

SUPPLEMENTAL EXHIBIT "B"

Schedule Showing the Percentage and Kind of Ownership of Oil
And Gas Interests in Lands Being Added to The
Gallegos Canyon Unit Area, San Juan County, New Mexico

Tract No.	Description	Type of Land	Serial No. & Effective Date	Number of Acres	Royalty Owner and Percentage	Record Owner of Lease	Overriding		Working Interest Owner & Percentage
							Royalty Owner & %	Royalty	
158	T-27-N, R-12-W Sec. 5: S/2	Fed.	SF-078902 2-1-48	320.00	U. S. A. - 12-1/2%	Earl A. Benson & Wm. B. Montin	None		*George J. Dar- neille-87-1/2%
159	Sec. 9: N/2	Fed.	SF-078902 2-1-48	320.00	U. S. A. - 12-1/2%	Earl A. Benson & Wm. B. Montin	None		To Base of Pic- tured Cliffs Stanolind-43.75% Darneille-43.75% Below Base of Pic- tured Cliffs Stanolind-1/2 of 7/8 Darneille-1/2 of 3/4 of 7/8 Earl A. Benson- 1/2 of 1/3 of 1/4 of 7/8 Wm. B. Montin- 1/2 of 1/3 of 1/4 of 7/8 Weston Payne-1/2 of 1/6 of 1/4 of 7/8 Albert R. Greer-1/2 of 1/6 of 1/4 of 7/8
160	Sec. 6: Lots 3, 4, & 5 SE/4 NW/4	Fed.	SF-080111 4-1-48	152.04	U. S. A. - 12-1/2%	Earl A. Benson & William B. Montin	H. K. Riddle- 2%		Stanolind-42.75% ** Darneille-4.275% ** Bankers Life and Casualty Company of Chicago-38.475%
161	Sec. 6: Lots 6 & 7 E/2 SW/4	Fed.	SF-080111 4-1-48	152.24	U. S. A. - 12-1/2%	McConnell Drilling Corp.	H. K. Riddle- 2%		McConnell Drilling Corp. -85-1/2%

Tract No.	Description	Type of Land	Serial No. & Effective Date	Number of Acres	Royalty Owner and Percentage	Record Owner of Lease	Overriding		Working Interest Owner & Percentage
							Royalty Owner & %		
162	T-27-N, R-12-W								
	Sec. 6: Lots 1 & 2 <u>S/2 NE/4</u>	Ind.Pat. Allot. Allot.	Allot. No. 059312 5-27-50	159.88	Yee-Nea-Pah #11040-12-1/2%	The Texas Co.	None		The Texas Co. - 87-1/2%
163	Sec. 6: SE/4	Ind.Pat. Allot.	Allot. No. 059313 5-27-50	160.00	Chee-Nee-Wot #11039-12-1/2%	The Texas Co.	None		The Texas Co. - 87-1/2%
164	Sec. 5: Lots 3 & 4 <u>S/2 NW/4</u>	Pat.	5-10-51 (HBP)	159.94	To Base of Pic- tured Cliffs A. L. Foutz-1/4 of 1/8 Kenneth Washburn, et ux, Rose-3/4 of 1/8 Below Pictured Cliffs <u>Unleased. Minerals</u> owned 1/4 by A. L. Foutz 3/4 by Kenneth Washburn, et ux, Rose	Lloyd B. Taylor & Lloyd D. Locke	None		To Base of Pic- tured Cliffs Locke-Taylor Dril- ling Co. -87-1/2%
									Below Pictured Cliffs <u>Unleased</u>

TOTAL ACRES IN ENLARGEMENT AREA				1,424.10					
ACREAGE IN UNIT AREA PRIOR TO ENLARGEMENT				41,722.72 (See Unit Agreement Exhibit "B")					
TOTAL ACRES IN ENLARGED UNIT AREA				<u>43,146.82</u>					
					Type of Acreage				
					Federal Lands		28,059.21		
					Navajo Indian Lands		5,225.34		
					State Lands		3,186.60		
					Patented Lands		6,675.67		
							<u>43,146.82</u>		

*Illamex Oils, Inc. holds an interest in proceeds of sale of oil and gas until completion of limited production payment at which time said interest reverts to Darneille.

**There is litigation now active involving Darneille and Bankers Life and Casualty Company. Darneille first assigned to John D. MacArthur who in turn assigned to Bankers Life and Casualty Company. Because of this, the true interests of said parties is indeterminable at the present time.

Note: Underlined acreage to be in Participating Area.

APPLICATION FOR APPROVAL OF SECOND
ENLARGEMENT OF PICTURED CLIFFS
PARTICIPATING AREA, GALLEGOS CANYON
UNIT
SAN JUAN COUNTY, NEW MEXICO

TO: THE DIRECTOR
UNITED STATES GEOLOGICAL SURVEY
WASHINGTON, D. C.

COMMISSIONER OF PUBLIC LANDS
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

Pursuant to the provisions of Section 10 of the Unit Agreement dated November 1, 1950, I - Sec. No. 844, covering lands within the Gallegos Canyon Unit Area, San Juan County, New Mexico, Stanolind Oil and Gas Company, as Unit Operator, on behalf of itself and other owners of working interest within said Unit Area, hereby submits for your approval a selection of lands to constitute the Second Enlargement of the Participating Area for the Pictured Cliffs Formation. Said lands to be added are described as: the S/2, Section 20, Township 29 North, Range 12 West, containing 320 acres, more or less.

The above additional lands were reasonably proven commercially productive of unitized substances from the Pictured Cliffs formation by completion thereon of Unit Well No. 73, located in the SW/4 of Section 20, T-29-N, R-12-W; completed on December 21, 1955; depth 1415', initial potential 4660 MCFG/day.

In support of this application, the applicant attaches hereto and makes a part hereof the following:

1. A map marked Exhibit "A", showing thereon the Gallegos Canyon Unit, the present Pictured Cliffs Participating Area and the proposed Second Enlargement of said Participating Area.
2. A schedule marked Exhibit "B", showing the percentage of participation in unitized substances of each tract or partial tract included in said Participating Area as enlarged.
3. A brief geological report which from a geological standpoint justifies the inclusion of the above described lands in the Participating Area for the Pictured Cliffs formation.

Wherefore, the applicant respectfully requests that the Director, the Commissioner and the Commission each approve this selection of lands to constitute the Second Enlargement of the Participating Area for the Pictured Cliffs formation to be effective January 1, 1956.

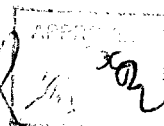
Dated this 27th day of February, 1956.

STANOLIND OIL AND GAS COMPANY

Attest:

[Signature]
Assistant Secretary


By *[Signature]*
Vice-President




The Second Enlargement of the Pictured Cliffs Participating Area in the Gallegos Canyon Unit as said enlargement is described in the foregoing application dated February 27, 1956, is hereby approved:

Date: _____
Director, United States Geological Survey

Subject to like approval by the Commissioner of Public Lands and the Oil Conservation Commission.

_____
Date: MAR 16 1956
Commissioner of Public Lands

Subject to like approval by the Director, United States Geological Survey and the Oil Conservation Commission.

_____
Date: 3-15-56
Oil Conservation Commission

Subject to like approval by the Director, United States Geological Survey and the Commissioner of Public Lands.

EXHIBIT "B"

GALLEGOS CANYON UNIT, SAN JUAN COUNTY, NEW MEXICO
 SCHEDULE OF LEASES, TRACT PARTICIPATION PERCENTAGES AND
 WORKING INTEREST OWNERSHIP IN PICTURED CLIFFS PARTICIPATING AREA
 AFTER SECOND ENLARGEMENT

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included In Participating Area		Working Interest Ownership In Lease		
			Description	Acres	Owner	%	
FEDERAL LEASES							
1	0524 (NM)	Devonian Gas and Oil Company	N/2 S/2 Sec. 24, 29N, 13W	160.00	.61290	Devonian Gas and Oil Company	87.5
4	NM 03654 2-1-51	Pauline S. McNaughton	NE/4 NE/4 Sec. 26, 29N, 13W	40.00	.15322	Pauline S. McNaughton	87.5
6	077966 2-1-48	Aztec Oil and Gas Company	Sec. 24 and SE/4 Sec. 14, 28N, 13W	800.00	3.06449	Aztec Oil and Gas Com- pany	87.5
(8)	078072 2-1-48	Louise M. Phillips	E/2 Sec. 11, 28N, (137.78) 13W			Robert Mims	87.5
9	078106 12-1-47	Sunray Mid-Continent Oil Company	Sections 15, 17, 2, 536.94 18, NW/4 Sec. 19, NW/4 and SE/4 Sec. 21, NW/4 Sec. 22, 28N, 12W		9.71801	Sunray Mid-Continent Oil Company	87.5
10	078109 2-1-48	Sunray Mid-Continent Oil Company	29N, 12W Sec. 31, SE/4 Sec. 33 28N, 12W Sec. 7, 8, 10, W/2 Sec. 9, Lots 3 & 4 Sec. 11.	1,801.19	6.89965	Sunray Mid-Continent Oil Company	87.5
11	078209 10-1-49	Albuquerque Assoc. Oil Co.	NE/4 NE/4, NE/4 SE/4, Lot 4, Sec. 30, 29N, 12W	119.68	.45845	Albuquerque Assoc. Oil Co.	87.5
11A	078209-B 10-1-49	George J. Darneille	S/2 NE/4 Sec. 33, 29N, 12W	80.00	.30645	Pictured Cliffs and above George J. Darneille Empire Trust Co.	17.5 70.0

Unit Tract No.	Serial No. And Date Of Lease	Record Owner	Acreage Included In Participating Area			Working Interest Ownership In Lease	
			Description	Acres	%	Owner	%
16	078807-A 4-1-48	Stanolind George J. Darneille	Lots 1, 2, 3, 4 and S/2 S/2 of Sec. 12; Sec. 13; NE/4 Sec. 14; 28N, 13W	1, 075. 40	4. 11943	Below Pictured Cliffs	
						George J. Darneille	43 - 75
						Benson-Montin	43 - 75
						Pictured Cliffs and Above	
						Stanolind	43 - 75
						George J. Darneille Empire Trust Co.	8 - 75 35 - 00
						Below Pictured Cliffs	
						Stanolind	43 - 75
						George J. Darneille Benson-Montin	21 - 875 21 - 875
17	078828-A 8-1-49	Stanolind George J. Darneille	NE/4 NE/4, SW/4 NE/4 Sec. 14; NE/4 Sec. 22; W/2 NW/4 Sec. 23; SE/4 Sec. 29, 28N, 12W	480. 00	1. 83869	(Same as Tract 16 above)	
17-A	078828-A 8-1-49	Stanolind George J. Darneille	W/2 S/2 S/2 Sec. 11; SW/4 Sec. 14; Sec. 27; Sec. 28; NE/4 of Sec. 29; 28N, 12W	1, 680. 00	6. 43542	(Same as Tract 16 above)	
18	078903A 2-1-48	Stanolind George J. Darneille	Sec. 34, 28N, 12W	640. 00	2. 45159	(Same as Tract 16 above)	
18-A	078903 2-1-48	George J. Darneille	Sections 35 & 36, 28N, 12W	1, 280. 00	4. 90317	(Same as Tract 11A above)	
18-B	078903 2-1-48	Stanolind	Sec. 33, 28N, 12W	640. 00	2. 45159	Stanolind Oil and Gas Co.	87 - 5
19	078904 2-1-48	Stanolind George J. Darneille	E/2, SW/4, E/2 NW/4, Sec. 23; Sections 24 & 26; 28N, 12W	1, 840. 00	7. 04831	(Same as Tract 16 above)	

Unit Tract No.	Serial No. And Date Of Lease	Record Owner	Acreage Included In Participating Area		Working Interest Ownership In Lease	
			Description	Acres %	Owner	%
19-A	078904 2-1-48	Stanolind	Sec. 25, 28N, 12W	640.00 2.45159	Stanolind	87.5
20	078905 7-1-48	Stanolind Geo. J. Darneille	NW/4, NW/4 NE/4, SE/4, SE/4 NE/4, SE/4, Sec. 14; S/2 Sec. 22; Lots 3 & 4, E/2 SW/4 Sec. 31; 28N, 12W	872.00 3.34029	(Same as Tract 16 above)	
21	078926 5-1-48	Stanolind Geo. J. Darneille	S/2 NW/4, S/2 Sect. 25; W/2 NE/4, SE/4 NE/4 Sec. 26; Sec. 35; 29N, 13W	1,160.00 4.44350	(Same as Tract 16 above)	
21A	078926-A 5-1-48	Stanolind	S/2, NW/4 Sec. 26, 29N, 13W	480.00 1.83869	Stanolind	87.5
22	078949 2-1-48	L. B. Hodges	E/2 NW/4, NW/4 NE/4 Sec. 19, 29N, 12W	120.00 .45967	L. B. Hodges	87.5
24	079244 5-1-48	Stanolind Geo. J. Darneille	NW/4 Sec. 20, 28N, 12W	160.00 .61290	(Same as Tract 16 above)	
24-A	079244-A 5-1-48	Stanolind Geo. J. Darneille	NE/4 Sec. 19, 28N, 12W	160.00 .61290	(Same as Tract 16 above)	
25	079346 5-1-49	Stanolind Geo. J. Darneille	SE/4 Sec. 32, 28N, 12W	160.00 .61290	(Same as Tract 16 above)	
25-A	078902 2-1-48	Geo. J. Darneille	Sec. 4; Lots 1 & 2, S/2 NE/4 Sec. 5; 27N, 12W	800.62 3.06686	(Same as Tract 11-A above)	
25-B	079346-A 5-1-49	Stanolind Geo. J. Darneille	N/2, SW/4 Sec. 32, 28N, 12W	480.00 1.83869	(Same as Tract 16 above)	

Unit Tract No.	Serial No. And Date Of Lease	Record Owner	Acreage Included In Participating Area		Working Interest Ownership In Lease	
			Description	Acres %	Owner	%
34	080723 1-1-50	Edward J. Johnson	E/2NE/4, NE/4 SE/4 Sec. 19; 29N, 12W; N/2 S/2, SE/4 SE/4 Sec. 20, 29N, 12W	320.00 1.22580	Edward J. Johnson	87.5
35-A	080844 10-1-51	George J. Darneille	S/2 Sec. 31, 28N, 11W	317.39 1.21580	(Same as Tract 11-A above)	
36	080862 7-1-50	Elma R. Jones	NE/4 SE/4, NE/4 SW/4, Sec. 29, 29N, 12W	80.00 .30645	Elma R. Jones	87.5
37	I-149- Ind. -8474	Glen J. Smith	Lots 1 & 2, S/2 SE/4 Sec. 9; N/2 Sec. 16; 28N, 12W	456.24 1.74768	Glen J. Smith	87.5
38	I-149- Ind. 8475	The Texas Company	S/2 Sec. 16; NE/4, SW/4 Sec. 21; 28N, 12W	640.00 2.45159	The Texas Company	87.5
39	I-149- Ind. 8476	The Texas Company	S/2 Sec. 19; S/2, NE/4 Sec. 20; 28N, 12W	792.62 3.03621	The Texas Company	87.5
40	I-149- Ind. 8477	The Texas Company	W/2 Sec. 29, 28N, 12W	320.00 1.22580	The Texas Company	87.5
41	I-149- Ind. 8478	The Texas Company	N/2, SE/4 Sec. 31, 28N, 12W	472.00 1.80805	The Texas Company	87.5
42	I-149- Ind. 8470 6-28-51	Aztec Oil and Gas Co.	Sec. 30, 28N, 12W	624.60 2.39260	Aztec Oil and Gas Co.	87.5
45	I-149 - Ind. 8486	Stanolind Geo. J. Darneille	SE/4 NE/4 Sec. 32; NE/4 NW/4, S/2 NW/4, SW/4 Sec. 33; 29N, 12W	320.00 1.22580	Pictured Cliffs and Above Stanolind Geo. J. Darneille Below Pictured Cliffs Stanolind Geo. J. Darneille Benson-Montin, et al	43.75 43.75 43.750 21.875 21.875

Unit Tract No.	Serial No. And Date Of Lease	Record Owner	Acreage Included in Participating Area		Working Interest Ownership In Lease	
			Description	Acres	Owner	%
STATE LEASES						
46-A	E-2447 2-10-54	Stanolind Geo. J. Darnielle	29N, 12W SW/4 NE/4, NE/4 SW/4 Sec. 32 29N, 13W NW/4 NE/4 Sec. 36	120.00	(Same as Tract 16 above)	
62	E-5462 8-10-51	T & P Coal and Oil Co.	NW/4 NW/4 Sec. 32, 29N, 12W	40.00	T & P Coal and Oil Co.	87.5
63	-	T & P Coal and Oil Co.	SW/4 NW/4 Sec. 32, 29N, 12W	40.00	T & P Coal and Oil Co.	87.5
64	B-10405-24 6-24-53	Stanolind Geo. J. Darnielle	SE/4 NW/4 Sec. 32; 29N, 12W	40.00	(Same as Tract 16 above)	
65	-	T & P Coal and Oil Co.	NW/4 SW/4 Sec. 32, 29N, 12W	40.00	T & P Coal and Oil Co.	87.5
66	-	T & P Coal and Oil Co.	SE/4 SW/4 Sec. 32, 29N, 12W	40.00	T & P Coal and Oil Co.	87.5
67	B-11318-10 6-26-54	Brookhaven Oil Co.	SW/4 SW/4 Sec. 32, 29N, 12W	40.00	Brookhaven Oil Co.	87.5
68	-	T & P Coal and Oil Co.	NW/4 SE/4 Sec. 32, 29N, 12W	40.00	T & P Coal and Oil Co.	87.5
(69)	E-2754 7-8-54	S. E. Day	SW/4 SE/4 Sec. 32, 29N, 12W	(40.00)	S. E. Day	87.5
70	B-10405-9 6-24-53	L. M. Johnson	NE/4 SE/4 Sec. 32, 29N, 12W	40.00	L. M. Johnson	87.5
71	B-10405-27 6-24-53	Brookhaven Oil Co.	SE/4 SE/4 Sec. 32, 29N, 12W	40.00	Brookhaven Oil Co.	87.5
78	B-9104-4 4-30-51	Albuquerque Assoc. Oil Co.	SE/4 NW/4 Sec. 36, 29N, 13W	40.00	Albuquerque Assoc. Oil Co.	87.5

Unit Tract No.	Serial No. And Date Of Lease	Record Owner	Acreage Included In Participating Area			Working Interest Ownership In Lease	
			Description	Acres	%	Owner	%
(82)	-	Pubco Development Co.	NE/4 NE/4 Sec. 36; 29N, 13W	(40.00)	-	Pubco Development Co.	87.5
83	-	T & P Coal and Oil Co.	NE/4 NW/4 Sec. 36, 29N, 13W	40.00	.15322	T & P Coal and Oil Co.	87.5
84	B-11017-8 2-18-54	Brookhaven Oil Co.	W/2 NW/4 Sec. 36, 29N, 13W	80.00	.30645	Brookhaven Oil Co.	87.5
85	E-331-9 5-16-50	Brookhaven Oil Co.	NW/4 SW/4 Sec. 36, 29N, 13W	40.00	.15322	Brookhaven Oil Co.	87.5
86	-	T & P Coal and Oil Co.	SE/4 NE/4 Sec. 36, 29N, 13W	40.00	.15322	T & P Coal and Oil Co.	87.5
87	-	T & P Coal and Oil Co.	SW/4 NE/4 Sec. 36, 29N, 13W	40.00	.15322	T & P Coal and Oil Co.	87.5
88	-	T & P Coal and Oil Co.	NE/4 SW/4 Sec. 36, 29N, 13W	40.00	.15322	T & P Coal and Oil Co.	87.5
89	-	T & P Coal and Oil Co.	NW/4 SE/4 Sec. 36, 29N, 13W	40.00	.15322	T & P Coal and Oil Co.	87.5
90	B-11017 2-18-54	Stanolind Geo. J. Darneille	NE/4 SE/4 Sec. 36, 29N, 13W	40.00	.15322	(Same as Tract 16 above)	
91	B-11017-15 2-18-54	Stanolind Geo. J. Darneille	SW/4 SW/4 Sec. 36, 29N, 13W	40.00	.15322	(Same as Tract 16 above)	
92	B-11017-11 2-18-54	Brookhaven Oil Co.	SE/4 SW/4 Sec. 36, 29N, 13W	40.00	.15322	Brookhaven Oil Co.	87.5
93	B-11017-1 2-18-54	E. H. Colby	SW/4 SE/4 Sec. 36, 29N, 13W	40.00	.15322	Lester F. Colby, Jr.	87.5
94	E-2526 3-10-54	New Mexico Natural Gas Co.	SE/4 SE/4 Sec. 36, 29N, 13W	40.00	.15322	New Mexico Natural Gas Co.	87.5

Unif. Tract No.	Serial No. And Date Of Lease	Record Owner	Acreage Included In Participating Area		Working Interest Ownership In Lease
			Description	Acres	Owner
				%	%
PATENTED LEASES					
105	9-17-52	Stanolind Geo. J. Darneille	W/12 Ac. NW/4 NW/4 Sec. 24, 29N, 13W	12.00 .04597	(Same as Tract 16 above)
106	3-13-42	Stanolind Geo. J. Darneille	E28 Ac. NW/4 NW/4 except 2 Ac. on East- ern edge of Sec. 24, 29N, 13W	26.00 .09960	(Same as Tract 16 above)
106-A	12-3-47	Stanolind Geo. J. Darneille	E2 Ac. NW/4 NW/4 Sec. 24, 29N, 13W	2.00 .00766	(Same as Tract 16 above)
107	3-8-42	Stanolind Geo. J. Darneille	NE/4 NW/4 Sec. 24 29N, 13W	40.00 .15322	(Same as Tract 16 above)
108	3-8-42	Stanolind Geo. J. Darneille	S/2 NW/4, SW/4 NE/4, except 3 Ac. in NW corner, Sec. 24, 29N, 13W	117.00 .44818	(Same as Tract 16 above)
108-A	12-6-47	Stanolind Geo. J. Darneille	3 Ac. in NW corner of SW/4 NW/4 Sec. 24, 29N, 13W	3.00 .01149	(Same as Tract 16 above)
(109)	Not Leased	Not Leased	NW/4 NE/4 less 1/2 Ac. in Extreme SE/c Sec. 24, 29N, 13W	(39.50)	Clara Zanolio 54.6875 James F. Zanolio 6.5625 Nicholas C. Zanolio 6.5625 Josephine Zanolio 6.5625 Mable Zanolio 6.5625 Grace Z. Discus 6.5625
110	9-8-43	Stanolind Geo. J. Darneille	W/2 E/2 NE/4 and E/2 E/2 NE/4 Ex- cept E .5 Ac of SE/4 NE/4 Sec. 24, 29N, 13W	75.00 .28730	(Same as Tract 16 above)

Unit Tract No.	Serial No. And Date Of Lease	Record Owner	Acreage Included in Participating Area		Working Interest Ownership In Lease	
			Description	Acres	Owner	%
111	12-3-47	George J. Darneille	1/2 Ac. S. of Public Road in SE/c of NW/4 NE/4 Sec. 24, 29N, 13W	.50	(Same as Tract 11-A above)	
112	5-15-42	Stanolind Geo. J. Darneille	29N, 13W S/2 S/2 Sec. 24 N/2 N/2 Sec. 25 29N, 12W NW/4 NE/4, SE/4, NW/4, S/2 NE/4, N/2 NW/4 of Sec. 30; SW/4 SW/4 of Sec. 19	598.93	(Same as Tract 16 above)	
113	2-24-47	Stanolind Geo. J. Darneille	29N, 13W SW/4 NE/4 Sec. 25 29N, 12W W/2 SW/4, SE/4 SW/4 Sec. 29	160.00	(Same as Tract 16 above)	
114	2-11-57	Stanolind Geo. J. Darneille	29N, 13W SE/4 NE/4 Sec. 25 29N, 12W SW/4 NW/4, N/2 SW/4 Sec. 30	159.12	(Same as Tract 16 above)	
117	8-17-43	Stanolind Geo. J. Darneille	SE/4 SE/4 Sec. 19; W/2 SW/4 SW/4 Sec. 20; 29N, 12W	60.00	(Same as Tract 16 above)	
118)	5-8-47	Stanolind	E/60 Ac. E/2 SW/4 Sec. 19, 29N, 12W	60.00	Stanolind	43.75
)						
)						
118-A)	8-1-46	Stanolind	E/60 Ac. E/2 SW/4 Sec. 19, 29N, 12W		Pictured Cliffs and Above	21.875
)		Geo. J. Darneille			Stanolind	4.375
					Geo. J. Darneille	17.500
					Empire Trust Co.	
				Below Pictured Cliffs		
				Stanolind		21.8750
				Geo. J. Darneille		10.9375
				Benson-Montin, etal		10.9375

Unit Tract No.	Serial No. And Date Of Lease	Record Owner	Acreage Included in Participating Area			Working Interest Ownership In Lease	
			Description	Acres	%	Owner	%
119	9-17-47	Stanolind Geo. J. Darneille	W/20 Ac. E/2 SW/4 Sec. 19, 29N, 12W	20.00	.07661	(Same as Tract 16 above)	
120	2-8-47	Stanolind Geo. J. Darneille	29N, 12W W/2 NW/4, W/23.46 Ac. of NW/4 SW/4 Sec. 19 29N, 13W E/5 Ac. of SE/4 NE/4 Sec. 24	107.31	.41106	(Same as Tract 16 Above)	
121	9-17-42	Stanolind Geo. J. Darneille	E/16Ac. of NW/4 SW/4 Sec. 19, 29N, 12W	16.00	.06129	(Same as Tract 16 Above)	
122	2-12-42	Stanolind Geo. J. Darneille	W/2 SE/4, SW/4 NE/4 Sec. 19, 29N, 12 W	120.00	.45967	(Same as Tract 16 above)	
123	2-11-47	Stanolind Geo. J. Darneille	SE/4 SE/4, W/2 SE/4, SE/4 SW/4, Sec. 30, 29N, 12W	160.00	.61290	(Same as Tract 16 above)	
124	10-13-47	Stanolind Geo. J. Darneille	29N, 12W N/2 NE/4, NE/4 NW/4 Sec. 32 NW/4 SE/4, S/2 SE/4 Sec. 29 NW/4 NW/4 Sec. 33	280.00	1.07257	(Same as Tract 16 above)	
125	8-17-43	Stanolind Geo. J. Darneille	NE/4 Sec. 29, 29N, 200.00 12W; SW/4 SE/4 Sec. 20, 29N, 12W.		.76612	(Same as Tract 16 above)	
126	1-31-47	Stanolind Geo. J. Darneille	NW/4 Sec. 29, 29N, 200.00 12W; SE/4 SW/4 Sec. 20, 29N, 12W		.76612	(Same as Tract 16 above)	
127	8-17-43	Stanolind Geo. J. Darneille	E/2 SW/4 SW/4 Sec. 20; 29N, 12W.	20.00	.07661	Stanolind Geo. J. Darneille	43.75 43.75

Unit Tract No.	Serial No. And Date Of Lease	Record Owner	Acreage Included in Participating Area		Working Interest Ownership in Lease	
			Description	Acres	Owner	%
144	3-12-42	Stanolind Geo. J. Darneille	N/2 NE/4 Sec. 33 29N-12W	80.00	(Same as Tract 16 above)	
Total Acreage In Enlarged Participating Area				26,362.82		
Uncommitted Tracts				257.28		
Committed Acreage In Participating Area				26,105.54	100.00000	

RECAPITULATION

Type of Acreage	Total		% of Participation
	Acreage	Committed Acreage	
Federal Land	19,061.00	18,923.22	72.48737
Indian Land	3,625.46	3,625.46	13.88770
State Land	1,000.00	920.00	3.52416
Patented Land	2,676.36	2,636.86	10.10077
	26,362.82	26,105.54	100.00000

Note: Tracts in parentheses are not committed.

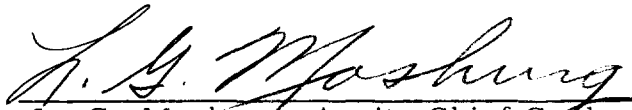
GEOLOGICAL REPORT
TO SUPPORT THE SECOND ENLARGEMENT
OF THE INITIAL PARTICIPATING AREA
GALLEGOS CANYON UNIT
SAN JUAN COUNTY, NEW MEXICO

The Initial Pictured Cliffs Participating Area of the Gallegos Canyon Unit has heretofore been enlarged due to proving additional acreage commercially productive. Completion of a well capable of producing unitized substances in commercial quantities in Section 20, T-29-N, R-12-W, has necessitated a second enlargement to the Initial Participating Area. Acreage proposed for inclusion by this enlargement will consist of the south half (S/2) Section 20, T-29-N, R-12-W. Pertinent data on this well, which has been completed subsequent to the preceding enlargement, are shown on the attached Tabulation I. Also, deliverability data for 1955 are shown on the tabulation as an indication of the productivity of other wells in the immediate area of the proposed enlargement.

In addition to the data shown on Tabulation I which concerns the specific well to be included, a brief discussion of the Gallegos Canyon Unit Area and the West Kutz-Pictured Cliffs Field is presented to adequately support this enlargement to the Pictured Cliffs Participating Area of the Gallegos Canyon Unit. The Gallegos Canyon Unit is located in the northern portion of the West Kutz-Pictured Cliffs Field. In the West Kutz-Pictured Cliffs Field the productive zone is a lense-type sandstone found in the upper portion of the Pictured Cliffs formation. This sandstone is described lithologically as a tight, fine-grained salt and pepper sandstone with good porosity development but with a fair to poor development of permeability. The sand lense from which production is obtained bears little relationship to structure; hence a map contoured on top of the Pictured Cliffs formation has little significance with respect to determining the productive limits and therefore has not been prepared as a portion of this report. The limits of production in this sand lense are due entirely to a lack of permeability and porosity development within the sand zone. The trend of the productive area is

northwest-southeast along the strike of the regional dip of the Pictured Cliffs formation, with the top of the Pictured Cliffs being found generally between the depths of +4300' and +4500'.

The well which is proposed for inclusion in this enlargement to the Initial Participating Area is near the northeastern limits of commercial production in the Pictured Cliffs zone. It is for this reason that only the south 320 acres of Section 20, T-29-N, R-¹²~~17~~-W, are proposed for inclusion. The well is indicated to be a commercial producer as is indicated by its estimated allowable for the proration period from March through December 1955 of 236 MCF per day. An allowable of this magnitude indicates a payout period sufficiently attractive to justify the classification of this well as "capable of producing unitized substances in paying quantities" and thereby justify the inclusion of acreage assigned to it in an enlargement to the Initial Participating Area.


L. G. Mosburg, Ass't. Chief Geologist
Stanolind Oil and Gas Company

PAN AMERICAN PETROLEUM CORPORATION

(FORMERLY STANOLIND OIL AND GAS COMPANY)

OIL AND GAS BUILDING

FORT WORTH, TEXAS

E. V. HEWITT
DIVISION PRODUCTION SUPERINTENDENT

April 10, 1957

File: KJB-4272-416

Subject: Gallegos Canyon Unit
San Juan County, New Mexico

The Oil and Gas Supervisor (6)
United States Geological Survey
Roswell, New Mexico

Oil Conservation Commission (3)
State of New Mexico
Santa Fe, New Mexico

Commissioner of Public Lands (3)
State of New Mexico
Santa Fe, New Mexico

All Working Interest Owners
Gallegos Canyon Unit
(See Attached Addressee List)

Gentlemen:

Reference is made to our letter of December 11, 1956, File: RGH-4637-416, pertaining to the Plan of Development for the Calendar Year 1957 for the Gallegos Canyon Unit, San Juan County, New Mexico. At the bottom of the 1st. page of the referenced letter we stated that the present Pictured Cliffs Participating Area consists of 27,794.68 acres. This figure should have been 27,377.46 as reflected on Exhibit "B" attached to our Application for Approval of Fourth Enlargement of Pictured Cliffs Participating Area dated March 9, 1956, effective as of April 1, 1956. Will you please correct your records accordingly.

Yours very truly,

E. V. Hewitt

FAM:lj

MAILING LIST OF WORKING INTEREST OWNERS
GALLEGOS CANYON UNIT AREA
SAN JUAN COUNTY, NEW MEXICO

*Aztec Oil and Gas Company
920 Mercantile Securities Building
Dallas 1, Texas

* Devonian Gas and Oil Company
11406 Keystone Building
324 Fourth Avenue
Pittsburg 22, Pennsylvania

Benson and Montin
1501 Republic Building
Oklahoma City, Oklahoma

Phillip Gates
802 N. LaBrea Avenue
Englewood, California

Mary Roberts Berry
208 E. Washington Street
Washington, Iowa

Ernest A. Hanson
P. O. Box 852
Roswell, New Mexico

*Brookhaven Oil Company
P. O. Box 396
Scottsdale, Arizona

John W. Hjertstedt
P. O. Box 326
Grand Central Station
New York, New York

Carroll and Cornell
Albuquerque Associated Oil Company
824 Simms Building
Albuquerque, New Mexico

*L. B. Hodges
P. O. Box 671
Roswell, New Mexico

*E. H. Colby
45 Woodstock
Crystal Lake, Illinois

*Edward J. Johnson
223 Greenbank Avenue
Piedmont, 10, California

Thelma Gapen
3601 W. Lincoln Avenue
Sacramento, California

*L. M. Johnson
Box 594
Greensboro, North Carolina

B. H. and Dyvena Crawford
Bloomfield, New Mexico

*Elma R. Jones
764 Twentieth Avenue
San Francisco, California

*George J. Darneille
3251 Cold Water Canyon
North Hollywood, California

Nathan Kessler
5900 States Drive
Oakland, California

Billie Dunlap Day
302 W. Third Street
Roswell, New Mexico

George H. Krause, et al
P. O. Box 1107
Colorado Springs, Colorado

Charles and Eunice McDonald
3130 W. Pierce
Phoenix, Arizona

Otto Schindler
Box 449
Schenectady, New York

*Pauline S. McNaughton
1423 Madison Street
Oakland, California

Skelly Oil Company
Tulsa 2, Oklahoma
Attention: Mr. T. F. Thompson

*New Mexico Natural Gas Company
918 Simms Building
Albuquerque, New Mexico
Attention: Clinton C. Seymour, Pres.

*Glenn J. Smith
First National Building
Tulsa, Oklahoma

Nilaco Company
1107 Mercantile Securities Building
Dallas 1, Texas

*Southern Union Gas Company
Burt Building
Dallas, Texas
Attention: D. W. Whitlow

Pacific Northwest Pipeline Corporation
P. O. Box 1526
Salt Lake City 10, Utah
Attention: Mr. Doanld L. Anderson

M. H. and Eula Stark
Route 3
Farmington, New Mexico

Summit Oil Company
Burt Building
Dallas, Texas

*Petro-Atlas Corporation
First National Bldg.
Tulsa 3, Oklahoma

*Sunray Mid-Continent Oil Company
P. O. Box 2039
Tulsa, Oklahoma
Attention: Mr. J. H. Douma

Paul T. Purcell
Box 317
Manhattan Beach, California

Arthur W. Sunter
2210 Tenth Street
Berkeley, California

Bertha Rahn and Frieda Rahn
1775 Cullom Avenue
Chicago 13, Illinois

*The Texas Company
Box 1720
Fort Worth 1, Texas
Attention: Mr. E. W. Lewis

John J. Redfern, Jr.
Box 1747
Midland, Texas

*Texas Pacific Coal and Oil Company
P. O. Box 2110
Fort Worth, 1, Texas

H. K. Riddle
Box 129
Payette, Idaho

John H. Trigg
P. O. Box 5629
Roswell, New Mexico

Robb Woods
501 W. Grand River Street
Clinton, Missouri

* Members of Pictured Cliffs
Participating Area

TABULATION I
G. ALLEGOS CANYON UNIT
WELL NO. 73
SE SW 20-29-12

Completed:	12-21-55
Initial Potential:	4660 MCF/D + 1 1/2 BW/hr.
Stimulation:	Sand-water frac - 20,000 gal. + 30,000# sand
Interval:	Perf. 1377'-91'
Top Pictured Cliffs:	1372'
Total Depth:	1435' PB 1415'
Initial Shut-In Pressure:	504 psig/168 hrs.
5 1/2" CSA:	1435'
*Current Deliverability:	699 MCF/D (est)
Current Allowable:	236 MCF/D (est)

*Deliverability of Other Wells
In Immediate Area

G. C. U. Well 1	357.4
G. C. U. Well 28	153.5
G. C. U. Well 69	32.0
G. C. U. Well 66	522.7

APPLICATION FOR APPROVAL OF THIRD
ENLARGEMENT OF PICTURED CLIFFS
PARTICIPATING AREA, GALLEGOS CANYON
UNIT
SAN JUAN COUNTY, NEW MEXICO

TO: THE DIRECTOR
UNITED STATES GEOLOGICAL SURVEY
WASHINGTON, D. C.

COMMISSIONER OF PUBLIC LANDS
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

Pursuant to the provisions of Section 10 of the Unit Agreement dated November 1, 1950, I - Sec. No. 844, covering lands within the Gallegos Canyon Unit Area, San Juan County, New Mexico, Stanolind Oil and Gas Company, as Unit Operator, on behalf of itself and other owners of working interest within said Unit Area, hereby submits for your approval a selection of lands to constitute the Third Enlargement of the Participating Area for the Pictured Cliffs Formation. Said lands to be added are described as: the E/2, Section 25 and E/2, Section 36, Township 28 North, Range 13 West, containing 640 acres, more or less.

The above additional lands were reasonably proven commercially productive of unitized substances from the Pictured Cliffs formation by completion thereon of Unit Well No. 72, located in the NE/4 of Section 36, T-28-N, R-13-W; completed on February 4, 1956; depth 1455', initial potential 3700 MCFG/day.

In support of this application, the applicant attaches hereto and makes a part hereof the following:

1. A map marked Exhibit "A", showing thereon the Gallegos Canyon Unit, the present Pictured Cliffs Participating Area and the proposed Third Enlargement of said Participating Area.
2. A schedule marked Exhibit "B", showing the percentage of participation in unitized substances of each tract or partial tract included in said Participating Area as enlarged.
3. A brief geological report which from a geological standpoint justifies the inclusion of the above described lands in the Participating Area for the Pictured Cliffs formation.

Wherefore, the applicant respectfully requests that the Director, the Commissioner and the Commission each approve this selection of lands to constitute the Third Enlargement of the Participating Area for the Pictured Cliffs formation to be effective March 1, 1956.

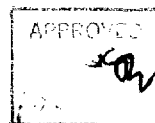
Dated this 8th day of March, 1956.

STANOLIND OIL AND GAS COMPANY

Attest:

[Signature]
Assistant Secretary

By *[Signature]*
Vice-President



The Third Enlargement of the Pictured Cliffs Participating Area in the Gallegos Canyon Unit as said enlargement is described in the foregoing application dated March 8, 1956, is hereby approved:

Date: _____
Director, United States Geological Survey

Subject to like approval by the Commissioner of Public Lands and the Oil Conservation Commission.

E. Sawyer Date: MAR 13 1956
Commissioner of Public Lands

Subject to like approval by the Director, United States Geological Survey and the Oil Conservation Commission.

W. S. Murray Date: 3-15-56
Oil Conservation Commission

Subject to like approval by the Director, United States Geological Survey and the Commissioner of Public Lands.

EXHIBIT "B"
GALLEGOS CANYON UNIT, SAN JUAN COUNTY, NEW MEXICO
SCHEDULE OF LEASES, TRACT PARTICIPATION PERCENTAGES AND
WORKING INTEREST OWNERSHIP IN PICTURED CLIFFS PARTICIPATING AREA
AFTER THIRD ENLARGEMENT

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included in Participating Area			Working Interest Ownership in Lease	
			Description	Acres	%	Owner	%
<u>FEDERAL LEASES</u>							
1	0524 (NM)	Devonian Gas and Oil Company	N/2 S/2 Sec. 24, 29N, 13W	160.00	.59823	Devonian Gas and Oil Company	87.5
4	NM 03654 2-1-51	Pauline S. McNaughton	NE/4 NE/4 Sec. 26, 29N, 13W	40.00	.14956	Pauline S. McNaughton	87.5
6	077966 2-1-48	Aztec Oil and Gas Company	Sec. 24 and SE/4 Sec. 14, 28N, 13W	800.00	2.99115	Aztec Oil and Gas Company	87.5
7	077967 2-1-46	Southern Union Gas Co.	E/2 Sec. 36, 28N, 13W	320.00	1.19646	Southern Union Gas Co.	87.5
(8)	078072 2-1-48	Louise M. Phillips	E/2 Sec. 11, 28N, 13W	(137.78)		Robert Mims	87.5
9	078106 12-1-47	Sunray Mid-Continent Oil Company	Sections 15, 17, 18, NW/4 Sec. 19, NW/4 and SE/4 Sec. 21, NW/4 Sec. 22, 28N, 12W	2,536.94	9.48547	Sunray Mid-Continent Oil Company	87.5
10	078109 2-1-48	Sunray Mid-Continent Oil Company	29N, 12W Sec. 31, SE/4 Sec. 33 28N, 12W Sec. 7, 8, 10, W/2 Sec. 9, Lots 3 & 4 Sec. 11.	1,801.19	6.73454	Sunray Mid-Continent Oil Company	87.5

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included in Participating Area		Working Interest Ownership in Lease	
			Description	Acres	%	Owner
11	078209 10-1-49	Albuquerque Assoc. Oil Co.	NE/4 NE/4, NE/4 SE/4 Lot 4, Sec. 30, 29N, 12W	119.68	.44748	Albuquerque Assoc. Oil Co.
11A	078209-B 10-1-49	George J. Darnelle	S/2 NE/4 Sec. 33, 29N, 12W	80.00	.29911	<u>Pictured Cliffs and Above</u> George J. Darnelle Empire Trust Co. <u>Below Pictured Cliffs</u> George J. Darnelle Benson-Montin
16	078807-A 4-1-48	Stanolind George J. Darnelle	Lots 1, 2, 3, 4 and S/2 S/2 of Sec. 12; Sec. 13; NE/4 Sec. 14; 28N, 13W	1,075.40	4.02086	<u>Pictured Cliffs and Above</u> <u>Stanolind</u> George J. Darnelle Empire Trust Co. <u>Below Pictured Cliffs</u> <u>Stanolind</u> George J. Darnelle Benson-Montin
17	078828-A 8-1-49	Stanolind George J. Darnelle	NE/4 NE/4, SW/4 NE/4 Sec. 14; NE/4 Sec. 22; W/2 NW/4 Sec. 23; SE/4 Sec. 29, 28N, 12W	480.00	1.79469	(Same as Tract 16 above)
17A	078828-A 8-1-49	Stanolind George J. Darnelle	W/2 S/2 S/2 Sec. 11; SW/4 Sec. 14; Sec. 27; Sec. 28; NE/4 of Sec. 29; 28N, 12W	1,680.00	6.28142	(Same as Tract 16 above)

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included in Participating Area			Working Interest Ownership in Lease	
			Description	Acres	%	Owner	%
18	078903-A 2-1-48	Stanolind George J. Darneille	50% 50%	Sec. 34, 28N, 12W	640.00	2.39292	(Same as Tract 16 above)
18A	078903 2-1-48	George J. Darneille		Sections 35 & 36, 28N, 12W	1,280.00	4.78584	(Same as Tract 11A above)
18B	078903 2-1-48	Stanolind		Sec. 33, 28N, 12W	640.00	2.39292	Stanolind Oil and Gas Co.
19	078904 2-1-48	Stanolind George J. Darneille	50% 50%	E/2, SW/4, E/2 NW/4, Sec. 23; Sections 24 & 26; 28N, 12W	1,840.00	6.87965	(Same as Tract 16 above)
19A	078904 2-1-48	Stanolind		Sec. 25, 28N, 12W	640.00	2.39292	Stanolind
20	078905 7-1-48	Stanolind George J. Darneille	50% 50%	NW/4, NW/4 NE/4, SE/4 NE/4, SE/4, Sec. 14; S/2 Sec. 22; Lots 3 & 4, E/2 SW/4 Sec. 31; 28N, 12W	872.00	3.26036	(Same as Tract 16 above)
21	078926 5-1-48	Stanolind George J. Darneille	50% 50%	S/2 NW/4, S/2 Sec. 25; W/2 NE/4, SE/4 NE/4 Sec. 26; Sec. 35; 29N, 13W	1,160.00	4.33717	(Same as Tract 16 above)
21A	078926A 5-1-48	Stanolind		S/2, NW/4 Sec. 26, 29N, 13W	480.00	1.79469	Stanolind

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included in Participating Area		Working Interest Ownership in Lease		
			Description	Acres	%	Owner	%
22	078949 2-1-48	L. B. Hodges	E/2 NW/4, NW/4 NE/4 Sec. 19, 29N, 12W	120.00	.44867	L. B. Hodges	87.5
24	079244 5-1-48	Stanolind George J. Darneille	NW/4 Sec. 20, 28N, 12W	160.00	.59823	(Same as Tract 16 above)	
24A	079244-A 5-1-48	Stanolind George J. Darneille	NE/4 Sec. 19, 28N, 12W	160.00	.59823	(Same as Tract 16 above)	
25	079346 5-1-49	Stanolind George J. Darneille	SE/4 Sec. 32, 28N, 12W	160.00	.59823	(Same as Tract 16 above)	
25A	078902 2-1-48	George J. Darneille	Sec. 4; Lots 1 & 2, S/2 NE/4 Sec. 5; 27N, 12W	800.62	2.99347	(Same as Tract 11A above)	
25B	079346-A 5-1-49	Stanolind George J. Darneille	N/2, SW/4 Sec. 32, 28N, 12W	480.00	1.79469	(Same as Tract 16 above)	
34	080723 1-1-50	Edward J. Johnson	E/2 NE/4, NE/4 SE/4 Sec. 19; 29N, 12W; N/2 S/2, SE/4 SE/4 Sec. 20, 29N, 12W	320.00	1.19646	Edward J. Johnson	87.5
35A	080844 10-1-51	George J. Darneille	S/2 Sec. 31, 28N, 11W	317.39	1.18670	(Same as Tract 11A above)	
36	080862 7-1-50	Elma R. Jones	NE/4 SE/4, NE/4 SW/4, Sec. 29, 29N, 12W	80.00	.29911	Elma R. Jones	87.5

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included in Participating Area		Working Interest Ownership in Lease	
			Description	Acres	%	Owner
37	I-149- Ind. 8474	Glen J. Smith	Lots 1 & 2, S/2 SE/4 Sec. 9; N/2 Sec. 16; 28N, 12W	456.24	1.70585	Glen J. Smith
38	I-149- Ind. 8475	The Texas Company	S/2 Sec. 16; NE/4, SW/4 Sec. 21; 28N, 12W	640.00	2.39292	The Texas Company
39	I-149- Ind. 8476	The Texas Company	S/2 Sec. 19; S/2, NE/4 Sec. 20; 28N, 12W	792.62	2.96356	The Texas Company
40	I-149- Ind. 8477	The Texas Company	W/2 Sec. 29, 28N, 12W	320.00	1.19646	The Texas Company
41	I-149- Ind. 8478	The Texas Company	N/2, SE/4 Sec. 31, 28N, 12W	472.00	1.76478	The Texas Company
42	I-149- Ind. 8470 6-28-51	Aztec Oil and Gas Co.	Sec. 30, 28N, 12W	624.60	2.33534	Aztec Oil and Gas Co.
43	I-149- Ind. 8471	F. D. Jernigan	E/2 Sec. 25, 28N, 13W	320.00	1.19646	Southern Union Gas Co.
45	I-149- Ind. 8486	Stanolind George J. Darneille	SE/4 NE/4 Sec. 32; NE/4 NW/4, S/2 NW/4, SW/4 Sec. 33; 29N, 12W	320.00	1.19646	Pictured Cliffs and Above Stanolind George J. Darneille Below Pictured Cliffs Stanolind George J. Darneille Benson-Montin, et al
						43.75 43.75 43.750 21.875 21.875

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included in Participating Area			Working Interest Ownership in Lease	
			Description	Acres	%	Owner	%
	STATE LEASES						
46A	<u>E-2447</u> 2-10-54	Stanolind George J. Darneille	50% 50%	<u>29N, 12W</u> <u>SW/4 NE/4, NE/4</u> SW/4 Sec. 32 29N, 13W <u>NW/4 NE/4 Sec. 36</u>	120.00	.44867	(Same as Tract 16 above)
62	E-5462 8-10-51	T & P Coal and Oil Co.	NW/4 NW/4 Sec. 32, 29N, 12W	40.00	.14956	T & P Coal and Oil Co.	87.5
63	-	T & P Coal and Oil Co.	SW/4 NW/4 Sec. 32, 29N, 12W	40.00	.14956	T & P Coal and Oil Co.	87.5
64	B-10405-24 6-24-53	Stanolind George J. Darneille	50% 50%	SE/4 NW/4 Sec. 32; 29N, 12W	40.00	.14956	(Same as Tract 16 above)
65	-	T & P Coal and Oil Co.	NW/4, SW/4 Sec. 32, 29N, 12W	40.00	.14956	T & P Coal and Oil Co.	87.5
66	-	T & P Coal and Oil Co.	SE/4 SW/4 Sec. 32, 29N, 12W	40.00	.14956	T & P Coal and Oil Co.	87.5
67	B-11318-10 6-26-54	Brookhaven Oil Co.	SW/4 SW/4 Sec. 32, 29N, 12W	40.00	.14956	Brookhaven Oil Co.	87.5
68	-	T & P Coal and Oil Co.	NW/4 SE/4 Sec. 32, 29N, 12W	40.00	.14956	T & P Coal and Oil Co.	87.5
(69)	E-2754 7-8-54	S. E. Day	SW/4 SE/4 Sec. 32, 29N, 12W	(40.00)		S. E. Day	87.5
70	B-10405-9 6-24-53	L. M. Johnson	NE/4 SE/4 Sec. 32, 29N, 12W	40.00	.14956	L. M. Johnson	87.5

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included in Participating Area		Working Interest Ownership in Lease		
			Description	Acres	%	Owner	%
71	B-10405-27 6-24-53	Brookhaven Oil Co.	SE/4 SE/4 Sec. 32, 29N, 12W	40.00	.14956	Brookhaven Oil Co.	87.5
78	B-9104-4 4-30-51	Albuquerque Assoc. Oil Co.	SE/4 NW/4 Sec. 36, 29N, 13W	40.00	.14956	Albuquerque Assoc. Oil Co.	87.5
(82)	-	Pubco Development Co.	NE/4 NE/4 Sec. 36; 29N, 13W	(40.00)	-	Pubco Development Co.	87.5
83	-	T & P Coal and Oil Co.	NE/4 NW/4 Sec. 36, 29N, 13W	40.00	.14956	T & P Coal and Oil Co.	87.5
84	B-11017-8 2-18-54	Brookhaven Oil Co.	W/2 NW/4 Sec. 36, 29N, 13W	80.00	.29911	Brookhaven Oil Co.	87.5
85	E-331-9 5-16-50	Brookhaven Oil Co.	NW/4 SW/4 Sec. 36, 29N, 13W	40.00	.14956	Brookhaven Oil Co.	87.5
86	-	T & P Coal and Oil Co.	SE/4 NE/4 Sec. 36, 29N, 13W	40.00	.14956	T & P Coal and Oil Co.	87.5
87	-	T & P Coal and Oil Co.	SW/4 NE/4 Sec. 36, 29N, 13W	40.00	.14956	T & P Coal and Oil Co.	87.5
88	-	T & P Coal and Oil Co.	NE/4 SW/4 Sec. 36, 29N, 13W	40.00	.14956	T & P Coal and Oil Co.	87.5
89	-	T & P Coal and Oil Co.	NW/4 SE/4 Sec. 36, 29N, 13W	40.00	.14956	T & P Coal and Oil Co.	87.5
90	B-11017 2-18-54	Stanolind George J. Darnelle	NE/4 SE/4 Sec. 36, 29N, 13W	40.00	.14956	(Same as Tract 16 above)	

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included in Participating Area			Working Interest Ownership in Lease		
			Description	Acres	%	Owner	%	
91	B-11017-15 2-18-54	Stanolind George J. Darneille	50%	SW/4 SW/4 Sec. 36, 29N, 13W	40.00	.14956	(Same as Tract 16 above)	
92	B-11017-11 2-18-54	Brookhaven Oil Co.		SE/4 SW/4 Sec. 36, 29N, 13W	40.00	.14956	Brookhaven Oil Co.	87.5
93	B-11017-1 2-18-54	E. H. Colby		SW/4 SE/4 Sec. 36, 29N, 13W	40.00	.14956	Lester F. Colby, Jr.	87.5
94	E-2526 3-10-54	New Mexico Natural Gas Co.		SE/4 SE/4 Sec. 36, 29N, 13W	40.00	.14956	New Mexico Natural Gas Co.	87.5
PATENTED LEASES								
105	9-17-52	Stanolind George J. Darneille	50%	W/12 Ac. NW/4 NW/4 Sec. 24, 29N, 13W	12.00	.04487	(Same as Tract 16 above)	
106	3-13-42	Stanolind George J. Darneille	50%	E28 Ac. NW/4 NW/4 except 2 Ac. on East- ern edge of Sec. 24, 29N, 13W	26.00	.09721	(Same as Tract 16 above)	
106A	12-3-47	Stanolind George J. Darneille	50%	E2 Ac. NW/4 NW/4 Sec. 24, 29N, 13W	2.00	.00748	(Same as Tract 16 above)	
107	3-8-42	Stanolind George J. Darneille	50%	NE/4 NW/4 Sec. 24 29N, 13W	40.00	.14956	(Same as Tract 16 above)	
108	3-8-42	Stanolind George J. Darneille	50%	S/2 NW/4, SW/4 NE/4, except 3 Ac. in NW corner, Sec. 24, 29N, 13W	117.00	.43746	(Same as Tract 16 above)	

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included in Participating Area		Working Interest Ownership in Lease			
			Description	Acres	%	Owner	%	
108A	12-6-47	Stanolind George J. Darneille	50%	3 Ac. in NW corner of SW/4 NW/4 Sec. 24, 29N, 13W	3.00	.01122	(Same as Tract 16 above)	
(109)	Not Leased	Not Leased		NW/4 NE/4 less 1/2 Ac. in Extreme SE/c Sec. 24, 29N, 13W	(39.50)		Clara Zanolio James F. Zanolio Nicholas C. Zanolio Josephine Zanolio Mable Zanolio Grace Z. Discus	54.6875 6.5625 6.5625 6.5625 6.5625 6.5625
110	9-8-43	Stanolind George J. Darneille	50%	W/2 E/2 NE/4 and E/2 E/2 NE/4 Ex- cept E. 5 Ac of SE/4 NE/4 Sec. 24, 29N, 13W	75.00	.28042	(Same as Tract 16 above)	
111	12-3-47	George J. Darneille		1/2 Ac. S. of Pub- lic Road in SE/c of NW/4 NE/4 Sec. 24, 29N, 13W	.50	.00187	(Same as Tract 11A above)	
112	5-15-42	Stanolind George J. Darneille	50%	29N, 13W S/2 S/2 Sec. 24 N/2 N/2 Sec. 25 29N, 12W NW/4 NE/4, SE/4 NW/4, S/2 NE/4, N/2 NW/4 of Sec. 30; SW/4 SW/4 of Sec. 19	598.93	2.23936	(Same as Tract 16 above)	

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included in Participating Area		Working Interest Ownership in Lease	
			Description	Acres	%	Owner
113	2-24-47	Stanolind George J. Darneille	29N, 13W <u>SW/4 NE/4</u> Sec. 25 29N, 12W <u>W/2 SW/4, SE/4</u> SW/4 Sec. 29	160.00	.59823	(Same as Tract 16 above)
114	2-11-57	Stanolind George J. Darneille	29N, 13W <u>SE/4 NE/4</u> Sec. 25 29N, 12W <u>SW/4 NW/4, N/2</u> SW/4 Sec. 30	159.12	.59494	(Same as Tract 16 above)
117	8-17-43	Stanolind George J. Darneille	SE/4 SE/4 Sec. 19; W/2 SW/4 SW/4 Sec. 20; 29N, 12W	60.00	.22434	(Same as Tract 16 above)
118))) 118A)	5-8-47 8-1-46	Stanolind Stanolind George J. Darneille	E/60 Ac. E/2 SW/4 Sec. 19, 29N, 12W E/60 Ac. E/2 SW/4 Sec. 19, 29N, 12W	60.00	.22434	Stanolind <u>Pictured Cliffs and Above</u> Stanolind George J. Darneille Empire Trust Co. Below Pictured Cliffs Stanolind George J. Darneille Benson-Montin, et al
119	9-17-47	Stanolind George J. Darneille	W/20 Ac. E/2 SW/4 Sec. 19, 29N, 12W	20.00	.07478	(Same as Tract 16 above)
						21.875 4.375 17.500 21.8750 10.9375 10.9375

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included in Participating Area		Working Interest Ownership in Lease	
			Description	Acres	%	Owner
120	2-8-47	Stanolind George J. Darneille	29N, 12W W/2 NW/4, W/23.46 Ac. of NW/4 SW/4 Sec. 19 29N, 13W E/5 Ac. of SE/4 NE/4 Sec. 24	107.31	.40123	(Same as Tract 16 above)
121	9-17-42	Stanolind George J. Darneille	E/16 Ac. of NW/4 SW/4 Sec. 19, 29N, 12W	16.00	.05982	(Same as Tract 16 above)
122	2-12-42	Stanolind George J. Darneille	W/2 SE/4, SW/4 NE/4 Sec. 19, 29N, 12W	120.00	.44867	(Same as Tract 16 above)
123	2-11-47	Stanolind George J. Darneille	SE/4 SE/4, W/2 SE/4, SE/4 SW/4, Sec. 30, 29N, 12W	160.00	.59823	(Same as Tract 16 above)
124	10-13-47	Stanolind George J. Darneille	29N, 12W N/2 NE/4, NE/4 NW/4 Sec. 32 NW/4 SE/4, S/2 SE/4 Sec. 29 NW/4 NW/4 Sec. 33	280.00	1.04690	(Same as Tract 16 above)
125	8-17-43	Stanolind George J. Darneille	NE/4 Sec. 29, 29N, 12W; SW/4 SE/4 Sec. 20, 29N, 12W	200.00	.74779	(Same as Tract 16 above)
126	1-31-47	Stanolind George J. Darneille	NW/4 Sec. 29, 29N, 12W; SE/4 SW/4 Sec. 20, 29N, 12W	200.00	.74779	(Same as Tract 16 above)

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included in Participating Area			Working Interest Ownership in Lease	
			Description	Acres	%	Owner	%
127	8-17-43	Stanolind George J. Darneille	E/2 SW/4 SW/4 Sec. 20; 29N, 12W	20.00	.07478	Stanolind George J. Darneille	43.75 43.75
144	3-12-42	Stanolind George J. Darneille	50% 50%	N/2 NE/4 Sec. 33 29N-12W	80.00	.29911	(Same as Tract 16 above)
Total Acreage in Enlarged Participating Area				27,002.82	-		
Uncommitted Tracts				257.28	-		
Committed Acreage in Participating Area				26,745.54	100.00000		

RECAPITULATION

Type of Acreage	Total Acreage	Committed Acreage	% of Participation
Federal Land	19,381.00	19,243.22	71.94927
Indian Land	3,945.46	3,945.46	14.75184
State Land	1,000.00	920.00	3.43983
Patented Land	2,676.36	2,636.86	9.85906
	27,002.82	26,745.54	100.00000

Note: Tracts in parentheses are not committed.

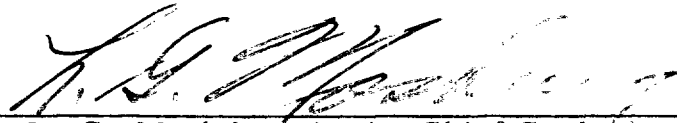
GEOLOGICAL REPORT
TO SUPPORT THE THIRD ENLARGEMENT
OF THE INITIAL PARTICIPATING AREA
GALLEGOS CANYON UNIT
SAN JUAN COUNTY, NEW MEXICO

The Initial Pictured Cliffs Participating Area of the Gallegos Canyon Unit has previously been enlarged with the second enlargement currently in progress. Completion of a well capable of producing unitized substances in commercial quantities in Section 36, T-28-N, R-13-W, has necessitated a Third Enlargement to the Initial Participating Area. The proposed third enlargement will consist of the east half (E/2) Sections 25 and 36, T-28-N, R-13-W. Pertinent data on this well are shown on the attached Tabulation 1. Deliverability data for 1955 are also tabulated as an indication of the productivity of the wells in the area of the proposed enlargement. The map attached to the application accompanying this report shows the Gallegos Canyon Unit Area, the present Participating Area, and the proposed enlargement to the present Participating Area.

In addition to the data shown on Tabulation 1, which concerns the specific well to be included, a brief discussion of the Gallegos Canyon Unit Area, and the West Kutz-Pictured Cliffs Field is presented to further support this enlargement to the Pictured Cliffs Participating Area of the Gallegos Canyon Unit. The Gallegos Canyon Unit is located in the northern portion of the West Kutz-Pictured Cliffs Field. In the West Kutz-Pictured Cliffs Field, the productive zone is a lense-type sandstone found in the upper portion of the Pictured Cliffs formation. This sandstone is described lithologically as a tight fine-grained salt and pepper sandstone with good porosity development but with fair to poor development of permeability. The sand lense from which production is obtained bears little relationship to structure; hence a map contoured on top of the Pictured Cliffs formation has little significance with respect to determining the productive limits and therefore has not been prepared as a portion of this report. The limits of production in this sand lense are due entirely to a lack of permeability and porosity development within the

sand zone. The trend of the productive area is northwest-southeast along the strike of the regional dip of the Pictured Cliffs formation, with the top of the Pictured Cliffs being found generally between the depths of +4300' and +4500'.

The well which is proposed for inclusion in the Third Enlargement to the Initial Participating Area is near the southwestern limit of commercial production in the Pictured Cliffs zone. It is for this reason that the 640 acres comprising the E/2 of Sections 25 and 36, T-28-N, R-13-W, are proposed for inclusion. The well is considered a commercial producer as indicated by an estimated allowable of approximately 200 MCF per day. An allowable of this magnitude indicates a payout period sufficiently attractive to justify classification of the well as "capable of producing unitized substances in paying quantities" and thereby justify the inclusion of acreage assigned to it in an enlargement to the Initial Participating Area.



L. G. Mosburg, Ass't. Chief Geologist
Stanolind Oil and Gas Company

TABULATION 1
GALLEGOS CANYON UNIT
WELL NO. 72
SW NE 36-28-13

Completed:	2-4-56
Initial Potential:	3700 MCF/D + 1 BW/hr.
Stimulation:	Sand-water frac - 28,500 gal. + 30,000# sd.
Interval:	Perf. 1440'-1452'
Top Pictured Cliffs:	1440'
Total Depth:	1487' PB 1455'
5 1/2" CSA	1487'
Initial Shut-In Pressure:	385 psi
* Current Deliverability:	555 MCF (est.)
Current Allowable:	200 MCF/D (est.)

*Deliverability of other wells
in immediate area

G. C. U. Well No.	7	186
	37	229
	38	231
	48	144
	49	283
	71	575 est.
	72	555 est.

APPLICATION FOR APPROVAL OF FOURTH
ENLARGEMENT OF PICTURED CLIFFS
PARTICIPATING AREA, GALLEGOS CANYON
UNIT
SAN JUAN COUNTY, NEW MEXICO

TO: THE DIRECTOR
UNITED STATES GEOLOGICAL SURVEY
WASHINGTON, D. C.

COMMISSIONER OF PUBLIC LANDS
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
SANTA FE, NEW MEXICO

Pursuant to the provisions of Section 10 of the Unit Agreement dated November 1, 1950, I - Sec. No. 844, covering lands within the Gallegos Canyon Unit Area, San Juan County, New Mexico, Stanolind Oil and Gas Company, as Unit Operator, on behalf of itself and other owners of working interest within said Unit Area, hereby submits for your approval a selection of lands to constitute the Fourth Enlargement of the Participating Area for the Pictured Cliffs formation. Said lands are described as follows:

New Mexico Principal Meridian, T-27N, R-12W

Section 5: Lots 3 and 4, S/2 NW/4
(Being all of NW/4 of Section 5)

Section 6: Lots 1, 2, 3, 4, and 5, S/2 NE/4,
SE/4 NW/4
(Being all of N/2 of Section 6)

Section 9: N/2

Embracing 791.86 acres more or less

The above lands were reasonably proven commercially productive of unitized substances from the Pictured Cliffs formation by completion thereon of the following wells:

Locke and Taylor's Foutz No. 1 well located in the NW/4 of Section 5, T-27-N, R-12-W; Completed on 3-21-51; Depth 1290'; Initial Potential 1250 MCFGPD.

The Texas Company's Navajo No. 1 well located in the NE/4 of Section 6, T-27-N, R-12-W; Completed 12-22-53; Depth 1351'; Initial Potential 1350 MCFGPD.

Stanolind - Darneille Lilly No. 1 well located in the NE/4 Section 9, T-27-N, R-12-W; Completed 11-26-54; Depth 1450'; Initial Potential 1167 MCFGPD.

In support of this application, the applicant attaches hereto and makes a part hereof the following:


1. A map marked Exhibit "A", showing thereon the Gallegos Canyon Unit, the present Pictured Cliffs Participating Area, and the proposed Fourth Enlargement of said Participating Area.
2. A schedule marked Exhibit "B", showing the percentage of participation in unitized substances of each tract or partial tract included in said Participating Area as enlarged.
3. A brief geological report which from a geological standpoint justifies the inclusion of the above-described lands in the Participating Area for the Pictured Cliffs formation.

Wherefore, the applicant respectfully requests that the Director, the Commissioner, and the Commission each approve this selection of lands to constitute the Fourth Enlargement of the Participating Area for the Pictured Cliffs formation to be effective the first of the month following the date of final approval.

Dated this 9th day of March, 1956.

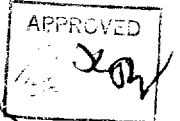
STANOLIND OIL AND GAS COMPANY

Attest:


Assistant Secretary

By

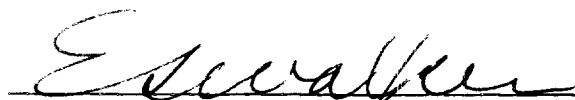

Vice-President




The Fourth Enlargement of the Pictured Cliffs Participating Area in the Gallegos Canyon Unit as said enlargement is described in the foregoing application dated March 9, 1956, is hereby approved:

Date: _____
Director, United States Geological Survey

Subject to like approval by the Commissioner of Public Lands and the Oil Conservation Commission.

_____
Date: 8-1-56
Commissioner of Public Lands

Subject to like approval by the Director, United States Geological Survey and the Oil Conservation Commission.

_____
Date: 8-1-56
Oil Conservation Commission

Subject to like approval by the Director, United States Geological Survey and the Commissioner of Public Lands.

EXHIBIT "B"

GALLEGOS CANYON UNIT, SAN JUAN COUNTY, NEW MEXICO
 SCHEDULE OF LEASES, TRACT PARTICIPATION PERCENTAGES AND
 WORKING INTEREST OWNERSHIP IN PICTURED CLIFFS PARTICIPATING AREA
 AFTER FOURTH ENLARGEMENT

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included In Participating Area		Working Interest Ownership In Lease		
			Description	Acres	Owner	%	
Tracts In Participating Area Prior To Fourth Enlargement							
1	0524 (NM)	Devonian Gas and Oil Company	N/2 S/2 Sec. 24, 29N, 13W	160.00	.58442	Devonian Gas and Oil Company	87.5
4	NM 03654 2-1-51	Pauline S. McNaughton	NE/4 NE/4 Sec. 26, 29N, 13W	40.00	.14611	Pauline S. McNaughton	87.5
6	077966 2-1-48	Aztec Oil and Gas Company	Sec. 24 and SE/4 Sec. 14, 28N, 13W	800.00	2.92211	Aztec Oil and Gas Com- pany	87.5
7	077967 2-1-46	Southern Union Gas Co.	E/2 Sec. 36, 28N, 13W	320.00	1.16884	Southern Union Gas Co.	87.5
(8)	078072 2-1-48	Louise M. Phillips	E/2 Sec. 11, 28N, 13W	(137.78)	-0-	Robert Mims	87.5
9	078106 12-1-47	Sunray Mid-Continent Oil Company	Sections 15, 17, 18, NW/4 Sec. 19, NW/4 and SE/4 Sec. 21, NW/4 Sec. 22, 28N, 12W	2,536.94	9.26652	Sunray Mid-Continent Oil Company	87.5
10	078109 2-1-48	Sunray Mid-Continent Oil Company	29N, 12W Sec. 31, SE/4 Sec. 33 28N, 12W Sec. 7, 8, 10, W/2 Sec. 9, Lots 3 & 4 Sec. 11	1,801.19	6.57909	Sunray Mid-Continent Oil Company	87.5
11	078209 10-1-49	Albuquerque Assoc. Oil Co.	NE/4 NE/4, NE/4 SE/4, Lot 4, Sec. 30, 29N, 12W	119.68	.43714	Albuquerque Assoc. Oil Co.	87.5

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included In Participating Area		Working Interest Ownership In Lease	
			Description	Acres	Owner	%
11A	078209-B 10-1-49	George J. Darneille	S/2 NE/4 Sec. 33, 29N, 12W	80.00	<u>Pictured Cliffs and above</u> George J. Darneille Empire Trust Co.	17.5 70.0
16	078807-A 4-1-48	Stanolind George J. Darneille	Lots 1, 2, 3, 4 and S/2 S/2 of Sec. 12; Sec. 13; NE/4 Sec. 14; 28N, 13W	1, 075.40	<u>Below Pictured Cliffs</u> George J. Darneille Benson-Montin	43.75 43.75
17	078828-A 8-1-49	Stanolind George J. Darneille	NE/4 NE/4, SW/4 NE/4 Sec. 14; NE/4 Sec. 22; W/2 NW/4 Sec. 23; SE/4 Sec. 29, 28N, 12W	480.00	<u>Pictured Cliffs and Above</u> Stanolind George J. Darneille Empire Trust Co.	43.75 8.75 35.00
17-A	078828-A 8-1-49	Stanolind George J. Darneille	W/2 S/2 S/2 Sec. 1, 680.00	1.75326	<u>Below Pictured Cliffs</u> Stanolind George J. Darneille Benson-Montin	43.75 21.875 21.875
17-A	078828-A 8-1-49	Stanolind George J. Darneille	NE/4 NE/4, SW/4 NE/4 Sec. 14; NE/4 Sec. 22; W/2 NW/4 Sec. 23; SE/4 Sec. 29, 28N, 12W	1.75326	(Same as Tract 16 above)	
17-A	078828-A 8-1-49	Stanolind George J. Darneille	W/2 S/2 S/2 Sec. 1, 680.00	6.13643	(Same as Tract 16 above)	
18	078903-A 2-1-48	Stanolind George J. Darneille	Sec. 34, 28N, 12W	640.00	(Same as Tract 16 above)	
18-A	078903 2-1-48	George J. Darneille	Sections 35 & 36, 28N, 12W	4.67537	(Same as Tract 11A above)	
18-B	078903 2-1-48	Stanolind	Sec. 33, 28N, 12W	640.00	Stanolind Oil and Gas Co.	87.5

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included In Participating Area			Working Interest Ownership In Lease	
			Description	Acres	%	Owner	%
19	078904 2-1-48	Stanolind George J. Darneille	E/2, SW/4, E/2 NW/4, Sec. 23; Sections 24 & 26; 28N, 12W	1,840.00	6.72085	(Same as Tract 16 above)	
19-A	078904 2-1-48	Stanolind	Sec. 25, 28N, 12W	640.00	2.33769	Stanolind	87.5
20	078905 7-1-48	Stanolind Geo. J. Darneille	NW/4, NW/4 NE/4, SE/4 NE/4, SE/4, Sec. 14; S/2 Sec. 22; Lots 3 & 4, E/2 SW/4 Sec. 31; 28N, 12W	872.00	3.18510	(Same as Tract 16 above)	
21	078926 5-1-48	Stanolind Geo. J. Darneille	S/2 NW/4, S/2 Sec. 25; W/2 NE/4, SE/4 NE/4 Sec. 26; Sec. 35; 29N, 13W	1,160.00	4.23706	(Same as Tract 16 above)	
21A	078926-A 5-1-48	Stanolind	S/2, NW/4 Sec. 26, 29N, 13W	480.00	1.75326	Stanolind	87.5
22	078949 2-1-48	L. B. Hodges	E/2 NW/4, NW/4 NE/4 Sec. 19, 29N, 12W	120.00	.43832	L. B. Hodges	87.5
24	079244 5-1-48	Stanolind Geo. J. Darneille	NW/4 Sec. 20, 28N, 12W	160.00	.58442	(Same as Tract 16 above)	
24-A	079244-A 5-1-48	Stanolind Geo. J. Darneille	NE/4 Sec. 19, 28N, 12W	160.00	.58442	(Same as Tract 16 above)	
25	079346 5-1-49	Stanolind Geo. J. Darneille	SE/4 Sec. 32, 28N, 12W	160.00	.58442	(Same as Tract 16 above)	

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included In Participating Area			Working Interest Ownership In Lease	
			Description	Acres	%	Owner	%
25-A	078902 2-1-48	Geo. J. Darneille	Sec. 4; Lots 1 & 2, S/2 NE/4 Sec. 5; 27N, 12W	800.62	2.92437	(Same as Tract 11-A above)	
25-B	079346-A 5-1-49	Stanolind Geo. J. Darneille	N/2, SW/4 Sec. 32, 28N, 12W	480.00	1.75326	(Same as Tract 16 above)	
34	080723 1-1-50	Edward J. Johnson	E/2 NE/4, NE/4 SE/4 Sec. 19; 29N, 12W	320.00	1.16884	Edward J. Johnson	87.5
35-A	080844 10-1-51	George J. Darneille	S/2 Sec. 31, 28N, 11W	317.39	1.15931	(Same as Tract 11-A above)	
36	080862 7-1-50	Elma R. Jones	NE/4 SE/4, NE/4 SW/4, Sec. 29, 29N, 12W	80.00	.29221	Elma R. Jones	87.5
37	I-149- Ind. -8474	Glen J. Smith	Lots 1 & 2, S/2 SE/4 Sec. 9, N/2 Sec. 16; 28N, 12W	456.24	1.66648	Glen J. Smith	87.5
38	I-149- Ind. 8475	The Texas Company	S/2 Sec. 16; NE/4, SW/4 Sec. 21; 28N, 12W	640.00	2.33769	The Texas Company	87.5
39	I-149- Ind. 8476	The Texas Company	S/2 Sec. 19; S/2, NE/4 Sec. 20; 28N, 12W	792.62	2.89516	The Texas Company	87.5
40	I-149- Ind. 8477	The Texas Company	W/2 Sec. 29, 28N, 12W	320.00	1.16884	The Texas Company	87.5
41	I-149- Ind. 8478	The Texas Company	N/2, SE/4 Sec. 31, 28N, 12W	472.00	1.72405	The Texas Company	87.5
42	I-149- Ind. 8470 6-28-51	Aztec Oil and Gas Co.	Sec. 30, 28N, 12W	624.60	2.28144	Aztec Oil and Gas Co.	87.5

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included In Participating Area		Working Interest Ownership In Lease	
			Description	Acres	Owner	%
43	I-149- Ind. 8471	F. D. Jernigan	E/2 Sec. 25, 28N, 13W	320.00	Southern Union Gas	87.5
45	I-149- Ind. 8486	Stanolind Geo. J. Darneille	SE/4 NE/4 Sec. 32; NE/4 NW/4, S/2 NW/4, SW/4 Sec. 33; 29N, 12W	320.00	Pictured Cliffs and Above Stanolind Geo. J. Darneille Below Pictured Cliffs Stanolind Geo. J. Darneille Benson-Montin, et al	43.75 43.75 43.750 21.875 21.875
46-A	STATE LEASES E-2447 2-10-54	Stanolind Geo. J. Darneille	29N, 12W SW/4 NE/4, NE/4 SW/4 Sec. 32 29N, 13W NW/4 NE/4 Sec. 36	120.00	(Same as Tract 16 above)	
62	E-5462 8-10-51	T & P Coal and Oil Co.	NW/4 NW/4 Sec. 32, 29N, 12W	40.00	T & P Coal and Oil Co.	87.5
63	-	T & P Coal and Oil Co.	SW/4 NW/4 Sec. 32, 29N, 12W	40.00	T & P Coal and Oil Co.	87.5
64	B-10405-24 6-24-53	Stanolind Geo. J. Darneille	SE/4 NW/4 Sec. 32; 29N, 12W	40.00	(Same as Tract 16 above)	
65	-	T & P Coal and Oil Co.	NW/4 SW/4 Sec. 32, 29N, 12W	40.00	T & P Coal and Oil Co.	87.5
66	-	T & P Coal and Oil Co.	SE/4 SW/4 Sec. 32, 29N, 12W	40.00	T & P Coal and Oil Co.	87.5
67	E-11318-10 6-26-54	Brookhaven Oil Co.	SW/4 SW/4 Sec. 32, 29N, 12W	40.00	Brookhaven Oil Co.	87.5
68	-	T & P Coal and Oil Co.	NW/4 SE/4 Sec. 32, 29N, 12W	40.00	T & P Coal and Oil Co.	87.5
(69)	E-2754 7-8-54	S. E. Day	SW/4 SE/4 Sec. 32, 29N, 12W	(40.00)	S. E. Day	87.5

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included In Participating Area		Working Interest Ownership In Lease	
			Description	Acres	Owner	%
70	B-10405-9 6-24-53	L. M. Johnson	NE/4 SE/4 Sec. 32, 29N, 12W	40.00	L. M. Johnson	87.5
71	B-10405-27 6-24-53	Brookhaven Oil Co.	SE/4 SE/4 Sec. 32, 29N, 12W	40.00	Brookhaven Oil Co.	87.5
78	B-9104-4 4-30-51	Albuquerque Assoc. Oil Co.	SE/4 NW/4 Sec. 36, 29N, 13W	40.00	Albuquerque Assoc. Oil Co.	87.5
(32)	-	Pubco Development Co.	NE/4 NE/4 Sec. 36, 29N, 13W	(40.00)	Pubco Development Co.	87.5
83	-	T & P Coal and Oil Co.	NE/4 NW/4 Sec. 36, 29N, 13W	40.00	T & P Coal and Oil Co.	87.5
84	B-11017-8 2-18-54	Brookhaven Oil Co.	W/2 NW/4 Sec. 36, 29N, 13W	80.00	Brookhaven Oil Co.	87.5
85	E-331-9 5-16-50	Brookhaven Oil Co.	NW/4 SW/4 Sec. 36, 29N, 13W	40.00	Brookhaven Oil Co.	87.5
86	-	T & P Coal and Oil Co.	SE/4 NE/4 Sec. 36, 29N, 13W	40.00	T & P Coal and Oil Co.	87.5
87	-	T & P Coal and Oil Co.	SW/4 NE/4 Sec. 36, 29N, 13W	40.00	T & P Coal and Oil Co.	87.5
88	-	T & P Coal and Oil Co.	NE/4 SW/4 Sec. 36, 29N, 13W	40.00	T & P Coal and Oil Co.	87.5
89	-	T & P Coal and Oil Co.	NW/4 SE/4 Sec. 36, 29N, 13W	40.00	T & P Coal and Oil Co.	87.5
90	B-11017 2-18-54	Stanolind Geo. J. Darneille	NE/4 SE/4 Sec. 36, 29N, 13W	40.00	(Same as Tract 16 above)	
91	B-11017-15 2-18-54	Stanolind Geo. J. Darneille	SW/4 SW/4 Sec. 36, 29N, 13W	40.00	(Same as Tract 16 above)	

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included In Participating Area		Working Interest Ownership In Lease	
			Description	Acres	Owner	%
92	B-11017-11 2-18-54	Brookhaven Oil Co.	SE/4 SW/4 Sec. 36, 29N, 13W	40.00	Brookhaven Oil Co.	87.5
93	B-11017-1 2-18-54	E. H. Colby	SW/4 SE/4 Sec. 36, 29N, 13W	40.00	Lester F. Colby, Jr.	87.5
94	E-2526 3-10-54	New Mexico Natural Gas Co.	SE/4 SE/4 Sec. 36, 29N, 13W	40.00	New Mexico Natural Gas Co.	87.5
<u>PATENTED LEASES</u>						
105	9-17-52	Stanolind Geo. J. Darneille	W/12 Ac. NW/4 NW/4 Sec. 24, 29N, 13W	12.00	(Same as Tract 16 above)	
106	3-13-42	Stanolind Geo. J. Darneille	E28 Ac. NW/4 NW/4 except 2 Ac. on Eastern edge of Sec. 24, 29N, 13W	26.00	(Same as Tract 16 above)	
106-A	12-3-47	Stanolind Geo. J. Darneille	E2 Ac. NW/4 NW/4 Sec. 24, 29N, 13W	2.00	(Same as Tract 16 above)	
107	3-8-42	Stanolind Geo. J. Darneille	NE/4 NW/4 Sec. 24 29N, 13W	40.00	(Same as Tract 16 above)	
108	3-8-42	Stanolind Geo. J. Darneille	S/2 NW/4, SW/4 NE/4, except 3 Ac. in NW corner, Sec. 24, 29N, 13W	117.00	(Same as Tract 16 above)	
108-A	12-6-47	Stanolind Geo. J. Darneille	3 Ac. in NW corner of SW/4 NW/4 Sec. 24, 29N, 13W	3.00	(Same as Tract 16 above)	
(109)	Not Leased	Not Leased	NW/4 NE/4 less 1/2 Ac. in Extreme SE/c Sec. 24, 29N, 13W	(39.50)	Clara Zanolio James F. Zanolio Nicholas C. Zanolio Josephine Zanolio Mable Zanolio Trace Z. Discus	54.6875 6.5625 6.5625 6.5625 6.5625 6.5625

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included in Participating Area			Working Interest Ownership In Lease	
			Description	Acres	%	Owner	%
110	9-8-43	Stanolind Geo. J. Darneille	W/2 E/2 NE/4 and E/2 E/2 NE/4 Except E. 5 Ac of SE/4 NE/4 Sec. 24, 29N, 13W	75.00	.27395	(Same as Tract 16 above)	
111	12-3-47	George J. Darneille	1/2 Ac. S. of Pub- lic Road in SE/c of NW/4 NE/4 Sec. 24, 29N, 13W	.50	.00183	(Same as Tract 11-A above)	
112	5-15-42	Stanolind Geo. J. Darneille	29N, 13W S/2 S/2 Sec. 24 N/2 N/2 Sec. 25 29N, 12W NW/4 NE/4, SE/4 NW/4, S/2 NE/4, N/2 NW/4 of Sec. 30; SW/4 SW/4 of Sec. 19	598.93	2.18768	(Same as Tract 16 above)	
113	2-24-47	Stanolind Geo. J. Darneille	29N, 13W SW/4 NE/4 Sec. 25 29N, 12W W/2 SW/4, SE/4 SW/4 Sec. 29	160.00	.58442	(Same as Tract 16 above)	
114	2-11-57	Stanolind Geo. J. Darneille	29N, 13W SE/4 NE/4 Sec. 25 29N, 12W SW/4 NW/4, N/2 SW/4 Sec. 30	159.12	.58121	(Same as Tract 16 above)	
117	8-17-43	Stanolind Geo. J. Darneille	SE/4 SE/4 Sec. 19 29N, 12W	60.00	.21916	(Same as Tract 16 above)	

Unit Tract No.	Serial No. And Date of Lease	Record Owner	Acreage Included in Participating Area		Working Interest Ownership In Lease	
			Description	Acres	Owner	%
118)	5-8-47	Stanolind	E/60 Ac. E/2	60.00	Stanolind	43.75
)			SW/4 Sec. 19,			
)			29N, 12W			
118-A) 8-1-46		Stanolind	E/60 Ac. E/2SW/4		Pictured Cliffs and Above	21.875
)		Geo. J. Darneille	Sec. 19, 29N, 12W		Stanolind	4.375
					Geo. J. Darneille	17.500
					Empire Trust Co.	
					Below Pictured Cliffs	
					Stanolind	21.8750
					Geo. J. Darneille	10.9375
					Benson-Montin, et al	10.9375
119	9-17-47	Stanolind	W/20 Ac. E/2	20.00	(Same as Tract 16 above)	
		Geo. J. Darneille	SW/4 Sec. 19,			
			29N, 12W			
120	2-8-47	Stanolind	29N, 12W	107.31	(Same as Tract 16 above)	
		Geo. J. Darneille	W/2 NW/4, W/23.46			
			Ac. of NW/4 SW/4			
			Sec. 19			
			29N, 13W			
			E/5 Ac. of SE/4			
			NE/4 Sec. 24			
121	9-17-42	Stanolind	E/16 Ac. of NW/4	16.00	(Same as Tract 16 above)	
		Geo. J. Darneille	SW/4 Sec. 19,			
			29N, 12W			
122	2-12-42	Stanolind	W/2 SE/4, SW/4	120.00	(Same as Tract 16 above)	
		Geo. J. Darneille	NE/4 Sec. 19,			
			29N, 12W			
123	2-11-47	Stanolind	SE/4 SE/4, W/2	160.00	(Same as Tract 16 above)	
		Geo. J. Darneille	SE/4, SE/4 SW/4,			
			Sec. 30, 29N, 12W			

Unit Tract No.	Serial No. And Date Of Lease	Record Owner	Acreage Included in Participating Area			Working Interest Ownership In Lease	
			Description	Acres	%	Owner	%
124	10-13-47	Stanolind Geo. J. Darneille	29N, 12W N/2 NE/4, NE/4 NW/4 Sec. 32 NW/4 SE/4, S/2 SE/4 Sec. 29 NW/4 NW/4 Sec. 33	280.00	1.02274	(Same as Tract 16 above)	
125	8-17-43	Stanolind Geo. J. Darneille	NE/4 Sec. 29, 29N 12W	200.00	.73053	(Same as Tract 16 above)	
126	1-31-47	Stanolind Geo. J. Darneille	NW/4 Sec. 29, 29N 12W	200.00	.73053	(Same as Tract 16 above)	
127	8-17-43	Stanolind Geo. J. Darneille	E/2 SW/4 SW/4 Sec. 20, 29N, 12W	20.00	.07305	(Same as Tract 16 above)	
144	3-12-42	Stanolind Geo. J. Darneille	N/2 NE/4 Sec. 33 29N-12W	80.00	.29221	(Same as Tract 16 above)	

FOLLOWING TRACTS BEING ADDED BY THIS FOURTH ENLARGEMENT

<u>FEDERAL LAND</u>							
159	SF-078902 2-1-48	Earl A. Benson & William B. Montin	N/2 Sec. 9; 27N, 12W	320.00	1.16884	<u>Pictured Cliffs and Above</u> Stanolind Darneille <u>Below Pictured Cliffs</u> Stanolind Darneille Benson-Montin, et al	43.75 43.75 43.7500 32.8125 10.9375
160	SF-080111 4-1-48	Earl A. Benson & William B. Montin	Lots 3, 4 & 5, SE/4 NW/4 Sec. 6, 27N, 12W	152.04	.55535	Stanolind * Geo. F. Darneille * Bankers Life & Casualty Co.	42.750 4.275 38.475

Unit Tract No.	Serial No. And Date Of Lease	Record Owner	Acreage Included In Participating Area		Working Interest Ownership In Lease	
			Description	Acres	Owner	%

INDIAN LAND						
162	Allot. No. 05931C 5-27-50	The Texas Co.	Lots 1 & 2, S/2 NE/4 Sec. 6, 27N, 12W	159.88	The Texas Company	87.5
(164)	PATENTED 5-10-51	Taylor and Locke	Lots 3 & 4, S/2 NW/4 of Sec. 5, 27N, 12W	(159.94)	Locke-Taylor Drilling Co.	87.5
Total Acreage In Enlarged Participating Area				27,794.68	--	
Uncommitted Tracts				417.22		
Committed Acreage In Participating Area				27,377.46	100.0000	

RECAPITULATION			
Type of Acreage	Total Acreage	Committed Acreage	% of Participation
Federal Land	19,853.04	19,715.26	72.01274
Indian Land	4,105.34	4,105.34	14.99533
State Land	1,000.00	920.00	3.36043
Patented Land	2,836.30	2,636.86	9.63150
	27,794.68	27,377.46	100.00000

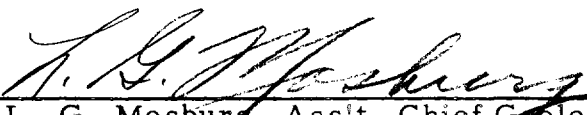
Notes:
 Tracts in parenthesis
 are not committed.
 * Tract 160 Working
 Interest is in litigation.

GEOLOGICAL REPORT
TO SUPPORT THE FOURTH ENLARGEMENT
OF THE INITIAL PARTICIPATING AREA
GALLEGOS CANYON UNIT
SAN JUAN COUNTY, NEW MEXICO

The Initial Pictured Cliffs Participating Area of the Gallegos Canyon Unit has been enlarged on three prior occasions due to proving additional acreage to be commercially productive. Completion of three wells capable of producing unitized substances in commercial quantities in Sections 5, 6, and 9, T-27-N, R-12-W, has necessitated a Fourth Enlargement to the Initial Participating Area. The proposed fourth enlargement will consist of the NW/4 of Section 5, the N/2 of Section 6, and the N/2 of Section 9. Pertinent data on the three wells which have been completed in this area as commercial producers are shown in the attached Tabulation I.

In addition to the data shown on Tabulation I, which has to do with the specific wells concerned, a brief discussion of the Gallegos Canyon Unit Area and the West Kutz-Pictured Cliffs Field in general is presented to support adequately this enlargement to the Pictured Cliffs Participating Area of the Gallegos Canyon Unit. The Gallegos Canyon Unit is located in the northern portion of the West Kutz-Pictured Cliffs Field. In the West Kutz-Pictured Cliffs Field the productive zone is a lense-type sandstone found in the upper portion of the Pictured Cliffs formation. This sandstone is described lithologically as a tight, fine-grained salt and pepper sandstone with good porosity development but with a fair to poor development of permeability. The sand lense from which production is obtained bears little relationship to structure; hence a map contoured on top of the Pictured Cliffs formation has little significance with respect to determining the productive limits and therefore has not been prepared as a portion of this report. The limits of production in this sand lense are due entirely to a lack of permeability and porosity development within the sand zone. The trend of the productive area is northwest-southeast along the strike of the regional dip of the Pictured Cliffs formation, with the top of the Pictured Cliffs being found generally between the depths of +4300' and +4500'.

These three wells which are proposed for inclusion in the Fourth Enlargement to the Initial Participating Area are near the southwestern limits of commercial production from the Pictured Cliffs zone. Their proximity to the productive limits is illustrated by the productivity of the three wells concerned. The average deliverability for these three wells is 236 MCFPD as compared to the average deliverability per well for the Gallegos Canyon Unit of 432 MCFPD. It has been recognized that deliverability is an indication of pay quality in the Pictured Cliffs formation. These three wells are commercial producers, however, as is indicated by their estimated allowables for the first proration period from March 1, 1955, through January 31, 1956, of from 101 to 152 MCFPD. Allowables of this magnitude indicate a payout period sufficiently attractive to justify classification of these wells as "capable of producing unitized substances in paying quantities" and thereby justify the inclusion of the acreage assigned to them in an enlargement to the Initial Participating Area.


L. G. Mosburg, Ass't. Chief Geologist
Stanolind Oil and Gas Company

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

247

February 23, 1956

Stanolind Oil and Gas Company
Oil and Gas Building
Fort Worth, Texas

Attention: Mr C. F. Bedford

Re: Gallegos Canyon Unit
San Juan County, New Mexico
1956 Plan of Development

Gentlemen:

This is to advise that the 1956 Plan of Development for the subject unit, dated December 21, 1955, has this date been approved by the New Mexico Oil Conservation Commission, subject to like approval by the United States Geological Survey and by the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the plan is returned herewith.

Very truly yours,

W. B. Macey
Secretary-Director

WBM:jh
cc: U. S. Geological Survey, Roswell
Commissioner of Public Lands, Santa Fe

C
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STANOLIND OIL AND GAS COMPANY
FORT WORTH, TEXAS

February 23, 1956

File: JEM-8066-416

Subject: Gallegos Canyon Unit
San Juan County
New Mexico*file*

Mr. John A. Anderson
Regional Oil and Gas Supervisor
U. S. Geological Survey
Roswell, New Mexico

Dear Sir:

Attached are four copies each of ratifications and joinders to the subject unit as follows:

1. "Ratification and Joinder of Unit Agreement and Unit Operating Agreement", dated February 20, 1956, and executed by Stanolind Oil and Gas Company, committing the working interest in the lands described thereon (Unit Tracts 115 and 116) to the subject unit.
2. "Ratification and Joinder of Unit Agreement" executed by John E. Hall, Lucille T. Hall, R. S. Poage and Annie Bert Poage, committing the royalty interest in the lands described thereon (Unit Tract 115) to the subject unit. The joinder of these parties has been approved and consented to by Stanolind as the working interest owner under said lands.
3. "Ratification and Joinder of Unit Agreement" executed by Allen H. Tonkin and Nancy P. Tonkin, committing the royalty interest in the lands described thereon (Unit Tract 116) to the subject unit. The joinder of these parties, also, has been approved and consented to by Stanolind as the working interest owner under said lands.

Upon your acknowledging receipt of these instruments, copies will be furnished to the other unit working interest owners. By carbon copies of this letter to the Commissioner and the Commission, we are sending them one copy each of said instruments.

Yours very truly,

JEM:cp
AttachmentsOriginal Signed By
C. F. Bedfordcc: Commissioner of Public Lands
Oil Conservation Commission

COPY

RATIFICATION AND JOINDER OF UNIT AGREEMENT
AND UNIT OPERATING AGREEMENT

In consideration of the execution of the Unit Agreement dated January 15, 1951, for the Development and Operation of the Gallegos Canyon Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, and in consideration of the execution or ratification by other working interest owners of the contemporary Unit Operating Agreement which relates to said Unit Agreement, the undersigned owners of certain leases, viz:

Covering

Lot 2, or SW/4 NW/4, SE/4 NW/4, NE/4 SW/4, W/2 SE/4 of

Sec. 18, 29N, 12W

hereby consent to the inclusion of said lands within the said Unit Agreement, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative, agree that the term of said leases are extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development, and producing requirements of said leases and other contracts relating thereto shall be deemed fully performed by the performance of the provisions of said Unit Agreement, and agree that payment for or delivery of oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the above described lands regardless of actual production therefrom shall constitute full performance of all such obligations to the undersigned existing under said leases.

For a like consideration, the undersigned do hereby expressly ratify, approve, adopt, confirm, and join in said Unit Operating Agreement to the extent of the undersigned's leasehold interest in the above-described lands, and agree to be governed by all the terms and provisions thereof as working interest owners, as fully to all intents and purposes as though the undersigned had originally executed said Unit Operating Agreement and all counterparts thereof.

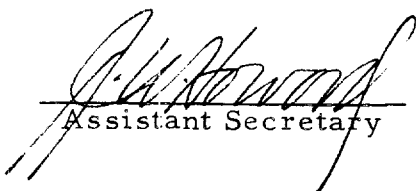
And the undersigned do especially agree to the allocation of cost as set forth in said Unit Operating Agreement and the Exhibits attached thereto.

This Agreement shall inure to the benefit of and be binding upon the successors and assigns of the undersigned.

ATTEST:

DATE

STANOLIND OIL AND GAS COMPANY
Unit Operator and Working Interest Owner


Assistant Secretary

Feb 20, 1956

By


Vice-President

RECD
JCS

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 19____, before me personally appeared _____ to me known to be the person _____ described in and who executed and delivered the foregoing instrument, and acknowledged to me that _____ executed the same as _____ free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 19____.

My commission expires:

Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 19____, before me personally appeared _____ to me known to be the person _____ described in and who executed and delivered the foregoing instrument, and acknowledged to me that _____ executed the same as _____ free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 19____.

My commission expires:

Notary Public

STATE OF OKLAHOMA)
COUNTY OF TULSA)

On this 20th day of February, 1956, before me appeared FRANK LINDEMAN, JR. to me personally known, who, being by me duly sworn, did say that he is the Vice President of STANDARD OIL AND GAS COMPANY and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors, and said FRANK LINDEMAN, JR. acknowledged said instrument to be the free act and deed of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 20th day of February, 1956.

My commission expires:

My Commission Expires October 4, 1959

Maxine McAdams
Notary Public
Maxine McAdams

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Gallegos Canyon Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, briefly described opposite his signature, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

SIGNATURES AND ADDRESSES

DESCRIPTION

<u>John F. Hall</u> John F. Hall	Sunshine Bldg.	Lot 2 (being the SW1/4)
<u>Lucille T. Hall</u> Lucille T. Hall	Albuquerque, New Mexico	38ANW1, NE1/4
<u>L. S. Poage</u> L. S. Poage	520 Tulane Drive NE, Albuquerque, New Mexico	Sec. 16-29N-12W
<u>Annie Bert Poage</u> Annie Bert Poage		

APPROVED AND CONSENTED TO:
SEAROLINE OIL & GAS COMPANY
WORKING INTEREST OWNER

STATE OF New Mexico
COUNTY OF Bernalillo

On this 16 day of January, 1956, before me personally appeared JOHN F. HALL and wife, LUCILLE T. HALL to me known to be the persons described in and who executed and delivered the foregoing instrument, and acknowledged to me that they executed the same as their free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 16 day of January, 1956.

My Commission expires: 10-8-59
STATE OF New Mexico
COUNTY OF Bernalillo

Glenn M. Pinkham
Notary public

On this 11th day of January, 1956, before me personally appeared L. S. POAGE and wife, ANNIE BERT POAGE to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that they executed the same as their free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 11th day of January, 1956.
My Commission expires:

August 18, 1959

Annabel Hardyman
Notary Public

139538

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RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Gallegos Canyon Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, briefly described opposite his signature, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

SIGNATURES AND ADDRESSES

DESCRIPTION

Allen P. Tonkin
Allen P. Tonkin

W/2 17/4 Section 10-
T. 29 N., . 12 W.

Nancy P. Tonkin
Nancy P. Tonkin

Address: Sunshine Building
Albuquerque, New Mexico

John Emerson Hall
WORKING INTEREST JOINDER
JCH

STATE OF NEW MEXICO
COUNTY OF SAN JUAN

On this 16 day of January, 1959, before me personally appeared Allen P. Tonkin and Nancy P. Tonkin, his wife known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that they executed the same as their free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 16 day of Jan, 1959
My Commission expires: 4-24-1969
John Emerson Hall
Notary Public



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 6721
Roswell, New Mexico

February 14, 1956

Stanolind Oil and Gas Company
Oil and Gas Building
Fort Worth, Texas

Gentlemen:

Your plan of development dated December 21, 1955, for the Callegos Canyon Unit, New Mexico, for the calendar year 1956, has been approved on this date subject to like approval by the appropriate State of New Mexico officials.

One approved copy of the plan is enclosed.

Very truly yours,

R. E. CANFIELD
Acting Oil & Gas Supervisor

Enclosure

Copy to: Wash (w/copy of plan)
Farmington (w/copy of plan)
O.C.G., Santa Fe (letter only) ✓

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

February 23, 1956

file

Stanolind Oil and Gas Company
Oil and Gas Building
Fort Worth, Texas

Attention: Mr C. F. Bedford

Re: (Gallegos Canyon Unit)
San Juan County, New Mexico
1956 Plan of Development

Gentlemen:

This is to advise that the 1956 Plan of Development for the subject unit, dated December 21, 1955, has this date been approved by the New Mexico Oil Conservation Commission, subject to like approval by the United States Geological Survey and by the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the plan is returned herewith.

Very truly yours,

W. B. Macey
Secretary-Director

WEM:jh

cc: U. S. Geological Survey, Roswell
Commissioner of Public Lands, Santa Fe

C
O
P
Y

STANOLIND OIL AND GAS COMPANY

OIL AND GAS BUILDING

FORT WORTH, TEXAS

C. F. BEDFORD

DIVISION PRODUCTION SUPERINTENDENT

December 21, 1955

File: JEM-8572-921.3

Subject: Plan of Development for 1956
Gallegos Canyon Unit
San Juan County, New Mexico

The Oil and Gas Supervisor
United States Geological Survey
Roswell, New Mexico

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

The Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

Gentlemen:

Herewith, for your approval, are copies of the 1956 Plan of Development for the Gallegos Canyon Unit, San Juan County, New Mexico. Your early consideration of this plan of development is respectfully requested.

Very truly yours,

JEM/njc
Attachment

cc: All Working Interest Owners, w/attach.

A large, stylized handwritten signature in black ink, appearing to read "C. F. Bedford".

PLAN OF DEVELOPMENT
For the Calendar Year 1956
Gallegos Canyon Unit
San Juan County
New Mexico

To: The Oil and Gas Supervisor (6)
United States Geological Survey
Roswell, New Mexico

Commissioner of Public Lands (3)
State of New Mexico
Santa Fe, New Mexico

Oil Conservation Commission (3)
State of New Mexico
Santa Fe, New Mexico

In compliance with Section 9 of the Gallegos Canyon Unit Agreement dated November 1, 1950, approved by the Survey on July 25, 1951 and designated I - Sec. No. 844, Stanolind Oil and Gas Company, as Unit Operator, on behalf of itself and the other affected working interest owners, hereby submits for your approval the plan for development of the unit area for the calendar year 1956.

History of Past Development. To date, seventy-one wells have been drilled within the present unit area and one additional well is expected to be completed within the next thirty days. Of these seventy-one wells, six were dry holes and one was a non-commercial Dakota well. Three commercial Pictured Cliffs wells are located outside the present unit boundary in an area proposed for inclusion in an enlargement to the unit area.

The present Pictured Cliffs Participating Area embraces some 25,785.54 committed acres and the proposed enlargement mentioned above is expected to increase the size of said participating area 791.86 acres.

Proposed Additional Wells. During the calendar year 1956 it is planned that five Pictured Cliffs wells will be drilled at the following locations:

NE/4 Section 29, T-29-N, R-12-W
SW/4 Section 29, T-29-N, R-12-W
SW/4 Section 23, T-28-N, R-12-W
NE/4 Section 26, T-28-N, R-12-W
SE/4 Section 5, T-27-N, R-12-W

The above location in the SE/4 of Section 5, T-27-N, R-12-W, is presently outside the unit area, but is included in the proposed unit area enlargement. Therefore, the drilling of a well on said location will be contingent upon its inclusion in the unit area as enlarged.

Well Casing Program. The well casing program will generally follow the program currently used in Pictured Cliffs wells in San Juan County, including such surface casing and other casing as may be required by the Supervisor, the Commissioner and the Commission, or as set forth in approvals of the applicable U.S.G.S. and State of New Mexico forms. The producing string of casing may be set and cemented on top of or partially through or completely through the producing zone.

Off-Set Obligations. Appropriate and adequate measures will be taken to prevent drainage of unitized substances from lands subject to the Gallegos Canyon Unit Agreement, or, pursuant to applicable regulations, fair and reasonable compensatory royalty will be paid as provided in Section 15 of said Agreement.

Further Development. This plan of development shall constitute the drilling obligations of the Unit Operator under the terms of the Gallegos Canyon Unit Agreement for the period ending December 31, 1956. Before this plan expires, another plan for further development of the unit area will be submitted.

Modifications. It is understood that this plan of development is dependent upon certain information to be obtained prior to and subsequent to drilling, and upon other contingencies, such as availability of well casing; therefore, this plan of development may be modified from time to time to meet changing conditions.

Effective Date. This plan of development shall be effective January 1, 1956.

Dated: December 21, 1955

STANOLIND OIL AND GAS COMPANY
Unit Operator

By

C. F. Bradford

Date:

Approved:

Regional Oil and Gas Supervisor
United States Geological Survey

Approved:

Commissioner of Public Lands
State of New Mexico

Date:

Approved:

W. B. Macey
Oil Conservation Commission
State of New Mexico

Date:

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OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

January 9, 1956

Stanolind Oil and Gas Company
P. O. Box 899
Roswell, New Mexico

Attention: Mr. C. L. Kelley

Re: Gallegos Canyon Unit
San Juan County, New Mexico
Enlargement of Unit Area
Enlargement of Pictured Cliffs
Participating Area

Gentlemen:

This is to advise that the Application for Approval of Enlargement of Gallegos Canyon Unit Area, dated December 22, 1955, and the Application for Approval of Third Enlargement of Gallegos Canyon Unit Pictured Cliffs Participating Area, dated December 30, 1955, have this date been approved by the New Mexico Oil Conservation Commission, subject to like approval by the United States Geological Survey and by the Commissioner of Public Lands of the State of New Mexico.

Very truly yours,

W. B. Macey
Secretary-Director

WBM:jh

cc: U. S. Geological Survey, Roswell
Commissioner of Public Lands, Santa Fe

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Copy
Gallegos Canyon Unit Area
San Juan County, New Mexico

Application For Final Approval Of Enlargement Of The Unit Area

To: The Honorable Director of the United States Geological Survey,
Department of the Interior, Washington, D. C.

The Honorable Commissioner of Public Lands, State of New Mexico,
Santa Fe, New Mexico

Supplementing an Application For Preliminary Approval of Enlargement, approved by the Director on July 14, 1955, and pursuant to Section 2 of the Unit Agreement For The Development and Operation of the Gallegos Canyon Unit Area, San Juan County, New Mexico, Stanolind Oil and Gas Company, as Unit Operator, and with the approval of 93% of the Working Interest Ownership within the existing Unit Area, hereby respectfully requests that said Unit Area be enlarged to include the following described lands:

New Mexico Principal Meridian
Township 27 North, Range 12 West

Section 5: Lots 3 and 4, S/2 NW/4, S/2
Section 6: All
Section 9: N/2,
embracing 1,424.10 acres, more or less.

Attached hereto is a Supplementary Exhibit "B" to the Unit Agreement describing the lease acreage and ownership in the lands to be added and a Revised Exhibit "A" map showing the present unit area and the lands to be added. Also attached are ratifications of the Unit Agreement signed by working interest and royalty owners in the lands to be added to the Unit Area by the enlargement and ratifications of the Unit Operating Agreement by working interest owners therein. It will be noted that all owners in the lands to be added have signed ratifications except as follows:

McConnell Drilling Corp., Record owner and working interest owners,
Tract 161
Lloyd B. Taylor, Record owner and working interest owner, Tract 164
Lloyd D. Locke, Record owner and working interest owner, Tract 164
A. L. Foutz, Royalty owner, Tract 164
Kenneth Washburn, royalty owner, Tract 164

Inclusion of the aforesaid lands is regarded as reasonably necessary and advisable for the purposes of the Unit Agreement. All of the extension acreage has been proven productive or potentially productive by 3 wells completed as paying producers in the Pictured Cliffs formation, located respectively in the NW/4 of Section 5-27N-12W, NE/4 of Section 6-27N-12W and NE/4 of Section 9-27N-12W. A separate Application For Enlargement of the Pictured Cliffs Participating Area to include said wells and a portion of the extension acreage attributable to the wells is being filed with this application. It is respectfully requested that this enlargement be approved to become effective on January 1, 1956.

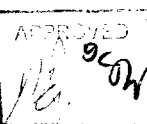
Dated this 22 day of December, 1955.

ATTEST:

STANOLIND OIL AND GAS COMPANY

Karl R. Garsdsmith
Assistant Secretary

By Frank Linderman
Vice President



APPROVED: _____ DATE: _____
U.S. Geological Survey

Subject to like approval by the appropriate State Officials.

APPROVED: orig/2 by Ed Walker DATE: JAN 9 1956
Commissioner of Public Lands

Subject to like approval by the U.S.G.S. and Oil Conservation Commission.

APPROVED: W B Macey DATE: JAN 9 1956
Oil Conservation Commission

Subject to like approval by the U.S.G.S. and Commissioner of Public Lands.