

**CASE 1555: H. K. Riddle application for 2  
NS oil exploration units & 2 unorthodox oil well  
well locations, Sections 18 & 19-26N-13W.**

Casa No.

1555

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Application, Transcript,  
Small Exhibits, Etc.

NOVEMBER, 1958

ORDER NO. A-108

NEW MEXICO  
OIL CONSERVATION COMMISSION  
STATEWIDE OIL PRORATION ORDER

THIS PRORATION SCHEDULE COVERS ALL  
PRODUCING OIL WELLS IN MCKINLEY,  
RIO ARRIBA, SANDOVAL AND SAN JUAN  
COUNTIES.

NORMAL UNIT ALLOWABLE 50 BBLs. PER DAY

THE DISTRICT SUPERVISOR AT AZTEC  
SHOULD BE NOTIFIED OF ANY ERRORS IMMEDIATELY.

- \* Effective Gas-Oil Ratio
- \*\* Non Effective Gas-Oil Ratio
- ( ) Amount of Production on Latest Gas-Oil Ratio Test.
- (X) Special Allowable Assigned per Order R-1191.
- (Y) Special LPG Experimental Allowable per Order R-1104.

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

ORDER NO. A-108

STATEWIDE OIL PRORATION ORDER FOR NOVEMBER, 1958

The Oil Conservation Commission held public hearing at Farmington, New Mexico, on October 15, 1958, at 9 a.m., pursuant to legal notice for the purpose of setting the allowable production of oil within the State of New Mexico for the month of November, 1958, and now on this day the Commission, a quorum being present, having considered the testimony adduced as to probable market demand, the nominations of purchasers, the capacities of producing wells, together with the anticipated newly completed or recompleted wells, and being otherwise fully advised in the premises,

FINDS:

(1) The reasonable market demand for oil produced in the State of New Mexico during the month of November, 1958, is approximately 331,403 barrels per day, which total includes a demand for approximately 292,263 barrels of oil per day from the counties of Lea, Eddy, Chaves, and Roosevelt, and a demand for approximately 38,140 barrels of oil per day from the counties of San Juan, McKinley, Rio Arriba, and Sandoval.

(2) The potential producing capacity of all oil wells in the State is in excess of such reasonable market demand, and in order to prevent waste the production of oil should be limited, allocated, and distributed for the month of November, 1958.

(3) That all the producing oil wells, together with the expected completed or recompleted wells in the state within the proration period, can produce a total of approximately 331,403 barrels per day without causing waste, and an allocation based upon such production would be reasonable and would protect correlative rights.

(4) That the demand for oil from each of the above-described areas is separate and distinct and cannot reasonably be met by the production of oil from the other area, and that the production allowable for each of the said areas should be based upon the demand for oil from that area.

(5) That a total Southeast New Mexico production allowable of 292,263 barrels per day, which includes 8,000 barrels per day supplemental allowable for new production and 20 barrels per day back allowable, can be produced without waste by a distribution and allocation of such production among the oil wells in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, by the establishment of a normal unit allowable for those counties of 34 barrels per unit per day.



(6) That a total Northwest production allowable of 38,140 barrels per day, which includes 2,000 barrels per day supplemental allowable for new production and 2236 barrels per day back allowable, can be produced without waste by a distribution and allocation of such production among the oil wells in San Juan, McKinley, Rio Arriba, and Sandoval Counties, New Mexico, by the establishment of a normal unit allowable for those counties of 50 barrels per unit per day.

(7) That applications for back allowable totalling some 205,721 barrels have been received by the Commission. Said applications are for back allowable resulting from underproduction incurred as the result of purchaser prorationing during April, 1958, by all major purchasers in Northwest New Mexico, in the amount of 205,721 barrels, and purchaser prorationing in the South Sawyer-San Andres Pool during the months of January through August, 1958, by The Atlantic Refining Company in the amount of 2434 barrels.

(8) That of the aforesaid applied for back allowable in the amount of 205,721 barrels, 31/92 of 205,721 or 69,319 barrels was authorized for production during the month of October, 1958, and authorization of the remaining 136,402 barrels was deferred. That of the remaining 136,402 barrels of applied-for back allowable, 30/92 of 205,721, or 67,083 barrels should be authorized for production by certain operators in certain pools in Northwest New Mexico during November, 1958, and authorization of the remaining 69,319 barrels should be deferred until a later date. That of the aforesaid applied-for back allowable in the amount of 2,434 barrels, 31/123 of 2,434, or 613 barrels was authorized for production during the month of October, 1958, and authorization of the remaining 1,821 barrels was deferred. That of the remaining 1,821 barrels of applied-for back allowable, 30/123 or 2,434, or 594 barrels should be authorized for production in the South Sawyer-San Andres Pool during November, 1958, and authorization of the remaining 1,227 barrels should be deferred until a later date.

IT IS THEREFORE ORDERED:

1. For the month of November, 1958, a normal unit allowable for production of oil in the allocated pools within Lea, Eddy, Chaves, and Roosevelt Counties, be, and the same hereby is set at 34 barrels per unit per day; provided that each well in the Knowles Pool in Lea County, New Mexico, under 80-acre spacing Order R-40 (except as amended by Order R-52) is allocated 68 barrels per 80 acres, with deep-pool adaptation. Provided further that the top unit allowable for the North Mason Delaware Pool in Lea and Eddy Counties, New Mexico, be and the same is hereby set at 34 barrels per unit per day, in accordance with the provisions of Order R-944. Provided further that the top unit allowable for the South Carter-San Andres Pool in Lea County, New Mexico, be and the same is hereby set at 45 barrels per unit per day, in accordance with the provisions of Order R-1012. The allocation hereby set for said month in the

Order No. A-108

allocated pools of Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, shall be in accordance with Rules 502, 505, and 506 of the Commission's Rules and Regulations, and subject to and as modified by any valid orders of the Commission relating directly to any well, areas, or pools, and the assignment of allowable thereto.

2. A southeast New Mexico proration schedule duly prepared by the Commission and thereafter adopted for the month of November, 1958, is hereto attached and made a part hereof. Said proration schedule distributes and allocates the allowable production among the oil wells in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, for the period stated. The sale, purchase, or acquisition, or the transporting, refining, processing, or handling in any other way of oil produced in excess thereof is hereby prohibited, and such oil is thereafter contraband.

3. A Southeast New Mexico supplemental proration schedule duly prepared by the Commission and thereafter adopted for the month of November, 1958, is hereto attached and made a part hereof. It distributes and allocates a total of not more than 594 barrels among certain oil wells in Lea County, New Mexico, for the period stated. The oil wells listed in this supplemental proration schedule are those top allowable wells which incurred underproduction as the result of purchaser prorationing in Lea County, New Mexico, during the months of January through August, 1958, by The Atlantic Refining Company.

IT IS FURTHER ORDERED:

1. For the month of November, 1958, a normal unit allowable for production of oil in the allocated pools within San Juan, McKinley, Rio Arriba, and Sandoval Counties, be, and the same hereby is set at 50 barrels per unit per day; provided that each well in the Bisti-Lower Gallup Oil Pool in San Juan County, New Mexico, which has been dedicated 80 acres, is allocated 100 barrels per 80 acres, in accordance with the provisions of Order R-1069-B. The allocation hereby set for said month in the allocated pools of San Juan, McKinley, Rio Arriba, and Sandoval Counties, New Mexico, shall be in accordance with Rules 502, 505, and 506 of the Commission's Rules and Regulations, and subject to and as modified by any valid orders of the Commission relating directly to any well, areas, or pools, and the assignment of allowable thereto.

2. A Northwest New Mexico proration schedule duly prepared by the Commission and thereafter adopted for the month of November, 1958, is hereto attached and made a part hereof. Said proration schedule distributes and allocates the allowable production among the oil wells in San Juan, McKinley, Rio Arriba, and Sandoval Counties, New Mexico, for the period stated. The sale, purchase, or acquisition, or the transporting, refining, processing or handling in any other way of oil produced in excess thereof is hereby prohibited and such oil is thereafter contraband.

-4-  
Order No. A-108

3. A Northwest supplemental proration schedule duly prepared by the Commission and thereafter adopted for the month of November 1958, is hereto attached and made a part hereof. It distributes and allocates a total of not more than 67,083 barrels among certain oil wells in San Juan, McKinley, Rio Arriba, and Sandoval Counties, New Mexico for the period stated. The oil wells listed in this supplemental proration schedule are those top allowable wells which incurred underproduction as the result of purchaser prorationing in the aforesaid counties during April, 1958.

The foregoing order shall remain effective until further order of the Commission.

DONE at Santa Fe, New Mexico, on this 17<sup>th</sup> day of October, 1958.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

MURRAY E. MORGAN, Member

A. L. PORTER, Jr., Member & Secretary

S E A L

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McKINLEY COUNTY  
HOSPAN-GALLUP POOL

Top Unit Allowable 50

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S.	T.	R.	DAILY ALLOWABLE	GOR
Texas Calgary	Osborne	1	L	31-18-8			2	
" "	Santa Fe	1-49	A	1-17-9			6	
" "	"	2-11-21-38	F	"			41	
" "	"	4-5-6-22	C	"			50	
" "	"	8-13-39	K	"			32	
" "	"	9	J	"			8	
" "	"	12-14-20-23-51	B	"			41	
" "	"	24-52	G	"			15	
" "	State	3-7-10-15-17	N	36-18-9			50	
" "	"	16-19-25-48-53	O	"			50	
" "	"	27-50	P	"			8	
" "	"	28-33-34-36	J	"			42	
" "	"	29	G	"			4	
" "	"	32-37	I	"			7	
" "	Wilson St.	18-35	K	"			50	
POOL TOTAL		43					406	

RED MOUNTAIN MESA VERDE POOL

Top Unit Allowable 50

GOR Limit 2,000 to 1

Chaco Oil Co.	Santa Fe	2-3-4	O	20-20-9			11	
"	"	1	B	"			0	
POOL TOTAL		4					11	

UNDESIGNATED  
0-5000 Feet

Top Unit Allowable 50

GOR Limit 2,000 to 1

Douglas & Silver	Indian	1-17	D	17-19-5	13	(13)	1847
Otto Reynolds	Ferris	1	P	18-18-10	5	(5)	TSTM

RIO ARriba COUNTY

LINDRITH DAKOTA POOL

Top Unit Allowable 50

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO	U. S. T. R.	DAILY ALLOWABLE		GOR
Magnolia Pet. Co.	Ingwersen	<u>1</u>	P 20-24-2	<u>5</u>	(5)	TSTM
POOL TOTAL		1		5		

OTERO GALLUP POOL

Top Unit Allowable 67

GOR Limit 6,000 to 1

Skelly Oil Co.	Jicarilla B	2	I 31-23-5	67	(84)	2881
"	"	3	D 5-24-5	60*	(69)	6811
"	"	4	M 32-25-5	67	(71)	5482
"	"	5	L "	64*	(75)	6327
"	"	6	F "	67	(77)	3448
"	"	7	J "	67	(82)	2669
"	"	8	H 31-25-5	67	(84)	2772
"	"	9	O "	67	(83)	2133
"	"	10	P 32-25-5	67	(71)	2978
"	"	11	B 5-24-5	67	(83)	3921
"	"	12	H 32-25-5	67	(76)	3054
"	"	13	B "	67	(89)	919
"	"	<u>14</u>	D "	<u>67</u>	(80)	2300
POOL TOTAL		13		861		

SOUTH BLANCO TOCITO POOL

Top Unit Allowable 139

GOR Limit 2,000 to 1

Caulkins Oil Co.	Breech A	T-125	D 8-26-6	55*	(232)	5116
"	"	T-127	B "	60x	(260)	1150
"	"	T-129	D 9-26-6	150x	(353)	830
"	"	T-132	A "	91x	(120)	1208
"	"	T-134	C 10-26-6	Water Injection		
"	"	T-157	E "	Water Injection		

RIO ARriba COUNTY CONT'D.

SOUTH BLANCO TOCITO POOL CONT'D.

Top Unit Allowable 139

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S.	T.	R.	DAILY ALLOWABLE	GOR
Caulkins Cont'd.	Breech A	T-177	L	9-26-6			60x	(148) 3649
"	"	T-179	J	"			34x	(116) 8379
"	"	T-182	K	10-26-6			40x	(4) 7000
"	"	T-207	O	10-26-6			83x	(172) 2791
"	" B	T-123	B	7-26-6			13*	(106) 22226
"	" D	T-185	L	11-26-6			203x	(330) 1769
"	" E	T-85	L	4-26-6			Water Injection	
"	"	T-87	J	"			Water Injection	
"	"	T-109	M	3-26-6			11x	(61) 574
EPNG Prod. Co.	Rincon Unit	6	F	6-26-6			57*	(160) 4947
"	"	11	N	"			15*	(62) 19612
"	"	20	F	"			35**	(35) 2023
POOL TOTAL		14					907	

x Allowable assigned per Order R-1191

ESCRITO-GALLUP POOL

Top Unit Allowable 67

GOR Limit 2,000 to 1

Eastern Pet. Co.	Federal	1-22	N	22-24-7			67	(77) 992
Pan American	Zanotti	1	C	34-24-7			20	(20) 1896
Southern Union	Ernest	1	D	27-24-7			42	(42) 1240
Standard of Texas	1-27	1	O	27-24-7			20	(20) 1000
"	2-26	1	C	26-24-7			2*	(17) 72900
"	4-26	1	G	"			5*	(17) 32400
"	6-22	1	K	22-24-7			43	(43) 581
POOL TOTAL		7					159	

RIO ARriba COUNTY CONT'D.

UNDESIGNATED  
0-5000 Feet

Top Unit Allowable 50

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
Honolulu Oil Co.	Jicarilla A	1	A	26-26-3	40	(40) 1847
Magnolia Pet. Co.	Jicarilla D	4	M	23-26-3	17	(17) 1398

Top Unit Allowable 67

5-6000 Feet

Amerada Pet. Corp.	Jicarilla E	1	L	30-24-4	15	(15) 1513
Harrell Budd	Dunn	1	M	10-23-7	No C-116	
EPNG Products Co.	Sapp C	1	M	5-23-7	4**	(4) 9750
Pan American	Dashko	1	M	15-24-7	9**	(9) 4118
W. H. Rogers, Jr.	McBee B	1	F	7-23-6	6	(6) 640
Skelly Oil Co.	Jicarilla D	2	A	5-23-4	7**	(7) 7714
Southern Union	Dunn	1	P	9-23-7	11**	(11) 3183
Texas Company	Yarbrough	1	J	3-23-6	6**	(6) 2500
"	" Fed. B	1	D	10-23-6	23	(23) 856

Top Unit Allowable 89

6-7000 Feet

Amerada Pet. Corp.	Jic. Apache A	5	P	25-25-5	26	(26) 1100
Pan American	" " Tr.35-A	1	L	35-25-5	39	
Skelly Oil Co.	Jicarilla C	16	D	34-25-5	20*	(41) 9132
Standard of Texas	Fed. 3-19	1	A	19-24-7	18	(18) 222
"	" 3-20	1	A	20-24-7	45	(45) 1530

Top Unit Allowable 117

7-8000 Feet

Skelly Oil Co.	Roberts	3	O	18-25-3	70	(70) 1857
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Top Unit Allowable 150

8-9000 Feet

Skelly Oil Co.	Lydia Rentz	4	A	19-25-3	63	(63) 1762
"	Roberts	4	M	17-25-3	104	

SANDOVAL COUNTY

OTERO-POINT LOOKOUT POOL

Top Unit Allowable 50

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
Fred Turner	Jicarilla	1	A	32-23-4	7	(7) TSTM
"	"	<u>2</u>	G	"	<u>7</u>	(7) TSTM
POOL TOTAL		2			14	

OTERO-SANASTEE POOL

Top Unit Allowable 67

GOR Limit 2,000 to 1

Skelly Oil Co.	Jicarilla E	1	A	8-22-4	6**	(6) 3043
Humble Oil & Rfg. Co.	Jicarilla B	1	A	1-22-5	8	(8) 375
"	Jicarilla E	<u>1</u>	P	36-23-5	<u>5</u>	(5) 400
POOL TOTAL		3			19	

UNDESIGNATED  
0-5000 Feet

Top Unit Allowable 50

GOR Limit 2,000 to 1

Magnolia Oil Co.	Hutchinson	1	L	14-19-3	3	(3) TSTM
Northwest Prod. Co.	Sandoval 22-7	1-23	I	23-22-7	10	(10) TSTM
"	"	2-35	B	35-22-7	6	(6) TSTM

5-6000 Feet

Top Unit Allowable 67

Plymouth Oil Co.	Federal	1	B	14-22-6	4**	(4) 2300
W. H. Rogers, Jr.	Rogers	1	L	24-23-7	6	(6) 1967
Texas National	Maddox	1	M	34-23-6	3	(3) TSTM

7-8000 Feet

Top Unit Allowable 117

Reynolds Mining Co.	Jic. Apache	1	P	29-23-3	117	
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SAN JUAN COUNTY

BISTI GALLUP FOOL

Top Unit Allowable 100

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
Amerada Pet. Corp.	Gle-Na-Nup-Pah	1	O	5-25-12	100	(128) 803
"	"	2	I	"	100	(124) 962
"	Ka-Da-Pah	1	M	4-25-12	100	(112) 513
"	"	2	K	"	41	(41) 997
"	Na-Des-Pah	1	P	8-25-12	100	(112) 915
"	"	2	J	"	100	(110) 846
"	Joan White	1	N	9-25-12	100	(114) 976
"	"	2	L	"	100	(107) 1875
"	Selena White	1	N	8-25-12	27	(27) 1803
"	"	2	L	"	59	(59) 1268
Atlantic Rfg. Co.	Francisco	1	G	30-25-10	100	(113) 89
Benson-Montin-Greer	Foster	1	K	21-26-13	34	(34) 311
"	"	5	M	"	99	(99) 688
"	Schwerdtfeger	1 (40)	G	17-24-9	22	(22) 1250
British American	Douthit B	2	M	28-26-13	46	(46) 1174
"	"	4	G	27-26-13	18	(18) 589
"	"	5	G	28-26-13	100	(150) 286
"	"	6	O	27-26-13	100	(125) 349
"	"	7	E	27-26-13	100	(108) 449
"	"	8	K	"	100	(108) 465
"	"	9	I	28-26-13	100	(118) 289
"	"	10	C	"	84	(84) 305
"	"	11	A	29-26-13	100	(117) 252
"	"	12	M	27-26-13	100	(122) 276
"	"	13	O	28-26-13	100	(123) 260

SAN JUAN COUNTY CONT'D.

BISTI GALLUP POOL CONT'D.

Top Unit Allowable 100

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
British Amer. Cont'd.	Douthit B	14	K	28-26-13	100	(120) 285
"	"	15	E	"	100	(120) 316
"	"	16	A	"	21	(21) 538
"	"	18	C	29-26-13	43	(43) 260
"	Marye	1	A	1-25-13	217 (Y)	(235) 1296
"	"	2	A	12-25-13	47	(47) 781
"	"	3	C	1-25-13	62	(62) 655
"	"	5	I	"	100	(121) 436
"	"	6	G	"	100	(119) 466
"	" B	1	G	35-26-13	100	(123) 287
"	"	2	C	"	100	(127) 298
"	"	3	I	"	100	(112) 304
"	"	4	K	"	100	(103) 285
"	"	5	E	"	100	(121) 282
"	Salge	2	E	3-25-13	59	(59) 189
"	" B	1	D	34-26-13	100	(117) 318
"	"	2	K	33-26-13	5	(5) 440
"	"	4	A	34-26-13	100	(122) 303
"	"	5	A	33-26-13	5	(5) 744
Elliott & Hall	Federal	1	N	33-25-10	100	(122) 664
"	"T"	2	L	"	100	(118) 640
"	"	3	F	"	100	(118) 590
"	"	4	D	"	100	(125) 620
Elliott Prod. Co.	"C"	1	N	34-25-10	100	(120) 557
EPNG Products Co.	Benally	1	G	5-25-12	38**	(38) 2390
"	Brookhaven A	1	M	29-25-10	100	(120) 516

SAN JUAN COUNTY CONT'D.

BISTI GALLUP POOL CONT'D.

Top Unit Allowable 100

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
EPNG Prod. Cont'd.	Brookhaven A	2	O	29-25-10	100	(120) 690
"	"	3	K	"	100	(118) 737
"	"	4	I	"	51	(51) 1365
"	Kelly State	1	A	16-25-12	100	(100) 1400
"	"	2-12	F-C	"	100	(124) 1390
"	"	3	I	"	32	(32) 1780
"	"	4	K	"	7	(7) 1000
"	"	5	B	"	100	(101) 1450
"	"	6	D	"	55	(55) 540
"	"	7	M	"	10	(10) 880
"	"	8	O	"	15	(15) 533
"	Moss	1	B	3-24-10	87	(87) 460
"	"	2	H	"	73	(73) 178
"	Sullivan D	1	M	26-26-13	64	(64) 1265
"	"	2	O	"	25	(25) 640
"	"	3	K	"	20	(20) 700
"	State Pool Unit	1	A	32-25-10	100	(116) 465
"	Todson	1	C	"	78**	(78) 2540
Forest Oil Corp.	Government	1 (40)	A	13-24-10	40	(40) 323
Gulf Oil Corp.	Carson Federal	1	K	30-25-10	88*	(99) 2273
"	"	3	M	24-25-11	100	(123) 684
"	"	4	K	"	100	(101) 387
"	"	5	G	"	5**	(5) 16228
"	Chaco Federal	1 (40)	M	9-24-9	9**	(9) 2371
Honolulu Oil Co.	St. of NM "D"	1	D	36-26-13	11	(11) 653

SAN JUAN COUNTY CONT'D.

BISTI GALLUP POOL CONT'D.

Top Unit Allowable 100

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE		GOR
Humble Oil & Rfg.	State AY	1	I	32-25-10	82*	(116)	2466
"	State AZ	1	D	2-24-10	100	(119)	513
"	"	2	F	"	100		
Magnolia Pet. Co.	Deet-So-Sa	1	O	24-25-11	96	(96)	407
"	"	2	J	"	13	(13)	288
"	Ken-No-To	1	A	26-25-11	82**	(82)	2405
"	Sadie Canuto	1	D	21-25-11	100	(108)	1258
"	"	2	C	"	62*	(83)	3250
"	Sanda Wall	1	F	17-25-11	100	(134)	522
"	"	2	E	"	100	(108)	424
Monsanto Chem. Co.	Atlas	1 (40)	J	34-25-10	50	(59)	391
"	"	2 (40)	E	"	50	(55)	610
"	"	3 (40)	N	35-25-10	50	(53)	470
"	Blanche	1	O	34-25-10	100	(122)	614
"	Frank	1	L	"	100	(118)	724
Moore, Moore & Miller	Caltrider	1	H	32-25-10	100	(115)	600
"	Doctor Irish	1	F	"	100	(127)	1016
"	Scott	1	B	4-24-10	100	(109)	394
"	"	2	D	3-24-10	97	(97)	381
"	"	3	F	"	100		
Kenneth Murchison	Federal	2	P	3-25-12	100		
"	"	3	G	"	75		
Pan American	In-Na-Da-Pah	1	O	4-25-12	73**	(73)	2114
"	"	2	I	"	21**	(21)	3692
"	Ka-Da-Pah	1	M	3-25-12	21	(21)	1214
"	"	2	K	"	16	(16)	1414

SAN JUAN COUNTY CONT'D.

BISTI GALLUP POOL CONT'D.

Top Unit Allowable 100

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
Pan American Cont'd. Rutter		1	D	10-24-10	26**	(26) 2757
Petro-Atlas, Inc.	Atlas	1 (40)	I	34-25-10	44	(44) 522
"	" "A"	1 (40)	M	35-25-10	50	(93) 763
"	"	2 (40)	F	34-25-10	50	(84) 820
Phillips Pet. Co.	Benally	1	M	5-25-12	100	(110) 638
"	"	2	K	"	100	(116) 673
"	Hospah Unit	1	P	36-26-13	64 (Y)	(117) 3799
"	"	2	N	"	100	(118) 485
"	"	3	J	"	100	(124) 386
"	"	4	F	"	17	(17) 1545
"	"	5	L	"	100	(127) 607
"	I-Tah-Nip	1	P	5-25-12	55*	(70) 3680
"	"	2	O	"	100	(116) 1432
Reese & Assoc.	Hickman	1	M	32-26-12	14	(14) 1605
"	Federal	2-9	A	9-24-10	20**	(20) 8120
Shell Oil Co.	Carson Unit	1	A	24-25-12	100	(122) 410
"	"	2	D	25-25-12	S. I.	
"	"	3	L	7-25-11	60	(60) 400
"	"	4	C	20-25-11	100	(125) 1100
"	"	11-14 (40)	D	14-25-12	50	(62) 130
"	"	12-13	E	13-25-12	100	(122) 390
"	"	12-14	E	14-25-12	100	(122) 330
"	"	12-18	E	18-25-11	100	(132) 1598
"	"	12-19	E	19-25-11	100	(120) 400
"	"	12-20	E	20-25-11	14*	(58) 14900
"	"	12-24	E	24-25-12	100	(125) 360

SAN JUAN COUNTY CONT'D.

BISTI GALLUP POOL CONT'D.

Top Unit Allowable 100

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
Shell Cont'd.	Carson Unit	13-11	L	11-25-12	100	
"	"	14-11	M	11-25-12	100	(122) 410
"	"	14-12	M	12-25-12	100	(115) 500
"	"	14-13	M	13-25-12	100	(122) 350
"	"	14-14	M	14-25-12	100	(122) 480
"	"	14-17	M	17-25-11	100	(122) 620
"	"	14-18	M	18-25-11	91	(91) 1050
"	"	21-13	C	13-25-12	100	(122) 740
"	"	21-14 (40)	C	14-25-12	50	(62) 710
"	"	21-18	C	18-25-11	100	
"	"	21-19	C	19-25-11	100	(122) 990
"	"	21-23	C	23-25-12	100	(114) 510
"	"	21-24	C	24-25-12	41	(41) 240
"	"	23-13	K	13-25-12	100	(122) 520
"	"	23-14	K	14-25-12	100	(122) 890
"	"	23-17	K	17-25-11	100	(122) 530
"	"	23-18	K	18-25-11	100	(125) 1200
"	"	23-20	K	20-25-11	33**	(33) 2540
"	"	23-24	K	24-25-12	100	(122) 400
"	"	32-13	G	13-25-12	100	(122) 570
"	"	32-14	G	14-25-12	100	(122) 340
"	"	32-17	G	17-25-11	100	(115) 440
"	"	32-18	G	18-25-11	100	(120) 580
"	"	32-19	G	19-25-11	100	(110) 610
"	"	32-24	G	24-25-12	34	(34) 1530
"	"	33-14 (40)	J	14-25-12	50	(62) 370

SAN JUAN COUNTY CONT'D.

BISTI GALLUP POOL CONT'D.

Top Unit Allowable 100

GOR LIMIT 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
Shell Cont'd.	Carson Unit	33-24	J	24-25-12	100	(123) 390
"	"	34-14 (40)	O	14-25-12	50	(61) 640
"	"	34-13	O	13-25-12	100	(122) 340
"	"	34-17	O	17-25-11	100	(122) 340
"	"	34-18	O	18-25-11	100	(122) 520
"	"	34-19	O	19-25-11	42**	(42) 2620
"	"	41-13	A	13-25-12	100	(122) 580
"	"	41-14	A	14-25-12	100	(115) 940
"	"	41-19	A	19-25-11	100	(118) 850
"	"	41-20	A	20-25-11	100	(122) 520
"	"	41-23	A	23-25-12	100	(121) 260
"	"	42-23	H	23-25-12	100	(115) 380
"	"	43-13	I	13-25-12	100	(122) 760
"	"	43-14 (40)	I	14-25-12	50	(62) 760
"	"	43-17	I	17-25-11	100	(121) 740
"	"	43-18	I	18-25-11	64	(64) 300
"	"	43-23	I	23-25-12	100	
"	"	43-24	I	24-25-12	95	(95) 200
"	"	44-11	P	11-25-12	100	(125) 420
"	"	44-14 (40)	P	14-25-12	50	(62) 370
"	Phillips #4	11-9 (40)	D	9-25-12	50	(62) 530
"	"	12-9 (40)	E	"	50	(61) 620
"	"	12-15	E	15-25-12	100	(121) 700
"	"	13-10 (40)	L	10-25-12	50	(61) 310
"	"	14-10 (40)	M	"	50	(61) 310
"	"	14-15	M	15-25-12	41**	(41) 2150

SAN JUAN COUNTY CONT'D.

BISTI GALLUP POOL CONT'D.

Top Unit Allowable 100

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
Shell Cont'd.	Phillips #4	21-9 (40)	C	9-25-12	50	(62) 480
"	"	21-15	C	15-25-12	100	(125) 390
"	"	22-9 (40)	F	9-25-12	50	(61) 660
"	"	23-10 (40)	K	10-25-12	50	(61) 340
"	"	23-15	K	15-25-12	100	(122) 750
"	"	24-10 (40)	N	10-25-12	50	(61) 330
"	"	31-9 (40)	B	9-25-12	50	(61) 1250
"	"	31-10	B	10-25-12	24	(24) 580
"	"	31-15 (40)	B	15-25-12	50	(60) 380
"	"	32-9 (40)	G	9-25-12	50	(62) 550
"	"	32-15 (40)	G	15-25-12	50	(61) 570
"	"	33-10 (40)	J	10-25-12	50	(60) 330
"	"	34-10 (40)	O	"	50	(61) 360
"	"	41-9 (40)	A	9-25-12	50	(61) 610
"	"	41-15	A	15-25-12	100	(125) 410
"	"	42-9 (40)	H	9-25-12	50	(62) 630
"	"	43-10 (40)	I	10-25-12	50	(60) 350
"	"	43-15	I	15-25-12	100	(122) 520
"	"	44-10 (40)	P	10-25-12	50	(60) 450
"	"	44-15	P	15-25-12	100	(122) 760
"	Mudge #4	41-21-A	A	21-25-12	56	
"	Mudge #6	13-16 (40)	L	16-25-11	50	(61) 540
"	"	14-16 (40)	M	"	50	(62) 490
"	"	23-16 (40)	K	"	50	(61) 540
"	"	24-16 (40)	N	"	50	(61) 540
"	"	34-16	O	"	100	(121) 210



SAN JUAN COUNTY CONT'D.

BISTI GALLUP POOL CONT'D.

Top Unit Allowable 100

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE		GOR
Skelly Oil Co.	A. L. Duff	2	P	20-26-13	100	(121)	362
"	"	3	J	"	99	(99)	739
"	"	4	H	"	8	(8)	1733
"	"	5	F	"	100	(113)	327
"	"	6	N	"	100	(123)	446
"	"	7	L	"	100	(111)	900
"	"	8	H	19-26-13	100	(122)	393
"	"	9	D	20-26-13	100	(120)	500
"	"	10	B	19-26-13	100	(119)	791
"	"	11	J	"	100	(116)	771
"	"	12	P	18-26-13	13	(13)	420
"	"	13	N	"	100	(123)	688
"	"	14	F	19-26-13	100	(108)	507
"	"	15	D	"	100	(103)	507
"	"	16	L	18-26-13	100		
"	Lockhart	1	O	33-25-10	100	(104)	404
"	"	2	I	"	100	(126)	843
"	"	3	G	"	100	(121)	339
"	"	4	A	"	88	(88)	710
"	"	5	O	28-25-10	82	(82)	1230
"	"	6	I	"	73	(73)	631
Southern Union	Ka-Gee-Tah	1	E	10-25-12	100	(115)	555
"	"	2	F	"	100	(115)	218
"	Whitley	1	C	17-24-9	72	(72)	781

SAN JUAN COUNTY CONT'D.

BISTI GALLUP POOL CONT'D.

Top Unit Allowable 100

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
Standard of Texas	Huerfano Federal	7-1	L	7-24-9	100	(122) 1967
"	"	8-1	P	8-24-9	40	(40) 650
"	"	8-2	N	"	100	(111) 514
"	"	12-1	H	12-24-10	45	(45) 1200
Sun Oil Co.	Heirs of Eaton	1	E	30-25-10	100	(122) 353
"	"	2	C	"	100	(122) 237
"	Heirs of Ith-Hal- E-Wood	1	M	19-25-10	37	(37) TSTM
"	Heirs of Ka-Na-Pah	1	H	22-25-11	100	(119) 988
"	"	2	B	"	100	(124) 646
"	Heirs of Ko-Sa	1	L	23-25-11	100	(122) 1076
"	"	2	N	"	100	(121) 839
Sunray Mid-Cont.	N.M. Federal B	1	A	17-25-12	14**	(14) 11180
"	"	3	I	"	10**	(10) 6770
"	"	4	C	"	12	(12) 280
"	" C	1	D	6-25-12	120 (Y)	(196) 2420
"	"	2	M	31-26-12	35 (Y)	(47) 3560
"	"	3	E	6-25-12	100	(114) 640
"	"	4	G	"	100	(104) 347
"	"	5	M	"	100	(128) 1210
"	"	6	K	"	100	(104) 688
"	"	7	O	31-26-12	100	(101) 360
"	"	9	A	6-25-12	100	(100) 420
"	"	10	O	"	100	(104) 1420
"	"	11	C	7-25-12	100	(106) 1030
"	"	12	I	6-25-12	100	(109) 498
"	"	13	E	5-25-12	100	(100) 762

SAN JUAN COUNTY CONT'D.

BISTI GALLUP POOL CONT'D.

Top Unit Allowable 100

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
Sunray Mid-Continent Cont'd.	N. M. Federal C	14	G	8-25-12	100	(112) 1118
"	"	15	C	"	100	(120) 375
"	"	16	E	"	100	(120) 1460
"	"	17	A	7-25-12	100	(106) 563
"	"	18	G	"	59	(59) 860
"	"	19	I	"	100	(115) 1090
"	"	20	E	"	52	(52) 1560
"	"	21	A	8-25-12	100	(105) 600
"	"	22	C	5-25-12	13**	(13) 3920
"	Bittoney Nez	1	G	23-25-11	100	(117) 1488
"	Es-Ka-Ba-Ey	1	C	25-25-11	100	(104) 367
"	Es-Ka-Nel-E-Wood	1	I	22-25-11	97*	(104) 2080
"	H. Platero	1	N	15-25-11	14*	(121) 15000
"	Ka-Des-Pah	1	B	25-25-11	100	(104) 813
"	"	2	H	"	100	(122) 737
"	Ki-Ya-De-Tah	1	E	24-25-11	31**	(31) 3110
"	Mar-Ga-Le-Tah	1	J	23-25-11	100	(128) 378
"	"	2	P	"	100	(162) 193
"	Nsh-Glee-Des-Pah- Eaton	1	P	30-25-10	73*	(123) 2750
"	"	2	J	"	100	(150) 340
The Texas Co.	Navajo M	1	E	23-25-11	100	(114) 698
"	"	2	F	"	100	(110) 1239
"	" O	1	O	15-25-11	100	(121) 1000
Harry T. Thorson, Trustee for C. M. & W. Drlg. Co.	Elliott	1 (40)	B	30-26-13	11	(11) 230
POOL TOTAL		279			21,498	

SAN JUAN COUNTY CONT'D.

BLOOMFIELD FARMINGTON POOL

Top Unit Allowable 50

GOR Limit 2,000 to 1

<u>OPERATOR</u>	<u>LEASE</u>	<u>WELL NO.</u>	<u>U.</u>	<u>S. T. R.</u>	<u>DAILY ALLOWABLE</u>	<u>GOR</u>
Reynolds, Otto & James	W. L. Hare	1-2	G	23-29-11	11	
Roberts, Elvis	Kittell	<u>1</u>	0	15-29-11	<u>5</u>	
POOL TOTAL		2			16	

FOUR CORNERS PARADOX POOL

Top Unit Allowable 67

GOR Limit 2,000 to 1

Humble Oil & Rfg. Co.	Navajo B	<u>1</u>	L	29-32-20	<u>67</u>	(70)	1529
POOL TOTAL		1			67		

GALLEGOS-GALLUP POOL

Top Unit Allowable 67

GOR Limit 2,000 to 1

British American	Warren "C"	1	M	30-27-12	S. I.		
EPNG Products	Delhi-Taylor	1	K	17-26-11	9*	(26)	15650
"	"	2	E	"	9*	(45)	16000
"	"	3	B	"	28*	(40)	4890
"	"	4	H	"	2*	(30)	86000
"	" "B"	1	H	12-26-12	52*	(61)	2580
"	"	2	B	"	30*	(75)	4480
"	Eddy	1	N	33-27-12	12**	(12)	8650
"	Frontier	1	K	5-26-12	4*	(27)	35700
"	" "A"	1	I	8-26-12	4*	(22)	40227
"	Hanson	1	E	36-27-13	48	(48)	1000
"	"	2	C	"	67	(77)	1630
"	" "B"	1	M	25-27-13	67	(75)	1870
"	"	2	K	36-27-13	20*	(47)	7020
"	Hickman "A"	1	L	10-26-12	2*	(31)	99047
"	"	2	L	3-26-12	61*	(80)	2210

SAN JUAN COUNTY CONT'D.

GALLEGOS GALLUP POOL CONT'D.

Top Unit Allowable 67

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S.T.R.	DAILY ALLOWABLE	GOR
EPNG Prod. Cont'd.	Hickman "A"	3	F	3-26-12	63*	(72) 2150
"	"	4	N	"	51	(51) 1690
"	"	5	J	"	31*	(70) 4430
"	Nelson	1	A	8-26-12	2*	(20) 74469
"	" "A"	1	F	9-26-12	2*	(39) 88112
"	Sullivan "A"	1	B	10-26-12	6*	(84) 23600
"	" "E"	1	I	9-26-12	2*	(28) 102968
"	" "F"	1	N	32-27-12	41*	(45) 3270
"	"	2	L	"	38*	(61) 3550
"	"	3	P	"	53**	(53) 2350
"	"	4	O	"	17*	(18) 8000
"	Western	1	N	7-26-11	11*	(42) 12300
"	"	2	P	"	15*	(39) 9400
"	"	3	D	"	10*	(40) 14000
"	"	4	B	18-26-11	5*	(22) 32500
"	"	5	B	7-26-11	11*	(51) 12650
"	" "A"	1	N	8-26-11	21*	(61) 6655
"	"	2	F	"	15*	(38) 9450
"	"	3	P	"	40**	(40) 2500
"	"	4	D	"	4*	(19) 42000
O. F. Featherstone	Roberson	1	G	36-27-13	66	(66) 1756
"	"	2	A	"	67	(75) 819
"	"	3	H	"	67	(81) 795
"	"	4	O	25-27-13	15	(15) 1551
Frontier Rfg. Co.	Chartier	1	M	4-26-12	5*	(43) 33093
"	"	2	I	"	33*	(35) 4140

SAN JUAN COUNTY CONT'D.

GALLEGOS GALLUP POOL CONT'D.

Top Unit Allowable 67

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
Frontier Cont'd.	Gov't. Morgan	1	P	31-27-12	13**	(13) 10650
"	"	2	J	"	67	(74) 1682
"	"	3	D	"	67	(72) 1010
"	"	4	L	"	57	(57) 1755
"	"	5	F	"	46*	(47) 2940
"	Walker	1	B	5-26-12	9*	(17) 15730
Gulf Oil Corp.	Blackrock Fed.	1	D	20-26-11	No C-116	
"	" "B"	1	L	8-26-11	20*	(83) 6959
"	"	2	J	"	31*	(82) 4356
"	Gallegos Fed.	1	G	31-27-12	62	(62) 1296
"	"	2	H	"	61	(61) 1638
"	Western Fed.	1	H	18-26-11	2*	(9) 126875
"	"	2	J	7-26-11	13*	(22) 10917
"	"	3	L	"	13*	(41) 10340
"	"	4	F	"	18*	(35) 7722
"	"	5	H	"	10*	(24) 13782
Pan American	Es-Ska-Eth-Not-Tah	1	A	6-26-12	7*	(12) 19391
"	Randel "A"	1	L	9-26-11	59*	(69) 2271
"	Uskayahewood	1	C	18-26-11	2*	(20) 124784
Petro-Atlas, Inc.	Walker	1	C	5-26-12	21*	(22) 6458
"	" "A"	1	H	4-26-12	67	(81) 955
Skelly Oil Co.	Goddard	1	P	1-26-12	13*	(27) 11110
"	"	2	K	"	2*	(14) 114793
"	"	3	I	11-26-12	67	(76) 1741
"	"	4	C	18-26-12	67	(71) 1698

SAN JUAN COUNTY CONT'D.

GALLEGOS GALLUP POOL CONT'D.

Top Unit Allowable 67

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
Skelly Oil Cont'd.	Goddard	5	K	2-26-12	67	(69) 1187
"	"	6	O	"	61	(61) 1869
"	"	7	M	1-26-12	67	
"	Navajo "B"	1	I	14-26-12	1*	(4) 252500
"	" "C"	1	D	24-26-12	2*	(10) 84410
"	" "D"	1	D	13-26-12	1*	(6) 162250
"	" "E"	1	I	12-26-12	22**	(22) 5000
"	" "F"	1	C	"	11*	(29) 13103
"	"	2	E	"	67	
"	" "G"	1	K	"	32**	(32) 3437
"	" "H"	1	A	13-26-12	2*	(13) 86231
"	" "J"	1	A	11-26-12	36	(36) 590
"	"	2	G	"	67	(83) 1363
"	" "L"	1	I	"	58*	(81) 2336
Sunray Mid-Cont.	N. M. Fed. "J"	1	A	35-27-13	3*	(10) 54000
Tenn. Gas Trans.	W. O. Berger	1	B	21-26-11	6*	(7) 25250
Western Dev. Co.	Holloway	1	N	6-26-11	53	(53) 1943
POOL TOTAL		82			2,456	

HOGBACK DAKOTA POOL

Top Unit Allowable 50

GOR Limit 2,000 to 1

Pan American	USG Federal "A"	2	C	19-29-16	50	(57) TSTM
"	"	5	J	"	4	(4) TSTM
"	"	7-9	B	"	50	(51) TSTM
"	"	11	G-H	"	9	(9) TSTM
"	"	12-14-15	G	"	50	(81) TSTM

SAN JUAN COUNTY CONT'D.

HOGBACK DAKOTA POOL CONT'D.

Top Unit Allowable 50

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
Pan American Cont'd.	USG Federal "B"	<u>8</u>	0	18-29-16	<u>8</u>	(8) TSTM
POOL TOTAL		6			171	

HOGBACK PENNSYLVANIAN POOL

Top Unit Allowable 89

GOR Limit 2,000 to 1

Pan American	USG Sec. 19	13	G	19-29-16	89	
"	"	<u>17</u>	I	"	<u>89</u>	
POOL TOTAL		2			178	

HORSESHOE-GALLUP POOL

Top Unit Allowable 50

GOR Limit 2,000 to 1

Arizona Expl. Inc.	Petro-Atlas-Bolack	1	J	9-30-16	10	(10)	60
Atlantic Rfg. Co.	Navajo	1 (39)	P	32-31-16	49		
"	"	2	J	"	50		
"	"	3	F	"	50		
"	"	4	D	"	50		
Banner Drlg. Co.	Ute Indian	1	M	34-31-16	50	(65)	315
"	"	2	L	"	50		
Tom Bolack	Bolack	1	G	4-30-16	50	(54)	148
"	"	2	L	3-30-16	50	(56)	162
"	"	3	J	4-30-16	50	(66)	182
"	"	4	M	3-30-16	50	(62)	196
"	"	5	F	4-30-16	50	(55)	185
"	"	6	C	10-30-16	50	(59)	255
"	"	9	G	3-30-16	50	(54)	185
EPNG Products Co.	Horseshoe Canyon	1	I	4-30-16	50	(61)	82
"	"	2	E	3-30-16	50	(53)	340



SAN JUAN COUNTY CONT'D.

HORSESHOE-GALLUP POOL CONT'D.

Top Unit Allowable 50

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
EPNG Prod. Cont'd.	Horseshoe Canyon	3	H	4-30-16	50	(53) 94
"	"	4	N	3-30-16	50	(55) 109
"	"	5	P	4-30-16	50	(56) 89
"	"	6	D	10-30-16	50	(57) 53
"	"	7	K	3-30-16	50	(55) 54
"	"	8	K	4-30-16	50	(56) 71
"	"	9	F	3-30-16	50	(57) 280
"	" "B"	1	D	3-30-16	13	(13) 230
"	"	2	C	4-30-16	50	(59) 68
"	Horseshoe Ute	1	N	33-31-16	50	(56) 71
"	"	2	P	"	21	(21) 1142
Monsanto Chem. Co.	State "H"	1	E	2-30-16	5	(5) TSTM
Pan American	Aidlin "A"	1	B	10-30-16	50	(64) 51
Petro-Atlas, Inc.	Horseshoe Can. "A"	1	A	4-30-16	50	(134) TSTM
"	"	2	B	"	50	(139) TSTM
"	" "B"	1	A	9-30-16	50	(129) TSTM
"	" "C"	1	B	3-30-16	50	
"	Ute Navajo	1	O	33-31-16	50	
"	"	<u>2</u>	J	"	<u>50</u>	
POOL TOTAL		35			1,598	

OSWELL FARMINGTON POOL

Top Unit Allowable 50

GOR Limit 2,000 to 1

Service Pipe & Supply	Oswell	1	E	34-30-11	10
H. R. Tuttle	Martin	<u>1</u>	N	"	<u>10</u>
POOL TOTAL		2			20

SAN JUAN COUNTY CONT'D.

RATTLESNAKE DAKOTA POOL

Top Unit Allowable 50

GOR Limit 2,000 to 1

<u>OPERATOR</u>	<u>LEASE</u>	<u>WELL NO.</u>	<u>U.</u>	<u>S. T. R.</u>	<u>DAILY ALLOWABLE</u>	<u>GOR</u>
Continental Oil Co.	Rattlesnake	8	G	2-29-19	0	
"	"	9-74-89	A	"	2	
"	"	19-19X	I	1-29-19	1	
"	"	27	N	"	0	
"	"	50	G	2-29-19	17	
"	"	51	P	1-29-19	0	
"	"	62	J	2-29-19	1	
"	"	70	E	2-29-19	1	
"	"	72	M	"	2	
"	"	83	K	"	1	
"	"	84	E	1-29-19	3	
"	"	87	B	2-29-19	2	
"	"	92	L	1-29-19	3	
"	"	93	F	"	0	
"	"	114-134	O	2-29-19	3	
"	"	119	F	13-29-19	1	
"	"	<u>127</u>	L	12-29-19	<u>1</u>	
POOL TOTAL		17			38	

STONEY BUTTE MESAVERDE POOL

Top Unit Allowable 50

GOR Limit 2,000 to 1

L. G. Sterns	Navajo	1	L	36-22-14	0
"	"	7	P	"	0
"	"	<u>8</u>	O	"	<u>0</u>
POOL TOTAL		3			0

SAN JUAN COUNTY CONT'D.

TABLE MESA DAKOTA POOL

Top Unit Allowable 50

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
Continental Oil Co.	Table Mesa	5	K	3-27-17	3	
"	"	9	E	"	3	
"	"	13	K	"	3	
"	"	14	J	"	22	
"	"	<u>15</u>	G	"	<u>6</u>	
POOL TOTAL		5			37	

VERDE GALLUP POOL

Top Unit Allowable 50

GOR Limit 2,000 to 1

Aztec Oil & Gas	Ute Indian	1	P	10-31-15	50	(60)	105
"	"	2	G	"	18	(18)	608
"	"	3	J	"	No C-116		
"	" "A"	1	I	15-31-15	8	(8)	254
"	"	2	G	16-31-15	10	(10)	TSTM
"	"	3-X	A	15-31-15	50	(60)	73
"	"	4	G	"	50	(59)	36
"	"	5	C	"	50	(53)	TSTM
"	" "D"	1	P	24-31-15	50	(65)	195 195
"	" "E"	1	E	20-31-14	50	(65)	175
"	"	2	K	"	50		
C. M. Carroll	Ute Mtn.	1	P	14-31-15	50	(61)	147
"	"	2	F	"	50	(67)	104
"	"	3	M	13-31-15	50	(55)	382
"	"	4	J	14-31-15	50	(60)	426
"	"	5	E	"	50	(67)	254
"	Ute Mtn. "A"	1	P	13-31-15	50	(60)	422
"	"	2	H	"	50		

SAN JUAN COUNTY CONT'D.

VERDE GALLUP POOL CONT'D.

Top Unit Allowable 50

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
EPNG Products Co.	Malco Copple	1	N	7-30-15	T. A.	
"	"	2	C	5-30-15	50	(54) 77
"	"	3	E	"	50	(57) 52
"	"	5	G	6-30-15	13	(13) 384
"	"	6	G	5-30-15	50	(56) 18 162
"	"	8	A	5-30-15	50	(65) 77 77
"	"	10	O	6-30-15	10	(10) 200
"	Ute	6	M	11-31-15	43	(43) 163
"	"	7	K	"	22	(22) 317
"	"	8	E	"	23	(23) 302
"	"	9	I	"	22	(22) 360
"	"	10	M	12-31-15	50	(59) 322
"	"	11	O	"	16	(16) 312
"	"	12	K	"	15	(15) 1065
"	"	13	C	"	19	(19) 915
Gulf Oil Corp.	SW Barker Dome	1	P	20-31-15	11	(11) 445
"	"	2	I	"	8	(8) TSTM
"	"	3	N	"	8	(8) 213
Humble Oil & Rfg.	Ute Indian	2	O	7-31-14	50	(57) 88
"	Ute "B"	1-X	A	25-31-15	50	(59) 51
Pan American	Thurland	1	A	6-30-15	50	(57) 48
"	"	2	I	"	50	(56) TSTM
"	Ute A	1	D	28-31-15	3	(3) 1204
"	"	2	E	33-31-15	24	(24) 155
"	"	3	M	"	50	(57) 102

SAN JUAN COUNTY CONT'D.

VERDE GALLUP POOL CONT'D.

Top Unit Allowable 50

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE	GOR
Pan American Cont'd.	Ute C	1	L	27-31-15	16	(16) 409
"	"	2	E	34-31-15	50	(56) 33
"	" E	1	D	26-31-15	50	(65) TSTM 574
"	"	2	D	35-31-15	50	
Pubco Pet. Co.	Mtn. Ute	18-1	A	18-31-14	35	(35) 366 366
"	"	18-3	C	"	28	(28) 319
"	"	18-5	E	"	50	(60) 415
"	"	18-7	G	"	50	(58) 238
"	"	18-9	I	"	50	(60) 185
"	"	18-11	K	"	50	(63) 204
"	"	18-13	M	"	50	(63) 252
"	"	18-15	O	"	50	(61) 215
"	"	19-1	A	19-31-14	50	(106) 234 234
"	"	19-3	C	"	50	(62) 273
"	"	19-4	D	"	50	(64) 191 191
"	"	19-5	E	"	50	(106) 221 221
"	"	19-7	C	"	50	(61) 245
"	"	19-9	I	"	50	(59) 180 234
"	"	19-11	K	"	50	(60) 274 274
"	"	19-13	M	"	50	(106) 252 252
"	"	19-15	O	"	50	(62) 258
"	"	19-16	P	"	50	(105) 261 261
Skelly Oil Co.	Ute A	1	M	8-31-14	50	(60) 148
"	"	2	K	"	50	(60) 592 592

SAN JUAN COUNTY CONT'D.

VERDE GALLUP POOL CONT'D.

Top Unit Allowable 50

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S.T.R.	DAILY ALLOWABLE	GOR	
Southern Union	Ute	1-17	E	17-31-14	25	(25)	TSTM 737M
"	"	1-23	B	23-31-15	50	(63)	175
"	"	1-24	D	24-31-15	50	(63)	127
"	"	2-23	L	23-31-15	50	(63)	TSTM
"	"	2-24-	A	24-31-15	50	(63)	254
"	"	3-23	C	23-31-15	50	(99)	152 152
"	"	4-23	J	23-31-15	36	(36)	285
"	"	4-24	L	24-31-15	50	(63)	1921
"	"	5-23	H	23-31-15	50	(63)	333
"	"	5-24	F	24-31-15	50	(65)	272 272
Standard of Texas	Ute Mtn. 2-29	1	D	29-31-14	50	(64)	172
Tenn. Gas Trans.	Ute A	1	A	22-31-15	50	(50)	252
"	"	2	L	21-31-15	11	(11)	268
"	"	3	N	"	7	(7)	120
"	"	4	J	"	12	(12)	181
"	"	5	F	22-31-15	50	(54)	63
"	"	6	I	"	50	(51)	66
"	"	7	M	"	50	(58)	175
"	Ute B	1	B	29-31-15	4	(4)	105
"	"	2	F	"	50	(61)	294
"	"	3	N	32-31-15	50	(59)	31
"	"	4	F	"	27	(27)	222
"	"	5	P	31-31-15	50	(63)	170
"	"	6	P	32-31-15	50	(63)	59
"	"	7	N	31-31-15	8	(8)	168

SAN JUAN COUNTY CONT'D.

VERDE GALLUP POOL CONT'D.

Top Unit Allowable 50

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S. T. R.	DAILY ALLOWABLE		GOR
Tenn. Gas Cont'd.	Ute B	8	H	31-31-15	7	(7)	96
"	"	9	H	32-31-15	28	(28)	472
"	"	10	N	29-31-15	6	(6)	27
"	"	11	F	31-31-15	7	(7)	47
Three States	Tribal	1	D	30-31-14	50	(60)	44
"	"	<u>2-X</u>	A	"	<u>50</u>	(64)	19 19
POOL TOTAL		96			3,730		

UNDESIGNATED  
0-5000 Feet

Top Unit Allowable 50

GOR Limit 2,000 to 1

F. R. Anderson	Federal	21-29	C	29-25-12	No C-116		
R. L. Bayless	Navajo	2	H	5-31-17	50	(63)	240
"	"	4	A	"	50	(60)	274
British American	Ross	2	A	24-25-13	2**	(2)	5860
EPNG Prod. Co.	Hill	1	A	20-26-12	No C-116		
"	" "A"	1	M	36-26-12	No C-116		
"	McKee	1	D	1-25-11	3*	(5)	42600
"	Mims-Carson	1	D	4-24-12	No C-116		
"	Williams	1	O	11-30-16	50		
Great Western	Chaco Unit	3	G	21-23-8	S. I.		
Haynes & V. T.	Fed. Sapp	1	A	28-24-8	48	(48)	TSTM
Humble Oil & Rfg.	E-Ka-Ne-Pah	1	E	27-24-8	T. A. 9/29/58		
King Oil Co.	Navajo "C"	1-X	E	4-30-17	50		
"	" "H"	1	I	5-30-17	50		
Reynolds Mining	S. Huerfano	1	N	33-24-9	9	(9)	625

SAN JUAN COUNTY CONT'D.

UNDESIGNATED CONT'D.

Top Unit Allowable 67

5-6000 Feet

GOR Limit 2,000 to 1

OPERATOR	LEASE	WELL NO.	U.	S.	T.	R.	DAILY ALLOWABLE	GOR
British American	Navajo	2	O	13-26-14			12	(12) 277
EPNG Prod. Co.	Frontier "B"	1	P	9-27-11			4*	(27) 44400
"	Sapp	1	I	30-24-8			6**	(6) 3000
"	" "B"	2	N	19-24-8			11**	(11) 3000
Gulf Oil Corp.	Kinebeto	1	A	21-24-9			2**	(2) 4985
"	Largo Federal	1	L	14-24-9			7**	(7) 9918
"	" "B"	1	A	22-24-9			18*	(20) 7445
Pan American	Old Trading Post	1	P	10-26-14			25	(25) 1142
"	USG Holder	1	P	21-28-13			51	(51) 678
Rex Uranium	Douthit	1	B	8-27-13			12	(12) 583
"	Royal Rex	2	D	18-27-13			7	(7) 1214
Royal Development	Douthit	1	P	33-28-13			33	(33) 515
"	Paquenche	2	H	3-24-8			No C-116	
Skelly Oil Co.	Davis	1	A	26-26-11			No C-116	



SUPPLEMENTS TO THE SEPTEMBER, 1958 OIL PRORATION SCHEDULE FOR NORTHWEST

NO.	COMPANY	LEASE	NO.	S. T. R.	POOL	DAILY	CURRENT	REVISED OR ASSIGNED	EFFECTIVE DATE
43	Shell	Carson Unit	21-18	18-25-11	Bisti Gallup	102	1734	A	9-14-58
44	Skelly	Goddard	7	1-26-12	Gallegos Gal.	68	1156	A	"
45	Pampas Pet. Corp	Chapman (Cancelled)	1	20-23-6	WC.		1500	A	9/58
46	Reynolds Mng.	Jicarilla A.	1	29-23-3	Undes.	119	1428	A	9-19-58
47	Atlantic Rfg. Co	Navajo	1	32-31-16	Horseshoe Gall.	50	700	A	9-17-58
48	Petro-Atlas, Inc.	Horseshoe Can. C	1	3-30-16	"	51	561	A	9-20-58
49	Skelly	Jicarilla B	14	32-25-5	Otero Gal.	68	612	A	9-22-58
50	Pan American	Zanotti	1	34-24-7	Escrito Gal.	20	100	R	9-26-53
51	"	Ute Mtn. Tr. E	2	35-31-15	Verde Gal.	51	408	A	9-23-58
52	Shell	Carson Unit	13-11	11-25-12	Bisti Gal.	102	918	A	9-22-58
53	"	Mudge #4	41-21	21-25-12	"	56	672	A	9-19-58
54	"	Carson Unit	43-23	23-25-12	"	102	408	A	9-27-58
55	Aztec Oil & Gas	Ute Indian	2	20-31-14	Verde Gal.	51	204	A	"
56	EPNG Prod.	Williams	1	11-30-16	Undes.	51	204	A	"

SUPPLEMENTS TO THE OCTOBER, 1958 OIL PRORATION SCHEDULE FOR NORTHWEST

1	Shell	Carson Unit	21-18	18-25-11	Bisti Gal.	106	3286	A/2	10-1-58
2	Skelly	J. W. Goddard	7	1-26-12	Gallegos Gal.	71	2201	A/2	"
3	Amerada	Ka-Da-Pah	2	4-25-12	Bisti Gal.	41	1271	R	"
4	Renolds Mng.	Jic. Apache	1	29-23-3	Undes.	124	3844	A/2	"
5	Atlantic Rfg. Co.	Navajo	1	32-31-16	Horseshoe Gal.	51	1581	A/2	"
6	Petro-Atlas, Inc.	Horseshoe Canyon C	1	3-30-16	"	53	1643	A/2	"
7	Skelly	Jicarilla B	14	32-25-5	Otero Gal.	71	2201	A/2	"
8	Pan American	Zanotti	1	34-24-7	Escrito Gal.	20	620	R/2	"
9	"	Ute Mtn. Tr. E	2	35-31-15	Verde Gal.	53	1643	A/2	"
10	Shell	Carson Unit	13-11	11-25-12	Bisti Gal.	106	3286	A/2	"
11	"	Mudge #4	41-21	21-25-12	"	56	1736	A/2	"
12	"	Carson Unit	43-23	23-25-12	"	106	3286	A/2	"
13	Aztec O & G	Ute Indian	2	20-31-14	Verde Gal.	53	1643	A/2	"
14	EPNG Prod.	Williams	1	11-30-16	Undes.	53	1643	A/2	"
15	C. M. Carroll	Ute Mtn.	4	14-31-15	Verde Gal.	53	1643	R	"
16	EPNG Prod.	Frontier A	1	8-26-12	Gallegos Gal.	4	124	R	"
17	Atlantic Rfg. Co.	Francisco	1	30-25-10	Bisti Gal.	106	3281	R	"

SUPPLEMENTS TO THE OCTOBER, 1958 OIL PRORATION SCHEDULE FOR NORTHWEST (CONT'D.)

NO.	COMPANY	LEASE	NO.	S. T. R.	POOL	DAILY	CURRENT	REVISED OR ASSIGNED	EFFECTIVE DATE
18	Atlantic Rfg. Co.	Navajo	2	32-31-16	Horseshoe Gal.	53	1643	A	10-1-58
19	Skelly	Navajo F	2	12-26-12	Gallegos Gal.	71	2201	A	"
20	"	A. L. Duff	16	18-26-13	Bisti Gal.	106	3180	A	10-2-58
21	Pan American	In-Ni-Da-Pah	1	4-25-12	"	73	2258	R	10-6-58
22	Puboc Pet. Corp.	Mtn. Ute	19-1	19-31-14	Verde Gal.	53	1638	R	"
23	Tom Bolack	Bolack	3	4-30-16	Horseshoe Gal.	53	1635	R	10-9-58
24	Humble O & R.	N. M. AZ	2	2-24-10	Bisti Gal.	106	3286	A	10-1-58
25	Moore Moore, & Miller	Scott	3	3-24-10	"	106	2862	A	10-5-58
26	Kenneth Murchison	Federal	3	3-25-12	"	75	2325	A	10-1-58
27	Atlantic Pfg. Co.	Navajo	3	32-31-16	Horseshoe Gal.	53	1325	A	10-7-58
28	"	"	4	"	"	53	1007	A	10-13-58
29	C. M. Carroll	Ute A	2	13-31-16	Verde Gal.	53	1007	A	10-13-58
30	Magnolia	Sadie Canuto	2	21-25-11	Bisti Gal.	66	1122	R	10-15-58
31	Shell	Carson Unit	12-18	18-25-11	"	106	1802	R	"

SUMMARY OF OIL ALLOCATION TO NORTHWEST NEW MEXICO

COUNTY & POOL	PROD. FORM.	DEPTH RANGE	DEPTH FACTOR	NUMBER NON-MARG. UNITS	TOP UNIT ALLOW.	TOTAL NON-MARG. ALLOC.	MISC. ALLOW.	NUMBER MARG. UNITS	TOTAL MARG. ALLOC.	TOTAL NUMBER UNITS	TOTAL TOTAL ALLOC.
<u>McKINLEY COUNTY</u>											
Hospah-Gallup	G	0-5	1.00	4	50	200		11	206	15	406
Red Mt. Mesaverde	MV	0-5	1.00		50			1	11	1	11
Undesignated		0-5	1.00		50			2	18	2	18
<u>RIO ARriba COUNTY</u>											
Lindrith-Dakota	DK	0-5	1.00		50			1	5	1	5
Otero-Gallup	G	5-6	1.33	11	67	737		2	124	13	861
S. Blanco-Tocito (X)	T	6-7	2.77	2	139	353		12	554	14	907
Escrito-Gallup	G	5-6	1.33	1	67	67		6	92	7	159
<u>UNDESIGNATED</u>											
Group 1		0-5	1.00		50			2	57	2	57
Group 2		5-6	1.33		67			9	81	9	81
Group 3		6-7	1.77		89			5	148	5	148
Group 4		7-8	2.33		117			1	70	1	70
Group 5		8-9	2.77		150			2	167	2	167
<u>SANDOVAL COUNTY</u>											
Otero-Pt. Lookout	PL	0-5	1.00		50			2	14	2	14
Otero-Sanastee	S	5-6	1.33		67			3	19	3	19
<u>UNDESIGNATED</u>											
Group 1		0-5	1.00		50			3	19	3	19
Group 2		5-6	1.33		67			3	13	3	13
Group 3		7-8	1.77	1	117	117				1	117
<u>SAN JUAN COUNTY</u>											
Bisti-Lar. Gallup	IG	0-5	2.00	193	100	17550	137(Y)	86	3811	279	21498
Bloomfield Farmington	F	0-5	1.00		50			2	16	2	16
Four Corners-Paradox	PAR	5-6	1.33	1	67	67				1	67
Gallegos-Gallup	G	5-6	1.33	13	67	871		69	1585	82	2456
Hogback-Dakota	DK	0-5	1.00	3	50	150		3	21	6	171
Hogback-Penn.	PENN	6-7	1.77	2	89	178				2	178
Horseshoe-Gallup	G	0-5	1.00	30	50	1500		5	98	35	1598
Oswell-Farmington	F	0-5	1.00		50			2	20	2	20
Rattlesnake-Dakota	DK	0-5	1.00		50			17	38	17	38
Stoney Butte-MV	MV	0-5	1.00		50						
Table Mesa-Dakota	DK	0-5	1.00		50			5	37	5	37
Verde Gallup	G	0-5	1.00	64	50	3200		32	530	96	3730
<u>UNDESIGNATED</u>											
Group 1		0-5	1.00	5	50	250		4	62	9	312
Group 2		5-6	1.33		67			12	188	12	188
GRAND TOTAL				330		25240	137(Y)	302	8004	632	33381

(X) Special Allowable Assigned per Order R-1191.

(Y) Special LPG Experimental Allowable per Order R-1104.



Car 1555

RECEIVED  
NOV 4 PM 1:11  
**SKELLY OIL COMPANY**

**TULSA 2, OKLAHOMA**

PRODUCTION DEPARTMENT  
C. L. BLACKSHER, VICE PRESIDENT

November 3, 1958

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

Gentlemen:

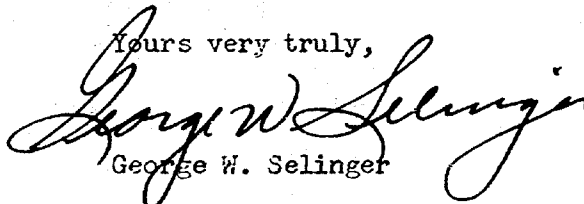
We are in receipt of a copy of H. K. Riddle's letter dated October 28, 1958, addressed to the New Mexico Oil Conservation Commission requesting a hearing before an examiner at the earliest possible date, for two non-standard units. One covering Lots 3, 4, 9, and 10, in lieu of Lots 1, 2, 3, and 4 in the application, in Section 18-26N-13W and the other covering Lots 3, 4, 9, and 10, in lieu of Lots 1, 2, 3, and 4 in the application, in Section 19-26N-13W in the Bisti Field of San Juan County, New Mexico.

This is acreage in excess of the normal 640 acre governmental subdivision. It is our understanding that the strip in Section 18 covers 60.84 acres and the strip in Section 19 covers 63.48 acres, and applicant is asking for a well in each of these two strips.

Skelly Oil Company is opposed to the granting of two wells on two units which applicant alleges covers 124.32 acres, for the reason that our information indicates that both of these strips are not entirely productive in the Gallup formation. It is our opinion that only the South half of the strip lying adjacent to Section 18 is productive and only the North half of the strip lying adjacent to Section 19 is productive, or a total of approximately 60 acres. This warrants the drilling of only one well.

Although the applicant requests an examiner hearing, it might be advisable for this matter to be set for hearing before the Commission itself in order to avoid unnecessary delay, but in any event, we would appreciate being advised when this matter is to be set.

Yours very truly,

  
George W. Selinger

GWS/db

CC: H. K. Riddle, 65 East Fourth South, Salt Lake City, Utah

British American Oil Producing Company, Denver Club Bldg., Denver, Colorado

Atlantic Refining Company, Box 520, Casper, Wyoming

BEFORE THE  
OIL CONSERVATION COMMISSION  
NOVEMBER 19, 1958

IN THE MATTER OF:

APPLICATION OF H. K. RIDDLE, CASE 1555

TRANSCRIPT OF HEARING

DEARNLEY - MEIER & ASSOCIATES  
GENERAL LAW REPORTERS  
ALBUQUERQUE, NEW MEXICO  
Phone CHapel 3-6691

I N D E X

WITNESS	PAGE
H. K. RIDDLE	
Direct Examination	3
Cross-examination	14
JOHN W. HENDERSON	
Direct Examination	37
Cross-Examination	40
JOHN STEIN	
Direct Examination	51
Cross-Examination	57

BEFORE THE  
OIL CONSERVATION COMMISSION  
NOVEMBER 19, 1958

IN THE MATTER OF:

Application of H. K. Riddle for two non-standard oil proration units and two unorthodox oil well locations. Applicant, in the above-styled cause, seeks an order establishing a 61-acre non-standard oil proration unit consisting of Lots 1, 2, 3 and 4 of Section 18, said unit to be dedicated to a well to be drilled on an unorthodox location 1980 feet from the South line and 252 feet from the West line of said Section 18; applicant further seeks the establishment of a 63-acre non-standard oil proration unit consisting of Lots 1, 2, 3, and 4 of Section 19, said unit to be dedicated to a well to be drilled on an unorthodox location 660 feet from the North line and 256 feet from the West line of said Section 19, all in the Bisti-Lower Gallup Oil Pool, Township 26 North, Range 13 West, San Juan County, New Mexico.

Case 1555

BEFORE: Elvis Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: The next case is 1555.

MR. PAYNE: Case 1555. Application of H. K. Riddle for two non-standard oil proration units and two unorthodox oil well locations.

MR. FOX: Robert Fox of Kellahin & Fox, Santa Fe, New Mexico. I want to enter my appearance on behalf of H. K. Riddle, the Applicant in this case. I would like to have the witness

sworn, Mr. Riddle.

(Witness sworn.)

MR. FOX: Mr. Examiner, do you want any other appearances?

MR. UTZ: Yes, I do. Any other appearances in this case?

MR. SELINGER: On behalf of Skelly, George W. Selinger.

MR. SULLIVAN: R. W. Sullivan, Modesitt & Sullivan, Denver, Colorado, representing British-American Oil Producing Company.

MR. UTZ: Any other appearances? Proceed.

MR. FOX: Mr. Examiner, this is an application which seeks an order establishing two non-standard oil proration units, as is indicated in the application, along the west boundaries of Sections 18 and 19 of the Township and Range shown. The testimony and exhibits will bring out the details of the application.

H. K. RIDDLE

the witness, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. FOX:

Q State your name, please.

A H. K. Riddle.

Q And where do you reside?

A I live in Salt Lake City.

Q What is your address?

A 29 South State.

Q Mr. Riddle, you have filed this application as an individual, is that correct?



A That is correct.

Q And what has been your education, Mr. Riddle?

A I graduated from Oklahoma University in Geology in 1932.

Q Have you testified before this Commission prior to this time?

A No.

Q What has been your experience since your graduation?

A I've been an independent oil operator for 26 years.

Q Are you familiar with the San Juan Basin?

A I am, for 13 years.

Q Have you been operating in that area for that period?

A Yes, sir.

Q Now, this application which you have filed in this case, Mr. Riddle, we have an exhibit marked Applicant's Exhibit Number One, that is the same plan as is attached to the application and Mr. Riddle doesn't have further copies at this time. We will be glad to supply those.

MR. UTZ: Mr. Fox, would you care to correct the lot numbers on that exhibit at this time?

MR. FOX: I was going to get to that. I think this is as good a time as any.

According to the initial information, the lot numbers which are shown were correct, but we later discovered that those lot numbers should be changed according to the land office's later survey. Reading from top to bottom, I believe those lots should

be numbered 3, 4, 9, 10, in Section 18, and 3, 4, 9, 10 in Section 19.

MR. UTZ: Without objection, that correction will be noted.

Q (By Mr. Fox) Mr. Riddle, will you take Applicant's Exhibit Number One and tell the Examiner what this discloses, represents?

A Well, on the west side of the Sections 18 and 19, there is a strip of land varying from 489.72 feet at the north end to 533.28 feet at the south end.

Q Does that exhibit show location of the proposed wells?

A Yes, it does, the proposed locations being in lot 9 of Section 18 and lot 3 of Section 19.

Q Does it likewise show distances from the boundaries; does the plat show this?

A Yes, these locations are in the center of the strip. They are approximately 250 feet from the east and west boundaries, and each location is directly west of producing oil wells of Skelly Oil Company, approximately 1165 feet.

Q That is, the Skelly wells are east of the proposed locations as shown on this plat?

A That's correct.

MR. SELINGER: May it please the Examiner, just a moment. Since you are referring to this plat, you have Skelly Well Number 14 in the wrong place. Skelly Well Number 14 is directly north, right here (indicating). It's right here; it's one location north.

That's an error made by the San Juan Engineering Company.

MR. SELINGER: That is where the well is.

A That wouldn't directly affect this case.

MR. SELINGER: Since you are correcting Exhibit One, we'd like to have it reflect the true location.

A It should, by all means; thank you.

Q (By Mr. Fox) Is this Federal land involved here, Mr. Riddle?

A Yes, it is Federal land.

Q In respect to the areas shown and involved in your application, who has the leases on that property in regard to Sections 18 and 19 respectively?

A Well, Skelly Oil Company has the leases on all of Sections 18 and 19, excepting this strip in question.

Q I'm speaking now of the strip in regard to Section 18; what is the status of that lease?

A Well, that lease is now owned by John W. Sullivan; however, previously it was a part of an original lease that also covered the strip in Section 19.

Q Do you have any interest in the portion held now by Mr. Sullivan?

A Only as operator.

Q And what is the status of the lease covering the strip on the west side of Section 19?

A I own that strip, the lease on that strip.

Q Just briefly, what is the history of these two sections in regard to the oil and gas leases, Sections 18 and 19?

A Well, I used to own the oil and gas lease on Sections 17, 18, 19 and 20; and that is the reason why I filed a lease on this strip, so as to completely cover those four sections, but my office failed to pay the rental at one time and we lost those four excepting the strip in question.

Q Now, Mr. Riddle, have you made any effort to communitize in respect to the strip in Section 18?

A Yes, I did. Last February I wrote Skelly proposing this.

Q I'm speaking now of the strip, Mr. Riddle.

A Communitizing the two strips?

Q Yes.

A Yes, I have. Mr. Sullivan is not interested in communitizing.

Q You have propositioned him in this regard?

A I have.

Q And he has declined to communitize?

A He has.

Q What has been the history insofar as communitization concerning the balance of Section 18 and the balance of Section 19?

A I wrote Skelly proposing communitization with their leases last February, and they wrote me a letter declining to communitize.

Q I hand you Applicant's Exhibit Number Two and ask you to identify that.

A Well, this is the letter dated February 18, 1958, from Skelly Oil Company.

Q Is this the letter to which you refer and which Skelly has declined to communitize as shown in the letter?

A That is correct.

MR. FOX: I move the admission of these --

MR. SELINGER: -- May I see that. I have no objection.

MR. UTZ: Any objection to the entrance of Exhibit Two?

MR. SULLIVAN: May I see it, too, please? Are you proposing that this be offered, Mr. Fox, solely to show that they refused to communitize?

MR. FOX: Well, I don't know quite what you have in mind by the question, but that is certainly the primary purpose in offering it.

MR. SULLIVAN: Well, the letter also sets forth a reason why they refused to communitize. I think the entire letter, the contents, should be offered.

MR. FOX: That is what is being proposed.

MR. UTZ: Without objection, the exhibit, the Two will be received.

Q (By Mr. Fox) Mr. Riddle, have you, to the best of your knowledge, notified the adjoining lease holders, that is, the parties interested in the adjoining leaseholds in respect to these

strips in question?

A Yes, I've notified both the British-American and Skelly, who are the only lease owners adjacent.

Q Have you communicated with the USGS concerning the proposals set out in the application?

A Yes, and the USGS have approved these locations subject to the State's approval.

MR. FOX: I don't want to clutter the record in this. I don't know frankly what the practice of the Commission is. I have a letter here which I propose to -- from the USGS, formal approval, which I propose to introduce.

MR. SELINGER: We don't have any objection.

Q (By Mr. Fox) I hand you, Mr. Riddle, Applicant's Exhibit Number Three and ask you if that is the letter to which you refer reflecting the approval by USGS subject to the action of the New Mexico Oil Conservation Commission?

A Yes, this is the letter.

MR. FOX: I move the admission of Applicant's Exhibit Number Three.

MR. UTZ: Without objection it will be received.

(Whereupon Applicant's Exhibit Number 3 was received in evidence.)

Q (By Mr. Fox) Now, Mr. Riddle, with respect to this area in the plat marked Applicant's Exhibit Number One, is there production in this area?

A Yes, there is.

Q And what production, to your knowledge, is there?

A Well, Skelly has 16 oil wells trending southeasterly from about the center of this strip, and British-American has production to the west.

Q Now, in regard to this area, Mr. Riddle, what has been the experience in respect to the delineation of the productive area? Is it accepted that the structure is controlling in this area in question?

A Well, there is no surface indication of structure. This production is found in a permeability trap, which is stratigraphic condition only.

Q Is there any well-defined boundary of the producing area in this?

A Well, yes, there is a boundary to the Bisti trend; and, as you reach the boundary, you either get light wells or dry holes when you get off it. But those boundaries can only be determined by drilling; and the boundary lines certainly are not straight lines as you might draw with a ruler, but are probably waved or curved lines with considerable irregularities.

Q These strips in Sections 18 and 19, are they now a part of any unit or communitization agreement?

A No, they are not.

Q Is there any production being realized insofar as these strips are concerned?

A No, they are not.

Q In your opinion, would the approval of this application be in the interest of prevention of waste and the protection of correlative rights?

A Yes, it would.

Q Is it, in your opinion reasonable to conclude that the acreage in question in your application would be productive?

A Yes, of course.

Q In your view and opinion, is it economically feasible that these wells which you have proposed be drilled?

A It is.

Q As matters stand, Mr. Riddle, and with the refusal to communitize by both Mr. Sullivan and by Skelly, is there any way in the world that you know of to realize any production from this acreage short of the approval of the application before the Commission and the Examiner now being heard?

A No, there is no way unless I can drill it. Furthermore, the leases will expire if I don't drill it.

Q Under the existing circumstances, Mr. Riddle, and the status of this acreage, do you have an opinion as to whether these offsetting wells presently producing will or will not drain the acreage which you have and the subject of this application?

A Well Skelly has two wells directly offsetting this strip that certainly are draining the oil from under it; however, I think the British-American well, being 1980 feet west, is not



subjecting my strip to any amount of drainage.

MR. FOX: If the Examiner please, I don't think I moved for the admission of Applicant's Exhibit Number One.

MR. UTZ: No.

MR. FOX: I would like to do so at this time, with the corrections Mr. Selinger suggested.

MR. SELINGER: Before you admit Exhibit One, we believe also that the distances that the exhibit shows of 1165 feet in case of Number 16 and 1164 in the case of Number 15 is also incorrect, because the two Skelly wells are 660 from the west line plus the 265 -- 256 -- on one case and plus 252 on another would mean that the distance between the well Number 15 and the proposed location would be 912 feet rather than 1164; and in case of the northern location, instead of 1165, it would be only 916. The two Skelly wells are 660 feet.

A Those distances are not intended to be from the Skelly well to my proposed location; they are intended to be from the Skelly well to the west side of the section.

MR. SELINGER: I see.

A So the engineering company is right.

MR. SELINGER: But not the distance between the two wells.

A We can see the Skelly well is in the middle of the section. It is obvious it is 660 feet from my line.

MR. SELINGER: That wasn't intended to be the distance between the two wells, your proposed well in 16 or your proposed

location well Number 15?

A No, that's the distance of your well from the west of the section line.

MR. SELINGER: With that connection, we have no objection to the introduction of Exhibit Number One.

MR. UTZ: Is there objection to the introduction of Exhibit One as corrected? If not, it will be admitted.

(Whereupon the document marked Applicant's Exhibit Number One was admitted in evidence.)

Q (By Mr. Fox) Mr. Riddle, if this application were granted, how soon could you commence drilling on these locations?

A I could commence immediately one well; but I would want to see the outcome of it before drilling the other well.

Q If the application were not permitted, would this injure you financially?

A Well, yes, it would, because I've made arrangements for the money to drill these wells. If I'm unable to drill them at this time, I might not have the money at a later date, which would be injurious.

Q As matters stand further, there will be no production attributable to this acreage under the present circumstances?

A No, there wouldn't.

MR. FOX: That's all I have.

MR. UTZ: Are there questions of the witness?

MR. SELINGER: Yes.

MR. UTZ: Mr. Selinger.

CROSS-EXAMINATION

BY MR. SELINGER:

Q You stated you would like to drill one well immediately and await the outcome for the second well. Why is that?

A Well, for one thing, I can't look after two at once, and I can only hire one contractor at a time.

Q Any other reasons?

A No, no other reasons. They are too far apart to determine whether it proves the location productive.

Q Which well would you drill first?

A I don't think it makes any difference.

Q Now, what is the distance between the Skelly 16, the north well, from your proposed location; what is the distance between those two wells?

A It's approximately 910 feet.

Q What is the distance between the Skelly Number 15 well, the south well, and your proposed south location?

A Approximately the same distance.

Q You are familiar, are you not, with the Commission Order with respect to drilling and development in the Bisti Field, are you?

A I am.

Q You know there is 80-acre spacing in drilling units established in this field?

A I know that.

Q And you know the distance between the wells are approximately 1980 feet?

A Yes, I know that.

Q Mr. Riddle, are you familiar with the geology of this field? Can you state to this Commission that the entire strip is productive from the Gallup zone?

A I'm no more able to make that statement than anyone else is that it is not productive.

Q Are there any dry holes north of the strip?

A Not nearby, so far as I know.

Q Are there any dry holes to the south of the strip or southeast of the strip?

A There is a dry hole about three fourths of a mile east of the south end of the strip, which is shown on this plat.

MR. SELINGER: I believe that's all I have.

MR. UTZ: Are there other questions of the witness?

MR. SULLIVAN: Yes, sir, might I question him at this time?

MR. UTZ: Mr. Sullivan.

EXAMINATION BY MR. SULLIVAN:

Q Mr. Riddle, in your direct examination, you stated that in your opinion the drilling of either or both of these locations would aid the prevention of waste. What do you mean by waste?

A My lessor under this strip expected me to drill and

produce oil or gas from it if such be discovered in the vicinity, and it would be a waste to my lessor, which is the United States of America, if I don't fulfill my obligation to drill these wells and carry out the purpose of this lease.

Q Are you aware of the fact that waste has a statutory definition in the State of New Mexico?

A No, I'm not aware of that.

Q Then, when you stated a moment ago that this well could be drilled without waste, you did not have the statutory definition of waste in New Mexico in mind, is that right?

A No, I did not.

Q And the only waste you had in mind was the waste you stated with regard to the United States as your lessor?

A And me as lessee. There is a waste of my oil if I don't produce it.

Q You stated, I believe, that either or both of these wells could be drilled and would protect correlative rights. What is your conception of correlative rights?

A Well, I have the right to produce the oil from under my lease.

Q Does it mean to you a freedom from drainage; is that what you are saying?

A Yes, that.

Q Is it possible with your knowledge as a geologist of the area you propose to drill, Mr. Riddle, is it possible for you

to drill a well on this strip anywhere from lands which you do now have under lease?

A It is possible.

Q Do you mean you can drill and produce these wells on this strip without draining the oil across the lease lines that outline your property?

A No, it is not probable I can drill and produce without draining any more than the wells are draining that are offsetting me.

Q You give in that statement any regard to the shape of the parcels that you propose to drill, sir?

A I grant you 80-acre regular, 80-acre spacing would be better; but I didn't survey the section.

Q I refer you, Mr. Riddle, to Section 65-3-14, Sub-section C of the New Mexico Statutes, where I find it is provided the only provision for the drilling of one of these unorthodox locations -- "provided, that the owner of any tract that is smaller than the drilling unit established for the field, shall not be deprived of the right to drill on and produce from such tract, if same can be done without waste." There is other pertinent language there. That is the part I want to refer to you. Now, sir, do you believe that you can drill either of these two 60-odd-acre tracts without waste as that term is defined in the New Mexico statutes?

MR. FOX: Just a moment -- if he wants to answer this,

let him read to him the definition. The man says he's not familiar with the definition.

A I don't know what you mean by waste.

MR. PAYNE: The witness is not qualified as an expert in the law. If you want his comment on it, perhaps you should read the section in mind.

MR. SULLIVAN: I think his answer is apparent from the fact he wasn't aware there was such a statutory definition. The answer is apparent to the question that he can't be contemplating the drilling of these wells without waste as is required in these provisions.

All right, sir, with the permission of the Examiner, I'll read the definition of waste, if it is not too late in the day.

MR. UTZ: You may go ahead.

MR. SULLIVAN: 65-3-3 of the New Mexico Statutes Annotated reads, Mr. Riddle -- I hope I don't bore you -- "As used in this act, the term "waste," in addition to its ordinary meaning, shall include:

(a) "Underground waste" as those words are generally understood in the oil and gas business, and in any event to embrace the inefficient, excessive, or improper, use or dissipation of the reservoir energy, including gas energy and water drive, of any pool, and the locating, spacing, drilling, equipping, operating, or producing, of any well or wells in a manner to reduce or tend to reduce the total quantity of crude petroleum oil

or natural gas ultimately recovered from any pool, and the use of inefficient underground storage of natural gas.

(b) "Surface Waste" as those words are generally understood in the oil and gas business, and in any event to embrace the unnecessary or excessive surface loss or destruction without beneficial use, however caused, of natural gas of any type or in any form or crude petroleum oil, or any product thereof, but including the loss or destruction, without beneficial use, resulting from evaporation, seepage, leakage or fire, especially such loss or destruction incident to or resulting from the manner of spacing, equipping, operating, or producing, well or wells, or incident to or resulting from the use of inefficient storage or from the production of crude petroleum oil or natural gas in excess of the reasonable market demand."

I will omit sub-paragraph C, with the permission of the Commission, inasmuch as it refers to production of oil in excess of market demand. I don't think that is pertinent to my question, as well as D and E of the Statute.

Now, having read those to you, sir, which gives you the statutory definition of waste, do you believe that you can drill either or both of these wells without waste?

A I do.

Q Now, are you familiar with the fact that British-American has drilled a dry hole slightly north and to the east of Lot Number 3 in what we've referred to as the northernmost part, sir?



A You mean northwest?

Q No, sir, I mean northeast.

MR. UTZ: Give the location.

MR. SULLIVAN: Located in the southwest quarter, southwest quarter of Section 7, 26 North, 13 West.

A No, I didn't know that dry hole is there.

Q (By Mr. Sullivan) Approximately how far is that well as it is so located from your land, Mr. Riddle?

A About a thousand feet northeast, if it is in the center, northwest, northwest.

Q I beg your pardon?

A It's about a thousand feet if it is in the center, southwest, southwest of Section Seven.

Q Will you refer to your Exhibit Number One, I believe it was marked, a letter of the Skelly Oil Company -- Exhibit Number Two -- in which you used to show that Skelly had refused to communitize with your property. Will you read the article in the paragraph in that letter relating to the British-American dry hole which I just mentioned?

A The dry hole in Section Seven, but it doesn't say in what part of the Section.

Q I see, and you didn't bother to pin it down any closer when they refused to communitize nor for purposes of this hearing?

A No.

~~Q Nor for purposes of your application?~~

A No, I didn't.

Q Do you have prepared any isopachus maps of this part of the field?

A No, I have not.

Q Have you seen any isopachus maps of this part of the field?

A Yes, I have.

Q Who were they prepared by?

A Paul Umboch for one.

Q Who is Paul Umboch?

A He's a geologist in Boulder, Colorado.

Q From where, sir?

A Boulder Colorado.

Q Is it based upon those maps that you have determined that all of the acreage included in these two tracts will be productive acreage?

A Not necessarily.

Q Upon what information have you based that statement you made a while ago in response to a question by Mr. Fox?

A I simply intend to offset Skelly's producing wells.

Q That is not an answer. My question, Mr. Riddle, on what do you base the statement you made in answer to Mr. Fox' question on direct examination, that, in your opinion, all of the acreage in these two tracts which you propose to drill will be productive acreage? You did so state, did you not, you thought that would

all be productive acreage?

A I did.

Q How did you arrive at that conclusion?

A I have no way of arriving. I can only go by the production that exists. There is no dry holes to condemn it.

Q Was it in your opinion condemned in effect by, parts of it, condemned by Skelly in view of the response they made to you in your request for communitization?

A No.

Q What was the gist of their letter, in your opinion?

A The gist of it was they didn't wish to communitize my acreage with theirs.

Q Mr. Riddle, you stated that you would like to commence the drilling of one of these wells immediately.. Are you aware of the fact there is a 30-day period in which any of us may request a hearing in the event this order authorizing these locations is granted?

A Well, I expected delay, of course. I can't commence it until I have a permit. All steps take time, which is to be expected.

Q Did you mail the notice required under the regulations; did you mail a notice to Atlantic Refining Company?

A No, I did not.

Q Who is the lease owner of Section 24, sir, in Range, in 26 North Range 14 West in this field?

A I don't know.

Q Did you mail a notice to the owner of the lease on that acreage covering Section 24 I just mentioned?

A I don't -- I did not, unless British-American is the owner.

Q Would it surprise you if I told you British-American is not the owner of that lease?

A Not in the least.

Q Do you feel you've given notice as required under the regulations of this Commission?

A If it's owned by Atlantic, if it is necessary to give notice, I didn't, I did not.

MR. SULLIVAN: Mr. Examiner, I move this application be dismissed for lack of proper notice as required by the regulations of the Commission.

MR. FOX: In regard to that, Mr. Examiner, in answer to the motion that the application be dismissed, I move that the application not be dismissed but rather that this applicant be given time and permission to give notice to any such party who hasn't presently been notified.

MR. UTZ: Mr. Sullivan, the objection will be overruled on the grounds that the applicant is not obligated to serve notice on Atlantic or whoever owns Section 24, since the Commission itself gave notice.

MR. SULLIVAN: Well, Mr. Utz, are you -- I think probably

what you are referring to is the fact the published notice is sufficient where there has been no consent by the adjoining land owner, is that correct?

MR. UTZ: That is right.

MR. SULLIVAN: I think your ruling is probably correct then. I think that's all from me.

MR. SELINGER: May I inquire several more questions, Mr. Fox?

MR. FOX: Yes.

EXAMINATION BY MR. SELINGER:

Q Section 18, which is Skelly acreage, is a normal 640-acre section, is it not?

A No, it is not. This strip is in addition to 640 acres.

Q I asked whether Section 18 was a normal 640 acres?

A My answer is no.

Q All right, let's look at the computation of plat one that shows it is. You show there is 5794.14 acres?

A Feet.

Q Feet from one point, which is the southwest corner of your strip, to the southeast corner of Section 18; isn't that what your map shows?

A That's right.

Q Does it show 514.14 feet wide in that strip?

A That's correct.

Q If you deduct 514.14 from 5794.14, do you get 5,280 feet?

A That's correct.

Q Go to Section 19. Your plat shows 5813.28 from the southwest to the southeast corner of Section 19?

A That's correct.

Q Does it show the width of the strip is 533.28?

A That's correct.

Q Deduct 533.28 from 5813.28. Does it give you 5,280 feet?

A That is correct, one mile.

Q Sections 18 and 19 are full 640 acres, is that correct, excluding the strip?

A No, I disagree.

MR. FOX: I think Mr. Selinger has answered his question in this thing. If it is a 640-acre section, well and good, but the statement he just concluded with, it is not, because he has to exclude the strip to get the 640.

MR. SELINGER: Section 18, all I asked was whether or not Section 18 contained 640 acres excluding the strip.

MR. FOX: With that qualification, I'll be quiet.

MR. SELINGER: His answer was no. That is what I asked him.

MR. FOX: Your first question did not exclude the strip.

Q (By Mr. Selinger) Does not Section 18 contain 640 acres excluding the strip?

A It does.

Q Does Section 19 contain 640 acres excluding the strip?

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2. The above are the names of the persons who are

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4. The above are the names of the persons who are

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25. The

would say the northwest quarter of Section 18 or the southwest quarter of Section 19 is included in the nomenclature.

MR. PAYNE: I didn't ask you if you wanted to stipulate. I asked if he would agree it was included in the Lower Bisti.

MR. SELINGER: That was my question, wasn't it?

MR. PAYNE: We will take administrative notice of the Lower Bisti as shown by the Commission records.

MR. SELINGER: I have no objection.

A I'd like to know what the new boundaries are for my information.

MR. UTZ: That would reflect the present boundaries of the Bisti Pool as designated by the Oil Commission (indicating).

A It takes in all of the south half of 18, takes in British-American's quarter --

MR. SELINGER: -- Excludes the southwest of 19.

A Excludes the southwest of 19.

MR. SELINGER: And the north half of 18; exactly what I said.

MR. PORTER: How much of the strip then lies outside of the designated pool? By lot numbers rather than try to jump over, which of the lots are included in your defined pool?

MR. SULLIVAN: Nine and ten in 18 and three and fourteen in 19.

A That's correct.

MR. SULLIVAN: Thank you.



MR. PORTER: Would that mean the two end lots, the extreme north lot and the extreme south lot, are outside the pool?

MR. SELINGER: The two north and two south, yes.

MR. PORTER: The two north and two south?

MR. SELINGER: Yes.

MR. PORTER: That would leave four lots within the designated pool?

MR. SELINGER: That's right. Now, in order to make the record complete, Mr. Fox, I wonder if you have any objection to the letter that Skelly, that I wrote November 3 to the New Mexico Commission, and a copy went to Mr. Riddle, a copy to the British-American and a copy to the Atlantic Refining Company may be a part of this record?

MR. FOX: I haven't seen it.

MR. SELINGER: A letter was sent to the Commission and also a copy to Mr. Riddle. Here is the original.

MR. FOX: Is this the one here?

MR. SELINGER: Yes.

MR. FOX: Then I do have it, then.

MR. UTZ: Any other questions of the witness?

MR. FOX: Mr. Examiner, there is pending, I think, a request by Mr. Selinger for our agreement, so to speak, to the admission of the letter dated November 3, 1958, from Mr. Selinger of Skelly Oil Company to this Commission. I feel I couldn't agree as to the last two paragraphs of the letter. This is a

letter setting out -- I feel both argumentative and the material is an opinion matter; and I wouldn't feel I could agree to that in that respect.

MR. SELINGER: We will withdraw it.

MR. UTZ: Any other questions of this witness? Mr. Riddle, would you care to divulge the expiration date of this lease?

A The lease expired July 1, 1958, but prior to that time, the portion of Section 18 was assigned to John W. Sullivan, thereby segregating and thereby entitling a two-year extension of both portions.

Q The lease expires July 1, 1950--

A -- Sixty.

Q Mr. Riddle, would one well on any part of this lease save the lease?

A No, it won't. The other portion would expire.

Q What part of the lease would be saved by the drilling of one well?

A Only that part upon which the well is drilled.

Q And the part that would be segregated would be parts 3 and 4 in Section 18?

A Three, four, nine and ten in Section 18.

MR. PORTER: I don't believe I'm clear on what acreage you propose to dedicate to each of the wells. You would dedicate the four lots in the north to the northernmost well and four lots in

the south to the southernmost well?

A That is correct.

MR. PORTER: What would be your objection to drilling a well near the center of each of the four lots, of the two sub-divisions?

A My objection would be that I'd be subjected to drainage from both Skelly's Number 15 and 16 if I don't directly offset those wells to protect myself from drainage.

MR. PORTER: That's all the questions I had.

Q (By Mr. Payne) Could you rely on counter-drainage to protect yours, Mr. Riddle?

A What do you mean by counter-drainage?

Q I mean they may be draining some of yours, but you may be draining some of theirs.

A Well, that may be true since I'm closer to the boundary line with my locations that they are with theirs, but they got a head start; maybe I can catch up.

Q What I mean by counter-drainage, if you drilled in the middle of both of the proposed units, do you think if you drilled in the middle of the two lots on the middle of the four lots in Section 19, do you think you would have any affect on Skelly's well Number 14 in Section 19?

A Well, I would have some, naturally.

Q But not as much as --

A -- Not as much as their Number 15 would have on the two

northern lots of that unit on yours.

No, I would be further from both wells. Furthermore, if I drilled there, it would have to be on either one or the other of the segregated portions, and the other one would expire.

Q (By Mr. Selinger) That leads to another question. Would it not be as likely to unitize your acreage with your own well as it would be to try to communitize somebody else's?

A That opportunity passed when I approached it to Skelly.

Q You don't have your opportunity to communitize your sections now for the drilling of your one well?

A No, I don't.

Q You claim now that the northern lease expired and has been assigned to somebody else; the two tracts are now segregated?

A That's right.

Q I'm trying to ask you why isn't it likely to communitize the two portions of the two separate tracts into one for the purpose of drilling the well? I think that is what Mr. Payne is inquiring.

A No.

Q What is to prevent you from doing that?

A The man that owns the portion in Section 18 refused to communitize.

Q Mr. Sullivan also refuses to communitize now?

A That's right. He wants it drilled.

Q What's to prevent you from drilling on Mr. Sullivan's

tract and unitize the other by order of the Commission?

A I presume if the Commission ordered it, we'd have to.

Q ( By Mr. Utz) Mr. Riddle, do you know the nature of the proration unit in the dedication of the Skelly well?

A Only that I understand 80 acres is dedicated to each well.

Q (By Mr. Selinger) East and west, this 80?

A And they run east and west.

Q (By Mr. Utz) Do you know whether the 13, 14, 15 and 16 Skelly wells are top allowable wells for 80-acre units?

A Yes, I know they are. They all produce more than 100 barrels a day.

MR. SELINGER: Thirteen is not.

A As was reported, I might add.

Q (By Mr. Utz) The British-American Number Two, is it a top allowable well?

A No, it is not according to the reports.

Q Do you know what that well produces?

A Skelly's scout or land man told me about 15 barrels per day.

Q With regard to your Section 18, Mr. Riddle, would you object to the location in lot four?

A Yes, I would.

Q Why would you object to the location there?

A For the same reason that I stated a while ago -- I would like to directly offset the Skelly Number 16.

Q To prevent drainage by the Skelly 16?

A That's correct.

Q Would you have any fear of getting a dry hole in lot four?

A I'll answer that this way -- I would have more fear of getting a dry hole in lot four than I would at the proposed location.

Q In regard to Section 19, would you have any objection to drilling a well in lot four in that section?

A In lot which did you say?

Q Lot four.

A I would.

Q For the same reason you stated in Section 18?

A It would not be the same reason.

Q What would be your reason?

A Well, yes, it would be the same reason, but I would not be directly offsetting Skelly's Number 15 well, and that I would be more afraid of getting a dry hole than I would be on the proposed location.

Q Does the Exhibit Number One reflect all the producing wells in this locality?

A No, it does not. Skelly has other producers in the east half of Sections 18 and 19 which were inconsequential and which the engineering company failed to show. I think altogether they have 16 producing wells in 18, 19 and 20, perhaps one or two in 17.

Q Well, in the west half of Sections 18 and 19, this exhibit reflects all the producing wells?

A So far as I know.

Q Are there producing wells in Section 7 in the north half of Section 18?

A I don't think so.

Q Any in Section 30 to the south of Section 19?

A Yes, sir. CM & W Drilling Company have two wells, one of which is shown here, three quarters of a mile east of the west line of Section 19.

Q Is that a top allowable well?

A I don't think so. And they have another one which is much closer to the south end of my strip that is not shown.

Q What is the location of that well, sir?

A I don't have it.

Q The Commission's records would no doubt reflect that, would they not?

A Both of those CM & W wells are light wells as I remember.

MR. UTZ: Any other questions of the witness?

MR. SULLIVAN: Yes, sir, may I ask?

MR. UTZ: Mr. Sullivan.

EXAMINATION BY MR. SULLIVAN:

Q May I have Applicant's Exhibit One. Mr. Riddle, you stated in response to a question that you would have some, more objection to locating a well either in lot four to the north or

or lot four to the south than your proposed locations, and what was the reason one for that opinion, that position?

A Number one, that I prefer to directly offset Skelly's Number 15 and 16 wells.

Q Now, sir, at the proposed locations, would you mark on that exhibit what you think the probable area of drainage would be from your proposed locations?

A I don't think anyone can determine that without drilling wells.

Q Well, now, sir, you state that you would like to drill up here at the proposed locations to offset Skelly's wells because they are draining your land?

A Right.

Q You certainly have some conception as to what the radius of drainage is for the Skelly wells?

A Well, a well drains from every direction.

Q Well, sir, would you mind marking on that exhibit what you anticipate or what you contemplate as a geologist is the area being drained by the two Skelly wells, Number 15 and 16?

A No, because --

Q -- Does the area of drainage extend over into your land?

A It certainly does.

Q Is it not to be expected that the area of drainage of your wells would be coincident with the area of the wells which you are complaining of itself?



A That's true.

Q If you were permitted to drill wells only somewhere in lots four of the respective parcels, could you give us some conception of what the area of drainage would be around those wells?

A Approximately the same.

Q And yet you stated you had some reluctance to drill farther north and farther south because of the probability of dry holes?

A There is more possibility as you go out from the middle.

Q That is a contradiction, is it not, to Mr. Fox' question that you felt all this acreage was productive?

A I have no reason to know it isn't productive. It has not been condemned.

Q The farther you go in either direction the --

A -- The Bisti trend is, it varies from two to three miles. There is an outside boundary. I propose to stay in the middle.

MR. SULLIVAN: That's all.

MR. UTZ: Any other questions of the witness?

MR. SULLIVAN: Let me ask one more.

Q (By Mr. Sullivan) If you were granted, as suggested a while ago, permission to drill a well somewhere up in the respective -- at your proposed location, would you be willing to drill those locations with an allowable based upon the acreage which you can anticipate will be productive?

A I like to anticipate it will all be productive.

Q But you say the farther out you go the less chance and probability it will be productive?

A That's true.

Q In other words, are you willing to trade locations for a better chance?

A I've picked what I think is the best locations.

MR. SULLIVAN: Thank you.

MR. UTZ: No further questions of the witness? You may be excused.

(Witness excused.)

MR. FOX: That's all we have at this time.

MR. SELINGER: We have one witness we'd like to put on.

MR. UTZ: All right.

(Witness sworn.)

JOHN W. HENDERSON

called as a witness, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. SELINGER:

Q State your name.

A John W. Henderson.

Q And you are with Skelly Oil Company?

A That's correct.

Q In what capacity?

A I'm Assistant District Geologist for the Albuquerque District.

Q Mr. Henderson, have you testified before any State regulatory body as a geologist?

A Yes, sir, I have.

Q Have you testified before the New Mexico Commission as a geologist?

A No, sir, I have not.

Q Are you a graduate of an accredited school in geology?

A Yes, sir.

Q In what year?

A I graduated from the University of Oklahoma in 1937.

Q With a degree in geology?

A With a BS in geological engineering.

Q Have you practiced your profession since that time except for the years you spent in the armed services?

A That's correct.

MR. SELINGER: I wonder if there are any questions as to his qualifications as a geologist?

MR. UTZ: His qualifications are acceptable.

Q (By Mr. Selinger) Mr. Henderson, has the geological department at Skelly Oil Company in Albuquerque had occasion to make an investigation of this particular area involved in this application?

A Yes, sir.

Q And you are a member of that geological department at Albuquerque?

A That's correct.

Q I hand you what has been marked as exhibit, Skelly Exhibit One, and ask you whether or not that is a summation of the results of the geological department of the Skelly Oil Company, conclusions from the Albuquerque office?

A It is, sir.

Q In your opinion, is the information indicated thereon true and accurate?

A It is.

Q Will you briefly explain what that is?

A This is a plat showing the immediate area and the existing wells nearby the area in question. It was prepared by W. R. Kendall and shows by isopachtic lines the microlog thickness of the pay zone in this most westerly end of the Bisti trend.

Q Does it generally run northwest-southeast?

A It does.

Q As you go away, as Mr. Riddle testified, from the heart of the field toward the flank, you get less feet of pay?

A That is correct in this immediate area.

Q You have the net pay that shows by the microlog opposite each of the wells, is that correct?

A That's correct. The figures are listed underneath the wells.

Q And you have a zero line, both the north and south, along the strip that Mr. Riddle has under lease?

A For this particular sand body.

Q It is your opinion that as you go in the strip outside of the zero line that, in your opinion, it would or would not be productive?

A It is my opinion in this sand body it would not be productive from the Gallup.

Q Your opinion, only those portions of the strip lying within the two zero lines is productive from the Gallup.

A That's correct.

MR. SELINGER: We'd like to offer in evidence Skelly Exhibit One. That's all we have.

MR. UTZ: Any objection to the entrance of Skelly Exhibit One?

MR. FOX: No objection.

MR. UTZ: In the absence of objection, it will be received.

(Whereupon the document marked Skelly Exhibit One was received in evidence.)

MR. UTZ: Any questions of the witness?

MR. FOX: I would like to ask a few.

MR. UTZ: Mr. Fox.

CROSS-EXAMINATION

BY MR. FOX:

Q Mr. Henderson, you show on your Exhibit Number One a dry

hole in the southern portion of Section 19. Now, would you say that the location of, the existence of the dry hole as shown would prevent the production being obtained, say, west of that area a quarter of a mile -- you couldn't say that?

A No, not with positive certainty.

Q Neither could you arbitrarily condemn, say, the entire southwest quarter because of the existence of that dry hole, could you?

A Not with positive certainty. If I may add, there is the possibility of separate sand lenses.

Q The actual geological knowledge of this area is in effect quite limited by virtue of the facts which you have available to you as of now, is it not?

A I would not say so.

Q This plat indicates the information which you do have in the vicinity, is that correct?

A As far as holes drilled, is that what you mean?

Q Yes.

A That's right.

Q Now, are there various reasons for dry holes; there are, are there not?

A Yes.

Q You might have a tight spot or tight place which might very well indicate there not being a producer in any area around it, is that true?

A That is true, dependent upon the area.

Q These plats dealing with the subject matter of your Exhibit Number One are as a matter of fact continually being revised, based on additional information uncovered, disclosed?

MR. SELINGER: You mean in this area?

MR. FOX: No, as a general representation.

MR. SELINGER: In the entire Bisti Field?

MR. FOX: In the entire proposition, such as your plat number one, they are, are they not, continually revised as a geological practice?

MR. SELINGER: We'd like to object to that question unless it is limited to this area, since plat one, Skelly Exhibit One, is confined to this particular area.

MR. FOX: Well, in the interest of saving time, I will restate the question. I don't want to thrash this out.

Q (By Mr. Fox) Mr. Henderson, this plat, if it is to be an accurate reflection of your opinion or the opinion of the Geology Department with which you are associated, as new holes are drilled it will be revised accordingly, and your opinions will likewise be revised?

A They could be.

Q They would be, as a matter of fact?

A They might not be.

Q They might not be. I'll accept that. Now, the character of the area, the pool limitations as to this particular pool are quite

irregular, are they not, so far as you know them in dealing with your opinion?

A Again, I would like to confine myself to this plat. They are not irregular on this plat.

Q Well, let me ask you as to the pool without confining you to the plat. Aren't the limits of the pool quite irregular?

A In other parts and pools, yes.

Q The width, so to speak, of the pool will vary greatly from one point to another?

A That depends upon your definition of greatly.

Q They will vary, I take it?

A They will vary within limits, and --

Q How much will they vary?

MR. SELINGER: Let the witness finish his answer. What was your answer?

A The limits of particular sand bodies will vary, and it depends on what you mean by greatly.

Q (By Mr. Fox) That is what I asked for you to explain.

A What do I mean by greatly?

Q No, I asked you what are the variations?

A What are the variations? This depends again on whether you are dealing with the main sand body or with other sand lenses. If you refer to the main sand body, they do vary; the width of the sand body, shall we say, varies within, not over in total width not over a half a mile or, say, a quarter of a mile or



each side. Does that answer your question?

Q In part, I think. Just one further question as a generality, so to speak. You definitely can't state there will be no production in the strip in question in this hearing at any point, can you?

A I'm sorry, but you are asking me to state there will or will not be production anywhere on the strip?

Q My question is this, or my statement rather -- is it possible for you to say there will not be production on any portion of this strip?

A I'm sorry, I'm confused on that.

MR. SELINGER: He means the extreme north or extreme south, any part on the strip.

Q (By Mr. Fox) The area in question has been referred to as the strip in this hearing. Can you state that there will be no production from any portion of the strip?

A There will be no production on some portions of the strip, depending on your limited area in the Gallup horizon.

Q You can't say as a positive proposition, can you?

A In my opinion I can.

Q You are stating in your opinion as you have stated previously?

A Exactly.

Q But you, in answer to the question, you say what?

MR. SELINGER: I don't think it is necessary to argue

with the witness. The witness has already said in his opinion the entire strip is not productive. I don't think it is necessary to argue with the witness to be positive or not. The man said in his opinion the entire portion is not productive.

MR. FOX: I think the answer is specifically evident but the witness won't give it.

MR. SELINGER: I think the evidence is the entire strip is not productive.

MR. PAYNE: I don't believe that is Mr. Fox's question. He asked if he could say within any degree of certainty whether any of the strip was not productive, whether you cannot obtain production on some portion of the strip.

MR. SELINGER: The witness answered on some portion, yes, but not on the entire portion. He answered the question.

MR. PAYNE: That answered the question?

MR. UTZ: Is that your answer to the question?

A Yes.

MR. FOX: That's all.

MR. UTZ: Are there further questions of the witness?

MR. COOLEY: What is your name?

A John Henderson.

Q (By Mr. Cooley) Mr. Henderson, this isopach map you have put into evidence here, does it take into account all stringers of the Gallup, Lower Gallup formation, or is it limited to what we have previously referred to in this hearing and others as the

major and most prolific pay?

A I'm sure we are talking in the same terms. The Gallup, of course, is known to be a confusing issue; but in this particular area, the main body, which is in what most people interpret as the Lower Gallup, this reflects that thickness.

Q Now, there are other horizons in what the Commission has designated as Lower Gallup itself I believe, less productive stringers, that are also present in the Gallup, are there not?

A There are, but not in this area.

Q None of those stringers are present in this area?

A To my knowledge.

Q Do any of the logs in wells in 18, and 19 show complete absence of stringers in this area at all?

A Except for this particular main body.

Q (By Mr. Utz) In most of the Bisti-Gallup, there are four stringers, is that correct?

A We could go around and around about this. There have been numerous hearings about whether they are stringers or whether they are connected or not.

Q Well, let's call them four sands.

A There could be four or more. There are portions of the Gallup that are sand shale laminations just fractions of an inch thick.

Q How many defined sands are in Sections 18 and 19?

A One, sir.

Q One?

MR. SELINGER: That is the main pay, the Lower Gallup main pay.

Q (By Mr. Utz) This contour represents microlog isopachs on that one stringer?

A That's correct.

Q Mr. Henderson, would you explain your control on the zero isopachus on this Exhibit Number One?

A The control is merely extrapolated from the nearest well. There are only two wells to give such control within the Skelly-Duff Number 12 in the southeast corner of Section 18 and the other Skelly-Duff Number One in the southwest corner of the southeast corner of Section 19, both these wells being in the Range 13 West.

Q I note that your isopachus contour, was it through the Duff Number One?

A That is correct.

Q Is ten feet. Can you explain why that is a dry hole with ten feet of isopachus pay?

A As it is obvious from this interpretation geologically it is the opinion of this interpretation that the sand bodies are possibly separated there; they are not continuous.

Q You have no control actually in that immediate area on your zero contour or your five foot contour of your extrapolation?

A That's correct. You never would have unless you drilled

another hole in between eleven and one.

Q So would it not be possible interpretation by someone else that the ten foot contour could swing down through the Duff rather than have a zero contour through there?

A I'm not sure I understand you.

Q Looking at the ten foot contour in the lower part of the exhibit --

A All right.

Q -- would it not be possible for that contour to swing down through the Duff and back up rather than form a separation?

A You are speaking of Duff One?

Q Duff One.

A It is possible that interpretation could be made.

Q Also, in the northeast quarter of Section 19 where you have shown separation of your 15-foot contours, could the 15-foot contour, rather than to show separation, could it not just as logically go on across instead of showing the thick portion at the intersection of Sections 18 and 19? In other words, what control did you have this separation of the 15-foot contour?

A Could I be permitted to see where you are talking about? I get it. That is possible.

MR. UTZ: Are there other questions of the witness?

Mr. Cooley.

Q (By Mr. Cooley) Just to pursue this line of questioning Mr. Utz was following for a moment, Mr. Henderson, to say the

least, your control is rather poor by the time you get to non-standard units in question, is it not? The control for your isopachus map is rather poor when you get to the strip referred to in this hearing?

A Let's say it is less controlled than we have to the east of there.

Q To the west of that strip which you are trying to go beyond, how much control do you have?

A You have the Number Two British-American southwest, southeast of Section 13, Range 14 West, and not shown on this map you have British-American's well in Section Seven of 13 West, which is immediately north of the strip.

MR. SULLIVAN: Southwest to, southwest of Seven, Jack, is the dry hole.

Q (By Mr. Cooley) Now, Mr. Henderson, in your experience in the oil industry, have you ever seen a well completed as a producer in an area where you have zero microlog pay?

A Of course, I have.

MR. COOLEY: That's all the questions I have.

Q (By Mr. Utz) Referring to the well in Section 7, the dry hole of British-American, have you inspected the log on that well?

A I have, sir.

Q Did it have any microlog pay?

A It doesn't have.

Q It is zero then?

A That's correct.

Q Well, with that control, wouldn't it be more reasonable for the zero contour to run through that well?

A Not in my opinion.

Q In other words, you figure it is somewhere south of that well, is that it?

A Correct.

MR. UTZ: Any other questions of this witness? Mr. Fischer.

Q (By Mr. Fischer) Are there any dry holes in the southwest quarter of Section 19 or in Section 24 that are not on this map that were drilled through this pay?

A Not to my knowledge.

Q Then, actually on this five foot isopach contour coming out of the south half of Section 19 on that dry hole, if you followed the symmetry, wouldn't it be possible for that five foot contour to go in a way, follow this zero isopach contour?

A That line could go anywhere, sir.

MR. FISCHER: Thank you.

MR. UTZ: Any other questions of the witness?

MR. SULLIVAN: Yes, sir, I have one.

MR. UTZ: Mr. Sullivan.

Q (By Mr. Sullivan) Do you know of any wells, Mr. Henderson, in the first bench of the lower Gallup which have been productive

with zero feet of microlog sand?

A I couldn't make a definite answer to that question.

Q You are saying you don't know there are any or there are not any?

A I don't know that there are any that produce without some microlog.

MR. SULLIVAN: Thank you.

MR. UTZ: Any further questions? If there are no further questions, the witness may be excused.

(Witness excused.)

MR. UTZ: Does that conclude your case?

MR. SELINGER: Yes, sir.

MR. UTZ: Is there any further testimony to be given?

MR. SULLIVAN: Yes, sir, I have a witness. He's noted for his terse and succinct testimony. He will be as brief as possible.

(Witness sworn.)

JOHN STEIN

called as a witness, having first been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. SULLIVAN:

Q State your name, please.

A John Stein.

Q What is your position and who is your employer?



A I'm employed by the British-American Oil Producing Company as a District Engineer for the entire Northwestern District.

Q Have you previously testified before this Commission?

A I have.

Q As an expert witness:

A Yes.

Q Mr. Stein, in your capacity as District Engineer for the British-American Oil Producing Company, do you have occasion to study the Bisti-Lower Gallup Oil Field?

A Yes, I have.

Q And in connection with your studies, Mr. Stein, are you familiar with the wells that exist in Sections 18 and 19 in 26 North 13 West, in Section 13 of 26 North 14 West?

A Yes, I am familiar with those wells.

Q Mr. Stein, are you familiar with the definition of waste as it is set forth in the New Mexico Statutes annotated, particularly the Conservation Act?

A Yes, I'm familiar with that term, its definition.

Q Now, sir, are you familiar with the application that Mr. Riddle has made to drill wells in what has been referred to in this hearing as the strip along the Sections 18 and 19, just mentioned?

A Yes, I am familiar with that application.

Q If the location in the north half of that strip is granted, as proposed by Mr. Riddle, in your opinion, would waste result

as waste is defined in the New Mexico Statutes?

A Yes, in my opinion waste would result.

Q How did you arrive at that conclusion, in your opinion, Mr. Stein?

A Previous testimony before this Commission, notably in Case 1308, has conclusively proven that the Lower Gallup sand pay is a continuous reservoir with permeability and porosity connected throughout. In this case, it was conclusively proven that one well was possible of draining an area far in excess of 80 acres. This proof consisted of pressure data on project, LPG project and pressure interference data taken on wells on British-American's Douhit B. Lease. If the Applicant were allowed to drill a well 1980 feet from the south line in Section 18, he would, of course, be draining oil out from under the leases on either side, which would be Skelly's lease to the east and British-American's lease to the west.

Q How does that result in waste?

A If the Commission allows that, as I understand the statutory definition, production from this well, if allowed to be drilled on that position, will cause a rapid pressure draw down, due to the fact there would be at least two wells in this area; and later, when British-American drills a west offset, there would be three wells producing in the proximity. Consequently, a local gas cap would be built up in this area. As a result of the local gas cap, the three wells would immediately develop an extremely

high gas-oil ratio. Producing these three creates a high gas-oil ratio, could create sub-surface waste, as a matter of fact. Natural energy would be designated in a short period of time and consequently result in less recovery from that particular area.

Q Mr. Stein, you indicated, I believe, that a well drilled at the location proposed in the north segments of these two parcels of the strip would drain both the land leased by British-American to the west and land leased by Skelly to the east, is that correct?

A That's correct.

Q In your opinion, is there drainage from this strip to, say, Skelly's Well Number 16?

A There is or probably will be some in the later stages.

Q If British-American drilled an on-pattern 80-acre location in the eastern, let's say the northeast of the southeast of Section 13, would there be drainage from that well to that well from the northern segment of this strip?

A Would you state that again?

Q If British-American drills a well, which would be a regular well location, under the existing 80-acre spacing ordinance, which location would be in the northeast of the southeast of Section 13, would drainage to that well from the strip result or occur?

A There would be a slight amount of drainage later likely

in the well.

Q So that, in your opinion, would any well drilled in that vicinity result in drainage across lease lines?

A Yes, it would.

Q So that, is it your opinion, Mr. Stein, that a well drilled at Mr. Riddle's proposed location would result in drainage from both the Skelly and British-American properties?

A Yes, it would, most certainly.

Q Where, Mr. Stein, will you recommend to your management will be the location of your next well, if drilled in the north-east of the southeast of Section 13?

A Well, it will depend on what the Commission, where the Commission decides Mr. Riddle can drill his well. If they approve the location he has requested, we would have no alternative but to drill our well 252 feet from the east line and 1980 feet from the south line of Section 18.

Q You wouldn't be permitted --

A -- We would have to ask for permission to do that.

Q In other words, you anticipate you would ask for an unorthodox location?

A I anticipate that.

Q Such an unorthodox location would aggravate the pressure draw down if another well was located in the strip, would it not?

A That is most certainly true. We wouldn't like to ask to drill a well there, but if Mr. Riddle is allowed to drill one

we would be forced to come here.

Q Who is the lessor under that lease?

A The Navajo Tribal Group.

Q Did you see the isopach map marked Skelly Exhibit One?

A Yes, I did. As a matter of fact, it is in front of me right now.

Q Do you generally agree or specifically agree with the contours shown on that map?

A Yes, I do.

Q What do you base your agreement on?

A I base it on the fact that he has picked about the same feet of pay I would have picked for these wells, and his interpretation there of the area, I think, is very representative.

Q What do you mean, you would pick for these wells? Have you seen the micrologs on any or all of these wells as shown on Skelly's Exhibit One?

A I have seen them and have made such a map, although I don't have it with me.

Q In your opinion, Mr. Stein, are there parts of the strip, both to the north and to the south, which in all -- which would probably not be productive?

A Yes, in my opinion, there is; certain portions of the northern end of this strip would not be productive, and some portions of the southern part of the strip would not be productive.

Q If British-American were the owner of the lease or lots 3

and 4 in Section 18, would you, based on your present knowledge, recommend the drilling of a well in those lots?

A I would not.

Q Would you, with regard to lots 9 and 10 in Section 18, recommend to your employers, if they owned the lease thereon, recommend a drilling of a well in those lots?

A No, I wouldn't.

MR. SULLIVAN: That's all I have.

MR. SELINGER: May I ask Mr. Stein a question?

MR. UTZ: Yes, sir.

CROSS-EXAMINATION

Q (By Mr. Selinger) Would it be your recommendation to the Commission they consider only that acreage of the strip that lies between the zero isopach line to be considered productive for the assignment of drilling of a well?

A I certainly would not recommend they consider any more than that portion.

Q Now, this may take you by surprise. I'll ask you if that portion of the strip which lies between the two zero lines on the north and south perimeter was 55.9 acres; by eyeballing that acreage there, would you say that is correct?

MR. SULLIVAN: Mr. Examiner, I think that is shooting a fast question at a competent engineer. He could give us an answer by 7:30 that would be right to the nub. I believe it is unfair to question this witness to that detail on an exhibit he did not prepare.

MR. FOX: I'll join that.

MR. SULLIVAN: I don't want to squeeze this witness to give an answer which would embarrass or otherwise throw down on the credibility of the rest of his testimony, sir.

MR. SELINGER: I withdraw that question.

MR. UTZ: Mr. Selinger, your question was with regard to the amount of acreage, was it?

MR. SELINGER: We have a perimeter of 55.9. I wanted to know if he could indicate from eyeballing the total amount of acreage in the strip.

MR. SULLIVAN: I would permit the witness to make a guess, say ten plus or minus acres. I don't think we should make him vouch to the eyeball estimate.

MR. FOX: I object to that, too.

MR. SULLIVAN: I'm inclined to go along with you.

MR. UTZ: Didn't the Federal Land Survey Office indicate the correct acreage?

MR. SELINGER: I would think it would be 11, the perimeter, the amount of land lying between the lines. I'm willing to withdraw the question.

MR. UTZ: Any further questions?

MR. SELINGER: That's all.

MR. FOX: I have some questions.

MR. UTZ: Mr. Fox.

CROSS-EXAMINATION

BY MR. FOX:

Q You say that any well drilled on the strip would drain either one or the other of your client's property or Skelly, is that right?

A That's right.

Q But you say you are not now draining the strip, nor is Skelly?

A I didn't say that. I said sometime in the future of the producing life there will be drainage across. I don't think the British-American well is creating any appreciable drainage at the present time; however, if we drill a well from the northeast to the southwest, there may be drainage later.

MR. UTZ: From the northeast to the southwest?

A From the northeast to the southeast; I beg your pardon.

Q Wasn't it your statement that Skelly and British-American, they are not now draining the strip?

A Not precisely that. I stated there would be some drainage and it would become progressively more as time goes on.

Q But the drilling in, any production out of either of the proposed wells would not at some later date but now drain both the British-American and Skelly, in your opinion?

A There would be some drainage; I beg your pardon -- would you restate that?

Q And you state that the drilling of these proposed wells would immediately, as I understand your testimony, result in



drainage of both British-American and Skelly property?

A Yes, that is due to the close proximity of the location to the lease line.

Q This is the way you arrive at your conclusion as to this question concerning waste then, by reason of the effects of the drilling of the proposed wells -- the drainage will begin immediately -- but the present existing producing wells, possibly some inconsequential drainage now from the strip, but it will be some future date when there will be substantial drainage?

A That amount of drainage, I don't think, will change too much with time because of the distance across the lease. If another well is allowed to be drilled in between these wells, such as Mr. Riddle proposes, then there will be a large pressure draw down immediately due to the three wells draining from the same approximate area, which, of course, creates an initial gas cap and high gas-oil ratio conducive to sub-surface waste.

Q The correlative rights, as matters stand, of Mr. Riddle are not being protected, are they?

A Not until he drills a well.

Q And if he drills a well in the Section 19 and the Commission denies him a well in 18, his correlative rights in 18 will be denied, I presume, is that right?

A Well, as I see it, there is only enough acreage there to possibly support one well. Now, where the well is drilled is not for me to say.

Q Well, by the same token, and accepting your answer, if the well is drilled in either section, either 18 or 19, under the testimony and under the condition of the leases, the correlative rights in the opposite portion of the strip are not being protected?

A Mr. Riddle's correlative rights will be protected when he drills a well. He will be getting drainage from other leases. Nobody will be allowed to buck up and drill a well. He'll be draining the two offset operators; his rights are protected.

Q Is it not contemplated by you as soon as Mr. Riddle is allowed to drill a well any where that you will immediately make application for an unorthodox well of your own, as you stated?

A No, sir, that is only in the case of Mr. Riddle being allowed to drill a well 1980 from the south line and 252 feet from the west line. If he's allowed to drill any other reasonable location of that strip, British-American would drill their well on the accepted 80-acre spacing pattern.

Q The deduction and conclusion which you have stated in conjunction with the definition of waste is, I gather this, waste will result from a well which is drilled by Mr. Riddle; it will not result from the existing well, or wells which are possibly drilled in the future under the present rule governing this pool?

A That's a long, drawn-out question; I don't remember all of it.

MR. SULLIVAN: In the first place, the record will show the

witness never came near saying anything like that.

MR. FOX: I think the attorney is about to tell the witness what to say.

MR. PAYNE: Are you objecting?

MR. SULLIVAN: I certainly am.

MR. PAYNE: On what basis?

MR. SULLIVAN: On the basis he is asking the question as to whether or not the witness has stated such and such a conclusion. Now, if you want to let the witness answer whether or not that is purely and simply his original testimony or whether it isn't, I'm perfectly willing to let the question go in.

MR. PAYNE: What is the question? Restate it.

MR. UTZ: Read the question back.

REPORTER: (Reading) "Q The deduction and conclusion which you have stated in conjunction with the definition of waste is, I gather this, waste will result from a well which is drilled by Mr. Riddle; it will not result from the existing well, or wells which are possibly drilled in the future under the present rule governing this pool?"

MR. SULLIVAN: Where is the question?

MR. FOX: Is that correct?

A If I understand the question right, I never made any such a conclusion.

Q (By Mr. Fox) Let me ask you this -- waste will result from the drilling of either of these proposed wells? Is that

not your position?

A That is my position.

Q Waste is not presently effected by the production from the existing wells, is that correct?

A It is not.

Q Waste would not be effected by the production from wells drilled in conformity with the present rules and regulations governing this pool on standard units, is that correct?

A Waste would not occur.

Q In other words, it's only Mr. Riddle's Wells, as he proposes them, that is going to cause any waste?

A It is the location of Mr. Riddle's wells with reference to other wells, and the combination of three wells or two wells -- we will say three wells -- because British-American is going to drill a well; it's the combination of three wells that creates the aggravated condition of waste.

Q If Mr. Riddle is granted permission to drill those wells, you presume to aggravate the waste further by applying for an additional unorthodox unit, is that right?

A If the Commission allowed him to drill this well at the location he proposes in his application, that would be correct.

Q That would be correct, and the purpose of applying for such a well would be to protect the correlative rights of British-American, isn't that right?

A That is true.

MR. FOX: That's all.

MR. UTZ: Any other questions of the witness?

Q (By Mr. Cooley) Mr. Stein, let's break this into two areas; one, whether it is productive, and, second, where the well should be located, assuming it is productive. Taking the proposed unit in Section 18, where would you propose the well be located to avoid causing this waste that you discussed, if we are going to grant the unit in 18?

A Since you've asked me for a specific recommendation, I'd say 660 feet from the south line and 252 feet from the west line of Section 18.

MR. UTZ: That is lot ten?

A Yes, it would be in lot ten.

Q (By Mr. Cooley) That would be a more favorable location structurally according to Skelly's Exhibit One?

A Isopachtic wise, it would, yes; I don't know about structurally.

Q Is your objection to the well in Section 19, the same proposed location in 19, the same as it is in 18, or do you feel that waste would occur?

A I feel waste would occur. It would be a similar location.

Q Where would you suggest the well be located?

A I wouldn't suggest a well for that location.

Q Assuming that it is actually productive as Mr. Riddle contends, where should he locate the well?

MR. SELINGER: Considering Skelly Exhibit One, assuming it is productive, it is in the record it is productive.

MR. COOLEY: I am asking where he feels the well should be located.

A Well, I could -- I'd say 1980 feet south, if you have to have a location.

Q (By Mr. Cooley) Do you know whether Atlantic proposed to drill a well in the northeast quarter northeast quarter of Section 24?

MR. SELINGER: We object as speculative.

MR. COOLEY: I asked if he knows; all he has to do is say no.

A I don't know.

Q (By Mr. Cooley) Let's get to this question of whether in your opinion this proposed acreage, all of it, is productive or not productive. Am I to understand you recommend any acreage lying outside of this zero contour on the isopach map submitted by Skelly, or any other critically prepared isopach map, should be excluded from the proration unit?

A I personally think it should.

Q You think it should?

A If you have enough control, I don't see why it should enter into a proration unit if it has no productive potentiality.

Q You consider a zero isopachus microlog permeability as shown on this map as a true delineation of productivity?

A It is as near as you can get it.

Q Are you aware of any Gallup oil pool that has produced --

MR. PORTER: -- Do you mean wells?

Q (By Mr. Cooley) Are you aware of any wells in the Lower Bisti oil pool that have produced oil where that microlog permeability is not shown?

A Yes, but not from the first bench of the Gallup. Second and third bench have produced some oil in small amounts without any microlog shown, microlog separation.

Q Is there something peculiar about the second and third bench that makes them not susceptible to microlog separation?

A Yes, they are just extremely light. It is not peculiar; it happens to be a fact.

Q Also the major stringer in here, it continues tight in some areas?

A Where it is, it is non-productive.

Q Where it is?

A It is non-productive.

Q What I'm getting at, is it at all possible it could be tight enough to show microlog permeability but loose enough to produce oil?

A It is always possible. I never have seen it happen.

Q It occurs in the second and third bench in the Bisti oil pool?

A Yes, it does.

Q You still state your recommendation is all areas outside of the microlog permeability be excluded from the proration unit?

A Yes.

Q Would you direct your attention to Skelly's Exhibit One?

A All right, sir.

Q I believe it is Skelly's Number 14 well in the southeast quarter of the northwest quarter of Section 19?

A Yes.

Q And I believe it is in the record that the proration unit runs east and west, is that right?

MR. SELINGER: Yes.

Q (By Mr. Cooley) What portion of that proration unit do you feel is non-productive, based on your former conclusion?

A It would be a very small percentage.

Q What percentage of it lies outside of the zero contour?

A Maybe 10 per cent.

MR. FOX: I think there is some misunderstanding.

MR. SULLIVAN: Let the witness have a ruler and let him eyeball estimate it. I'd like to make the same objection to Mr. Selinger's question where he asked for estimates based upon a map.

Q (By Mr. Cooley) It is immaterial what it is. Take your figure of ten percent --

A Yes.



Q -- Would you recommend that unit be reduced by 10 percent?

MR. SELINGER: We object to that question on the grounds this Commission has ruled that every location on regular locations be assigned in 80 acres; and if the Commission undertakes to go around the entire perimeter of the Bisti Field to determine the productive acreage, we have no objection; and you'll find at least 40 units of which portions lie outside of the zero line. If this Commission desires to make a determination of the productive limits of the Bisti Field, we have no objection.

Q (By Mr. Cooley) Is that what we are doing with Mr. Riddle's unit? You are singling it out to see whether it is productive or not?

A No.

MR. SULLIVAN: In addition, this whole line of questioning about those other units is irrelevant and immaterial to this question.

The mandate of the statute is, when you give an unorthodox location, as I read it, you must do everything or must do something that will offset any advantage that the unorthodox well spacer gets.

All we've been trying to establish in here, number one, I think we've been trying to establish there is some question whether the well can be drilled at all without waste, which is the primary, unassailable condition set forth in one phrase in the statute, which gives him the unquestioned right to drill if he

can do so without waste; but, secondly, you are supposed to offset any advantage that he gets by virtue of this unorthodox location.

All we are trying to do is to establish in here, not the minimum, not the maximum, but that acreage which can reasonably be expected to be productive.

If he's going to drain other people's lands, how much drainage is he going to be permitted to commit, and the fractions he's going to be permitted to commit has to bear relationship. Under these circumstances of a narrow strip, he can't avoid production, no matter what his production is.

We are trying to establish for the benefit not only for ourselves who are interested in this hearing but for the benefit of hearing what percentage of orthodox production or allowable is he going to be entitled to. What he thinks about what ought to be done to these other units is irrelevant and immaterial, and I object to that questioning on that ground. I wish the Examiner would rule on that objection.

MR. UTZ: The Examiner will overrule the objection on the grounds we must take cognizance of the Exhibit One in order to determine what acreage is productive and what acreage is not productive in this immediate area, as to these lots and any other area.

MR. SELINGER: Where is the application on the other unit?

MR. UTZ: Not in this case.

MR. PAYNE: We feel the evidence should be admissible for

what it is worth, that it is relevant.

MR. UTZ: Whether the acreage is productive or not is relevant to these lots.

MR. SULLIVAN: Well, now, I can't object, sir, and I did not object to this line of questioning in determining what acreage is or is not productive.

MR. COOLEY: My question was limited to that.

MR. SULLIVAN: You were asking this witness what he would do about the other, would he cut their allowable. I say that questioning has no relevancy to the subject. If you want to ask Mr. Stein, based on the isopachus map, whether or not he thinks the section attributable to the west part of Skelly's 14 well, based on that exhibit or not, that is not objectionable and it is not irrelevant; but if you were asking him what he would do with reference to this allowable, it is.

MR. COOLEY: Since Mr. Stein can't do anything about the allowable, I'll withdraw the question. I'm still interested in whether he thinks that area is productive.

MR. UTZ: Any further questions of the witness?

MR. FOX: One.

Q (By Mr. Fox) Mr. Stein, you are familiar with the present allowable in that area?

A Well, fairly familiar, yes.

Q Isn't it a fact that this concern you stated in regard to gas cap will, and gas waste, by reason of the existence of the

proposed wells would be, if not eliminated, greatly, extremely, substantially reduced by reason of the present allowable?

A No, because you have three wells close to each other, or will have eventually, with an aggravated condition, they will have a top allowable; that they will, of course, being close together, will drawn down the pressure in that particular area much sooner than if they were wider spaced.

MR. SELINGER: Isn't this repetitious of previous cross-examination?

MR. COOLEY: Is that a comment or objection?

MR. SELINGER: I'm raising the point with the Examiner.

MR. FOX: I think part of the answer is; I don't believe the question is.

MR. PAYNE: There has been a great deal of repetition. We will overlook it if it is.

A The allowable is sort of an elusive thing down there. It might be 100 barrels today and two months from now it might jump to 200, as far as I know.

Q (By Mr. Fox) Do you think that is reasonable, to anticipate it will be 200 in a couple of months?

MR. SULLIVAN: I object; it calls for a conclusion of the witness which he can't possibly answer.

MR. UTZ: Sustain the objection.

MR. FOX: That's all.

MR. UTZ: If there are no further questions of the witness,

he may be excused.

MR. SULLIVAN: Mr. Utz, I hate to drag that out. I think there is a part of Mr. Stein's testimony, in response to Mr. Cooley's direct examination or cross-examination, that requires redirect, and that is with regard to his recommended well locations, sir. If I may take about two minutes, I hope that it at least will straighten me out if it doesn't help straighten out the record.

Q (By Mr. Sullivan) Mr. Stein, you said you would recommend a well location for the lots in Section 18 where, sir?

A I believe I stated 660 from the south line of Section 18.

Q And two hundred -- an equal distance?

A Well, 252, equal distance from the west line.

Q If a well were permitted to be drilled there, would you have any recommendation with regard to a well to be located in the southern group of lots or the group of lots in Section 19?

A There should not be a well drilled in there.

Q In other words, your recommendation of the location on Section 18 is based upon the assumption only one well would be permitted in the entire strip?

A That's correct.

Q Thank you. Would you make a recommendation, in the event the Commission decides to permit the drilling of two wells, what would be your recommendation with regard to the location of the wells, the respective lots north and south? Is that question

clear?

A Regardless of what the isopach shows, if I were pinned down to make a recommendation for two holes for the benefit of the Commission, where would I recommend it?

Q I think that is a fair statement of my question.

A If I had to make a recommendation in the south part of the strip, 1980 feet south of the north line.

Q And where would you recommend the well in the northern tier of lots?

A Let it sit 660 from the south line.

Q Making those recommendations, do you have the consideration in mind of waste and protection of correlative rights?

A Yes, I do.

Q Whose correlative rights?

A I believe I have Mr. Riddle in mind.

Q As well as British-American?

A Yes.

Q And the lessors of the respective people you mentioned?

A Yes.

MR. SULLIVAN: Thank you, that's all.

Q (By Mr. Utz) Mr. Stein, have you made a fairly detailed study of this immediate area?

A Yes, fairly detailed.

Q Do you know where the location is of the producing wells in Section 30?

A Section 30?

Q Immediately south of Section 19?

A Yes, there is one in the northwest quarter of the northeast of 30, and then there is one in the southeast of the northwest in 30. I don't believe that is quite centered; it is in that general vicinity.

Q Do you know what the allowable is on the second well mentioned? What is the name of that well?

A CM & W Elliotts One and Two. The first is One, the second is Two -- I don't know right at the present time. I know they were very light wells to start with. They may be even shut in at this time. I haven't looked at the allowable scheduled for those particular wells lately.

Q To your knowledge, they did make oil wells?

A Yes. Initially, they were fairly good, but they declined rapidly, as I recall.

MR. UTZ: Any other questions? If not, the witness may be excused.

A Thank you.

(Witness excused.)

MR. UTZ: Any other statements to me made in this case?  
No further statements, the case will be taken under advisement.

MR. SULLIVAN: I'm slow at this hour of the evening.

MR. UTZ: Almost too late.

MR. SULLIVAN: I'd like to, one, object to the admission

of Applicant's Exhibit Number One in evidence on the grounds that the palpable error discovered there gives rise to doubt as to the reliable value of the rest of the map. I have also picked up another one. The San Juan Engineering Company, who claims to have produced this map, made a mistake even in spelling of Farmington, New Mexico, which I think adds to the lack of credance to be given to that exhibit on its face.

MR. UTZ: The objection will be overruled.

MR. SULLIVAN: May I move, sir, that any other errors that may be discovered in that may be taken into account as they are discovered by examination by the Commission staff?

MR. UTZ: We certainly will. We intend to examine it.

MR. SULLIVAN: I'd like to move the dismissal of the application on the grounds there is no competent legal evidence to support it.

Your laws very clearly state that no order will be issued by this Commission without some competent legal evidence to support it, and I submit there is none given in support of the application.

Mr. Riddle, even though a geologist and an expert witness, had nothing to support his opinion that the wells would be productive regardless of where drilled in the strip. That is not stated fairly -- that, in effect, that they, the wells, would, that the entire strip would be productive. He had nothing to support his conclusion that could be produced at the suggested and



proposed locations without waste. He had nothing to support his statements that those wells would be drilled and still protect correlative rights. He acknowledged on cross-examination that those wells drilled anywhere would result in drainage of the adjoining landowner's property. And I also submit that he bore the burden of proof in this case, which, I think, is questionable whether or not he has been able to maintain.

MR. UTZ: The motion will be denied, Mr. Sullivan. The Examiner will take recognition of the evidence or lack of evidence as the case may be.

MR. SULLIVAN: May I ask this -- is your ruling on this final? You don't issue the order; this is all submitted to the Commission. May they not again consider the motions that have been made and rule on them, particularly a motion of the substance of this nature? A motion to dismiss, I think, should be one beyond the normal role of the Examiner.

MR. UTZ: If the Commission so wishes to overrule my decision, I'm sure it is within their power to do so.

MR. SULLIVAN: May I reserve that question for the Commission?

MR. PAYNE: Yes.

MR. SELLINGER: I have one comment to make, and that is, if you will note from Applicant's Exhibit One that the four 80-acre units running north and south, running east and west, consist -- that the southwest of 18 and the northwest of 19

correspond to the two, the north half of the south strip and they also correspond to the south half of the north strip, so that it is our contention that only the two, the four lots, the two in Section 18 and two lots in Section 19 are all that are productive, and they are joined on the east by producing units and south of the, or in the southwest quarter of 19 there are no producing units, nor are there any producing units in the northwest of 18. It is our contention that only half of the north strip and half of the south strip is productive.

MR. UTZ: Thank you. Any further statements? The case will be taken under advisement.

STATE OF NEW MEXICO )  
 ) ss  
 COUNTY OF BERNALILLO)

I, JOHN CALVIN BEVELL, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me in stenotype and reduced to typewritten transcript by me; that the same is a true and correct record, to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this 24th day of November, 1958, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

*John Calvin Bevell*  
 NOTARY PUBLIC

MY COMMISSION EXPIRES:

January 24, 1962

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1555, heard by me on Nov. 19, 1958

*John A. [Signature]*, Examiner  
 New Mexico Oil Conservation Commission

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE NO. 1555  
Order No. R-1301

APPLICATION OF H. K. RIDDLE FOR TWO  
NON-STANDARD OIL PRORATION UNITS AND  
FOR TWO UNORTHODOX WELL LOCATIONS IN  
THE BISTI-LOWER GALLUP OIL POOL, SAN  
JUAN COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on  
November 19, 1958, at Santa Fe, New Mexico, before Elvis A. Utz,  
Examiner duly appointed by the Oil Conservation Commission of  
New Mexico, hereinafter referred to as the "Commission," in  
accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 4<sup>th</sup> day of December, 1958, the Commission,  
a quorum being present, having considered the application, the  
evidence adduced and the recommendations of the Examiner, Elvis  
A. Utz, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required  
by law, the Commission has jurisdiction of this cause and the  
subject matter thereof.

(2) That the applicant, H. K. Riddle, proposes the  
establishment of the two following-described non-standard oil  
proration units in the Bisti-Lower Gallup Oil Pool, San Juan  
County, New Mexico:

Lots 3, 4, 9, and 10 (60.84 acres) of Section 18  
Lots 3, 4, 9, and 10 (63.48 acres) of Section 19

both in Township 26 North, Range 13 West.

(3) That the applicant proposes to dedicate the 60.84-acre  
unit to a well to be drilled to the Bisti-Lower Gallup Oil Pool at  
a point 1980 feet from the South line and 252.5 feet from the West  
line of said Section 18, and to dedicate the 63.48-acre unit to  
a well to be drilled to the Bisti-Lower Gallup Oil Pool at a  
point 660 feet from the North line and 256 feet from the West line  
of said Section 19.

(4) That lot 3 in said Section 18 cannot reasonably be presumed to be productive of oil.

(5) That there is a reasonable probability that approval of the subject application would cause waste and impair correlative rights.

(6) That the applicant should be permitted to develop the subject acreage in accordance with either of the options herein-after set forth:

OPTION I

Form one non-standard oil proration unit in the Bisti-Lower Gallup Oil Pool consisting of lots 4, 9, and 10 in said Section 18 and lots 3 and 4 in said Section 19, said unit to be dedicated to a well to be centered between the East and West lines of lot 10 in Section 18 and located not closer than 560 feet to the North boundary nor closer than 560 feet to the South boundary of said lot 10.

OPTION II

Form two non-standard oil proration units in the Bisti-Lower Gallup Oil Pool, one unit consisting of lots 4, 9, and 10 in Section 18, the other consisting of lots 3, 4, 9, and 10 of Section 19, said units to be dedicated respectively to a well to be centered between the East and West lines of lot 10 in Section 18 and located not closer than 560 feet to the North boundary nor closer than 560 feet to the South boundary of said lot 10 and to a well to be centered between the East and West lines of lot 4 in Section 19 and located not closer than 560 feet to the North boundary nor closer than 560 feet to the South boundary of said lot 4.

(7) That permitting the applicant to develop the subject acreage in accordance with either of the options set forth above, will not cause waste nor impair correlative rights.

IT IS THEREFORE ORDERED:

(1) That the application of H. K. Riddle for two non-standard oil proration units in the Bisti-Lower Gallup Oil Pool, one unit consisting of lots 3, 4, 9, and 10 in Section 18 and the other consisting of lots 3, 4, 9, and 10 in Section 19, both in Township 26 North, Range 13 West, NMPM, San Juan County, New Mexico, be and the same is hereby denied.

(2) That the application of H. K. Riddle for two unorthodox locations for wells to be drilled on the above-described acreage to the said Bisti-Lower Gallup Oil Pool at points 1980 feet from the South line and 252.5 feet from the West line of said Section 18 and 660 feet from the North line and 256 feet from the West line of said Section 19 be and the same is hereby denied.

(3) That the applicant be and the same is hereby permitted to develop the subject acreage in accordance with either of the following options:

OPTION I

Form one 77.36-acre non-standard oil proration unit in the Bisti-Lower Gallup Oil Pool consisting of lots 4, 9, and 10 in said Section 18 and lots 3 and 4 in said Section 19, said unit to be dedicated to a well to be centered between the East and West lines of lot 10 in Section 18 and located not closer than 560 feet to the North boundary nor closer than 560 feet to the South boundary of said lot 10.

OPTION II

Form two non-standard oil proration units in the Bisti-Lower Gallup Oil Pool, one being a 45.91-acre unit consisting of lots 4, 9, and 10 in Section 18, the other being a 63.48-acre unit consisting of lots 3, 4, 9, and 10 of Section 19, said units to be dedicated respectively to a well to be centered between the East and West lines of lot 10 in Section 18 and located not closer than 560 feet to the North boundary nor closer than 560 feet to the South boundary of said lot 10 and to a well to be centered between the East and West lines of lot 4 in Section 19 and located not closer than 560 feet to the North boundary nor closer than 560 feet to the South boundary of said lot 4.

(4) That if the applicant proceeds under Option I, he shall submit proof of communitization to the Oil Conservation Commission prior to drilling the subject well.

(5) That the unit well (or wells) shall be granted an allowable in the proportion that the acreage in said unit (or units) bears to the acreage in a standard oil proration unit for

-4-

Case No. 1855  
Order No. R-1301

the Bisti-Lower Gallup Oil Pool, subject to the Special Rules  
and Regulations for the Bisti-Lower Gallup Oil Pool as set forth  
in Order Nos. R-1000-B and R-1000-D.

DONE at Santa Fe, New Mexico, on the day and year herein-  
above designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*E L McChen*

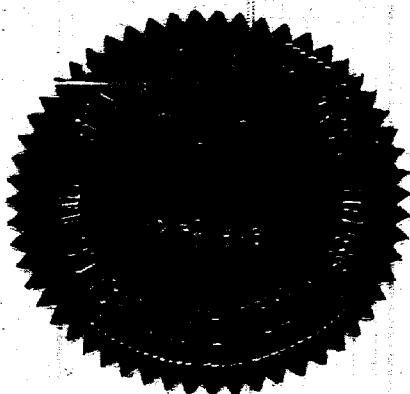
EDWIN L. MCCHEN, Chairman

*Murray E. Morgan*

MURRAY E. MORGAN, Member

*A. L. Porter, Jr.*

A. L. PORTER, Jr., Member & Secretary

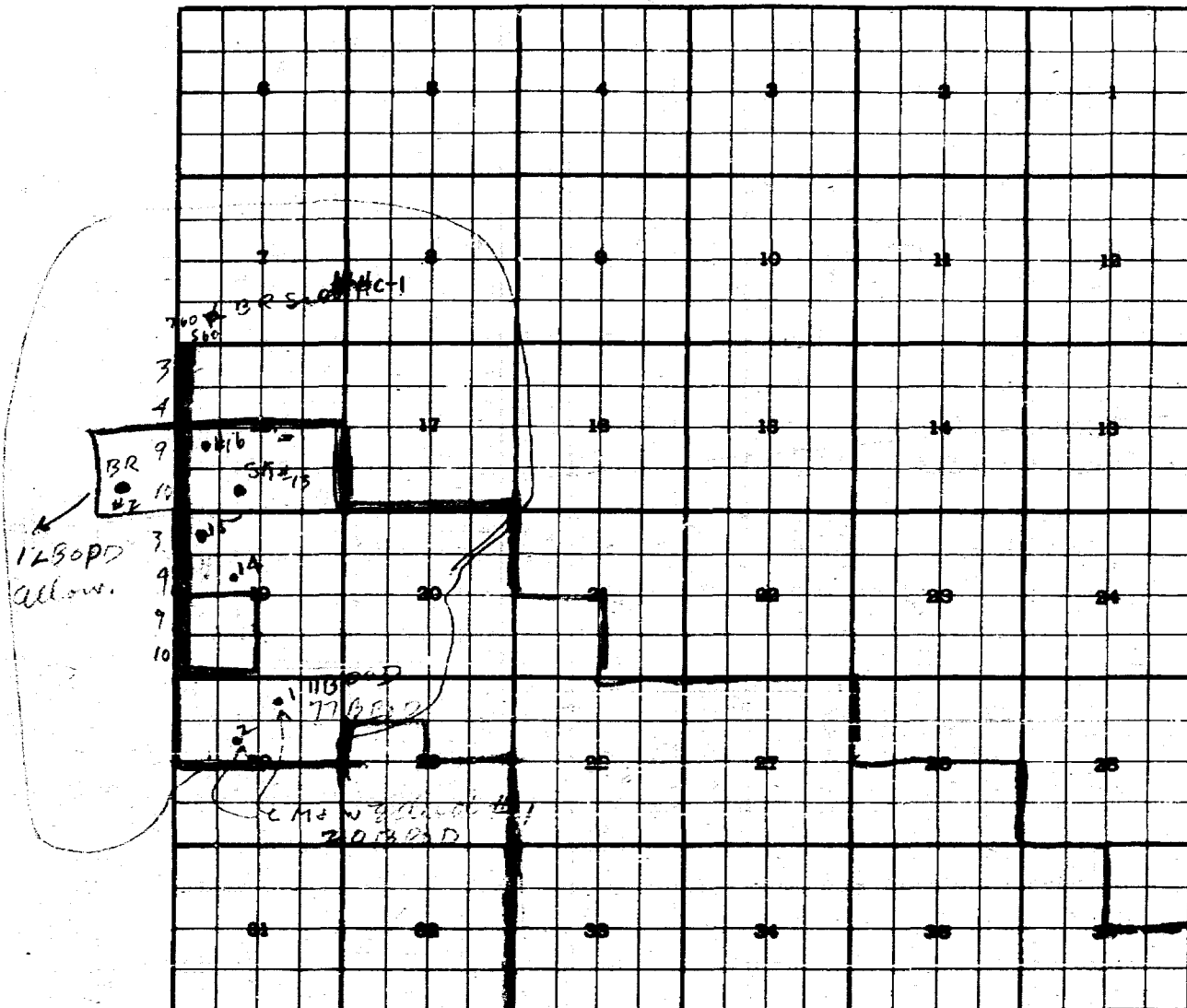


ir/

County 1555 Pool \_\_\_\_\_

18-26 5:  
19- " " :

TOWNSHIP \_\_\_\_\_ South, RANGE \_\_\_\_\_ East, NEW MEXICO PRINCIPAL MERIDIAN



Page 14 H<sub>00</sub> Schedule.



MAINT OFFICE OCC

H.K. Riddle

65 E. FOURTH SOUTH  
SALT LAKE CITY, UTAH

1958 OCT 28 PM 1:07 28 October 1958

New Mexico Oil Conservation Commission  
State Capitol Building  
Santa Fe, New Mexico

Gentlemen:

Request is hereby made for permits to drill and produce two oil wells and to be allowed daily production from such wells in an amount of oil proportional to Standard Oil Proration Units on two Non-Standard Oil Proration Units.

Unit #1 provided for Well #1;

Lots 1, 2, 3 & 4, Section 18, T. 26N., R. 13 W.,  
N.M.P.M., San Juan County, New Mexico,  
containing 60.84 acres, more or less.

(This strip is 489.72 feet wide at the north end and 514.14 feet wide at the south end).

Unit #2 provided for Well #2;

Lots 1, 2, 3 & 4, Section 19, T. 26 N., R. 13 W.,  
N.M.P.M., San Juan County, New Mexico,  
containing 63.48 acres, more or less.

(This strip is 514.14 feet wide at the north end and 533.28 feet wide at the south end.)

Attached hereto and made a part hereof is a plat showing the lands described which was prepared by the San Juan Engineering Company.

The lands above described are owned by the United States of America and have been covered by one separate and distinct oil and gas lease describing no other lands.

Said lands are presumed to be productive of oil and being drained by Skelly Oil Co. wells Nos. 15 and 16, both 660 feet from the East line of said lands, and British American Well No. 2 located 1980 feet from the west line on Navajo lands.

Each Non-Standard Unit lies wholly within a single government section and adjacent to the Navajo Reservation.

*Docket Mailed*  
*11-5-58 B P*

*Case 1555*

10-28-58

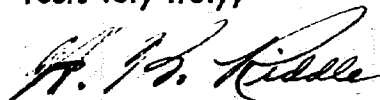
Unit #1 described above was assigned to John W. Sullivan and segregated from the original lease including Unit #2, however, the applicant herein has been designated Operator of said Unit #1 and is both owner and operator of Unit #2.

British American and Skelly Oil Company are the only operators owning or operating wells or leases within 2640 feet of either of the herein described Non-Standard Units and copies of this application have been sent to both with the request that each of them notify the New Mexico Oil Conservation of their approval or disapproval of the application herein.

Application has been made with the U.S.G.S. for drilling said two wells and it is presumed that approval has reached the office of New Mexico Conservation Comm.

The applicant hereby requests an examiners hearing upon this application at the earliest possible date.

Yours very truly,



H. K. Riddle

HKR:ab

DOCKET: EXAMINER HEARING NOVEMBER 19, 1958

Oil Conservation Commission 9 a.m., Mabry Hall, State Capitol, Santa Fe, New Mexico

The following cases will be heard before Elvis A. Utz, Examiner:

CASE 1337: Application of Gulf Oil Corporation for permission to commingle the production from two separate oil pools. Applicant, in the above-styled cause, seeks an order amending Order R-1093 and Order R-1093-A to authorize it to commingle the production from the Montoya formation with the production from the Ellenburger, Fusselman, and McKee formations on its Learcy Mc-Buffington Lease consisting of the S/2 of Section 13, Township 25 South, Range 37 East, Lea County, New Mexico.

CASE 1548: Application of Shell Oil Company for an automatic custody transfer system and for permission to commingle the production from four separate leases. Applicant, in the above-styled cause, seeks an order authorizing it to install an automatic custody transfer system and to commingle the production from the Vacuum Pool on four State Leases located in Sections 29, 30, and 31, Township 17 South, Range 35 East, Lea County, New Mexico.

CASE 1549: Application of Tidewater Oil Company for two non-standard gas proration units. Applicant, in the above-styled cause, seeks an order establishing a 120-acre non-standard gas proration unit, in both the Tubb Gas Pool and the Blinbry Gas Pool, each to comprise the S/2 SE/4 and SE/4 SW/4 of Section 36, Township 21 South, Range 37 East, Lea County, New Mexico, and to be dedicated to applicant's State "Q" Well No. 1, located in the SE/4 SW/4 of said Section 36, which well is dually completed in the aforesaid pools.

CASE 1550: Application of Tidewater Oil Company to commingle the production from several separate oil pools. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the production from the Ellenburger, McKee, Fusselman, Montoya and any other pool or pools encountered which produces oil of similar qualities on its Coates "C" Lease comprising the E/2 and SE/4 NW/4 and NE/4 SW/4 of Section 24, Township 25 South, Range 37 East, Lea County, New Mexico. Applicant further requests permission to commingle production from the Drinkard formation on said lease with any other pool or pools encountered which produce sour crudes. Applicant proposes to separately meter production from each pool prior to being commingled. Applicant further seeks permission to produce more than sixteen wells into said common facilities.

CASE 1551: Application of Pan American Petroleum Corporation for permission to commingle the production from three separate leases and for permission to produce more than sixteen wells into a common tank battery. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the production from the Empire-Abo Pool from the three separate Federal leases hereinafter described:

LC-065478-B N/2 NW/4, NE/4, N/2 SE/4, and E/2 SW/4  
Section 3; E/2 Section 10

NM-025604 S/2 SE/4 Section 3; W/2 Section 10

LC-067858 N/2 and SW/4 Section 11

all in Township 18 South, Range 27 East, Eddy County, New Mexico. Applicant further requests authority to produce more than sixteen wells into the common tank battery for said leases. Applicant proposes to separately meter production from each of the above-described leases prior to being commingled.

CASE 1552:

Application of Pan American Petroleum Corporation for permission to commingle the production from four separate leases. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the production from the Abo formation adjacent to the Empire-Abo Pool from the four separate State leases hereinafter described:

E-5461 NW/4 NW/4 Section 2

B-7244-30 S/2 NW/4, NW/4 SW/4, and SE/4 SW/4 Section 2

B-8814-12 NE/4 SW/4 Section 2

E-7833 SW/4 SE/4 Section 2

all in Township 18 South, Range 27 East, Eddy County, New Mexico. Applicant proposes to separately meter the production from each of said leases prior to being commingled.

CASE 1553:

Application of The Texas Company for a dual completion and for permission to commingle the liquids produced from two separate pools. Applicant, in the above-styled cause, seeks an order authorizing it to dually complete its Peery-Federal (NCT-1) Well No. 1 located 1980 feet from the North and East lines of Section 29, Township 15 South, Range 30 East, Chaves County, New Mexico, in such a manner as to permit the production of oil from an undesignated Devonian oil pool and gas from an undesignated Ellenburger Gas Pool through parallel strings of tubing. Applicant further requests permission to commingle the liquids and low pressure gas produced from the Devonian and Ellenburger formations from all existing and future wells on its Peery-Federal Lease which comprises all of said Section 29.

CASE 1554:

Application of The Texas Company for an automatic custody transfer system and for permission to commingle the production from five separate leases. Applicant, in the above-styled cause, seeks an order authorizing it to install an automatic custody transfer system and to commingle the production from the Bisti-Lower Gallup Oil Pool on five Navajo Allottee leases located in Sections 14, 15, and 23, Township 25 North, Range 11 West, San Juan County, New Mexico. Applicant proposes to separately meter the production from each lease prior to being commingled.

CASE 1555:

Application of H. K. Riddle for two non-standard oil proration units and two unorthodox oil well locations. Applicant, in the above-styled cause, seeks an order establishing a 61-acre non-standard oil proration unit consisting of Lots 1, 2, 3, and 4 of Section 18, said unit to be dedicated to a well to be drilled on an unorthodox location 1980 feet from the South line and 252 feet from the West line of said Section 18; applicant further seeks

the establishment of a 63-acre non-standard oil proration unit consisting of Lots 1, 2, 3, and 4 of Section 19, said unit to be dedicated to a well to be drilled on an unorthodox location 660 feet from the North line and 256 feet from the West line of said Section 19, all in the Bisti-Lower Gallup Oil Pool, Township 26 North, Range 13 West, San Juan County, New Mexico.

CASE 1556:

Application of Chaco Oil Company for an exception to Rule 104 of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an order authorizing it to drill four additional oil wells in the Red Mountain-Mesaverde Oil Pool in the SW/4 SE/4 of Section 20 and the NW/4 NE/4 of Section 29, Township 20 North, Range 9 West, McKinley County, New Mexico.

CASE 1557:

Application of Cities Service Oil Company for a dual completion. Applicant, in the above-styled cause, seeks an order authorizing it to dually complete its State "P" No. 3 Well located 990 feet from the South and West lines of Section 32, Township 22 South, Range 38 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Blinberry Oil Pool and from an undesignated Glorieta oil pool through parallel strings of tubing.

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

Date 11-29-58

CASE NO. 1555

HEARING DATE 11-19-58

My recommendations for an order in the above numbered case(s) are as follows:

1. Grant application conditionally as follows:
  - (a) Form a unit consisting of lots 4, 8 & 9 of sec. 18-26-13. The well for this unit to be drilled in lot 10 of said sec.
  - (b) Form a unit consisting of lots 3, 4, 8, & 9 of sec. 19-26-13. The well for this unit to be drilled in lot 4 of said sec.
  - (c) The wells in lots 10 of 18 and lot 4 of 19 shall be centered between East & West lines and no closer than 560' ft. from the North or South boundaries of the lots.

*Thos. H. Hoga*

Staff Member

2 copies handed  
to Jason  
Kellum  
12-4-58

T. H. Hoga  
British American  
Denver, give  
copy of order 12-14-58

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

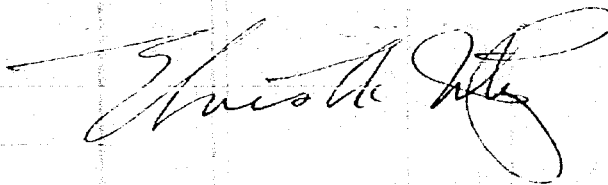
Date \_\_\_\_\_

CASE NO. \_\_\_\_\_

HEARING DATE \_\_\_\_\_

My recommendations for an order in the above numbered case(s) are  
as follows:

2. Or in the alternative form a unit  
consisting of Lots 4, 9 & 10 of sec. 18 and  
lots 3, 4 of sec. 19. The well for this  
unit should be located in ~~Lot~~ Lot 10 of  
sec. 18.



\_\_\_\_\_  
Staff Member



## SKELLY OIL COMPANY

LAND AND LEASE DEPARTMENT  
ALBUQUERQUE, DISTRICT  
J. W. LOOFBOURROW, MANAGER

TULSA 2, OKLAHOMA

February 18, 1958

*Address reply to:*

P. O. Box 4115, STATION A  
ALBUQUERQUE, NEW MEXICO

Re: Santa Fe - 080236  
124.32 acres in  
Secs. 18 & 19,  
T26N, R13W, San Juan  
County, New Mexico

Mr. H. K. Riddle  
Grand Pacific Hotel  
Bismarck, North Dakota

Dear Mr. Riddle:

We are in receipt of your letter of February 15, 1958 wherein you stated that you wanted to communitize the above captioned lease with our acreage adjoining you to the east.

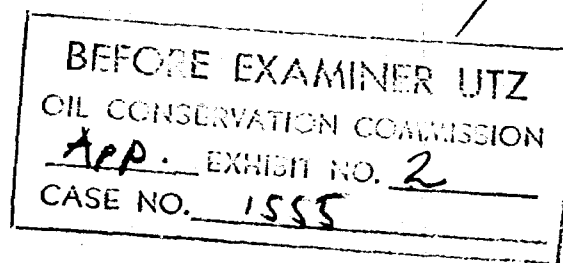
Please be advised that Skelly is not interested in developing the west side of our lease due to British-American's dry hole in Section 7, T26N, R13W, and their non-commercial well in Section 13, T26N, R14W.

If our development in Sections 19 and 20, T26N, R13W, continues to be commercial, we may approach you at a later date to communitize your lease.

Very truly yours,

*Harvey B. Hunt, Jr.*  
Harvey B. Hunt, Jr.

HBH:bb







UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
P. O. Box 965  
Farmington, New Mexico

IN REPLY REFER TO:

Nov. 18, 1958

TO WHOM IT MAY CONCERN:

The two following locations will be approved by the United States Geological Survey as to spacing and the drilling unit providing like approval is given by the State of New Mexico Oil and Gas Conservation Commission.

The two proposed wells are designated as follows:

Well No. 1, 1980 feet/S line and 252.5 feet from W line of sec. 18, T. 26 N., R. 13 W., N.M.P.M., San Juan County, New Mexico.

Well No. 2, 660 feet/N line and 256 feet /W line of sec. 19, T. 26 N., R. 13 W., N.M.P.M., San Juan County, New Mexico.

*Billy J. Shoger*

Billy J. Shoger  
Acting District Engineer

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
App	EXHIBIT NO. 3
CASE NO.	1555

BURR & COOLEY  
ATTORNEYS AND COUNSELORS AT LAW  
SUITE 1 - SPAFFORD BUILDING  
413 1/2 WEST MAIN  
SARASOTA, FLORIDA

JOEL B. BURR, JR.  
WILLIAM J. COOLEY

TELEPHONE DA 5-0462

July 8, 1959  
1959 JUL 10 AM 8:56

*Case file  
1555*

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

Attention: Mr. D. S. Nutter

Re: Case No. 1555  
Order No. R-1301

Gentlemen:

This is to advise that Mr. H. K. Riddle has elected to proceed under Option 1 of the above referenced order as shown on the enclosed plat.

In compliance with paragraph 4 of Order No. R-1301 we submit herewith a copy of a pooling agreement between H. K. Riddle and John W. Sullivan covering Lots 3, 4, 9, and 10 of Section 18 and Lots 3, 4, 9, and 10 of Section 19, all in Township 26 North, Range 13 West, N.M.P.M., San Juan County, New Mexico.

The foregoing option is exercised, however, with the understanding that Mr. Riddle will be permitted to rededicate the acreage involved and proceed under Option 2 of Order No. R-1301 in the event he desires to do so after having drilled the well

Page Two

provided for in Option 1. The foregoing is in accordance with an agreement reached between the undersigned and Mr. Nutter by telephone conversation on June 25, 1959.

Very truly yours,

BURR & COOLEY

By

  
William J. Cooley

WJC:DH  
Enclosures

cc: United States Geological Survey  
Farmington, New Mexico

New Mexico Oil Conservation Commission  
Aztec, New Mexico

## Well Location and Acreage Dedication Plat

## Section A.

Date

Operator H. K. RIDDLE, trustee MAIN OFFICE OCC  
 Well No. 1 Unit Letter M Lease SF. 080236-A  
 Located 615 Feet From THE SOUTH Line, 18 Township 26 NORTH Range 13 WEST NMPM  
 County SAN JUAN G. L. Elevation 6480.5 Feet From THE WEST Line  
 Name of Producing Formation Gallup Dedicated Acreage 5769.72 Acres  
 Pool Cisti - Lower Gallup

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below?  
 Yes X No X
2. If the answer to question one is "no", have the interests of all the owners been consolidated by communization agreement or otherwise? Yes X No X. If answer is "yes", Type of Consolidation.  
Communization Agreement dated March 9, 1959.
3. If the answer to question two is "no", list all the owners and their respective interests below:

Owner

Land Description

NOTE: The nonstandard proration unit and unorthodox well location shown below are in accordance with Option 1 as provided in N-0000 Order No. N-1501.

## Section B.

Note: All distances must be from outer boundaries of section.

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

(Operator)

(Representative)

(Address)

255.5 feet from the West line

Centered E to W in Lot 10

Ref: GLO Plat dated 19 July 1915



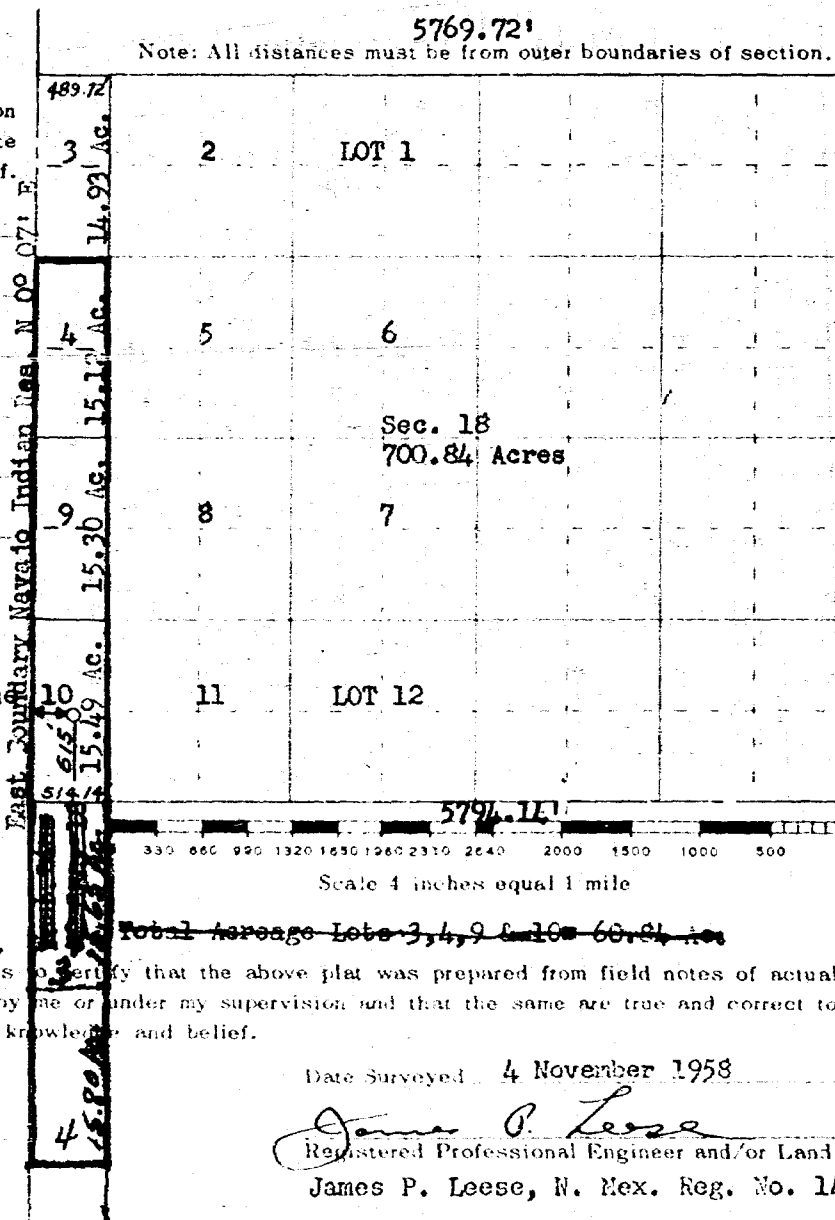
(Seal)

Farmington, New Mexico

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

Date Surveyed 4 November 1958

James P. Leese  
 Registered Professional Engineer and/or Land Surveyor  
 James P. Leese, N. Mex. Reg. No. 1463



MINUTEMAN COO

ISSUED TO ME 8:57

POOLING AGREEMENT

THIS AGREEMENT made and entered into this 9<sup>th</sup> day of March, 1959, by and between H. K. RIDDLE, hereinafter referred to as "Operator", and JOHN W. SULLIVAN, hereinafter referred to as "Non-Operator",

WITNESSETH:

Whereas the parties hereto are the owners of certain oil and gas leases, being more fully described as Santa Fe 080236, wherein the United States of America is the lessor, and Marguerite Riddle is the lessee, and

Whereas, by subsequent assignments, said lease interest is presently held as follows:

John W. Sullivan:

Township 26 North, Range 13 West  
Section 18 - Lots 3, 4, 9, and 10;

H. K. Riddle:

Township 26 North, Range 13 West  
Section 19 - Lots 3, 4, 9, and 10;

and

Whereas, it is the desire of the parties hereto to enter into a joint operating agreement covering the development and operation of said lease interests in so far as they cover the above described lands;

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements hereinafter contained to be kept and performed by the parties hereto, said parties do hereby agree as follows:

1. FORMATION OF THE UNIT:

For the purpose hereof, it is agreed that the aforementioned lease interests, in so far as they cover the above described lands are hereby pooled and communitized to form a unit covering the lands described above for production of oil and/or dry gas and liquid hydrocarbons extracted therefrom, it being the intention of the parties hereto in forming said unit to so pool and communitize all leases and lease interests which they may now own or which they may hereafter acquire covering any interest in the communitized unit.

2. OPERATOR:

H. K. Riddle, as operator, shall have the full and complete management of the development and operation of said leased premises for oil and/or dry gas and liquid hydrocarbons extracted therefrom. All costs and expenses attending the development and operation of said lands shall be borne and paid in the proportions as the acreage dedicated to said well under the provisions of applicable law, rules and regulations of state and federal agencies, and particularly under the provisions of Order No. R-1301 issued by the Oil Conservation Commission of New Mexico under date of December 4, 1958.

3. DURATION OF AGREEMENT:

This agreement shall be effective as of the date hereof upon approval by the Director, United States Geological Survey, and shall remain in force and effect for a period of two years and so long thereafter as oil or gas, or both, are produced from any part of said communitized unit in paying quantities.

4. COSTS AND EXPENSES:

The Operator shall pay and discharge all costs and expenses incurred, and shall charge Non-Operator with its proportionate share thereof, provided, however, Operator shall make no single expenditure in excess of Five Thousand (\$5,000.00) Dollars, with-

out first obtaining consent thereto by Non-Operator. The approval of drilling of a well, however, shall include all expenditures for the drilling, equipping and completing of such well.

5. ABANDONMENT OF WELLS:

No well which is producing or has once produced shall be abandoned without the mutual consent of the parties hereto. If the parties cannot agree to the abandonment of an unprofitable well, the party desiring to abandon shall so advise the other party in writing and the latter shall have ten (10) days from the receipt of said notice in which to elect whether to agree to the abandonment of said well or to acquire the interest in said well of the party electing to abandon. If he elects to acquire such interest, the party electing to abandon shall be paid, in cash, the value of the latter's interest in the salvage of the material and equipment in and on said well, and upon receipt of such sum the party electing to abandon such well shall assign, without warranty of title, to the other party its interest in said well, together with a tract surrounding said well of any area equal to that prescribed for one well by any valid order of state or federal authority, except that said assignment shall not include lease acreage upon which another producing well is located.

6. RENTALS:

Each party hereto agrees to pay all rentals which may become due under the lease or leases which such party is contributing to such unit hereunder, and Operator shall not have any obligation to pay any such rentals except as to the lease contributed by Operator. Each party further agrees to keep and maintain in full force and effect the oil and gas leases contributed by such party to said unit.

7. INSURANCE:

Operator shall at all times while conducting operations hereunder, carry and require its contractors and their subcontractors

to carry insurance to protect and save the parties hereto harmless as to Workmen's Compensation Insurance, general public liability insurance within the limits of not less than \$50,000.00 per person and \$100,000.00 per accident, and general public liability property damage of not less than \$50,000.00 per accident, and automobile public liability insurance within the limits of not less than \$25,000.00 per person and \$50,000.00 per accident, and property damage insurance with a limit of not less than \$25,000.00 per accident.

8. DISPOSAL OF PRODUCTION:

Operator shall have the right to dispose of all oil and/or dry gas and liquid hydrocarbons extracted from the communitized property, accounting to Non-Operator for such products sold, on a cash basis.

9. FORCE MAJEURE:

The terms of this agreement are subject to all valid statutes, rules and regulations of any state or federal agency, and no party to this agreement shall be liable to any other party for any delay or default occasioned by acts of God or the public enemy, unforeseen accidents, or delays in delivery of any material, equipment, or services necessary for the performance of any provisions hereof.

10. RELATION OF PARTIES:

The rights, duties, obligations and liabilities of the parties hereto shall be several and not joint or collective, it being the express purpose and intention of the parties hereto that their ownership in said unit shall be as tenants in common; and nothing herein contained shall ever be construed as creating a partnership of any kind, joint venture, or association or trust.

11. ACCESS TO PREMISES, LOGS AND REPORTS:

Non-Operator shall have access to the premises at all reasonable times, with full right to inspect all books, records,



logs or other information on any well or wells drilled on the communitized premises.

12. SURRENDER, EXPIRATION, ABANDONMENT OR RELEASE OF LEASE:

No lease or leases subject to this agreement shall be surrendered, let to expire, abandoned or released, in whole or in part, unless the parties mutually consent thereto in writing.

13. OPERATOR'S LIEN:

Operator shall have an express contract lien, which is hereby granted, upon the interest of Non-Operator in said unit, in the oil, gas or other minerals produced from such unit and in the materials and equipment located thereon, to secure the payment of Non-Operator's proportionate part of the costs and expenses incurred or paid by Operator hereunder, and interest, if any, accrued on such part. Such lien may be enforced and foreclosed as any other contract lien.

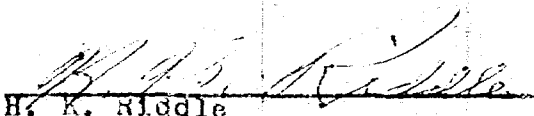
14. NOTICES:

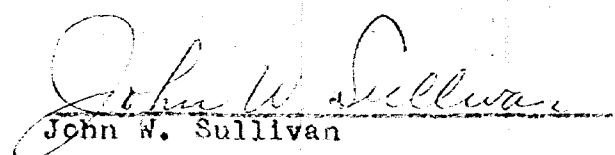
Any notice required or made necessary by the terms of this agreement shall be deemed to have been properly served and received if sent by mail or telegram as follows:

Mr. H. K. Riddle  
29 South State Street  
Salt Lake City, Utah

Mr. John W. Sullivan  
65 East Fourth South Street  
Salt Lake City, Utah

IN WITNESS WHEREOF, the parties hereto have executed this agreement in several counterparts as of the day and year first above written.

  
H. K. Riddle

  
John W. Sullivan

ACKNOWLEDGMENTS

STATE OF Utah )  
COUNTY OF Salt Lake ) ss.

The foregoing instrument was acknowledged before me this  
9<sup>th</sup> day of March, 1959, by H. K. RIDDLE.

Richard J. Jones  
Notary Public

(SEAL)

My Commission Expires:

10-28-62

\* \* \*

STATE OF Utah )  
COUNTY OF Salt Lake ) ss.

The foregoing instrument was acknowledged before me this  
9<sup>th</sup> day of March, 1959, by JOHN W. SULLIVAN.

Richard J. Jones  
Notary Public

(SEAL)

My Commission Expires:

10-28-62