sec. 5: W<sub>1</sub>SE<sub>1</sub>

80      LC-065600  
Humble Oil & Ref. Co.  
Dated 9-1-47  
(5 year Competitive  
Schedule "B")  
(Note 6.)

USA  
Humble Oil & Ref. Co.  
Lillie Mae Yates  
William Hudson  
Don Angle  
Francis Nix  
Total  
1.000000

USA  
Humble Oil & Ref. Co.  
Lillie Mae Yates  
William Hudson  
Don Angle  
Francis Nix  
Total  
1.000000

		<u>Basic Royalty</u>	<u>Working Interest</u>	<u>Overriding Royalty</u>
		USA Hondo Oil & Gas Co.		.050000*
		Hondo Oil & Gas Co.		.825000*
		Mildred Crane Hudson		.050000
		Higgins Trust, Inc.		.060937
		Total		.014063
				<u>.0005847767</u>
				<u>.0415826400</u>

\* Note: Effective 1-1-60, 5% royalty increases to 12 1/2%, percentages of participation will then be:

		<u>Basic Royalty</u>	<u>Working Interest</u>	<u>Overriding Royalty</u>
		USA Hondo Oil & Gas Co.		.125000
		Hondo Oil & Gas Co.		.750000
		Mildred Crane Hudson		.825000
		Higgins Trust, Inc.		.050000
		Total		<u>1.000000</u>
				<u>.0831652700</u>

		<u>Basic Royalty</u>	<u>Working Interest</u>	<u>Overriding Royalty</u>
		USA Hondo Oil & Gas Co.		.125000
		Hondo Oil & Gas Co.		.825000
		Mildred Crane Hudson		.050000
		Higgins Trust, Inc.		<u>.0041582636</u>
		Total		<u>1.000000</u>
				<u>.0831652700</u>

\* Note: By contract agreement between parties.

		<u>Basic Royalty</u>	<u>Working Interest</u>	<u>Overriding Royalty</u>
		USA Humble Oil & Ref. Co.*		.125000
		Hondo Oil & Gas Co.*		.670313
		Mildred Crane Hudson		.154687
		Total		<u>.050000</u>
				<u>.0031186976</u>
				<u>.0623739500</u>

\* Note: Effective 1-1-60, 5% royalty increases to 12 1/2%. Working interest remains at 75%, difference is subtracted from overriding royalty. Percentages of participation will be:

26. T-18-S, R-27-E  
Sec. 8: S<sub>2</sub>SE<sub>4</sub>

80      LC-070678 (a)  
Hondo Oil & Gas Co.  
Dated 1-1-40  
(20 year - 5%)  
(Renewal Lease  
Dated 1-1-60  
Schedule "C")  
(Note 7., Note 2.)

160      LC-070938  
Hondo Oil & Gas Co.  
Dated 7-11-34  
(20 year "B" Sliding  
Scale) (Relief to  
11-10-61) (Note 5.)

120      NM-C758  
Hondo Oil & Gas Co.  
20 year "B" Sliding  
Scale  
Dated 1-1-40  
Relief to 12-1-61  
(Note 5.)

29. T-18-S, R-27-E  
Sec. 17: E<sub>2</sub>NW<sub>4</sub><sup>1</sup>, SW<sub>4</sub>SE<sub>4</sub><sup>1</sup>  
NM-C4175 (c)  
Humble Oil & Ref. Co.  
20 year - 5% Dated  
1-1-40 (Exchange  
Lease NM-04175 (c)  
Dated 1-1-60  
Schedule "C")  
(Note 5., Note 7.)

40      NM-C4175 (c)  
Humble Oil & Ref. Co.  
20 year - 5% Dated  
1-1-40 (Exchange  
Lease NM-04175 (c)  
Dated 1-1-60  
Schedule "C")  
(Note 5., Note 7.)

USA	.125000	.0025989151
Humble Oil & Ref. Co.	.750000	.0155934900
Mildred Crane Hudson	.110937	.0023065266

33. T-18-S, R-27-E  
Sec. 8: NE<sub>4</sub> SE<sub>4</sub>

MM-04175 (a)  
Mildred Crane Hudson  
Dated 1-1-40  
(20 year - 5% Renewal  
Lease Dated 1-1-60  
Schedule "C")  
(Note 2., Note 7.)

40

34 (C). T-13-S, R-27-E  
Sec. 17: NE<sub>4</sub> NE<sub>4</sub>, SW<sub>4</sub> NW<sub>4</sub>,  
E<sub>2</sub> SW<sub>4</sub>, SE<sub>4</sub> SE<sub>4</sub>

34 (D). T-18-S, R-27-E  
Sec. 17: NW<sub>4</sub> NE<sub>4</sub>, NW<sub>4</sub> NW<sub>4</sub>,  
W<sub>2</sub> SW<sub>4</sub>

200

34 (E). T-18-S, R-27-E  
Sec. 17: S<sub>2</sub> NE<sub>4</sub>

160

USA	.050000*	.0010395660*
Hondo Oil & Gas Co.	.905937*	.0188356260*
Higgins Trust, Inc.	.014063	.0002923883
Mildred Crane Hudson	.030000	<u>.0006237397</u>
Total	<u>1.000000</u>	.0207913200

\* Note: Effective 1-1-60, 5% royalty increases  
to 12 $\frac{1}{2}$ %.  
Percentages of participation  
will then be:

USA	.125000	.0025989150
Hondo Oil & Gas Co.	.830937	.0172762770

USA	.125000	.0129945725
Humble Oil & Ref. Co.*	.6093750	.0633485409
Hondo Oil & Gas Co.*	.1406250	.0146188941
Mildred Crane Hudson	.125000	<u>.0129945725</u>
Total	<u>1.0000000</u>	.1039565800

\* Note: By contract agreement between parties.

USA	.125000	.0129945725
Humble Oil & Ref. Co.*	.6093750	.0506788365
Hondo Oil & Gas Co.*	.1406250	.0116951161
Julian E. Simon	.125000	<u>.0103956587</u>
Total	<u>1.0000000</u>	.0831652700

\* Note: By contract agreement between parties.

USA	.125000	.0051978300
Humble Oil & Ref. Co.*	.6093750	.0253394212
Hondo Oil & Gas Co.*	.1406250	.0058475588
Julian E. Simon	.062500	.0025989250
Nearburg & Ingram	.015625	.0006497287
R. J. St. Germain	.023438	.0009746139
Tela Corporation	.023437	<u>.0009745724</u>
Total	<u>1.0000000</u>	.0415826400

\* Note: By contract agreement between parties.

34 (F). T-18-S, R. 27-E  
Sec. 17: NW $\frac{1}{4}$  SE $\frac{1}{4}$

80  
NM-04175 (b)  
Humble Oil & Ref. Co.  
(Same as Tract 34 (c).

Basic Royalty  
Working Interest  
Overriding Royalty

USA	.125000	.0051978287
Humble Oil & Ref. Co.*	.6093750	.0253394152
Hondo Oil & Gas Co.*	.1406250	.0058475573
Mildred Crane Hudson	.062500	.0025989143
Nearburg & Ingram	.015625	.0006497286
R. J. St. Germain	.023437	.0009745721
Tela Corporation	.023438	.0009746138
Total	<u>1.0000000</u>	<u>.0415826300</u>

\* Note: By contract agreement between parties.

USA	.125000	.0103956587
Humble Oil & Ref. Co.	.750000	.0623739526
Mildred Crane Hudson	.125000	.0103956587
Total	<u>1.000000</u>	<u>.0831652700</u>

160  
NM-031186  
Mildred Crane Hudson  
Humble Oil & Ref. Co.  
Dated 7-11-34  
(20 year "B" Sliding  
Scale) (Relief to  
11-10-61) (Note 4.)

USA	.125000	.0051978287
Humble Oil & Ref. Co.*	.6093750	.0253394152
Mildred Crane Hudson	.062500	.0025989143
Nearburg & Ingram	.015625	.0006497286
R. J. St. Germain	.023437	.0009745721
Tela Corporation	.023438	.0009746138
Total	<u>1.0000000</u>	<u>.0415826300</u>

Notes:

1. 5% royalty effective until 2-1-60.
2. Royalty on Pennsylvanian (Bend) gas production fixed at 12 $\frac{1}{2}\%$  pursuant to 43 CFR 192.82 (3) III.
3. Royalty on production from NW $\frac{1}{4}$ -NE $\frac{1}{4}$  and SE $\frac{1}{4}$ -NE $\frac{1}{4}$  Section 8, fixed at 12 $\frac{1}{2}\%$  (43 CFR 192.82 (3) I. Royalty on Pennsylvanian (Bend) gas production from NE $\frac{1}{4}$ -NE $\frac{1}{4}$  Section 8, fixed at 12 $\frac{1}{2}\%$  (43 CFR 192.82 (3) III. Royalty on other production from NE $\frac{1}{4}$ -NE $\frac{1}{4}$  Section 8, on Schedule "D".
4. Royalty on Pennsylvanian (Bend) gas production fixed at 12 $\frac{1}{2}\%$  (43 CFR 192.82 (3) III. Royalty on gas may be 5%, to be determined by the Department of the Interior.
5. Royalty on all production fixed at 12 $\frac{1}{2}\%$  (43 CFR 192.82 (3) I.
6. Competitive lease, royalty not fixed, Schedule "B" effective.
7. 5% royalty effective until 1-1-60
8. Overriding royalties may in certain instances be reduced pursuant to 43 CFR 192.83.

RECAPITULATION

<u>TRACT NO.</u>	<u>PARTICIPATING ACREAGE</u>	<u>PERCENTAGE OF PARTICIPATION</u>
4	121	.06289373
6	40	.02079132
8	121.07	.06293012
)	120	.06237395
10	160	.08316527
11	161.81	.08410608
18	80	.04158264
20	80	.04158264
26	160	.08316527
28	120	.06237395
29	40	.02079132
32	120	.06237395
33	40	.02079132
34(C)	200	.10395658
34(D)	160	.08316527
34(E)	80	.04158264
34(F)	80	.04158263
	<u>160</u>	<u>.08316527</u>
<u>17 Tracts</u>	<u>1923.88</u>	<u><u>1.00000000</u></u>

COPY

HUMBLE OIL & REFINING COMPANY

April 7, 1959

ATT  
763

In re: Plan of Development - 1959  
Chalk Bluff Draw Unit  
Eddy County, New Mexico

Mr. Murray E. Morgan  
Commissioner of Public Lands  
P. O. Box 791  
Santa Fe, New Mexico

Attention: Unit Supervisor, Mrs. Marian Rhea

Dear Sir:

I am enclosing herewith fully executed copy of Plan of Development for the Chalk Bluff Draw Unit for the year 1959. This instrument has now been approved by the United States Geological Survey and is being furnished for your permanent files.

Yours very truly,

Gene T. Oliver

GTO:ch

Encl.

cc: Mr. A. L. Porter, Secretary-Director  
New Mexico Oil Conservation Commission  
Mabry Hall  
Santa Fe, New Mexico

State of New Mexico

TELEPHONE

505-827-2748



Commissioner of Public Lands

September 14, 1973

ALEX J. ARMIJO  
COMMISSIONER

P. O. BOX 1148  
SANTA FE, NEW MEXICO

Exxon Corporation  
P. O. Box 1600  
Midland, Texas 79701

Re: Chalk Bluff Draw Unit  
AMENDMENT  
Eddy County, New Mexico

ATTENTION: Mr. L. H. Hahn

Gentlemen:

The Commissioner of Public Lands has this date approved the Amendment to the Chalk Bluff Draw Unit, Eddy County, New Mexico, eliminating all of the leasehold, royalty and other oil and gas interests within the following described lands insofar as they relate to the Abo Reef formation being unitized under the Empire Abo Unit Agreement, and insofar as such interests relate to any and all formations underlying the SE/4SW/4 of Section 4 and the NW/4, N/2SW/4, SE/4SW/4 Section 16, Township 18 South, Range 27 East.

Township 18 South, Range 27 East, N.M.P.M.

Section 4- SE/4SW/4 (Lot 18)  
Section 8- SE/4NE/4, E/2SE/4  
Section 9- W/2  
Section 16- NW/4, N/2SW/4, SE/4SW/4  
Section 17- NE/4NE/4, S/2NE/4, N/2SE/4, NE/4SW/4, SE/4NW/4

Please submit Revised Exhibits "A" and "B" to the Unit Agreement reflecting this elimination. Eventho, all State lands have been eliminated from the unit we would still like to have revised Exhibits "A" and "B" for our records.

This approval is subject to like approval by the United States Geological Survey. This amendment will become effective concurrently with the Empire Abo Unit Agreement becoming effective. Please advise when the USGS approves the amendment to ascertain the effective date.

Very truly yours,

RAY D. GRAHAM, Director  
Oil and Gas Department

AJA/RDG/s

cc: USGS-Roswell, New Mexico  
OCC- Santa Fe, New Mexico

Drawer 1857  
Roswell, New Mexico 88201

March 18, 1964

Humble Oil and Refining Company  
P. O. Box 1597  
Roswell, New Mexico

Attention: Mr. John S. Cron

Gentlemen:

Your 1964 plan of development for the Chalk Bluff Draw unit agreement, Eddy County, New Mexico, proposing no further development of the Abo and Pennsylvanian Sand formations, has been approved on this date. Said plan was approved by the Commissioner of Public Lands and the Oil Conservation Commission of the State of New Mexico on January 30 and February 6, 1964, respectively.

Five approved copies of the plan are enclosed.

Sincerely yours,

JOHN A. ANDERSON  
Regional Oil & Gas Supervisor

cc:

Washington (w/cy of plan)  
Artesia (w/cy of plan)  
NMOCC - Santa Fe (ltr. only)  
Com. of Pub. Lands - Santa Fe (ltr. only)

OIL CONSERVATION COMMISSION  
P. O. BOX 871  
SANTA FE, NEW MEXICO

XXXXXX 2088

February 6, 1964

Humble Oil & Refining Company  
P. O. Box 1597  
Roswell, New Mexico

Attention: Mr. John S. Cron

Re: 1964 Plan of Development  
Chalk Bluff Draw Unit,  
Eddy County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation has this date approved the 1964 Plan of Development for the Chalk Bluff Draw Unit, Eddy County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Eight approved copies of the application are returned herewith.

Very truly yours,

A. L. PORTER, Jr.,  
Secretary-Director

ALB/JMK/og  
cc: Commissioner of Public Lands - Santa Fe  
U. S. Geological Survey - Roswell

HUMBLE OIL & REFINING COMPANY  
SOUTHWEST REGION  
P. O. BOX 1597  
ROSWELL, NEW MEXICO

February 3, 1964

In re: Application for Plan of Development  
for Year 1964  
Chalk Bluff Draw Unit  
Eddy County, New Mexico

Director  
New Mexico Oil Conservation Commission  
Post Office Box 871  
Santa Fe, New Mexico

Dear Sir:

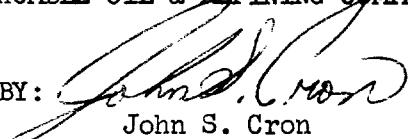
We are enclosing herewith nine copies of Application for Approval of Plan of Development for Chalk Bluff Draw Unit Area, which was approved by the Commissioner of Public Lands on January 30, 1964.

Upon your approval, please return eight copies to us for our transmittal to the United States Geological Survey.

Your early consideration of the enclosed application would be sincerely appreciated.

Yours very truly,

HUMBLE OIL & REFINING COMPANY

BY:   
John S. Cron

cc: Commissioner of Public Lands  
Attention: Mrs. Marian M. Rhea,  
Supervisor, Unit Division  
Post Office Box 1148  
Santa Fe, New Mexico

United States Geological Survey  
Post Office Drawer 1857  
Roswell, New Mexico

Encls.

JSC/mk

Humble Oil & Refining Company  
P. O. Box 1597  
Roswell, New Mexico

Re: Chalk Bluff Draw Unit  
Eddy County, New Mexico  
1964 Plan of Development

Attention: Mr. John S. Cron

Gentlemen:

The Commissioner of Public Lands approves as of January 30, 1964, your Plan of Development for the Calendar Year 1964 for the Chalk Bluff Draw Unit Area.

This Plan states that this Unit has been contracted back to the two participating areas and that no further development is contemplated in 1964 or succeeding years. Our approval is subject to changes which might occur in this area. Also subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are returning nine approved copies of this Plan of Development.

Very truly yours,

E. S. JOHNNY WALKER  
COMMISSIONER OF PUBLIC LANDS

BY:

(Mrs.) Marian M. Rhea, Supervisor  
Unit Division

ESW/mar/v

cc: Oil Conservation Commission

United States Geological Survey

January 20, 1964

In re: Application for Plan of  
Development for Year 1964  
Chalk Bluff Draw Unit  
Eddy County, New Mexico

Commissioner of Public Lands  
Post Office Box 791  
Santa Fe, New Mexico

ATTENTION: Mrs. Marian M. Rhea, Supervisor, Unit Division

Dear Sir:

We are enclosing herewith eleven copies of Application for Approval of Plan of Development for Chalk Bluff Draw Unit Area for calendar year 1964. This Plan of Development actually covers the year 1964 and succeeding years and, unless the Commissioner, the Director of the Oil Conservation Commission or the Director of United States Geological Survey have some objections, Humble Oil & Refining Company, as Unit Operator, does not contemplate filing any further plans of development for this unit.

Upon your approval of the enclosed application, please forward at least ten copies of this application to the Director, New Mexico Oil Conservation Commission, Post Office Box 871, Santa Fe, New Mexico, for his approval. With a copy of this letter to the Director of the Oil Conservation Commission, we are requesting that after his approval, he return at least nine copies to the attention of the undersigned for filing with the United States Geological Survey. We wish to thank you for your assistance in securing the Commissioner's approval of this Plan of Development. If there should be any questions regarding this matter, please let us know.

Yours very truly,

HUMBLE OIL & REFINING COMPANY

BY:

John S. Cron

JSC/mk  
Enclosures  
cc: Director  
New Mexico Oil Conservation Commission  
Post Office Box 871  
Santa Fe, New Mexico

Commissioner of Public Lands

-2-

January 20, 1964

cc: United States Geological Survey  
Post Office Drawer 1857  
Roswell, New Mexico

Gulf Oil Corporation  
Post Office Drawer 1938  
Roswell, New Mexico  
ATTENTION: Mr. Jack Cavanaugh

Pan American Petroleum Corporation  
Post Office Box 268  
Lubbock, Texas  
ATTENTION: Mr. Neil S. Whitmore

Continental Oil Company  
Post Office Box 1291  
Roswell, New Mexico  
ATTENTION: Mr. W. A. Mead

CHALK BLUFF DRAW UNIT AREA

EDDY COUNTY, NEW MEXICO

TO: Director  
New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

Commissioner of Public Lands of the  
State of New Mexico  
Santa Fe, New Mexico

Director  
United States Geological Survey  
Roswell, New Mexico

APPLICATION FOR APPROVAL OF PLAN OF DEVELOPMENT  
FOR CHALK BLUFF DRAW UNIT AREA FOR CALENDAR YEAR 1964

Comes the undersigned, Humble Oil & Refining Company, the Unit Operator under the Chalk Bluff Draw Unit Agreement, and respectfully submits, in accordance with said agreement, the following plan of development for the Chalk Bluff Draw Unit Area for the calendar year 1964 for approval of the New Mexico Oil Conservation Commission, the Commissioner of Public Lands and the Director of the United States Geological Survey:

1. Your attention is invited to Plans of Development heretofore approved covering the Abo and Pennsylvanian Bend participating areas for information relative to the wells drilled and completed inside the Chalk Bluff Draw Unit Area.

2. As of August 1, 1961, the Unit Area was automatically contracted to cover 2,242.31 acres. All well spacing and proration units which are within the unit area are included in the Abo participating area or the Pennsylvanian Bend participating area, and all of said lands are considered as fully developed for primary production purposes.

3. Due to the fact that all lands in the respective participating areas are considered as fully developed, the drilling of additional

wells to any of the known producing zones are not contemplated in 1964 and succeeding years; however, such remedial work will be performed in connection with existing producing wells from time to time as may be deemed necessary.

Respectfully submitted,

HUMBLE OIL & REFINING COMPANY

By Bill R. Payne  
Agent and Attorney-in-fact

APPROVED	
1. F.S.C.	
2. A.P.L.	
3. D.O.	
4. P.D.	
5. T.D.	
6. C.R.	
7. G.C.	

*CH  
JSC*

APPROVED February 1964  
C.H. Painter,  
Director  
New Mexico Oil Conservation Commission

APPROVED January 30, 1964  
E. Ladd  
Commissioner of Public Lands of the  
State of New Mexico

APPROVED \_\_\_\_\_  
\_\_\_\_\_  
Director  
United States Geological Survey

RECEIVED FILED  
May 13, 1963

In re: Application for Plan of Development  
1963, Chalk Bluff Draw Unit  
Eddy County, New Mexico

Commissioner of Public Lands  
P. O. Box 791  
Santa Fe, New Mexico

Attention: Mrs. Marian Rhea

Dear Sir:

Enclosed for your permanent record is fully approved copy of our Application for Approval of Plan of Development for Chalk Bluff Draw Unit Area for Calendar Year 1963.

Yours very truly,

HUMBLE OIL & REFINING COMPANY

BY:

John S. Cron

JSC/mk  
Enclosure

cc: New Mexico Oil Conservation Commission  
Post Office Box 871  
Santa Fe, New Mexico

*Jed*  
Drawer 1857  
Roswell, New Mexico

May 9, 1963

Humble Oil & Refining Company  
P. O. Box 1597  
Roswell, New Mexico

Attention: Mr. John S. Cron

Gentlemen:

Your 1963 plan of development for the Chalk Bluff Draw unit area, Eddy County, New Mexico, proposing the drilling of no additional wells, has been approved on this date. The plan has been approved by the Oil Conservation Commission and the Commissioner of Public Lands of the State of New Mexico.

Six approved copies of the plan are enclosed.

Sincerely yours,

John A. Anderson  
Regional Oil and Gas Supervisor

cc:

Washington (w/cy of plan)  
Artesia (w/cy of plan)  
NMOCC-Santa Fe (ltr only) ✓  
Com. of Pub. Lands-Santa Fe (ltr. only)

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

JL

April 19, 1963

Humble Oil & Refining Company  
P. O. Box 1597  
Roswell, New Mexico

Attention: Mr. John S. Cron

Re: 1963 Plan of Development  
Chalk Bluff Draw Unit,  
Eddy County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1963 Plan of Development for the Chalk Bluff Draw Unit, Eddy County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Ten approved copies of the plan of development are returned herewith.

Very truly yours,

A. L. PORTER, Jr.,  
Secretary-Director

ALP/JEK/ig

cc: Commissioner of Public Lands  
Santa Fe, New Mexico

United States Geological Survey  
Roswell, New Mexico

Encls.

REC'D APR 16 1963 49

April 15, 1963

Humble Oil & Refining Company  
P. O. Box 1597  
Roswell, New Mexico

Re: 1963 Plan of Development  
Chalk Bluff Draw Unit,  
Eddy County, New Mexico

Attention: Mr. John S. Cron

Gentlemen:

The Commissioner of Public Lands has approved as of April 15, 1963, the 1963 Plan of Development for Chalk Bluff Draw Unit Area, Eddy County, New Mexico subject to like approval by the Oil Conservation Commission and the United States Geological Survey.

We are handing eleven approved copies of this Plan of Development to the Oil Conservation Commission for their consideration.

Very truly yours,

E. S. JOHNNY WALKER  
COMMISSIONER OF PUBLIC LANDS

BY:  
(Mrs.) Marian M. Rhea, Supervisor  
Unit Division

RSW/mmr/v

cc: Oil Conservation Commission  
Santa Fe, New Mexico

encl - 11

U. S. Department of Interior  
Geological Survey  
Roswell, New Mexico  
Attention: Mr. John A. Anderson

April 11, 1963

In re: Application for Plan of Development for Year 1963  
Chalk Bluff Draw Unit  
Eddy County, New Mexico

Commissioner of Public Lands  
Post Office Box 791  
Santa Fe, New Mexico

Attention: Mrs. Marian M. Rhea, Supervisor  
Unit Division

Dear Sir:

Reference is made to our letter of February 4, 1963, wherein we forwarded to your office 13 copies of Application for Approval of Plan of Development for Chalk Bluff Draw Unit Area for calendar year 1963. In our letter of February 4th, we also requested that after the Commissioner's approval of said plan of development, that you forward same to the Director of the Oil Conservation Commission for his approval.

As we have not received any notice that said plan has been approved by the Commissioner, we would appreciate your advising when we may expect said plan to be considered for approval by your office. Your cooperation in this matter is sincerely appreciated.

Yours very truly,

HUMBLE OIL & REFINING COMPANY

By:

John S. Cron

JSC/mk

cc: Director, New Mexico Oil Conservation Commission  
United States Geological Survey  
Gulf Oil Corporation  
Pan American Petroleum Corporation  
Continental Oil Company

C O P Y

U. S. GOLGELOGICAL SURVEY

February 4, 1963

FEB 11 AM 8:19

In re: Application for Plan of Development for Year 1963  
Chalk Bluff Draw Unit  
Eddy County, New Mexico

RECEIVED  
FEB 11 1963

Commissioner of Public Lands  
P. O. Box 791  
Santa Fe, New Mexico

U. S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

Attention: Mrs. Marian M. Rhea, Supervisor  
Unit Division

Dear Sir:

We are enclosing herewith 13 copies of Application for Approval of  
Plan of Development for Chalk Bluff Draw Unit Area for calendar  
year 1963.

Upon your approval we would appreciate your forwarding at least 11  
copies of this Application to the Director, New Mexico Oil Conserva-  
tion Commission, P. O. Box 871, Santa Fe, New Mexico, for his approval.  
With a copy of this letter to the Director of the Oil Conservation  
Commission, we are requesting that after his approval, he return at  
least 10 copies to this office for our further handling and filing  
with the United States Geological Survey.

We are enclosing our draft No. 6F-1367 in the amount of \$12.00,  
covering the filing fee for this Plan of Development. If there  
should be any further questions or if we can be of any further  
assistance in this matter, please let us know.

Yours very truly,

JUMBLE OIL & REFINING COMPANY

John S. Crow

NOTE

FEB 6 1963

WYATT

JSC/mk

Encls.

cc: Director, New Mexico Oil Conservation Commission  
United State Geological Survey  
Gulf Oil Corporation  
Pan American Petroleum Corporation  
Continental Oil Company

NOTE

FEB 6 1963

FELDKILLER

NOTE  
FEB 7 1963  
LUWE

NOTE

FEB 6 - 1963

ANDERSON

NOTE  
FEB 7 1963  
PEARCY

CHALK BLUFF DRAW UNIT AREA  
PLAN OFFICE OCC  
EDDY COUNTY, NEW MEXICO  
1963 APR 15 PM 3 46

38354

FEB 5 1963 REC  
STANISLAWOWICZ  
SANTA FE, N.M.  
FEB 5 1963 REC

TO: Director  
New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

Commissioner of Public Lands of the  
State of New Mexico  
Santa Fe, New Mexico

Director  
United States Geological Survey  
Roswell, New Mexico

APPLICATION FOR APPROVAL OF PLAN OF DEVELOPMENT  
FOR CHALK BLUFF DRAW UNIT AREA FOR CALENDAR YEAR 1963

Comes the undersigned, Humble Oil & Refining Company, the Unit Operator under the Chalk Bluff Draw Unit Agreement, and respectfully submits, in accordance with said agreement, the following plan of development for the Chalk Bluff Draw Unit Area for the calendar year 1963 for approval of the New Mexico Oil Conservation Commission, the Commissioner of Public Lands and the Director of the United States Geological Survey:

1. Please refer to Plans of Development heretofore approved covering the Abo and Pennsylvanian Bend participating areas for pertinent information regarding wells drilled and completed inside the Chalk Bluff Draw Unit Area in prior years.

2. During the calendar year of 1962, Unit Operator re-completed the Abo Chalk Bluff Draw Unit Well 3-P in the Abo formation; however, unit operator and the other working interest owners unanimously agreed that said well was not a well capable of producing in paying quantities as defined in the Chalk Bluff Draw Unit Agreement and should not be included in the Abo participating area. The United States Geological Survey concurred with this determination.

3. Unit Operator proposes to drill no additional wells during the calendar year of 1963. Operator considers both the Abo and Pennsylvanian Bend Participating areas to be fully developed at this time, especially after the completion of Well 3-P referred to above.

38354

Unit Operator will continue to study the unit area and observe the production performance of the wells which have been drilled and completed inside the unit area.

Respectfully submitted,

HUMBLE OIL & REFINING COMPANY

By R. D. Payne  
Agent and Attorney-in-fact

RDP

APPROVED	
Desc.	
Acreage	
Int.	
Perm	CAC
Trade	PC

APPROVED April 19, 1963  
G. L. Porter,  
Director  
New Mexico Oil Conservation Commission

APPROVED April 15, 1963  
E. Gualher  
Commissioner of Public Lands of the  
State of New Mexico

APPROVED April 19, 1963  
A. H.  
Director  
United States Geological Survey

FEB 5 8 53 AM '63  
STATE LAND OFFICE  
SANTA FE, N. M.

RECEIVED

Drawer 1857  
Roswell, New Mexico

December 12, 1962

Humble Oil & Refining Company  
P. O. Box 1597  
Roswell, New Mexico

Attention: Mr. John S. Cron

Gentlemen:

Your letter of November 28, advises that the Abe Chalk Bluff Draw Unit well No. 3-P in the SE $\frac{1}{4}$  sec. 8, T. 18 S., R. 27 E., Eddy County, New Mexico, on Federal lease LC 054205, is determined to be not capable of producing unitized substances in paying quantities from the Pennsylvanian Bend and Abe formations.

This office concurs with the determination that unit well No. 3-P is incapable of producing unitized substances in paying quantities from either the Pennsylvanian Bend sand or the Abe formation.

Very truly yours,

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

Copy to: Washington (w/cy Humble letter)  
N.M.O.C.C. - Santa Fe (w/cy Humble letter)  
Com. Public Lands, Santa Fe (w/cy Humble letter)  
Artesia (w/cy Humble letter)

# HUMBLE OIL & REFINING COMPANY

SOUTHWEST REGION

P. O. BOX 1597

ROSWELL, NEW MEXICO

November 10, 1962

In re: Chalk Bluff Draw Unit Well No. 3-P  
Eddy County, New Mexico.

R E T E D  
NOV 29 1962

United States Geological Survey  
P. O. Drawer 1497  
Roswell, New Mexico

U. S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

Attention: Mr. John Anderson.

Gentlemen:

This letter is to notify you that the working interest owners of the Chalk Bluff Draw Unit have unanimously agreed that the Ab Chalk Bluff Draw Unit Well No. 3-P is not a well capable of producing in paying quantities as defined in the Chalk Bluff Draw Unit Agreement and should not be included in the Abo participating area.

The subject well was originally completed in July 5, 1961, as a gas well producing from the Pennsylvanian Sand and. Producing capability of the Pennsylvanian Sand card had declined severely and whatever attempts to increase gas production were unsuccessful. The Pennsylvanian sand core was shut off and the well was recompleted in the Ab Kest pay on April 6, 1962. The well initially tested at current of 11 per day with 5 per cent water and has subsequently declined in producing capability. Production by months since completion is as follows:

Month	Production	Ds.	B/D	W/D	
April 1962	630	-	30	-	21.0
May 1962	611	-	31	-	19.7
June 1962	545	-	30	-	18.2
July 1962	512	-	31	-	16.5
August 1962	486	-	31	-	15.7
September 1962	393	-	30	-	13.1
October 1962	406	-	31	-	13.1
	<b>3585</b>				

In view of the above, the Ab Chalk Bluff Draw Unit Well No. 3-P should be considered a non-commercial unit well in both the Pennsylvanian and Abo formations as contemplated by the Chalk Bluff Draw Unit Agreement.

ILLEGIBLE



**Page 2**

If you should need additional information regarding this well, please let us know.

Yours very truly,

HUMBLE OIL & REFINING COMPANY

By:   
John S. Cron

JSC/dm

cc: Pan American Petroleum Corporation  
P. O. Box 268  
Lubbock, Texas  
ATTENTION: Mr. N. S. Whitmore

Continental Oil Company  
P. O. Box 1377  
Roswell, New Mexico  
ATTENTION: Mr. W. A. Mead

Gulf Oil Corporation  
P. O. Drawer 1938  
Roswell, New Mexico  
ATTENTION: Mr. M. I. Taylor



IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

10-)

Drawer 1857  
Roswell, New Mexico

June 13, 1962

Humble Oil & Refining Company  
P. O. Box 1597  
Roswell, New Mexico

Attention: Mr. Robert J. Walker, Jr.

Gentlemen:

Your 1962 plan of development for the Chalk Bluff Draw unit area proposing the drilling of no additional wells, has been approved on this date.

The Commissioner of Public Lands and the New Mexico Oil Conservation Commission approved the plan on March 7 and March 23, 1962, respectively.

Six approved copies of the plan are enclosed.

Very truly yours,

CARL C. TRAYWICK  
Acting Regional Oil and Gas Supervisor

Attachments

Copy to: Washington (w/cy of plan)  
Artesia (w/cy of plan)  
NMOCC-Santa Fe (ltr only) ✓  
Com. of Pub. Lands-Santa Fe (ltr only)

APearcy:gs

OIL CONSERVATION COMMISSION

P. O. BOX 871  
SANTA FE, NEW MEXICO

76

March 23, 1962

Humble Oil & Refining Co.  
P. O. Box 1597  
Roswell, New Mexico

Attention: Mr. Robert J. Walker, Jr.

Re: 1962 Plan of Development  
Chalk Bluff Draw Unit,  
Eddy County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1962 Plan of Development for the Chalk Bluff Draw Unit, Eddy County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Nine approved copies of the plan are returned herewith.

Very truly yours,

A. L. PORTER, Jr.,  
Secretary-Director

ALP/JEK/ig

cc: U. S. Geological Survey  
State Land Office

March 7, 1962

Humble Oil & Refining Company  
P. O. Box 1597  
Roswell, New Mexico

Re: Plan of Development  
for 1962  
Chalk Bluff Draw Unit,  
Eddy County, New Mexico

Attention: Mr. Robert J. Walker, Jr.

Gentlemen:

The Commissioner of Public Lands has of this date approved your Application for Plan of Development for 1962 for the Chalk Bluff Draw Unit.

We are handing under copy of this letter ten copies to the Director of the New Mexico Oil Conservation Commission for his consideration.

We are enclosing Official Receipt No. 84566 which covers the filing fee for this Plan of Development.

Very truly yours,

E. S. JOHNNY WALKER  
COMMISSIONER OF PUBLIC LANDS

BY:  
(Mrs.) Marian M. Rhea, Supervisor  
Unit Division

ESW/mmr/v

HUMBLE OIL & REFINING COMPANY  
SOUTHWEST REGION  
P. O. BOX 1597  
ROSWELL, NEW MEXICO

January 22, 1962

Receipt 84566  
HC 13877

In re: Application for Plan of  
Development for 1962  
Chalk Bluff Draw Unit  
Eddy County, New Mexico

Director  
New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Dear Sir:

Enclosed we are forwarding to you 12 copies of Application for Approval of Plan of Development for Chalk Bluff Draw Unit Area for Calendar Year 1962.

Upon your approval we would appreciate your forwarding all copies to the Commissioner of Public Lands for his approval. We are, by copy of this letter, requesting that the Commissioner return at least ten copies to this office for our further handling and filing with the U.S.G.S. Also by copy of this letter, we are forwarding the Commissioner our Draft No. 6F-7159 in the amount of \$12.00 covering his filing fees.

If there should be any further question, or if we can be of any further assistance in this regard, please advise.

Yours very truly,

*Robert J. Walker Jr.*

Robert J. Walker, Jr.

RJW/dm

Encls.

cc: Commissioner of Public Lands  
U.S.G.S. - Roswell  
Hondo Oil & Gas Company  
Gulf Oil Corporation  
Pan American Petroleum Corporation  
Continental Oil Company

## CHALK BLUFF DRAW UNIT AREA

EDDY COUNTY, NEW MEXICO

TO: Director  
 New Mexico Oil Conservation Commission  
 Santa Fe, New Mexico

Commissioner of Public Lands of the  
 State of New Mexico  
 Santa Fe, New Mexico

Director  
 United States Geological Survey  
 Boswell, New Mexico

APPLICATION FOR APPROVAL OF PLAN OF DEVELOPMENT  
FOR CHALK BLUFF DRAW UNIT AREA FOR CALENDAR YEAR 1962

Whereas the undersigned, Humble Oil & Refining Company, the Unit Operator under the Chalk Bluff Draw Unit Agreement, and respectfully submits, in accordance with said agreement, the following status report and plan of development for the Chalk Bluff Draw Unit Area for the calendar year 1962 for approval of the New Mexico Oil Conservation Commission, the Commissioner of Public Lands and the Director of the United States Geological Survey:

1. During the calendar year of 1961, Unit Operator, with the approval of the participating working interest owners, drilled nine (9) wells for the purpose of determining the limits of the Abo participating area, six (6) of which were completed as producing wells and three (3) as dry holes, said wells with the respective completion dates being as follows:

<u>WELL NO.</u>	<u>LOCATION</u>	<u>TOTAL DEPTH</u>	<u>COMPLETION DATE</u>
20	1650 FSL 330 FEL Sec. 17-18S-27E	5,970'	1-14-61 Dry Hole
19	990 FSL 1650 FWL Sec. 16-18S-27E	5,985'	1-19-61
11	2310 FNL 330 FEL Sec. 17-18S-27E	5,638'	1-21-61
22	1650 FSL 330 FEL Sec. 8-18S-27E	5,576'	1-21-61

<u>WELL NO.</u>	<u>LOCATION</u>	<u>TOTAL DEPTH</u>	<u>COMPLETION DATE</u>
21	1592 FSL 2302 FWL Sec. 4-18S-27E	5,602'	4-26-61 Dry Hole
25	2314 FSL 330 FEL Sec. 17-18S-27E	5,602'	6-21-61
24	2310 FSL 1650 FEL Sec. 17-18S-27E	5,600'	6-30-61
26	2310 FSL & FWL Sec. 17-18S-27E	5,555'	9-16-61
27	1980 FNL 2303 FWL Sec. 17-18S-27E	5,655'	12-13-61 Dry Hole

In addition to the above, on May 14, 1961, Well No. 4-P, located 1980 feet from the North and East lines of Section 17, Township 18 South, Range 27 East, which had theretofore been completed as a gas well in the Pennsylvanian Bend Formation, was dually completed in the Abo Formation.

2. As of August 1, 1961, the unit area was automatically contracted in accordance with the provisions of Section 2(e) of the Unit Agreement, and the unit area now contains the following described lands, to-wit:

Township 18 South, Range 27 East, N.M.P.M.

Section 4: SE<sub>1/4</sub>SW<sub>1/4</sub>  
 Section 5: All  
 Section 8: E<sub>1/4</sub>  
 Section 9: W<sub>1/2</sub>  
 Section 16: NW<sub>1/4</sub>, N<sub>1/2</sub>SW<sub>1/4</sub>, SE<sub>1/4</sub>SW<sub>1/4</sub>  
 Section 17: All

Containing 2,242.31 acres, more or less.

3. That Well No. 3-P, which has heretofore been completed as a gas well in the Pennsylvanian Bend participating area, located in the SE<sub>1/4</sub>NW<sub>1/4</sub> of Section 8, Township 18 South, Range 27 East, N.M.P.M., is now in the process of being worked over by Unit Operator in an attempt to complete the same as a dual well in the Abo formation.

4. That depending upon the outcome of the dual completion of Well No. 3-P above referred to, in the Abo Formation, Operator will consider drilling a well for the purpose of extending the Abo participating area in the NW<sub>1/4</sub>NW<sub>1/4</sub> of Section 9, Township 18 South, Range 27 East, N.M.P.M., but would not like to make a definite commitment for the drilling of said well unless Well No. 3-P can be satisfactorily completed in the Abo formation.

That except as set forth in the preceding paragraph, Operator feels that both the productive limits of oil and gas in paying quantities has been reasonably defined for both the Abo and Pennsylvanian Bend participating areas, respectively, and it is believed that the drilling of additional wells for the purpose of extending either participating areas would not be justified at least until Unit Operator and the other working interest owners involved have had a reasonable time to observe production performance from the wells which have been drilled, especially those establishing the western limits of the Abo participating area.

Respectfully submitted,

HUMBLE OIL & REFINING COMPANY

By Bill A Payne

By L. L. McCarty

Unit Operator

APPROVED	
Desc.	
Acreage	
Int.	
Form	OK
Trade	RJW

APPROVED March 23, 1962  
D. J. Carter Jr.  
Director  
New Mexico Oil Conservation Commission

APPROVED March 7, 1962  
C. Walker  
Commissioner of Public Lands of the  
State of New Mexico

APPROVED \_\_\_\_\_  
\_\_\_\_\_  
Director  
United States Geological Survey



IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico

December 14, 1961

Humble Oil and Refining Company  
P. O. Box 1597  
Roswell, New Mexico

Gentlemen:

Your undated application for the tenth revision of the Abo participating area for the Chalk Bluff Draw unit agreement, Eddy County, New Mexico, was approved December 1, 1961, by the Acting Director, Geological Survey, effective as of September 1, 1961.

Five approved copies of the application are enclosed. It is assumed that you will furnish the State of New Mexico and any other interested party with appropriate evidence of this approval.

Very truly yours,

(Orig.Sgd.) CARL C. TRAYWICK

CARL C. TRAYWICK  
Acting Regional Oil and Gas Supervisor

Copy to: Washington (ltr. only)  
Artesia (w/cy of appln)  
BLM, Santa Fe (w/cy of appln.)  
NMGCC, Santa Fe (ltr. only)  
Com. of Pub. Lands, Santa Fe (ltr. only)

RECEIVED  
OCT 30 1961

October 30, 1961

Humble Oil & Refining Company  
P. O. Box 1597  
Roswell, New Mexico

RE: Tenth Expansion Participating  
Area, ABO Reef Formation  
Chalk Bluff Draw Unit,  
Eddy County, New Mexico

Attention: Mr. Robert J. Walker, Jr.

Gentlemen:

The Commissioner of Public Lands approved, as of October 30, 1961, the Tenth Expansion of Initial Participating Area of the Abo Reef Formation for the Chalk Bluff Draw Unit, Eddy County, New Mexico.

Nine approved copies of this application are enclosed.

Please notify us when this application has been fully approved.

Also enclosed is our Official Receipt No. F 78122 in the amount of \$12.00 which covers the filing fee.

Very truly yours,

E. S. JOHNNY WALKER  
COMMISSIONER OF PUBLIC LANDS

ESW/mmr/v

Encl:

cc: Oil Conservation Commission  
Santa Fe, New Mexico

U. S. Geological Survey  
Roswell, New Mexico

OIL CONSERVATION COMMISSION

P. O. BOX 871  
SANTA FE, NEW MEXICO

7-2-7  
October 27, 1961

Humble Oil & Refining Company  
P. O. Box 1391  
Roswell, New Mexico

Attention: Mr. Robert J. Walker, Jr.

Re: Tenth Expansion Participating  
Area, Abo Reef Formation Chalk  
Bluff Draw Unit, Eddy County,  
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Tenth Expansion of Initial Participating Area of the Abo Reef Formation for the Chalk Bluff Draw Unit, Eddy County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Eleven approved copies of the application are being forwarded to the Commissioner of Public Lands.

Very truly yours,

A. L. PORTER, Jr.,  
Secretary-Director

ALP/JEK/ig

cc: Commissioner of Public Lands  
U. S. Geological Survey - Roswell



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
Drawer 1857  
Roswell, New Mexico

6  
10  
October 16, 1961

Humble Oil and Refining Company  
P. O. Box 1397  
Roswell, New Mexico

Attention: Mr. Robert J. Walker, Jr.

Gentlemen:

Your undated application for the ninth revision of the Abo participating area for the Chalk Bluff Draw unit area, Eddy County, New Mexico, was approved October 5, 1961, by the Acting Director, Geological Survey, effective as of June 1, 1961.

Six approved copies of the application are enclosed. It is assumed that you will furnish the State of New Mexico and any other interested party with appropriate evidence of this approval.

Very truly yours,

(Orig. Sgd.) JOHN A. ANDERSON

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

Copy to: Washington (ltr. only)  
BLM-Santa Fe (w/cy of appln.)  
Artesia, (w/cy of appln.)  
NMOCG, Santa Fe (ltr. only)  
Com. of Pub. Lands, Santa Fe (ltr. only)

**HUMBLE OIL & REFINING COMPANY**

SOUTHWEST REGION

P. O. BOX 1597

**Roswell, New Mexico**

October 12, 1961

In re: Chalk Bluff Draw Unit  
Eddy County, New Mexico

New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Gentlemen:

Enclosed we are forwarding to you twelve (12) copies of our application for approval of tenth expansion of initial participating area, Chalk Bluff Draw Unit, for the Abo reef formation. We would appreciate your approval at your very earliest convenience, and forwarding the application to the Commissioner of Public Lands for his approval.

We are, by copy of this letter, forwarding the Commissioner of Draft No. 6F-6881 in the amount of \$12.00 to cover the filing fees for the above mentioned application. Upon the Commissioner's approval and execution of this application, we will appreciate his returning at least ten (10) copies for our further handling and filing with the U.S.G.S.

If there should be any further question, or if we can be of any further assistance in this regard, please advise.

Yours very truly,

*Robert J. Walker Jr.*  
Robert J. Walker, Jr.

RJW/dm  
Encls.

cc: Gulf Oil Corporation  
Continental Oil Company  
Pan American Petroleum Corporation  
Commissioner of Public Lands  
United States Geological Survey

In re: Chalk Bluff Draw Unit Area  
Eddy County, New Mexico

TO: Director  
United States Geological Survey  
  
Commissioner of Public Lands  
State of New Mexico  
  
New Mexico  
Oil Conservation Commission

APPLICATION FOR APPROVAL OF TENTH  
EXPANSION OF INITIAL PARTICIPATING AREA  
CHALK BLUFF DRAW UNIT AREA FOR THE ABO REEF FORMATION

Comes the Humble Oil & Refining Company, as Unit Operator for the Chalk Bluff Draw Unit Agreement approved by the New Mexico Oil Conservation Commission on October 13, 1955, by the Commissioner of Public Lands of the State of New Mexico on November 10, 1955, and by the Director of the United States Geological Survey on December 29, 1955, and pursuant to the provisions of said Unit Agreement respectfully submits for the approval of the Director, Commissioner and Commission the tenth revision of the initial participating area for the Abo reef formation as hereinafter set forth.

1. The initial participating area, together with the first through the eighth expansions and the application heretofore made for the ninth expansion include the following described lands within the unit area:

Township 18 South, Range 27 East, N.M.F.M.

Section 4: Lot 18  
Section 8: E $\frac{1}{2}$ SE $\frac{1}{4}$   
Section 9: E $\frac{1}{2}$ W $\frac{1}{2}$ , W $\frac{1}{2}$ SW $\frac{1}{4}$ , SW $\frac{1}{4}$ NW $\frac{1}{4}$   
Section 16: NW $\frac{1}{4}$ , N $\frac{1}{2}$ SW $\frac{1}{4}$ , SE $\frac{1}{4}$ SW $\frac{1}{4}$   
Section 17: S $\frac{1}{2}$ NE $\frac{1}{4}$ , N $\frac{1}{2}$ SE $\frac{1}{4}$

Containing 838.43 acres, more or less.

2. That during the month of September, 1961, one additional well was completed capable of producing oil and gas from the Abo Reef formation offsetting the participating area as heretofore approved and proposed to be expanded by application for the ninth expansion now pending. The additional well is location upon

the NE $\frac{1}{4}$  SW $\frac{1}{4}$  Section 17, Township 18 South, Range 27 East, N.M.P.M. and is more particularly described as follows:

Abo Chalk Bluff Draw Unit No. 26:

Location: 2310' FSL & FWL, Section 17, T-18-S, R-27-E  
Total Depth: 5555'  
Perforated Intervals: 5468-5473', 5486-5500', 5518'-5522'  
Net Pay: 38'  
Initial Potential: 35 BO plus 55 BW  
Completed Date: September 16, 1961

It is proposed that on account of the above well that the NE $\frac{1}{4}$  SW $\frac{1}{4}$  Section 17, Township 18 South, Range 27 East, N.M.P.M., be added to the participating area as heretofore approved, effective September 1, 1961, being the first of the month during which said well was completed.

That there is attached hereto, made a part hereof and for purposes of identification marked Exhibit "B" - 10, a schedule of participation for the tenth expanded participating area effective as of September 1, 1961, and which shows the percentages of participation by the owners of royalty, overriding royalties and working interests.

3. That there is attached hereto, made a part hereof and for purposes of identification marked Exhibit "A", a map of the Chalk Bluff Draw Unit Area showing the character of the lands, the ownership of the oil and gas leases within the unit area, and the participating area as expanded and proposed to be expanded and also the location of the well which has been drilled within the unit area.

4. That there is also attached hereto, made a part hereof and for purposes of identification marked Exhibit "C", a geological report prepared by C. V. Roberts, Area Geologist, together with an Isopachous Map of the Western portion of the Empire Abo Field which shows the relationship of the additional land to be included in the participating area by reason of the proposed expansion to the development of the Empire Abo Field to date and which indicates that said lands are reasonably proven to be productive of oil and gas in paying quantities from the Abo Reef formation.

WHEREFORE, applicant respectfully requests that the tenth proposed expansion of the initial participating area as outlined hereinabove be approved by

the Commissioner of Public Lands of the State of New Mexico, the New Mexico Oil Conservation Commission and the Director of the United States Geological Survey.

Respectfully submitted,

HUMBLE OIL & REFINING COMPANY

By

*Allen F. DeLoach*  
AGENT AND ATTORNEY IN FACT

Operator

APPROVED	
Desc.	RH
Arcage	RH
Int.	RH
Form	RH
Accdg.	
Prod.	
Trade	RH

HERVEY DOW & HINKLE  
*By Allen F. DeLoach*  
Attorneys for  
Humble Oil & Refining Company

APPROVED this the 27 day of Oct., 1961.

*Ad. Carter, Jr.*  
Secretary-Director  
New Mexico Oil Conservation Commission

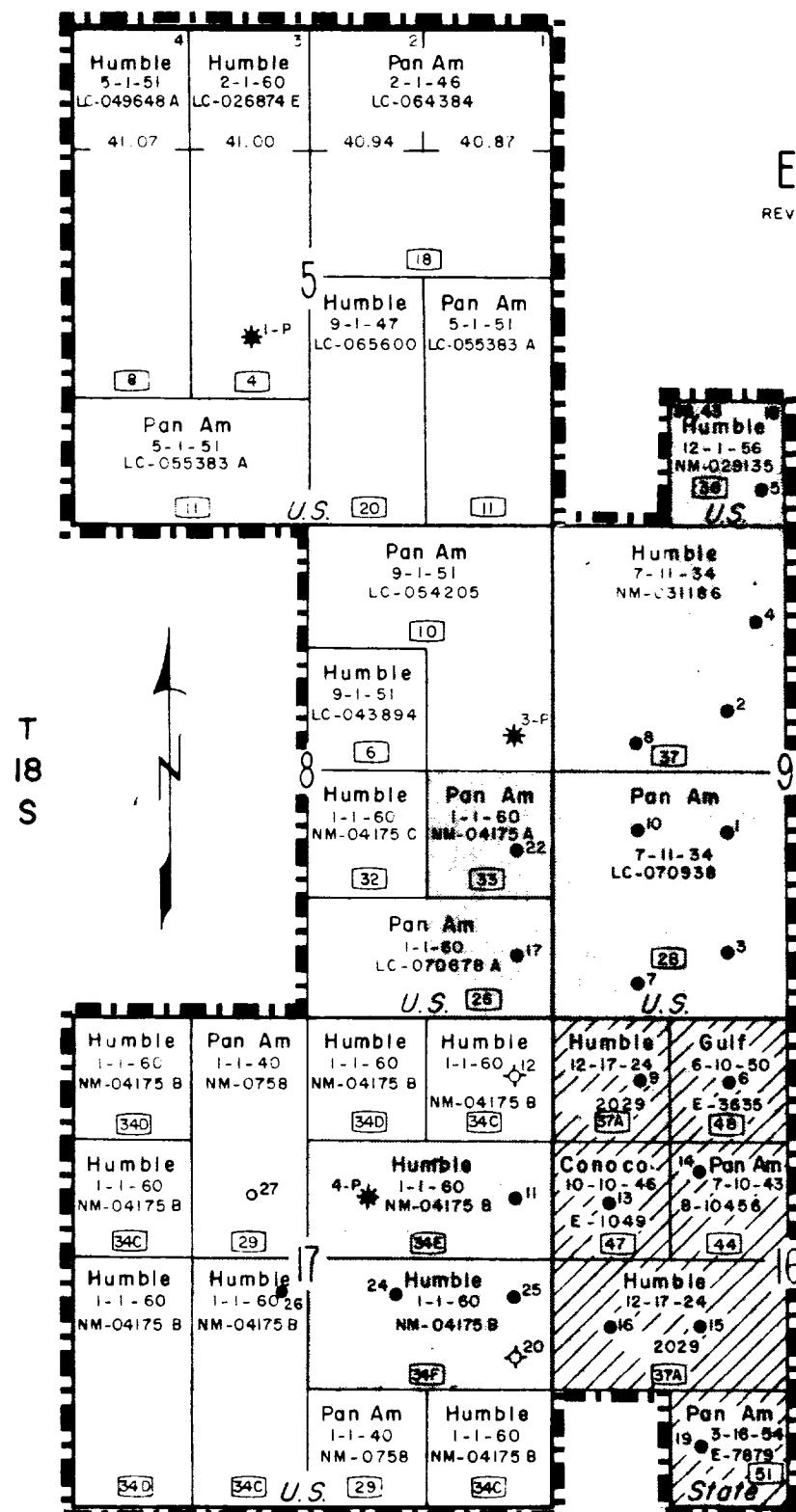
APPROVED this the \_\_\_\_\_ day of \_\_\_\_\_, 1961.

\_\_\_\_\_  
Commissioner of Public Lands

APPROVED this the \_\_\_\_\_ day of \_\_\_\_\_, 1961.

\_\_\_\_\_  
Director  
United States Geological Survey

R 27 E



R 27 E

## CHALK BLUFF DRAW UNIT AREA

Eddy County, New Mexico

2242.31 AC.

- |  |  |           |              |
|--|--|-----------|--------------|
|  | Federal Land<br>1962.31 acres, 87.513% of Unit Area.   | ○         | Location     |
|  | State Land<br>280 acres, 12.487% of Unit Area.   | ○         | Dry hole     |
|  | Penn (Bend) participating area (includes initial first and second expanded areas), all Federal land, 1923.88 acres.                        | ●         | Oil well     |
|  | Initial through ninth enlargement. Abo participating area, 838.43 acres. 558.43 acres Federal land.<br>280 acres State of New Mexico land. | ★         | Gas well     |
|  | Tenth expanded Abo participating area, 878.43 acres. 598.43 acres Federal land.<br>280 acres State of New Mexico land.                     | ■ ■ ■ ■ ■ | Unit Outline |
|  |  | 18        | Tract number |

EXHIBIT "B" - 10  
 SCHEDULE OF PARTICIPATION, TENTH EXPANDED PARTICIPATING AREA  
 CHALK BLUFF DRAW UNIT ABO PRODUCTION  
 (ABO REEF FORMATION ONLY)  
 EFFECTIVE SEPTEMBER 1, 1961

TRACT NO.	PARTICIPATING ACREAGE DESCRIPTION	PARTICIPATING ACREAGE	LEASE NUMBER, LESSEE OF RECORD AND DATE OF LEASE	PARTICIPATION BY PERCENTAGES TRACT AREA	
				OWNERSHIP	
26.	T-18-S, R-27-E Sec. 8: <u>SE<sub>4</sub></u> <u>SE<sub>4</sub></u>	40.00	LC-070678 (a) Pan American Pet. Corp. Dated 1-1-60	<u>Basic Royalty</u> <u>Working Interest</u> <u>Overriding Royalty</u>	.125000* .00569197 .750000 .03415184 .050000 .00227679 .060937 .00277481 .014063 .00064037 <u>Total</u> <u>.04553578</u>
				*Schedule "C" Royalty 12 <u>1/2</u> % to 25%	
28.	T-18-S, R-27-E Sec. 9: <u>SW<sub>4</sub></u>	160.00	LC-070938 Pan American Pet. Corp. Dated 7-11-34	<u>Basic Royalty</u> <u>Working Interest</u> <u>Overriding Royalty</u>	.125000* .02276789 .825000 .15026810 .050000 .00910716 <u>Total</u> <u>.18214315</u>
				*Sliding Scale Royalty	
33.	T-18-S, R-27-E Sec. 8: <u>NE<sub>4</sub></u> <u>SE<sub>4</sub></u>	40.00	NM-04175 (a) Pan American Pet. Corp. Dated 1-1-60	<u>Basic Royalty</u> <u>Working Interest</u> <u>Overriding Royalty</u>	.125000* .00569197 .770000 .03506255 .014063 .00064037 .090937 .00414089 <u>Total</u> <u>.04553578</u>
				*Schedule "C" Royalty 12 <u>1/2</u> % to 25%	
34 C.	T-18-S, R-27-E Sec 17: <u>NE<sub>4</sub></u> <u>SW<sub>4</sub></u>	40.00	NM-04175 (b) Humble Oil & Refg. Co. Dated 1-1-60	<u>Basic Royalty</u> <u>Working Interest</u> <u>Overriding Royalty</u>	.125000* .00569197 .609375 .02774837 .140625 .00640347 .125000 .00569197 <u>Total</u> <u>.04553578</u>
				*Schedule "D" Royalty 12 <u>1/2</u> % to 33-1/3%	

34 E.	T-18-S, R-27-E Sec. 17: $\frac{SE_1}{4}NE_1\frac{1}{4}$ , $SW_1\frac{1}{4}NW_1\frac{1}{4}$	80.00	NM-04175 (b) Humble Oil & Refg. Co. Dated 1-1-60	<u>Basic Royalty</u> <u>Working Interest</u> <u>Overriding Royalty</u>	U.S.A. Humble Oil & Refg. Co. Pan American Pet. Corp. Julian E. Simon Nearburg & Ingram R. J. St. Germain Tela Corporation Total *Schedule "D" Royalty $12\frac{1}{2}\%$ to 33-1/3%	.01138395 .05549675 .01280694 .00569197 .00142299 .00213454 .00213444 .09107158
34 F.	T-18-S, R-27-E Sec. 17: $\frac{N_2SE_1}{4}$	80.00	NM-04175 (b) Humble Oil & Refg. Co. Dated 1-1-60	<u>Basic Royalty</u> <u>Working Interest</u> <u>Overriding Royalty</u>	U.S.A. Humble Oil & Refg. Co. Pan American Pet. Corp. Julian E. Simon Nearburg & Ingram R. J. St. Germain Tela Corporation Total *Schedule "D" Royalty $12\frac{1}{2}\%$ to 33-1/3%	.01138395 .05549675 .01280694 .00569197 .00142299 .00213454 .00213444 .09107158
36.	T-18-S, R-27-E Sec. 4: Lot 18	38.43	NM-029135 Humble Oil & Refg. Co. Dated 12-1-56	<u>Basic Royalty</u> <u>Working Interest</u> <u>Overriding Royalty</u>	U.S.A. Humble Oil & Refg. Co. None Total *Schedule "B" Royalty $12\frac{1}{2}\%$ to 25%	.00546856 .03827995 .00000000 .04374851
37.	T-18-S, R-27-E Sec. 9: $\frac{E_2NW_1}{4},$ $SW_1\frac{1}{4}NW_1\frac{1}{4}$	120.00	NM-031186 Humble Oil & Refg. Co. Dated 7-11-34	<u>Basic Royalty</u> <u>Working Interest</u> <u>Overriding Royalty</u>	U.S.A. Humble Oil & Refg. Co. Mildred Crane Hudson Total *Sliding Scale Royalty	.125000* .750000 .125000 .13660736

		Basic Royalty	Working Interest	OVERRIDING ROYALTY	
37 A.	T-18-S, R-27-E Sec. 16: NW <sup>1</sup> NW <sup>1</sup> N <sup>1</sup> SW <sup>1</sup> N <sup>2</sup> SW <sup>1</sup> 120.00	2029 Humble Oil & Refg. Co. Dated 12-17-24	.125000 Humble Oil & Refg. Co. .750000 W. R. Atkinson .015625 Nearburg & Ingram .007813 Tela Corporation .011718 R. J. St. Germain .011718 J. Hiram Moore .007813 Blanche Wideman .015625 Stanley Carper .010417 Marshall Rowley .005208 Robert E. Boling .005208 Sameadan Foundation, Trust .007813 Ralph H. Hunt .005833 A. J. Losee .008750 Marion E. Spitler .004167 Western Development Co. .00056924 of Delaware .004167 Elbert T. Boling & wife, .003125 Stella M. Boling Total <u>1.000000</u>	.01707592 .10245552 .00213449 .00106731 .00160077 .00160077 .00106731 .00213449 .00142304 .00071145 .00071145 .00106731 .00079683 .00119532 .00056924 .00056924 .00042690 .00042690 <u>.13660736</u>	
44.	T-18-S, R-27-E Sec. 16: SE <sup>1</sup> NW <sup>1</sup> 40.00	B-10456 Pan American Pet. Corp. Dated 7-10-43	Basic Royalty Working Interest OVERRIDING ROYALTY	State of New Mexico Pan American Pet. Corp. None Total <u>1.000000</u>	.00569197 .03984381 .00000000 .04553578
47.	T-18-S, R-27-E Sec. 16: SW <sup>1</sup> NW <sup>1</sup> 40.00	E-1049 Continental Oil Company Dated 10-10-46	Basic Royalty Working Interest OVERRIDING ROYALTY	State of New Mexico Continental Oil Co. None Total <u>1.000000</u>	.00569197 .03984381 .00000000 .04553578
48.	T-18-S, R-27-E Sec. 16: NE <sup>1</sup> NW <sup>1</sup> 40.00	E-3635 Gulf Oil Corp. Dated 6-10-50	Basic Royalty Working Interest OVERRIDING ROYALTY	State of New Mexico Gulf Oil Corp. None Total <u>1.000000</u>	.00569197 .03984381 .00000000 .04553578
51.	T-18-S, R-27-E Sec. 16: SE <sup>1</sup> SW <sup>1</sup> 40.00	E-7879 Pan American Pet. Corp. Dated 3-16-54	Basic Royalty Working Interest OVERRIDING ROYALTY	State of New Mexico Pan American Pet. Corp. None Total <u>1.000000</u>	.00569197 .03984381 .00000000 .04553578

RECAPITULATION

<u>Tract No.</u>	<u>Participating Acreage</u>	<u>Percentage</u>
26	40.00	.04553578
28	160.00	.18214315
33	40.00	.04553578
34 C	40.00	.04553578
34 E	80.00	.09107158
34 F	80.00	.04374851
36	38.43	
37	120.00	.13660736
37 A	120.00	.13660736
44	40.00	.04553578
47	40.00	.04553578
48	40.00	.04553578
<u>51</u>	<u>40.00</u>	<u>1.0000000</u>
	<u>878.43</u>	
Total 13 Tracts		)

GEOLOGICAL AND ENGINEERING REPORT  
PROPOSED TENTH EXPANSION OF PARTICIPATING AREA  
EMPIRE ABO POOL - CHALK BLUFF DRAW UNIT  
EDDY COUNTY, NEW MEXICO

The Chalk Bluff Draw Unit, located in north-central Eddy County, New Mexico was approved December 29, 1955. The following data are submitted in support of the application for approval of the Tenth Expansion of Participating Area in the Chalk Bluff Draw Unit Area. This expansion adds 40 acres to the Ninth Expansion for a total of 878.43 acres of Unit Participation.

Well Data

Abo Chalk Bluff Draw Unit No. 26

Location: 2310' FSL & FWL, Section 17, T-18-S, R-27-E  
Total Depth: 5555'  
Perforated Intervals: 5468-5473', 5486-5500', 5518-5522'  
Net Pay: 38'  
Initial Potential: 35 BO plus 55 BW  
Completed Date: September 16, 1961

We believe the Abo Chalk Bluff Draw Unit No. 26 to be a paying well, based on the amount of pay penetrated and the initial producing rate. Therefore, it is submitted for your approval as the Tenth Expansion of the Initial Participating Area.

Geology and Reservoir

A revised isopach map of net Abo reef pay is attached. Past development in the Empire Abo reef field has indicated a favorable trend into the Chalk Bluff Draw Unit Area. The proposed Expansion of the Initial Participating Area will take into the Unit that well which indicates production from this southwestward extension of favorable reef development.

Conclusion

We recommend increasing the Participating Area of the Abo reservoir in the Chalk Bluff Draw Unit by 40 acres to include the lands in the vicinity of Abo Chalk Bluff Draw Unit No. 26, these lands having been proven productive of oil in paying quantities as defined by the Unit Agreement. The lands in the Participating Area, thus revised, should be described as follows:

Township 18 South, Range 27 East

Section 8: E/2 SE/4  
Section 4: SE/4 SW/4  
Section 9: SW/4, S/2 NW/4, NE/4 NW/4  
Section 16: NW/4, N/2 SW/4, SE/4 SW/4  
Section 17: S/2 NE/4, N/2 SE/4, NE/4 SW/4

It is further recommended that the effective date of the Tenth Expansion of Participating Area be September 1, 1961, the first of the month in which Unit well No. 26 was completed. Future expansions will be submitted monthly as additional wells are completed.

HUMBLE OIL & REFINING COMPANY

*C V Roberts*

C. V. Roberts  
Area Geologist

RLB:sw

Attach: Isopach Map of Net Abo Pay