CASE 1941: Application of JAL OIL CO. for exceptions to various provisions of Orders R-520, R-967, and R-1092-A for 5 wells in Jalmat Gas Pool.

CASE 1941: Application of JAL OIL CO. for exceptions to various provisions of Orders R-520, R-967, and R-1092-A for 5 wells in Jalmat Gas Pool.

Case No.

1941

Application, Transcript,
Small Exhibits, Etc.

JAL OIL COMPANY

Future Recoverable Hydrocarbons

October 1959

EXHIBIT NO._____

BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO EXHIBIT NO. 7 CASE 1921

Well	Gross Acres	No. Wells Oil	No. Wells Gas	Gross Ultimate	Gross 12 Months Production	Gross Cumulated 10-1-59	Gross Future	Net Interest	Net Future
Lea County, New Mexico									
Carlson Nos. 2 & 3	200								
HPGas - MCF			2	4,027,550	301,091	448,772	3,578,778	.654841	2,343,530
Christmas Nos. 1 - 5	320								
Oil - Bbls		3		160,000	12,266	78,936	81,064	.363327	29,450
LPGas - MCF				422,000	50,740	69,524	352,476		128,060
HPGas - MCF			2	8,866,420	220,101	2,422,619	6,443,801		2,341,210
Coll, A. P. (Dev Unit)	40								
Oil - Bbls				141,540	3,514	40,766	100,774	.041016	4,130
HPGas - MCF			1	24,886,100	536,434	3,836,096	21,050,004		863,390
Covington-Federal									
Oil - Bbls		1		16,000	766	1,451	14,549	.875	12,730
LPGas - MCF				503,840	23,753	31,958	471,882		412,900
Dyer	160								
Oil - Bbls		2		107,500	1,083	87,229	20,271	.814323	16,510
LPGas - MCF				475,000	13,938	151,974	323,026		263,050
HPGas - MCF			1	3,436,270	102,493	787,981	2,648,289		2,156,560
Farnsworth Nos. 1, 2 & 3	240								
Oil - Bbls		3		584,500	30,875	181,476	403,024	.678125	273,300
LPGas - MCF				1,957,330	171,930	655,016	1,302,314		883,130
Gregory, L. L.	80								
Oil - Bbls		1		60,620	1,862	24,893	35,727	.875	31,260
LPGas - MCF				516,500	18,640	158,448	358,052		313,300
Gregory, R.O.	120								
Oil - Bbls		1		56,000	2,873	34,680	21,320	.7375	15,720
LPGas - MCF				1,154,000	100,872	419,358	734,642		541,800
Gutman Nos. 1 & 2	80								
Oil - Bbls		2		87,000	2,526	38,351	48,649	.375	18,240
LPGas - MCF				870,000	33,531	390,674	479,326		179,750
Gutman "D" (Dev Unit)	40								
Oil - Bbls				172,020	3,094	43,977	128,043	.1875	24,010
HPGas - MCF			1	25,010,370	461,396	3,986,869	21,023,501		3,941,910
Gutman - 18	80								
Oil - Bbls		3		195,320	6,283	111,407	83,913	.773438	64,900
LPGas - MCF				285,000	14,799	14,438	270,562		209,260
HPGas - MCF				5,375,520	250,834	2,604,180	2,771,340		2,143,460
Harner No. 1	80								
Oil - Bbls		1		32,440	900	15,460	16,980	.807617	13,710
Hodge	160								
Oil - Bbls		4		179,560	6,309	79,863	99,697	.820313	81,780
LPGas - MCF				2,649,000	52,579	2,200,017	448,983		368,310
HPGas - MCF			1	8,106,680	563,118	417,975	7,688,705		6,307,140
Jack	160								
Oil - Bbls		4		119,320	4,711	68,191	51,129	.165	8,440
LPGas - MCF				727,990	37,176	429,927	298,063		49,180
HPGas - MCF			1	5,747,680	151,803	1,923,731	3,823,949		630,950
Jenkins	160								
Oil - Bbls		2		64,300	2,575	31,949	32,351	.783447	25,350
LPGas - MCF				1,957,500	70,081	1,085,913	871,587		682,840
HPGas - MCF			2	4,716,380	182,216	1,769,459	2,946,921		2,308,760
Lanehart-Sun									
Oil - Bbls				67,840	3,173	3,173	64,667	.020508	1,730
HPGas - MCF			1	13,568,250	477,551	1,545,800	12,022,450		246,960
Legal	160								
Oil - Bbls		2		84,050	3,545	45,741	38,309	.809050	30,990
LPGas - MCF				361,200	7,212	265,423	95,777		77,490
HPGas - MCF			1	3,931,080	123,029	1,687,161	2,243,919		1,815,440
Owen, Eva	40								
HPGas - MCF			1	2,848,030	1,399	950,157	1,897,873	.572591	1,086,700
Owen, Eva "D" (Dev Unit)	40								
Oil - Bbls		1		160,000	420	36,489	123,511	.337891	41,730
LPGas - MCF				120,000	484	31,510	88,490		29,900
Sarkeys Nos. 1-C, 1-T & 2-T	160								
Oil - Bbls		2		157,500	9,787	35,844	121,656	.375	45,620
LPGas - MCF				2,343,040	161,840	375,391	1,967,649		737,670
Watkins No. 1	80								
Oil - Bbls		1		209,870	12,889	32,864	177,006	.617188	109,280
HPGas - MCF				2,933,880	8,419	767,449	2,166,431		1,337,180

IRA BRINKERHOFF

JAL OIL COMPANY

Future Recoverable Hydrocarbons

October 1959

Wells	Gross Acres	No. Wells Oil	No. Wells Gas	Gross Ultimate	Gross 12 Months Production	Gross Cumulated 10-1-59	Gross Future	Net Interest	Net Future
Lea County, New Mexico cont'd									
Wells	640								
Oil - Bbls		2		286,500	16,415	61,277	225,223	.536250	120,780
LPGas - MCF				2,249,000	112,766	1,111,103	1,137,897		610,200
HPGas - MCF			6	8,216,850	772,667	1,141,565	7,075,285		3,794,120
Woolworth	160								
Oil - Bbls				79,800	1,610	5,287	74,513	.526042	39,200
HPGas - MCF			1	6,900,710	86,858	1,422,805	5,477,905		2,881,610
Woolworth - 27	240								
Oil - Bbls		1		7,780	246	3,272	4,508	.806409	3,640
LPGas - MCF				227,600	11,209	84,016	143,584		115,790
TOTAL New Mexico	3,440	36	21						
Oil - Bbls				3,029,460	127,722	1,062,576	1,966,884		1,012,070
LPGas - MCF				16,819,000	881,550	7,474,690	9,344,310		5,602,830
HPGas - MCF				128,571,770	4,239,409	25,712,619	102,859,151		34,198,440
Cochran County, Texas									
Masten Nos. 1 & 2	10,647								
Oil - Bbls		2		120,300	4,444	62,674	57,626	.75	43,220
Masten No. 3									
HPGas - MCF			1	1,949,350	14,136	30,481	1,918,869	.722656	1,386,680
TOTAL Texas	10,647	2	1						
Oil - Bbls				120,300	4,444	62,674	57,626		43,220
HPGas - MCF				1,949,350	14,136	30,481	1,918,869		1,386,680
TOTAL Original Wells New Mexico & Texas									
Oil - Bbls				3,149,760	132,166	1,215,250	2,024,510		1,055,290
LPGas - MCF				16,819,000	881,550	7,474,690	9,344,310		5,602,830
HPGas - MCF				130,521,120	4,253,545	25,743,100	104,778,020		35,585,120
New Wells - Since 11-1-57									
Lea County, New Mexico									
Christmas Nos. 6 - 9									
Oil - Bbls		4		412,320	18,518	18,518	393,802	.363327	143,080
LPGas - MCF				2,704,800	121,647	121,647	2,583,153		938,530
Farnsworth Nos. 4 & 5									
Oil - Bbls		2		340,000	13,969	22,820	317,180	.339063	107,540
LPGas - MCF				1,214,580	34,184	66,759	1,147,821		389,180
Harner No. 2									
Oil - Bbls				100,000	1,439	1,439	98,561	.807617	79,600
HPGas - MCF			1	2,000,000			2,000,000		1,615,230
Sarkeys No. 2-C (bln)									
Oil - Bbls		1		97,500	3,612	6,559	90,941	.375000	34,100
LPGas - MCF				780,900	53,949	85,571	695,329		260,750
Watkins No 2									
HPGas - MCF			1	2,900,000	28,579	28,579	2,871,421	.617188	1,772,210
Cochran County, Texas									
Masten Nos. 5 - 12									
Oil - Bbls		7		969,000	26,726	26,726	942,274	.75	706,710
LPGas - MCF				750,000	1,531	1,531	748,469		561,350
TOTAL New Wells		14	2						
Oil - Bbls				1,918,820	64,264	76,062	1,842,758		1,071,030
LPGas - MCF				5,450,280	211,311	275,508	5,174,772		2,149,810
HPGas - MCF				4,900,000	28,579	28,579	4,871,421		3,387,440
GRAND TOTAL									
Oil - Bbls				5,068,580	196,430	1,201,312	3,867,268		2,126,320
LPGas - MCF				22,269,280	1,092,861	7,750,198	14,519,082		7,752,640
HPGas - MCF				135,421,120	4,282,124	25,771,679	109,649,441		38,972,560

IRA BRINKERHOFF

EXHIBIT NO._____

April 6, 1960

FILE MEMO:

In Re: Jalmat wells & Allowable

In a discussion with Mr. Girand, he asked what Jal's percentage of wells as to total wells in above Pool, also Jal's allowables as to total allowables for the above Pool.

For this summary I am using March 1960 figures.

Total Jalmat wells	387	
Jal's Jalmat wells	10	
Jal's percentage to total		2.584%
Total Jalmat allowable	8,600,945 mcf	
Jal's Jalmat allowable	131,666 mcf	
Jal percentage to total		1.531%

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 3
CASE 1941

E. D. Hardwick

EDH/bl

April 12, 1960

FILE MEMO:

In Re: Jalmat Wells & Allowables

The following is a comparison of Jal Oil Co., Inc's well in the Jalmat Pool to total wells in Pool, also allowable as to total allowables for Jalmat Pool.

For the month of April 1960.

Total Jalmat wells	385	
Jal Oil Co. Jalmat wells	10	
Jal Oil percentage to total		2.597%
Total Jalmat allowable	6,541,921 mcf	
Jal Oil Jalmat allowable	100,340 mcf	
Jal Oil percentage to total		1.532%

EXHIBIT NO. 4

E. D. Hardwick

Case 1941

EDH/bl

Original
Santa Fe & Midland
6/10/59

El Paso Natural Gas Company

El Paso, Texas

June 8, 1959

ADDRESS REPLY TO
POST OFFICE BOX 1384
JAL, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 5
CASE 1941

Jal Oil Company
Drawer Z
Jal, New Mexico

Gentlemen:

This letter will confirm our conversation on June 5, 1959, concerning the reclassification of gas wells in the Jalmat Pool.

The New Mexico Oil Conservation Commission has reclassified four (4) of your wells connected to our gathering system from marginal to non-marginal status. The wells are the Dyer #3, Legal #2, Jenkins #1 and Repollo #1 in the Jalmat Gas Pool. The allowables were made retroactive to July, 1958, and all of the wells are now overproduced due to being produced at all times as marginal wells.

Since the Repollo #1 makes a considerable amount of water and if it should be ordered shut in by the New Mexico Oil Conservation Commission due to overproduction then it would probably be detrimental to the well with probable complete loss of gas production. It would probably be advantageous to request permission for an exception to the rules from the New Mexico Oil Conservation Commission to allow the Repollo #1 to continue to produce at all times. The Commission granted an exception to the rules in 1955 to allow it to continue to produce for a one year period when it was overproduced prior to being reclassified as a marginal well.

As you have requested in the past, the Repollo #1 well will be left producing into our system until we are notified otherwise.

Yours truly,

EL PASO NATURAL GAS COMPANY

D. B. Gillit

D. B. Gillit
Dispatching Department

RECEIVED
JUN 11 1959
JAL OIL CO., INC.
MIDLAND

RECEIVED
JUN 10 1959
JAL OFFICE

DBG:bjc

EXHIBIT NO._____

El Paso Natural Gas Company

El Paso, Texas

March 7, 1960

ADDRESS REPLY TO
POST OFFICE BOX 1384
JAL, NEW MEXICO

Girand and Stout, Lawyers
P. O. Box 1445
Hobbs, New Mexico

Attention: Mr. W. D. Girand

Gentlemen:

Confirming our telephone conversation last week regarding the Jal Oil Company - Watkins No. 2, Jalmat gas well, located SE¼ of NE¼, Section 35, Township 24 South, Range 36 East, Lea County, New Mexico, the following information is submitted:

In November, 1959, I met with Mr. Howard Olsen and Mr. Dale Ellis, with The Jal Oil Company, to discuss scheduling production of the Watkins No. 2 gas well. This meeting was brought about because of the difficulty in keeping the well producing into the line. As you know, allowables have been extremely low, and in order to keep the well in balance, we have been required to shut it in at times, or schedule production on a very low daily rate. In either case we found the well would log off, requiring it to be swabbed or blown down in order to unload.

In the meeting with Mr. Olsen, it was decided to attempt to establish an optimum rate of flow that would enable the well to flow continuously into the line without logging off. On or about November 16, 1959, the rate was set at approximately 450 MCFPD. This volume was gradually reduced until the rate was approximately 321 MCFPD. Production remained at this level until February 9, 1960, at which time we had a failure on our field compressor, causing it to be off some twenty-four (24) hours. During this interval I understand the well logged off and required unloading before it would produce into our one hundred (100) pound line. After unloading, the rate was again set at about 321 MCFPD and it remained constant until

February 24, 1960. For no apparent reason the volume dropped to 242 MCFPD on the 24th, to 75 MCFPD on the 25th, and on the 26th, the well logged off completely. During this period our compressor continued to operate. It is my understanding that Mr. Ellis was unable to unload the well by blowing and that it will requiring swabbing before production can be resumed. At this writing the well is still off.

Based on the facts outlined it is apparent the well will require approximately 325 MCFPD constant production in order to prevent consistant logging off. This, of course, presents the problem of getting the well in an unbalanced overproduced status. The 325 MCFPD required production is approximately four (4) times the wells average monthly allowable for the last proration period in 1959.

Should you need any further information or have any questions regarding this matter please notify us at your convenience.

Yours very truly,

EL PASO NATURAL GAS COMPANY

J.W. Baulch, Jr.

J. W. Baulch, Jr.
Gas Production Engineer

JWB,Jr:bjc
cc: Mr. Howard Olsen
Jal Oil Company
Midland, Texas

El Paso Natural Gas Company
Proration Department
El Paso, Texas

EXHIBIT NO._____

JAL OIL COMPANY, INC.
RESERVES & PRODUCTION FROM ENGINEERS REPORT
OCTOBER 1959-PLUS PRODUCTION TO 1-1-60

Watkins #2
SE NE 35-24S-36E Lea County
Jalmat Pool

Original Reserves	2,900,000 MCF
Less Production Thru Dec. 1959	39,768 MCF
Unrecovered Reserves 1-1-60	2,860,232 MCF

STATE OF TEXAS }
COUNTY OF MIDLAND }

I, J. Cheming, do hereby certify that the above is a true and correct account of the reserves and production from Engineering Report of October, 1959, plus production to January 1, 1960.

J. C. Cheming

Subscribed and sworn to before me this 28th day of March, 1960.

Joyce Madden
Notary Public

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEX.
EXHIBIT NO. 7
CASE 1947

EXHIBIT NO. 8

March 5, 1960

FILE MEMO:

In Re: Watkins #2 SE NE 35-24S-36E
Lea County, New Mexico

This summary of well activity covers period October 1, 1959 through February 29, 1960.

Oct. 1-8 Flowing well. No gas this period, well shut in, casing pressure 900#.

Oct. 8-16 Flowing well. No gas this period, well shut in.

Oct. 16-23 Flowing well. No gas this period, well shut in.

Oct. 23-31 Well rpoduced 308 mcf. Blew well in water 250 bbls per day.

Oct. 31-Nov. 8 Well produced 2,120 mcf. When line pressure goes up production drops due to water condition and line pressure, water 250 bbls. per day.

Nov.8-16 Well produced 141 mcf. Well blown in almost every day to keep water off. Had to swab well in on Nov. 11th as water was too great for well to blow around.

Nov. 16-22 Well produced 1,440 mcf. Water is blown off when well is not on line. Had to swab well in 11/17 due to same condition as above.

Nov. 22-30 Well produced 987 mcf. Changed orifice from 3/4" to 1/4" to see if well would produce less gas and not logg off.

Dec. 1-8 Well produced 221 mcf. Well died on 1/4" orifice and would not blow around, used a swab unit Dec. 4th to get water off formation and back producing.

Dec. 8-16 Well died again with 1/4" orifice and would not produce. Orifice changed Dec. 9th from 1/4" to 1/2" and well swabbed in. Well produced approx. 350 mcf and died. Well swabbed in Dec. 10th produced 25 mcf and died. Well swabbed in Dec. 11th produced approx. 40 mcf and died. Orifice changed from 1/2" to 1" and well was blown in. Well was able to produce with 1" orifice but casing pressure has dropped from 900# to 600# in approx. two months.

Dec. 16-23 Well produced 2,335 mcf. Chokes were pinched to reduce flow of gas, well started logging off. This flow procedure was tested with El Paso Nat'l Gas as per their letter of March 7, 1960.

BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO EXHIBIT No. 8 CASE 1941

Dec. 23-31 Well produced 2,642 mcf. Chart shows well heading due to enormous amount of water, same being approximately 250 bbls water per day.

Jan. 1-8 Well produced 2,164 mcf. Chart shows well pinched down to determine low rate of flow and well died. Well later blown in when line pressure dropped allowing same to unload water.

Jan. 8-16 Well produced 2,696 mcf. Chart shows production at a specified rate when choke is pinched well begins to logg off then choke is opened up and well unloads water.

Jan. 16-23 Well produced 2,075 mcf. Well producing at as low rate as can be produced without logging off. Water still approx. 250 bbls. per day.

Jan. 23-31 Well produced 2707 mcf. Well started out low and appeared to be logging off so choke was opened to allow well to unload water.

Feb. 1-8 Well produced 2,517 mcf. Producing at as low rate as possible without logging off.

Feb. 8-16 Well produced 1,706 mcf. Chart shows erratic production do to logging off condition. Well logged off on the 14th do to high line pressure and cold weather.

Feb. 16-21 Well produced 1,246 mcf. Chart shows same as above.

Feb. 21-29 Well produced 1,084 mcf. Well logged off several times due to cold weather. Was able to blow well in when line pressure and weather permitted. Water production still approx. 250 bbls. per day and casing pressure dropping gradually due to water encroachment.

Casing pressure on March 31, 1960 was 360#.

The above information prepared from El Paso Charts and field superintendent information.

R. D. Murdock

RDM/bl

EXHIBIT NO._____

JAL OIL COMPANY, INC.
RESERVES & PRODUCTION FROM ENGINEERS REPORT
OCTOBER 1959-PLUS PRODUCTION TO 1-1-60

E. Owen #1
SW SW 21-25S-37 E Lea County
Jalmat Pool

Original Reserves	2,848,030 MCF
Less Production Thru Dec. 1959	954,498 MCF
Unrecovered Reserves 1-1-60	1,893,532 MCF

STATE OF TEXAS }
COUNTY OF MIDLAND }

I, J. Chewning, do hereby certify that the above is a true and correct account of the reserves and production from Engineering Report of October, 1959, plus production to January 1, 1960.

J. Chewning

Subscribed and sworn to before me this 31 day of March, 1960.

Joyce Madden
Notary Public

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 9
CASE 1944

EXHIBIT NO._____

March 5, 1960

FILE MEMO:

In Re: E. Owen #1 SW SW 21-25S-37E
Lea County, New Mexico

The following is a summary of well activity October 1, 1959 through February 29, 1960.

Oct. 1-9 This well has a piston installation and was shut in approximately one year. Well is dead due to water condition after bng shut in period and unable to blow well in.

Oct. 9-17 Same as above

Oct. 17-24 Same as above

Oct. 24-31 Same as above. Had pulling unit swab well in 10/31 and same produced 43 mcf and considerable amount of water before well died.

Nov. 1-9 Well was swabbed in Nov. 3rd and produced very little before dying. Swabbed in again 11/4 and produced a total for this period of 90 mcf and considerable amount of water.

Nov. 9-17 Well produced 59 mcf for this period. Well was blown in several times and would not take line. This procedure performed each day to get fluid off well. Produced approx. 40 bbls water per day.

Nov. 17-23 Well produced 175 mcf under same conditions as above.

Nov. 23-Dec. 1 Well produced 438 mcf. Same conditions as above.

Dec. 1-9 Well produced 442 mcf. Same conditions as above.

Dec. 9-17 Well produced 297 mcf. Same conditions as above.

Dec. 17-24 Well produced 121 mcf. Changed orifice 12/18 from 1/2" to 1" to get piston to run. Produced 814 mcf after change and approximately 40 bbls. water per day.

Dec.24-Jan. 1 Well produced 1,664 mcf. Well having hard time keeping fluid off formation

Jan. 1-9 Produced 731 mcf. Well logged off five times in this period was able to blow same in. Water produced still about the same.

Jan. 9-17 Well produced 175 mcf. Well was blown each day but well only took line two times and logged off each time due to water on formation.

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 10
CASE 1281

Jan. 17-24 Well produced 121 mcf unable to get well to take line. Tried blowing in once or twice each day.

Jan.24-Feb.1 Well produced 7 mcf. Same conditions as above.

Feb. 1-9 Well produced 451 mcf. Line pressure down well blew in but unable to produce normally.

Feb. 9-17 Well produced 579 mcf. Same conditions as above.

Feb. 17-22 Well produced 161 mcf. Well logged off after two days low production due to same conditions as above.

Feb. 22-Mar. 1 Well produced 348 mcf. Produced low for 1/2 time and was logged off approximately 1/2 time. Each time well logged off the well was worked with to get water off formation and get same back to producing. When producing it unloads approx. 40 bbls water per day.

On March 31, 1960 the casing pressure was400# and tubing pressure 200#.

The above information gathered from field superintendent information and El Paso Gas Charts.

E. D. Hasbrouck

EDH/bl

EXHIBIT NO._____

JAL OIL COMPANY, INC.
RESERVES & PRODUCTION FROM ENGINEERS REPORT
OCTOBER 1959-PLUS PRODUCTION TO 1-1-60

Repello #1
SW NW 28-25S-37E Lea County
Jalmat Pool

Original Reserves	6,363,446 MCF
Less Production Thru Dec. 1959	2,184,353 MCF
Unrecovered Reserves 1-1-60	4,179,093 MCF

STATE OF TEXAS }
COUNTY OF MIDLAND }

I, J. Chewning, do hereby certify that the above is a true and correct account of the reserves and production from Engineering Report of October, 1959, plus production to January 1, 1960.

J. Chewning

Subscribed and sworn to before me this 28th day of March, 1960.

Joyce Madden
Notary Public

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 11
CASE 1941

EXHIBIT NO. ____

JAL OIL COMPANY, INC.
RESERVES & PRODUCTION FROM ENGINEERS REPORT
OCTOBER 1959-PLUS PRODUCTION TO 1-1-60

Dyer #3
SE NE 31-25S-37E Lea Co.
Jalmat Pool

Original Reserves	3,436,278 MCF
Less Production Thru Dec. 1959	793,606 MCF
Unrecovered Reserves 1-1-60	2,642,672 MCF

STATE OF TEXAS }
COUNTY OF MIDLAND }

I, J. Chewning, do hereby certify that the above is a true and correct account of the reserves and production from Engineering Report of October, 1959, plus production to January 1, 1960.

J. Chewning

Subscribed and sworn to before me this 28 day of March, 1960.

Joyce Madden
Notary Public

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 17
CASE 1941

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. ____
CASE ____

EXHIBIT NO._____

April 5, 1960

FILE MEMO:

In Re: Dyer #3 SE NE 31-25S-37E
Lea County, New Mexico

The following summary covers well from October 1, 1959 through February 29, 1960.

Oct. 1-9 Piston set 1½ hrs. on 1/2 hour off. Each gas production kick on chart is strong, then well production drops considerably due to water volumn. When line pressure is up to approx. 180# production drops sharply. Production 2,282 mcf water approximately 25 bbls day.

Oct. 9-17 Piston setting is the same. Line pressure up Oct. 12th, well died, was able to blow same in Oct. 14th. Line pressure still high, well died again. Same thing happened Oct. 15 & 16th Production 1,419 mcf, water same.

Oct. 17-24 Piston setting the same. Well blown in on 17th and well died. Well blown in Oct. 19th and died. Same thing happened Oct. 22 and 23rd. Production 405 mcf, water increasing

Oct.24-Nov. 1 Piston setting the same. Well was blown in four times in this period and logged off each time. Unable to keep same producing due to water. Prod. 569 mcf, water approximately 30 bbls per day.

Nov. 1-9 Piston setting the same. Well blown in two times in this period and died each time. Unable to keep producing due to water encroachment. Prod. 296 mcf, water approximately same.

Nov. 9-17 Same piston setting. Unable to blow well in. Had swab unit swab well in Nov. 13th but was unable to keep well producing. Well died about four hours later. Prod. 71 mcf, water same.

Nov. 17-23 Unable to blow well in. No gas.

Nov. 23-Dec. 1 Unable to blow well in. No gas.

Dec. 1-9 Piston setting the same. Swabbed well in Dec. 2nd and same died shortly thereafter. Prod. 151 mcf, water approx. 30 bbls.

Dec. 9-17 Unable to get well to produce. No gas.

Dec. 17-24 Unable to get well to produce. No gas.

Dec. 24- Jan. 1 Unable to get well to produce. No gas.

Jan. 1-9 Unable to get well to produce. No gas.

Jan. 9-17 Unable to get well to produce. No gas.

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 13
CASE 1941

Jan. 17-24 Unable to produce well so installed pump jack Jan. 21st to lift water off formation. Production 307 mcf, water 30 to 35 bbls per day.

Jan.24-Feb.1 Line pressure high approx. 225#. Pump running to keep water off formation. Production is low due to line pressure. Production 1,091 mcf, water same.

Feb. 1-9 Changed orifice from 1½" to 3/4". Pump running. Production 1,262, water same.

Feb. 9-17 Pump running to keep formation clean. When line pressure is high production is down. Production 880 mcf, water same.

Feb. 17-22 Had trouble with pump jack engine and cold weather. Well produced very little gas. Production 418 mcf, water approximately 35 bbls per day.

Feb. 22-Mar. 1 Well produced in accordance with line pressure. Pump running to keep formation clear of water. Produced 1,192 mcf water about the same.

This well on March 31, 1960 had casing pressure of 250#, tubing on pump.

The above summary compiled from El Paso Gas Charts and field superintendent information.

E. D. Murdock

EDM/bl

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The above summary compiled from El Paso Gas Charts and field superintendent information.

E. D. Murdock

EDM/bl

EXHIBIT NO._____

El Paso Natural Gas Company

El Paso, Texas

April 11, 1960

ADDRESS REPLY TO
POST OFFICE BOX 1384
JAL, NEW MEXICO

Girand and Stout, Lawyers
P. O. Box 1445
Hobbs, New Mexico

Attention: Mr. W. D. Girand

Gentlemen:

Enclosed herewith is a map showing a portion of El Paso Natural Gas Company's dry gas gathering system. The pipelines outlined in red represent that portion of our system operating at approximately one hundred (100) PSIG.

In order to reduce the line pressure to one hundred (100) pounds we have installed seven (7) field compressor units. They are identified on the map as "El Paso MB Field Compressors", "El Paso Maggie Rose Field Compressor" and "El Paso Cooper Field Compressors".

The "El Paso MB" and "El Paso Maggie Rose" compressors have a combined capacity of 14,700 MCFPD operating at 85 PSIG suction pressure and 200 PSIG discharge pressure. The "El Paso Cooper Field Compressors" have a capacity of 5,800 MCFPD operating at 85 PSIG suction pressure and 200 PSIG discharge pressure.

Should you need any further information regarding our 100 PSIG Intermediate System please let me know.

Yours truly,

EL PASO NATURAL GAS COMPANY

J. W. Baulch, Jr.

J. W. Baulch, Jr.
Gas Production Engineer

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT NO. 14
CASE 1977

JWB,Jr:bjc

Attachment

EXHIBIT NO._____

WELLS CONNECTED TO 1004 SYSTEM

OPERATOR AND WELL NAME	UNIT LETTER	LOCATION SECTION	TOWNSHIP	RANGE
Amerada Petroleum Corporation				
Cagle C-1 Tbg.	D	3	26	37
Argo Oil Corporation				
Lanehart #1	H	21	25	37
Cities Service Oil Company				
Dabbs #1	D	23	25	37
J. R. Cone				
Mobil Myers #4	I	22	24	36
Continental Oil Company				
Ascarate C-24-1	B	24	25	36
Ascarate D-24-1	J	24	25	36
Sholes A-13-3	P	13	25	36
Sholes A-19-1	L	19	25	37
Sholes B-19-1	N	19	25	37
State A-2-1	O	2	25	37
El Paso Natural Gas Company				
Carlson Federal #1	L	22	25	37
Carlson Federal #2	N	23	25	37
Farnsworth C-2	G	4	26	37
Gregory Federal #1	J	33	25	37
Harrison Federal #1	L	27	25	37
Harrison Federal #2	D	27	25	37
Langlie Federal A-1	J	17	25	37
Humble Oil & Refining Company				
Hadfield #1	J	21	25	37
Harrison #1	M	25	24	36
Harrison #3	K	25	24	36
Hunter #1	D	24	24	36
Lanehart #1	K	21	25	37
Thomas #1	O	23	24	36
Jal Oil Company				
Dyer #3	H	31	25	37
Jenkins #1	M	29	25	37
Legal #2	I	31	25	37
Owens #1	M	21	25	37
Repollo #1	E	28	25	37
Watkins #2	H	35	24	36

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 16
CASE 1944

WELLS CONNECTED TO TOD-1 SYSTEM

EXHIBIT NO._____

OPERATOR AND WELL NAME	UNIT LETTER	LOCATION SECTION	TOWNSHIP	RANGE
John M. Kelly				
Shahan #3	G	33	25	37
Leonard Oil Company				
Bates #1	L	20	25	37
Bates #2	D	29	25	37
Justis #1	H	19	25	37
Justis #2	H	20	25	37
B.M. Justis #7	F	20	25	37
Lanehart #1-A	G	21	25	37
Ralph Lowe				
Coates A-2	E	31	25	37
Maggie Rose #1	M	18	25	37
Maggie Rose #3	K	18	25	37
Olsen Oils, Incorporated				
S.R. Cooper #1	O	11	24	36
Cooper #5	H	14	24	36
Cooper B-2	C	14	24	36
Winningham #1	C	30	25	37
Winningham #2	P	19	25	37
Winningham #3	I	30	25	37
Producing Properties, Inc.				
Dabbs #1	M	34	25	37
Dabbs #2	E	34	25	37
Martin #2	A	31	24	37
E. C. Rodman				
Hadfield #1	O	21	25	37
Hadfield #2	P	21	25	37
Shell Oil Company				
State A-1	D	36	24	36
Sinclair Oil & Gas Company				
Crosby A-1	O	29	25	37
Crosby B-1	N	28	25	37
State 157 E-1	G	32	24	37
Skelly Oil Company				
Sherrell #3	B	6	25	37
Sun Oil Company				
Lanehart #2	I	20	25	37
Thompson & Cone				
Pan American Meyers #1	H	22	24	36
Westates Petroleum Company				
Wells B-1	A	6	25	37

Form 15-166R (5-58)

EL PASO NATURAL GAS COMPANY
State of New Mexico
One-point Back Pressure Test for Gas Wells
(Deliverability)

EXHIBIT NO.----------

Pool Jalmat | Formation Yates | County Lea
Initial | Annual X | Special | Date of test 4/1-8/60
Company Jal Oil Company | Lease Watkins | Well No. 2
Unit H | Sec. 35 | Twp. 24 | Rge. 36 | Purchaser El Paso Natural Gas Company
Casing 5 1/2 | Wt. 15.5 | I.D. | Set at 2982 | Perf. | To
Tubing 2 | Wt. 4.7 | I.D. | Set at 2869 | Perf. | To
Gas Pay: From 2942 | To 2954 | L 2869 | x G .666 | = GL 1911 | Bar. Press 13.2
Producing Thru: Casing | Tubing X | Type Well Single
Series 40 | Meter Run | Packer at | Single - Bradenhead-G.G. or G.O. Dual

FLOW DATA

Started Date	Started Time	Taken Date	Taken Time	Duration Hours	Type Taps	Line Size	Orfice Size	Static Press.	Differ-ential	Flow Temp.
4-4-60	8:45 AM PM	4-5-60	8:45 AM PM	24	Flg.	4	1.000	119	19.36	80

FLOW CALCULATIONS

Static Pressure Pf	Differ-ential h_w	Meter Extension Pf h_w	24-Hour Coeff-icient	Gravity Factor F_g	Temp. Factor F_t	Compress-ability F_{pv}	Rate of Flow MCF/Da @ 15.025 psia Q
132.2	19.36	50.59	6.135	.9491	.9813	1.011	292.3

SHUT-IN DATA

Shut-in Date	Shut-in Time	Press. Taken Date	Press. Taken Time	Duration Hours	Wellhead Pressure (P_c) psia Tubing	Wellhead Pressure (P_c) psia Casing
	AM PM		AM PM		Operator Did not not want well shut in	

FLOW DATA

W.H. Working Pressure (P_w) and (P_t) psia Tubing	W.H. Working Pressure (P_w) and (P_t) psia Casing
Bad Valve	400.2

FRICTION CALCULATION (if necessary)

DELIVERABILITY CALCULATION

P_w ____ P_c ____ $P_w + P_c$ ____

$1 - \frac{P_w}{P_c}$ ____ $1 + \frac{P_w}{P_c}$ ____ $\left(1 - \frac{P_w}{P_c}\right)\left(1 + \frac{P_w}{P_c}\right)$ ____ = M.

.36 + M ____ Log ____ x (n) .777 = ____ +

SUMMARY

P_c = ____ psia
Q = ____ MCF/Da.
P_w = ____ psia
P_d = ____ psia
D = ____ MCF/Da.

Log Q = ____
Log D = ____
Antilog = ____ = D

Company El Paso Natural Gas Company
Address P. O. Box 1364 - Jal, New Mexico
Agent and Title Bobby Boaz Gas Tester
Witnessed
Company

REMARKS

*Operator Did not want well shut-in.

BEFORE THE OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 11
CASE 1941

FORM 15-166R (5-58)

EL PASO NATURAL GAS COMPANY
State of New Mexico
One-point Back Pressure Test for Gas Wells
(Deliverability)

EXHIBIT NO.____________

Pool Jalmat Formation Yates County Lea
Initial ____ Annual X Special ____ Date of test 2-20/2-27-59
Company Jal Oil Company Lease Watkins Well No. 2
Unit H Sec. 35 Twp. 24 Rge. 36 Purchaser El Paso Natural Gas Company
Casing 5½ Wt. 15.5 I.D. ____ Set at 2982 Perf. ____ To ____
Tubing 2 Wt. 4.7 I.D. ____ Set at 2869 Perf. ____ To ____
Gas Pay: From 2942 To 2954 L 2869 x G 0.669 = GL ____ Bar. Press 13.2
Producing Thru: Casing ____ Tubing X Type well Single
Series 40 Meter Run Packer at ____ Single - Bradenhead-G.G. or G. O. Dual

FLOW DATA

Started Date	Started time	Taken Date	Taken time	Duration Hours	Type Taps	Line Size	Orfice Size	Static Press.	Differ-ential	Flow Temp.
2-23	8:00 AM	2-24	8:00 AM	24	Flg.	4"	1.000	305.2	51.84	67

FLOW CALCULATIONS

Static Pressure P_f	Differ-ential h_w	Meter Extension $\sqrt{P_f h_w}$	24-Hour Coeff-icient	Gravity Factor F_g	Temp. Factor F_t	Compress-ability F_{pv}	Rate of Flow MCF/Da. @ 15.025 psia Q
305.2	51.84	125.8	6.135	0.9470	0.9933	1.030	747.8

SHUT-IN DATA / FLOW DATA

Shut-In Date	Shut-In Time	Press. Taken Date	Press. Taken Time	Duration Hours	Wellhead Pressure (P_c) psia Tubing	Wellhead Pressure (P_c) psia Casing	W.H. Working Pressure (P_w) and (P_t) psia Tubing	W.H. Working Pressure (P_w) and (P_t) psia Casing
2-24	4:35 PM	2-25 2-26 2-27	8:00 AM	24 48 72	843.2 220.2 *NIL	844.2 844.2 844.2	357.2	639.2

FRICTION CALCULATIONS (if necessary)

Pw Measured

DELIVERABILITY CALCULATIONS

P_w 639.2 P_c 844.2 $P_w \div P_c$ 0.7572

$1 - \frac{P_w}{P_c}$ 0.2428 $1 + \frac{P_w}{P_c}$ 1.7572 $\left(1 - \frac{P_w}{P_c}\right)\left(1 + \frac{P_w}{P_c}\right) = M.$ 0.4266

.36 + M [illegible] Log [illegible] - 10 x (n) 0.819 = 9.939632 - 10

SUMMARY

P_c = 844.2 psia
Q = 747.8 MCF/Da.
P_w = 639.2 psia
P_d = 675.4 psia
D = 650.8 MCF/Da.

Log Q = 2.873786
Log D = 12.813418 - 10
Antilog = 650.8 = D

Company El Paso Natural Gas Company
Address P. O. Box 1384 - Jal, New Mexico
Agent and Title Gas Tester
Witnessed
Company El Paso Natural Gas Company

REMARKS

* The tbg. pressure on this well did not have any pressure on 72 hour shut-in.

FORM 15-166R (5-58)

EL PASO NATURAL GAS COMPANY
State of New Mexico
One-point Back Pressure Test for Gas Wells
(Deliverability)

EXHIBIT NO._____

Pool **Jalmat** Formation **Yates** County **Lea**

Initial **X** Annual ____ Special ____ Lease **Watkins** Date of test **November 10-14, 1958**

Company **Jal Oil Company** Purchaser **El Paso Natural Gas Company** Well No. **2**

Unit **H** Sec. **35** Twp. **24** Rge. **36**

Casing **5 1/2** Wt. **15.5#** I.D. ____ Set at **2982** Perf. ____ To ____

Tubing **2** Wt. **4.7#** I.D. ____ Set at **2869** Perf. ____ To ____

Gas Pay: From **2942** To **2954** L **2869** x G **.660 Assumed** GL **1894** Bar. Press **13.2**

Producing Thru: Casing ____ Tubing **X** Type Well **Single**

Series ____ Meter Run ____ Packer at ____ Single - Bradenhead-G.G. or G. O. Dual

FLOW DATA

Started Date	Started time	Taken Date	Taken time	Duration Hours	Type Taps	Line Size	Orfice Size	Static Press.	Differential	Flow Temp.
11-10-58	8:00 AM PM	11-11-58	8:00 AM PM	24	Flg.	4"	1.500	256.2	43.56	85

FLOW CALCULATIONS

Static Pressure Pf	Differential h_w	Meter Extension $P_f h_w$	24-Hour Coefficient	Gravity Factor F_g	Temp. Factor Ft	Compressability F_{pv}	Rate of Flow MCF/Da. @ 15.025 psia Q
256.2	43.56	105.64	13.99	.9535	.9768	1.022	1,406

SHUT-IN DATA

Shut-In Date	Shut-In Time	Press. Taken Date	Press. Taken Time	Duration Hours	Wellhead Pressure (P_c) psia Tubing	Wellhead Pressure (P_c) psia Casing
11-11-58	8:00 AM PM	11-12-58	8:00 AM	24	723.2	728.2
		11-13-58		48	712.2	745.2
		11-14-58	PM	72	633.2	747.2

FLOW DATA

W.H. working Pressure (Pw) and (Pt) psia Tubing	W.H. working Pressure (Pw) and (Pt) psia Casing
376.2	584.2

FRICTION CALCULATIONS(if necessary)

Pw Measured.

DELIVERABILITY CALCULATIONS

P_w **584.2** P_c **747.2** $P_w + P_c$ **.7818**

$1 - \frac{P_w}{P_c}$ **.2182** $1 + \frac{P_w}{P_c}$ **1.7818** $\left(1 - \frac{P_w}{P_c}\right) \left(1 + \frac{P_w}{P_c}\right) = M.$

.36 + M **.9959** Log **9.966564-10** x (n) **.3888** **.819** = **9.972652-10** +

Log Q = **3.147985**

Log D = **13.120637**

Antilog = **1320** = D

SUMMARY

P_c = **747.2** psia

Q = **1,406** MCF/Da.

P_w = **584.2** psia

P_d = **597.8** psia

D = **1,320** MCF/Da.

Company **El Paso Natural Gas Company**

Address **P. O. Box 1341 - Jal, New Mexico**

Agent and Title **J. R. Hickey**

Witnessed ____

Company ____

REMARKS

EXHIBIT NO.

Form 15-100 (9-54)

EL PASO NATURAL GAS COMPANY

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates County Lea

Initial X Annual Special Date of Test 8-22-58

Company Jal Oil Company, Inc. Lease Watkins Well No. 2

Unit H Sec. 35 Twp. 24 Rge. 36 Purchaser

Casing 5 1/2 Wt. 15.5 I.D. Set at 2982 Perf. To

Tubing 2 Wt. I.D. Set at 2869 Perf. To

Gas Pay: From 2942 To 2954 L x G = GL Bar. Press. 13.2

Producing Thru: Casing Tubing X Type Well Single

Single-Bradenhead-G. G. or G. O. Dual

Date of Completion: 8-22-58 Packer: None

No.	Flow Data: Line Size x Orifice Size	Press. psig	Diff. hw	Temp. °F.	Tubing Data: Press. psig	Temp. °F.	Casing Data: Press. psig	Temp. °F.	Duration of Flow Hr.
SI							1018		72
1.	4 x 2.000	285	4.41	81	660		838		24
2.	4 x 2.000	312	11.56	88	507		688		24
3.	4 x 2.000	323	3.6	76	440		583		24
4.									
5.									

No.	Coefficient (24-Hour)	$\sqrt{h_w p_m}$	Pressure psia	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	25.58	36.25		.9804	.9608	1.025	895
2.	25.58	61.30		.9741	.9608	1.027	1507
3.	25.58	65.99		.9850	.9608	1.029	1644
4.							
5.							

Gas Liquid Hydrocarbon Ratio Mcf/bbl.

Gravity of Liquid Hydrocarbons deg.

P_c Measured $(1-e^{-s})$

Specific Gravity Separator Gas

Specific Gravity Flowing Fluid

P_c 1031.2 P_c^2 1063.4

No.	P_t (psia)	P_t^2	$P_c^2 - P_t^2$	F_cQ	$(F_cQ)^2$	$(F_cQ)^2(1-e^{-s})$	P_w^2	$P_c^2 - P_w^2$
1.	673.2	453.2	610.2				724.5	338.9
2.	520.2	270.6	792.8				491.7	571.7
3.	459.2	305.4	758.0				355.5	707.9
4.								
5.								

Well was flowing load oil and water

Absolute Potential: 3,000 MCFPD; n .819

Wellhead Potential: 3,000 MCFPD; n .819

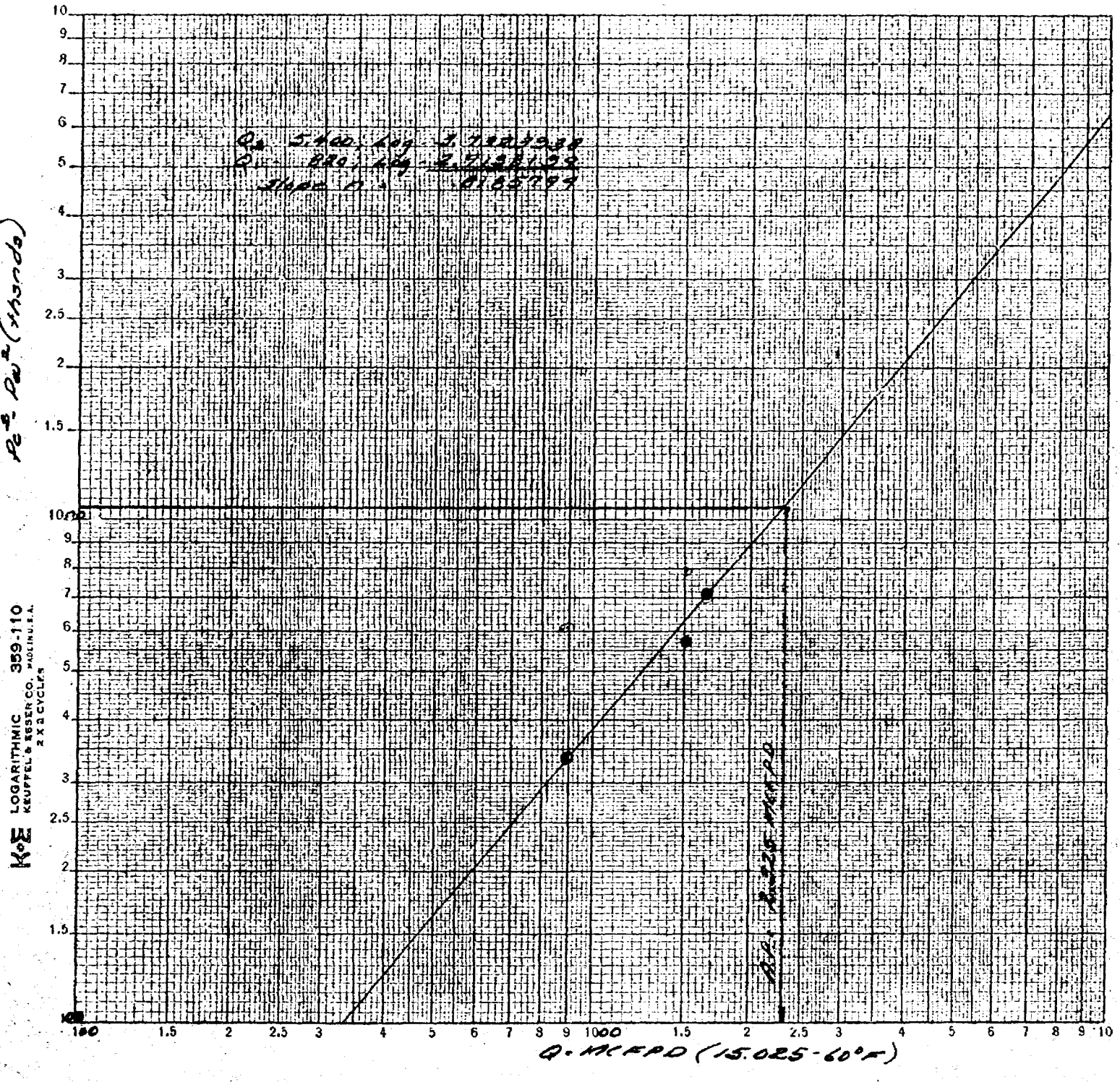
Conducted by: H. H. Kerley

Witnessed by:

Calculated by: H. H. Kerley

EXHIBIT NO._____

JAL OIL CO., INC
WATKINS #2
UNIT N, 35-24-36; LEA CO., N.M.
8-22-58



FORM 15-166R (5-58)

EL PASO NATURAL GAS COMPANY

CORRECTED COPY

State of New Mexico

One-point Back Pressure Test for Gas Wells

(Deliverability)

EXHIBIT NO.

Pool Jalmat Formation Yates County Lea

Initial ____ Annual X Special ____ Date of test 3-6/3-13/59

Company Jal Oil Company Lease Owens Well No. 1

Unit M Sec. 21 Twp. 25 Rge. 37 Purchaser El Paso Natural Gas Company

Casing 5½ Wt. 15.5 I.D. ____ Set at 2582 Perf. ____ To ____

Tubing 2½ Wt. 6.5 I.D. ____ Set at 2772 Perf. 2769 To 2772

Gas Pay: From 2769 To 2772 L 2769 x G .662 = GL ____ Bar. Press 13.2

Producing Thru: Casing ____ Tubing X Type Well Single

Series 40 Meter Run ____ Packer at ____ Single - Bradenhead-G.G. or G. O. Dual

FLOW DATA

Started Date	Started time	Taken Date	Taken time	Duration Hours	Type Taps	Line Size	Orfice Size	Static Press.	Differ-ential	Flow Temp.
3-9-59	9:15 AM PM	3-10-59	9:15 AM PM	24	Flg.	4	1.000	108.2	57.76	66

FLOW CALCULATIONS

Static Pressure P_f	Differ-ential h_w	Meter Extension $P_f h_w$	24-Hour Coeff-icient	Gravity Factor F_g	Temp. Factor F_t	Compress-ability F_{pv}	Rate of Flow MCF/Da. @ 15.025 psia Q
108.2	57.76	79.05	6.135	.9520	.9943		459.1

SHUT-IN DATA / FLOW DATA

Shut-in Date	Shut-in Time	Press. Taken Date	Press. Taken Time	Duration Hours	Wellhead Pressure (P_c) psia Tubing	Wellhead Pressure (P_c) psia Casing	W.H. Working Pressure (Pw) and (Pt) psia Tubing	W.H. Working Pressure (Pw) and (Pt) psia Casing
3-10	9:15 AM PM	3-11-59 3-12-59 3-13-59	9:15 AM PM	24 48 72	*	416.2 429.2 434.2	126.2	290.2

FRICTION CALCULATIONS (if necessary)

P W Measured

DELIVERABILITY CALCULATIONS

P_w 290.2 P_c 434.2 $P_w^2 + P_c^2$ .6683

$1 - \frac{P_w}{P_c}$ .3317 $1 + \frac{P_w}{P_c}$ 1.668 $\left(1 - \frac{P_w}{P_c}\right)\left(1 + \frac{P_w}{P_c}\right)$ = N. .5533

.36 + N .4506 Log 9.81331-10 x (n) .771 = 9.85606-10 +

SUMMARY

P_c = 434.2 psia

Q = 459.1 MCF/Da.

P_w = 290.2 psia

P_d = 347.4 psia

D = 329.6 MCF/Da.

Company El Paso Natural Gas Company

Address P.O. Box 1186, Jal, New Mexico

Agent and Title J. L. Whitaker, Gas Inspector

Witnessed ____

Company ____

Log Q = 2.66198

Log D = 12.51797-10

Antilog = 329.6 = D

REMARKS

* Tubing did not have any pressure on shut-in

BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO CASE 18 1941

Form 15-166R (5-58)

EL PASO NATURAL GAS COMPANY
State of New Mexico
One-point Back Pressure Test for Gas Wells
(Deliverability)

EXHIBIT NO. _____

Pool Jalmat Formation Yates County Lea
Initial _____ Annual _____ Special X Date of test 5-16-58
Company Jal Oil Company Lease Owens Well No. 1
Unit M Sec. 21 Twp. 25 Rge. 37 Purchaser El Paso Natural Gas Company
Casing 5 1/2 Wt. 15.5 I.D 4.976 Set at 2582 Perf. Open Hole To _____
Tubing 2 1/2 Wt. 6.5 I.D 2.441 Set at 2772 Perf. 2769 To 2772
Gas Pay: From 2605 To 2772 L 2769 x G .670 = GL 1855 Bar. Press 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Series _____ Meter Run Packer at _____ Single - Bradenhead-G.G. or G.O. Dual

FLOW DATA

Started Date	Started Time	Taken Date	Taken Time	Duration Hours	Type Taps	Line Size	Orfice Size	Static Press.	Differ-ential	Flow Temp.
5-12-58	8:25 AM PM	4-13-58	8:25 AM PM	24	Flg.	4	1.250	113.2	25.00	70

FLOW CALCULATIONS

Static Pressure Pf	Differ-ential h_w	Meter Extension $P_f h_w$	24-Hour Coeff-icient	Gravity Factor F_g	Temp. Factor F_t	Compress-ability F_{pv}	Rate of Flow MCF/Da @ 15.025 psia Q
113.2	25.00	53.15	9.643	.9463	.9905	1.010	485

SHUT-IN DATA

Shut-in Date	Shut-in Time	Press. Taken Date	Press. Taken Time	Duration Hours	Wellhead Pressure (P_c) psia Tubing	Wellhead Pressure (P_c) psia Casing	FLOW DATA W.H. Working Pressure (P_w) and (P_t) psia Tubing	FLOW DATA W.H. Working Pressure (P_w) and (P_t) psia Casing
		5-14-58		24	413.2*			
5-13-58	8:25 AM PM	5-15-58	8:25 AM PM	48	420.2*		227.2	
		5-16-58		72	425.2*			

FRICTION CALCULATION (if necessary)

P_w^2 51.6+(8.12)(.120)=52.6

SUMMARY

P_c = 425.2* psia
Q = 485 MCF/Da.
P_w = 229.4 psia
P_d = 340.2 psia
D = 288 MCF/Da.

DELIVERABILITY CALCULATIONS

P_w 229.4 P_c 425.2 $P_w + P_c$ .5395

$1-\frac{P_w}{P_c}$ .4605 $1+\frac{P_w}{P_c}$ 1.5395 $\left(1-\frac{P_w}{P_c}\right)\left(1+\frac{P_w}{P_c}\right)$ = M. .7089

.36 + M .5078 Log 9.7056927-10 x (n) .771*** = 9.7730891-10 +

Company El Paso Natural Gas Company
Address P. O. Box 1384 - Jal, New Mexico
Agent and Title L. D. Southern - Gas Tester
Witnessed David H. Dyer
Company El Paso Natural Gas Company

Log Q = 2.6857417
Log D = 12.4588308-10
Antilog = 288 = D

REMARKS

*Average Jalmat Slope
**The shut-in used to calculate this test was taken from the nearest off set wel (Sun-Lanehart #1) as requested by the NMOCC.

Form 15-166R (5-58)

EL PASO NATURAL GAS COMPANY
State of New Mexico
One-point Back Pressure Test for Gas Wells
(Deliverability)

EXHIBIT NO.

Pool Jalmat Formation Yates County Lea
Initial ____ Annual X Special ____ Date of test 4/1-8/60
Company Jal Oil Company Lease Dyer Well No. 3
Unit H Sec. 31 Twp. 25 Rge. 37 Purchaser El Paso Natural Gas Company
Casing 6 5/8 Wt. 19.5 I.D. ____ Set at 2792 Perf. ____ To ____
Tubing 2 1/2 Wt. 6.5 I.D. ____ Set at 2960 Perf. ____ To ____
Gas Pay: From 2945 To 2977 L 2960 x G .680 = GL 2013 Bar. Press 13.2
Producing Thru: Casing ____ Tubing X Type Well Single
Series 90 Meter Run Packer at ____ Single - Bradenhead-G.G. or G.O. Dual

FLOW DATA

Started Date	Started Time	Taken Date	Taken Time	Duration Hours	Type Taps	Line Size	Orfice Size	Static Press.	Differential	Flow Temp.
4-4-60	11:30 AM PM	4-5-60	11:30 AM PM	24	Flg.	4	.750	180	23.04	84

FLOW CALCULATIONS

Static Pressure Pf	Differential h_w	Meter Extension Pf h_w	24-Hour Coefficient	Gravity Factor F_g	Temp. Factor F_t	Compressability F_{pv}	Rate of Flow MCF/Da @ 15.025 psia Q
193.2	23.04	66.72	3.435	.9393	.9777	1.019	214.5

SHUT-IN DATA

Shut-in Date	Shut-in Time	Press. Taken Date	Press. Taken Time	Duration Hours	Wellhead Pressure (P_c) psia Tubing	Wellhead Pressure (P_c) psia Casing
4-5-60	11:30 AM PM	4-6-60	11:30 AM PM	24		281.2
		4-7-60		48		284.2
		4-8-60		72		287.2

FLOW DATA

W.H. Working Pressure (P_w) and (P_t) psia Tubing	W.H. Working Pressure (P_w) and (P_t) psia Casing
	195.2

FRICTION CALCULATION (if necessary)

$P_w^2 = (195.2)^2 + (5.866)(214.5)^2(0.129) = 38.30$

BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO EXHIBIT No. 19 CASE 1911

DELIVERABILITY CALCULATIONS

P_w 195.7 P_c 287.2 $P_w + P_c$ .6814

$1 - \frac{P_w}{P_c}$ .3186 $1 + \frac{P_w}{P_c}$ 1.681 $\left(1 - \frac{P_w}{P_c}\right)\left(1 + \frac{P_w}{P_c}\right)$ = M. .5356

.36 + M .6722 Log 9.827434-10 x (n) .763 = 9.868332-10 +

SUMMARY

P_c = 287.2 psia
Q = 214.5 MCF/Da.
P_w = 195.7 psia
P_d = 229.8 psia
D = 158.4 MCF/Da.

Company El Paso Natural Gas Company
Address P. O. Box 1384 - Jal, New Mexico
Agent and Title Bobby Boaz Gas Tester
Witnessed
Company

Log Q = 2.331427
Log D = 12.199759-10
Antilog = 158.4 = D

REMARKS

FORM 15-166R (5-58)

[illegible] NATURAL GAS COMPANY
State of New Mexico
One-point Back Pressure Test for Gas Wells
(Deliverability)

EXHIBIT NO.________

Pool **Jalmat** Formation **Yates** County **Lea**
Initial ____ Annual **X** Special ____ Date of test **3-6/3-13-59**
Company **Jal Oil Company** Lease **Dyer** Well No. **3**
Unit **H** Sec. **31** Twp. **25** Rge. **37** Purchaser **El Paso Natural Gas Company**
Casing **6 5/8** Wt. **19.5** I.D. ____ Set at **2792** Perf. ____ To ____
Tubing **2"** Wt. **6.5** I.D. ____ Set at **2960** Perf. ____ To ____
Gas Pay: From **2945** To **2977** L **2960** x G **.691** = GL **2045** Bar. Press **13.2**
Producing Thru: Casing ____ Tubing **X** Type well **Single**
Single - Bradenhead-G.G. or G. O. Dual
Series **90** Meter Run Packer at ____

FLOW DATA

Started Date	Started time	Taken Date	Taken time	Duration Hours	Type Taps	Line Size	Orfice Size	Static Press.	Differ-ential	Flow Temp.
3-9-59	1:45 PM	3-10-59	1:45 PM	24	Flg.	4	1.250	130.2	9.00	75

FLOW CALCULATIONS

Static Pressure P_f	Differ-ential h_w	Meter Extension $\sqrt{P_f h_w}$	24-Hour Coeff-icient	Gravity Factor F_g	Temp. Factor F_t	Compress-ability F_{pv}	Rate of Flow MCF/Da. @ 15.025 psia Q
130.2	9.00	34.23	9.643	.9318	.9859	1.012	307.0

SHUT-IN DATA / FLOW DATA

Shut-in Date	Shut-in Time	Press. Taken Date	Press. Taken Time	Duration Hours	Wellhead Pressure (P_c) psia Tubing	Wellhead Pressure (P_c) psia Casing	W.H. Working Pressure (P_w) and (P_t) psia Tubing	W.H. Working Pressure (P_w) and (P_t) psia Casing
	AM / PM		AM / PM		*	*	137.2	

FRICTION CALCULATIONS (if necessary)

$P_w^2 = (137.2)^2 + (5.866 \times 307.0) = 19.2$

DELIVERABILITY CALCULATIONS

P_w **138.6** P_c **209.2** $P_w + P_c$ **.6625**

$1 - \frac{P_w}{P_c}$ **.3375** $1 + \frac{P_w}{P_c}$ **1.663** $\left(1 - \frac{P_w}{P_c}\right)\left(1 + \frac{P_w}{P_c}\right) = H.$ **.5613**

$.36 + H$ **.6414** Log **9.80713-10** x (n) **.763**

= **9.85284-10** +

Log Q = **2.48714**

Log D = **12.33998-10**

Antilog = **218.8** = D

SUMMARY

P_c = * **209.2** psia
Q = **307.0** MCF/Da.
P_w = **138.6** psia
P_d = **167.4** psia
D = **218.8** MCF/Da.

Company **El Paso Natural Gas Company**
Address **P. O. Box 1384, Jal, New Mexico**
Agent and Title **Gas Tester**
Witnessed
Company **El Paso Natural Gas Company**

REMARKS

*Pc was taken from E. Olsen Wimmington No. 3 well could not be shut-in due to water logging off well bore.

Form 15-166R (5-58)

EL PASO NATURAL GAS COMPANY
State of New Mexico
One-point Back Pressure Test for Gas Wells
(Deliverability)

EXHIBIT NO.

Pool Jalmat Formation Yates County Lea
Initial ____ Annual ____ Special X Date of test 4-18-58
Company Jal Oil Company Lease Dyer Well No. 3
Unit H Sec. 31 Twp. 25 Rge. 37 Purchaser El Paso Natural Gas Company
Casing 6 5/8 Wt. 19.5 I.D. ____ Set at 2792 Perf. ____ To ____
Tubing 2 1/2 Wt. 6.5 I.D. 2.441 Set at 2960 Perf. 2800 To 2974
Gas Pay: From 2945 To 2977 L 2792 x G .680 = GL 1899 Bar. Press 13.2
Producing Thru: Casing ____ Tubing X Type Well Single
Series ____ Meter Run Packer at ____ Single - Bradenhead-G.G. or G.O. Dual

FLOW DATA

Started Date	Started Time	Taken Date	Taken Time	Duration Hours	Type Taps	Line Size	Orfice Size	Static Press.	Differential	Flow Temp.
4-14-58	8:45 AM PM	4-15-58	8:45 AM PM	24	Flg.	4	1.250	108.2	19.36	70

FLOW CALCULATIONS

Static Pressure pf	Differential h_w	Meter Extension $P_f h_w$	24-Hour Coefficient	Gravity Factor F_g	Temp. Factor F_t	Compressability F_{pv}	Rate of Flow MCF/Da @ 15.025 psia Q
108.2	19.36	45.72	9.643	.9393	.9905		410

SHUT-IN DATA

Shut-in Date	Shut-in Time	Press. Taken Date	Press. Taken Time	Duration Hours	Wellhead Pressure (Pc) psia Tubing	Wellhead Pressure (Pc) psia Casing	FLOW DATA W.H. Working Pressure (P_w) and (P_t) psia Tubing	FLOW DATA W.H. Working Pressure (P_w) and (P_t) psia Casing
4-15-58	AM	4-16-58		24	229.2		123.2	
		4-17-58	11:20 AM	48	173.2			
		4-18-58		72	108.2			
	1:20 PM		PM					

FRICTION CALCULATION (if necessary)

P_w^2 15.2+(5.81)(.122)=15.9

DELIVERABILITY CALCULATIONS

P_w 126.1 P_c 229.2 $P_w + P_c$ .5502

$1-\frac{P_w}{P_c}$ .4498 $1+\frac{P_w}{P_c}$ 1.5502 $\left(1-\frac{P_w}{P_c}\right)\left(1+\frac{P_w}{P_c}\right)$ = M. .6973

.36 + M .5163 Log 9.7129021-10 x (n) .763 = 9.7809443-10 +

Log Q = 2.6127839

Log D = 12.3937282-10

Antilog = 248 = D

SUMMARY

P_c = 229.2 psia
Q = 410 MCF/Da.
P_w = 126.1 psia
P_d = 183.4 psia
D = 248 MCF/Da.

Company El Paso Natural Gas Company
Address P. O. Box 1384 - Jal, New Mexico
Agent and Title L. D. Southern - Gas Tester
Witnessed David H. Dyer
Company El Paso Natural Gas Company

REMARKS

Form 15-100 (9-54)

EL PASO NATURAL GAS COMPANY

EXHIBIT NO._____

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates County Lea

Initial ____ Annual ____ Special X Date of Test 2-4 to 2-8-57

Company R. Olsen, Personal Lease Dyer Well No. 3

Unit M Sec. 31 Twp. 25 S Rge. 37 E Purchaser EPNG

Casing 6-5/8 Wt. 19.51 I.D. ____ Set at 2792 Perf. ____ To ____

Tubing 2⅜ Wt. ____ I.D. ____ Set at 2960 Perf. 2880 To 2974

Gas Pay: From 2945 To 2977 L 2792 x G .670 = GL 1871 Bar. Press. 13.2

Producing Thru: Casing ____ Tubing X Type Well Single

Single-Bradenhead-G. G. or G. O. Dual

Date of Completion: 7-11-54 Packer: None

No.	Flow Data: Line Size x Orifice Size	Press. psig	Diff. hw	Temp. °F.	Tubing Data: Press. psig	Tubing Temp. °F.	Casing Data: Press. psig	Casing Temp. °F.	Duration of Flow Hr.
SI					355				72
1.	4 x 1.309	164	10.2	60	218				24
2.	4 x 1.500	174	12.3	62	188				24
3.	4 x 1.500	153	15.2	64	171				24
4.									
5.									

* This well produces with a Garrett Oil Tool Plunger Lift and it was impossible to conduct a 4 point test.

No.	Coefficient (24-Hour) F_b	$\sqrt{h_w P_w}$	Pressure psia	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	13.99	42.57		1.000	.9463	1.018	574
2.	13.99	47.86		.9981	.9463	1.019	644
3.	13.99	50.25		.9962	.9463	1.016	673
4.							
5.							

Gas Liquid Hydrocarbon Ratio ____ Mcf/bbl.

Gravity of Liquid Hydrocarbons ____ deg.

F_c 3.888 (1-e-s) .120

Specific Gravity Separator Gas ____

Specific Gravity Flowing Fluid ____

P_c 368.2 P_c^2 135.6

No.	P_t (psia)	P_t^2	$P_c^2 - P_t^2$	$F_c Q$	$(F_c Q)^2$	$(F_c Q)^2(1-e^{-s})$	P_w^2	$P_c^2 - P_w^2$
1.	294.3	53.5	82.1	3.37	11.36	1.36	54.9	80.7
2.	288.2	46.5	95.1	3.78	14.29	1.71	48.2	93.4
3.	286.2	38.9	101.7	3.93	15.40	1.87	35.8	99.8
4.								
5.								

Wellhead Potential: 570 MCFPD; θ_t 32.5 ; n_t .788

Potential: 800 MCFPD; θ 30 ; n .763

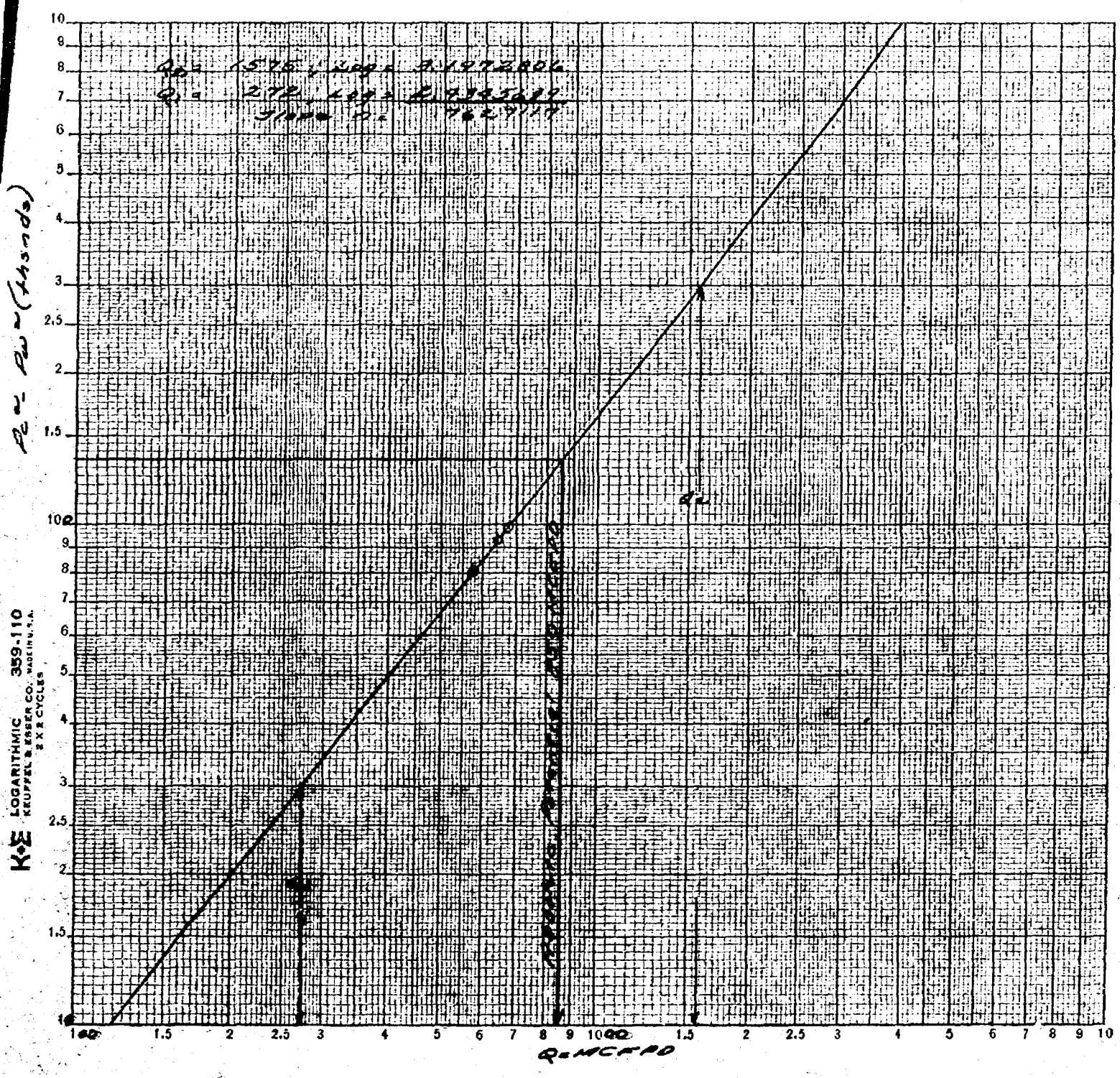
Conducted by: H. H. Kerby

Witnessed by: ____

Calculated by: H. H. Kerby

EXHIBIT NO.

R. OLSEN (PERSONAL)
OVER #3
UNIT "H", SEC. 31, T-25-S, R-37-E, LEA CO., N.M.
2-8-1957



JAL OIL COMPANY

Future Recoverable Hydrocarbons

October 1959

Case 1911
EXHIBIT NO. 2

Wells	Gross Acres	No. Wells Oil	No. Wells Gas	Gross Ultimate	Gross 12 Months Production	Gross Cumulated 10-1-59	Gross Future	Net Interest	Net Future
Lea County, New Mexico									
Carlson Nos. 2 & 3	200		2	4,027,550	301,091	448,772	3,578,778	.654841	2,343,530
HPGas - MCF									
Christmas Nos. 1 - 5	320	3		160,000	12,266	78,936	81,064	.363327	29,450
Oil - Bbls				422,000	50,740	69,524	352,476		128,060
LPGas - MCF			2	8,866,420	220,101	2,422,619	6,443,801		2,341,210
HPGas - MCF									
Coll, A. P. (Dev Unit)	40								
Oil - Bbls				141,540	3,514	40,766	100,774	.041016	4,130
HPGas - MCF			1	24,886,100	536,434	3,836,096	21,050,004		863,390
Covington-Federal									
Oil - Bbls		1		16,000	766	1,451	14,549	.875	12,730
LPGas - MCF				503,840	23,753	31,958	471,882		412,900
Dyer NO. 3	160								
Oil - Bbls		2		107,500	1,083	87,229	20,271	.814323	16,510
LPGas - MCF				475,000	13,938	151,974	323,026		263,050
HPGas - MCF			1	3,436,270	102,493	787,981	2,648,289		2,156,560
Farnsworth Nos. 1, 2 & 3	240								
Oil - Bbls		3		584,500	30,675	181,476	403,024	.678125	273,300
LPGas - MCF				1,957,330	171,930	655,016	1,302,314		883,130
Gregory, L. L.	80								
Oil - Bbls		1		60,620	1,862	24,893	35,727	.875	31,260
LPGas - MCF				516,500	18,640	158,448	358,052		313,300
Gregory, R.O.	120								
Oil - Bbls		1		56,000	2,873	34,680	21,320	.7375	15,720
LPGas - MCF				1,154,000	100,872	419,358	734,642		541,800
Gutman Nos. 1 & 2	80								
Oil - Bbls		2		87,000	2,526	38,351	48,649	.375	18,240
LPGas - MCF				870,000	33,531	390,674	479,326		179,750
Gutman "D" (Dev Unit)	40								
Oil - Bbls				172,020	3,094	43,977	128,043	.1875	24,010
HPGas - MCF			1	25,010,370	461,396	3,986,869	21,023,501		3,941,910
Gutman - 18	80								
Oil - Bbls		3		195,320	6,283	111,407	83,913	.773438	64,900
LPGas - MCF				285,000	14,799	14,438	270,562		209,260
HPGas - MCF				5,375,520	250,834	2,604,180	2,771,340		2,143,460
Harner No. 1	80								
Oil - Bbls		1		32,440	900	15,460	16,980	.807617	13,710
Hodge	160								
Oil - Bbls		4		179,560	6,309	79,863	99,697	.820313	81,780
LPGas - MCF				2,649,000	52,579	2,200,017	448,983		368,310
HPGas - MCF			1	8,106,680	563,119	417,975	7,688,705		6,307,140
Jack	160								
Oil - Bbls		4		119,320	4,711	68,191	51,129	.165	8,440
LPGas - MCF				727,990	37,176	429,927	298,063		49,180
HPGas - MCF			1	5,747,680	151,803	1,923,731	3,823,949		630,950
Jenkins NO. 1	160								
Oil - Bbls		2		64,300	2,575	31,949	32,351	.783447	25,350
LPGas - MCF				1,957,500	70,081	1,085,913	871,587		682,840
HPGas - MCF			2	4,716,380	182,216	1,769,459	2,946,921		2,308,760
Lanehart-Sun									
Oil - Bbls				67,840	3,173	3,173	64,667	.020508	1,330
HPGas - MCF			1	13,568,250	477,551	1,545,800	12,022,450		246,560
Legal	160								
Oil - Bbls		2		84,050	3,545	45,741	38,309	.809050	30,990
LPGas - MCF				361,200	7,212	265,423	95,777		77,490
HPGas - MCF			1	3,931,080	123,029	1,687,161	2,243,919		1,815,440
Owen, Eva	40								
HPGas - MCF			1	2,848,030	1,399	950,157	1,897,873	.572591	1,086,700
Owen, Eva "D" (Dev Unit)	40								
Oil - Bbls		1		160,000	420	36,489	123,511	.337891	41,730
LPGas - MCF				120,000	484	31,510	88,490		29,900
Sarkeys Nos. 1-C, 1-T & 2-T	160								
Oil - Bbls		2		157,500	9,787	35,844	121,656	.375	45,620
LPGas - MCF				2,343,040	161,840	375,391	1,967,649		737,870
Watkins No. 1	80								
Oil - Bbls		1		209,870	12,889	32,864	177,006	.617188	109,250
HPGas - MCF				2,933,880	8,419	767,449	2,166,431		1,337,180

EX-2

IRA BRINKERHOFF

JAL OIL COMPANY

Future Recoverable Hydrocarbons

October 1959

Wells	Gross Acres	No. Wells Oil	No. Wells Gas	Gross Ultimate	Gross 12 Months Production	Gross Cumulated 10-1-59	Gross Future	Net Interest	Net Future
Lea County, New Mexico cont'd									
Wells	640								
Oil - Bbls		2		286,500	16,415	61,277	225,223	.536250	120,780
LPGas - MCF				2,249,000	112,766	1,111,103	1,137,897		610,200
HPGas - MCF			6	8,216,850	772,667	1,141,565	7,075,285		3,794,120
Woolworth	160								
Oil - Bbls				79,800	1,610	5,287	74,513	.526042	39,200
HPGas - MCF			1	6,900,710	86,858	1,422,805	5,477,905		2,881,610
Woolworth - 27	240								
Oil - Bbls		1		7,780	246	3,272	4,508	.806409	3,640
LPGas - MCF				227,600	11,209	84,016	143,584		115,790
TOTAL New Mexico	3,440	36	21						
Oil - Bbls				3,029,460	127,722	1,062,576	1,966,884		1,012,070
LPGas - MCF				16,819,000	881,550	7,474,690	9,344,310		5,602,830
HPGas - MCF				128,571,770	4,239,409	25,712,619	102,859,151		34,198,440
Cochran County, Texas									
Masten Nos. 1 & 2	10,647								
Oil - Bbls		2		120,300	4,444	62,674	57,626	.75	43,220
Masten No. 3									
HPGas - MCF			1	1,949,350	14,136	30,481	1,918,869	.722656	1,386,680
TOTAL Texas	10,647	2	1						
Oil - Bbls				120,300	4,444	62,674	57,626		43,220
HPGas - MCF				1,949,350	14,136	30,481	1,918,869		1,386,680
TOTAL Original Wells New Mexico & Texas									
Oil - Bbls				3,149,760	132,166	1,215,250	2,024,510		1,055,290
LPGas - MCF				16,819,000	881,550	7,474,690	9,344,310		5,602,830
HPGas - MCF				130,521,120	4,253,545	25,743,100	104,778,020		35,585,120
New Wells - Since 11-1-57									
Lea County, New Mexico									
Christmas Nos. 6 - 9									
Oil - Bbls		4		412,320	18,518	18,518	393,802	.363327	143,080
LPGas - MCF				2,704,800	121,647	121,647	2,583,153		938,530
Farnsworth Nos. 4 & 5									
Oil - Bbls		2		340,000	13,969	22,820	317,180	.339063	107,540
LPGas - MCF				1,214,580	34,184	66,759	1,147,821		389,180
Harner No. 2									
Oil - Bbls				100,000	1,439	1,439	98,561	.807617	79,600
HPGas - MCF			1	2,000,000			2,000,000		1,615,230
Sarkeys No. 2-C (bln)									
Oil - Bbls		1		97,500	3,612	6,559	90,941	.375000	34,100
LPGas - MCF				780,900	53,949	85,571	695,329		260,750
Watkins No 2									
HPGas - MCF			1	2,900,000	28,579	28,579	2,871,421	.617188	1,772,210
Cochran County, Texas									
Masten Nos. 5 - 12									
Oil - Bbls		7		969,000	26,726	26,726	942,274	.75	706,710
LPGas - MCF				750,000	1,531	1,531	748,469		561,350
TOTAL New Wells		14	2						
Oil - Bbls				1,918,820	64,264	76,062	1,842,758		1,071,030
LPGas - MCF				5,450,280	211,311	275,508	5,174,772		2,149,810
HPGas - MCF				4,900,000	28,579	28,579	4,871,421		3,387,440
GRAND TOTAL									
Oil - Bbls				5,068,580	196,430	1,201,312	3,867,268		2,126,320
LPGas - MCF				22,269,280	1,092,861	7,750,198	14,519,082		7,752,640
HPGas - MCF				135,421,120	4,282,124	25,771,679	109,649,441		38,972,560

IRA BRINKERHOFF

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. 1779
Order No. R-1519

APPLICATION OF JAL OIL COMPANY
FOR AN ORDER PERMITTING SEVEN
OVERPRODUCED GAS WELLS IN THE
JALMAT GAS POOL, LEA COUNTY,
NEW MEXICO TO COMPENSATE FOR
SUCH OVERPRODUCTION AT A LESSER
RATE THAN COMPLETE SHUT-IN, AND
FURTHER FOR MINIMUM ALLOWABLES
FOR TWO OTHER JALMAT GAS WELLS,
LEA COUNTY, NEW MEXICO, PURSUANT
TO ORDERS NOS. R-520 AND R-967

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on October 7, 1959, 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 30th day of October, 1959, 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 original application in Case 1779 was for the consideration of seven wells, but that applicant requested at the hearing that one of the seven wells be dismissed from further consideration.

(3) That the following-described gas wells in the Jalmat Gas Pool, Lea County, New Mexico, are more than six times overproduced and are therefore subject to complete shut-in under the provisions of Orders Nos. R-520 and R-967:

TOWNSHIP 25 SOUTH, RANGE 37 EAST, NMPM
Legal Well No. 2, NE/4 SE/4 of Section 31
Dyer Well No. 3, SE/4 NE/4 of Section 31
Jenkins Well No. 1, SW/4 SW/4 of Section 29
Repollo Well No. 1, SW/4 NW/4 of Section 28

(4) That due to extreme liquid problems, the applicant seeks an order permitting the overproduction to be made up at a lesser rate than complete shut-in in order to preclude permanent injury to the subject wells.

(5) That the applicant should be permitted to produce each of the subject wells at a monthly rate equal to seventy-five percent of the well's current allowable or at a monthly rate equal to seventy-five percent of the well's average monthly allowable for the preceding six month proration period, whichever is greater.

(6) That the curtailed rate of production to compensate for overproduction as hereinabove prescribed should be adequate to prevent injury to the well or producing formation.

(7) That an administrative procedure should be established whereby the Secretary-Director of the Commission may authorize the operator to compensate for overproduction at a lesser rate than that provided in this order upon a satisfactory showing that the rate prescribed would result in permanent damage to the well and/or producing formation.

(8) That the Secretary-Director should be authorized to order that tests be made to determine whether the subwells may be produced at a lesser rate than that prescribed by this order without permanent injury to the well and/or producing formation and, if the test results so indicate, the Secretary-Director should be authorized to order the production rate curtailed below that herein prescribed.

(9) That any tests made to determine the minimum safe flow rate should be witnessed by a representative of the Commission.

(10) That the following-described gas wells in the Jalmat Gas Pool, Lea County, New Mexico are substantially in balance.

Owens Well No. 1, SW/4 SW/4 of Section 21
Township 25 South, Range 37 East, NMPM

Watkins Well No. 2, SE/4 NE/4 of Section 35, Township 24 South, Range 36 East, NMPM

(11) That due to severe liquid problems, the applicant seeks an order allotting minimum allowables to the above-described two wells pursuant to Rule 8 of Order No. R-967 amending Order No. R-520, the applicable portion of which provides as follows:

> "The Commission may assign minimum allowables in order to prevent the premature abandonment of wells."

(12) That since the two wells for which minimum allowables were requested are substantially in balance, the applicant has failed to show the necessity of granting them allowables in excess of those now assigned to the subject wells.

IT IS THEREFORE ORDERED:

(1) That the operator be and the same is hereby authorized to compensate for the overproduction of the following-described gas wells in the Jalmat Gas Pool, Lea County, New Mexico, by producing each of them at a monthly rate equal to seventy-five percent of the well's current monthly allowable or at a monthly rate equal to seventy-five percent of the well's average monthly allowable for the preceding six-month proration period, whichever is greater:

TOWNSHIP 25 SOUTH, RANGE 37 EAST, NMPM
Legal Well No. 2, NE/4 SE/4 of Section 31
Dyer Well No. 3, SE/4 NE/4 of Section 31
Jenkins Well No. 1, SW/4 SW/4 of Section 29
Repollo Well No. 1, SW/4 NW/4 of Section 28

PROVIDED HOWEVER, That an administrative precedure be and the same is hereby established wherein the Secretary-Director is authorized to set the percentage of curtailment at a lesser rate than that herein prescribed upon a satisfactory showing by the operator that the rate for compensating for overproduction as set forth in this order would result in permanent damage to the well and/or producing formation.

PROVIDED FURTHER, That the Secretary-Director be and the same is hereby authorized to order that tests be made to determine whether the subject wells may be produced at a lesser rate than that prescribed by this order without permanent injury to the well and/or producing formation, and, if the test results so indicate, the Secretary-Director is hereby authorized to order the production rate curtailed below that rate herein prescribed.

PROVIDED FURTHER, That any tests made to determine the minimum safe flow rate shall be witnessed by a representative of the Commission.

(2) That the minimum allowables sought by the applicant for the following-described wells be and the same are hereby denied:

Owens Well No. 1, SW/4 SW/4 of Section 21
Township 25 South, Range 37 East, NMPM

Watkins Well No. 2, SE/4 NE/4 of Section 35,
Township 24 South, Range 36 East, NMPM

(3) That the effective date of this order is November 1, 1959.

DONE at Santa Fe, New Mexico on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JOHN BURROUGHS, Chairman

MURRAY E. MORGAN, Member

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

S E A L

lcr/

FORM 15-166R (5-58)

EL PASO NATURAL GAS COMPANY
State of New Mexico
One-point Back Pressure Test for Gas Wells
(Deliverability)

CORRECTED COPY

EXHIBIT NO._____

Pool Jalmat Formation Yates County Lea
Initial ____ Annual X Special ____ Date of test 3-6/3-13/59
Company Jal Oil Company Lease Owens Well No. 1
Unit M Sec. 21 Twp. 25 Rge. 37 Purchaser El Paso Natural Gas Company
Casing 5½ Wt. 15.5 I.D. ____ Set at 2582 Perf. ____ To ____
Tubing 2⅜ Wt. 6.5 I.D. ____ Set at 2772 Perf. 2769 To 2772
Gas Pay: From 2769 To 2772 L 2769 x G .662 = GL ____ Bar. Press 13.2
Producing Thru: Casing ____ Tubing X Type Well Single
Series 40 Meter Run ____ Packer at ____ Single - Bradenhead-G.G. or G. O. Dual

FLOW DATA

Started Date	Started time	Taken Date	Taken time	Duration Hours	Type Taps	Line Size	Orfice Size	Static Press.	Differential	Flow Temp.
3-9-59	9:15 AM PM	3-10-59	9:15 AM PM	24	Flg.	4	1.000	108.2	57.76	66

FLOW CALCULATIONS

Static Pressure p_f	Differential h_w	Meter Extension $p_f h_w$	24-Hour Coefficient	Gravity Factor F_g	Temp. Factor F_t	Compressability F_{pv}	Rate of Flow MCF/Da. @ 15.025 psia Q
108.2	57.76	79.05	6.135	.9520	.9943		459.1

SHUT-IN DATA

Shut-in Date	Shut-in Time	Press. Taken Date	Press. Taken Time	Duration Hours	Wellhead Pressure (P_c) psia Tubing	Wellhead Pressure (P_c) psia Casing
3-10	9:15 AM PM	3-11-59 3-12-59 3-13-59	9:15 AM PM	24 48 72	*	416.2 429.2 434.2

FLOW DATA

W.H. Working Pressure (Pw) and (Pt) psia Tubing	W.H. Working Pressure (Pw) and (Pt) psia Casing
126.2	290.2

FRICTION CALCULATIONS (if necessary)

P W Measured

SUMMARY

P_c = 434.2 psia
Q = 459.1 MCF/Da.
P_w = 290.2 psia
P_d = 347.4 psia
D = 329.6 MCF/Da.

DELIVERABILITY CALCULATIONS

P_w 290.2 P_c 434.2 $P_w + P_c$ .6683

$1 - \frac{P_w}{P_c}$ .3317 $1 + \frac{P_w}{P_c}$ 1.668 $\left(1 - \frac{P_w}{P_c}\right)\left(1 + \frac{P_w}{P_c}\right)$ = H. .5533

.36 + M .6506 Log 9.81331-10 x (n) .771 = 9.85606-10 +

Company El Paso Natural Gas Company
Address P.O. Box 1384; Jal, New Mexico
Agent and Title J. L. White, Gas Tester
Witnessed ____
Company ____

Log Q = 2.66191
Log D = 12.51797-10
Antilog = 329.6 = D

REMARKS

* Tubing did not have any pressure on shut-in

Form 15-166R (5-58)

EL PASO NATURAL GAS COMPANY
State of New Mexico
One-point Back Pressure Test for Gas Wells
(Deliverability)

EXHIBIT NO.

Pool **Jalmat** Formation **Yates** County **Lea**
Initial ____ Annual ____ Special **X** Date of test **5-16-58**
Company **Jal Oil Company** Lease **Owens** Well No. **1**
Unit **M** Sec. **21** Twp. **25** Rge. **37** Purchaser **El Paso Natural Gas Company**
Casing **5 1/2** Wt. **15.5** I.D **4.976** Set at **2582** Perf. **Open Hole** To ____
Tubing **2 1/2** Wt. **6.5** I.D **2.441** Set at **2772** Perf. **2769** To **2772**
Gas Pay: From **2605** To **2772** L **2769** x G **.670** = GL **1855** Bar. Press **13.2**
Producing Thru: Casing ____ Tubing **X** Type Well **Single**
Series ____ Meter Run Packer at ____ Single - Bradenhead-G.G. or G.O. Dual

FLOW DATA

Started Date	Started Time	Taken Date	Taken Time	Duration Hours	Type Taps	Line Size	Orfice Size	Static Press.	Differ-ential	Flow Temp.
5-12-58	8:25 AM PM	4-13-58	8:25 AM PM	24	Flg.	4	1.250	113.2	25.00	70

FLOW CALCULATIONS

Static Pressure P_f	Differ-ential h_w	Meter Extension $P_f h_w$	24-Hour Coeff-icient	Gravity Factor F_g	Temp. Factor F_t	Compress-ability F_{pv}	Rate of Flow MCF/Da @ 15.025 psia Q
113.2	25.00	53.15	9.643	.9463	.9905	1.010	485

SHUT-IN DATA / FLOW DATA

Shut-in Date	Shut-in Time	Press. Taken Date	Press. Taken Time	Duration Hours	Wellhead Pressure (P_c) psia Tubing	Wellhead Pressure (P_c) psia Casing	W.H. Working Pressure (P_w) and (P_t) psia Tubing	W.H. Working Pressure (P_w) and (P_t) psia Casing
		5-14-58		24	413.2*			
5-13-58	8:25 AM PM	5-15-58	8:25 AM PM	48	420.2*		227.2	
		5-16-58		72	425.2*			

FRICTION CALCULATION (if necessary)

P_w^2 51.6+(8.12)(.120)=52.6

SUMMARY

P_c = 425.2* psia
Q = 485 MCF/Da.
P_w = 229.4 psia
P_d = 340.2 psia
D = 288 MCF/Da.

DELIVERABILITY CALCULATIONS

P_w 229.4 P_c 425.2 $P_w + P_c$ .5395

$1 - \frac{P_w}{P_c}$ .4605 $1 + \frac{P_w}{P_c}$ 1.5395 .7089

.75 + N .5078 9.7056927-10 .771** 9.7730891-10 +

2.6857417

12.4588308-10

288

Summary El Paso Natural Gas Company
Address P. O. Box 1384 - Jal, New Mexico
Approved and Title L. D. Southern - Gas Tester
Witnessed David H. Dyer
Company El Paso Natural Gas Company

**Average Jalmat Slope
*The shut-in used to calculate this test was taken from the nearest off set wel (Sun-Lanehart #1) as requested by the NMOCC.

Form 15-166R (5-58)

EL PASO NATURAL GAS COMPANY
State of New Mexico
One-point Back Pressure Test for Gas Wells
(Deliverability)

EXHIBIT NO.----------

Pool **Jalmat** Formation **Yates** County **Lea**
Initial ____ Annual **X** Special ____ Date of test **4/1-8/60**
Company **Jai Oil Company** Lease **Watkins** Well No. **2**
Unit **H** Sec. **35** Twp. **24** Rge. **36** Purchaser **El Paso Natural Gas Company**
Casing **5 1/2** Wt. **15.5** I.D. ____ Set at **2982** Perf. ____ To ____
Tubing **2** Wt. **4.7** I.D. ____ Set at **2869** Perf. ____ To ____
Gas Pay: From **2942** To **2954** L **2869** x G **.666** = GL **1911** Bar. Press 13.2
Producing Thru: Casing ____ Tubing **X** Type Well **Single**
Series **40** Meter Run ____ Packer at ____ Single - Bradenhead-G.G. or G.O. Dual

FLOW DATA

Started Date	Started Time	Taken Date	Taken Time	Duration Hours	Type Taps	Line Size	Orfice Size	Static Press.	Differential	Flow Temp.
4-4-60	8:45 AM PM	4-5-60	8:45 AM PM	24	Flg.	4	1.000	119	19.36	80

FLOW CALCULATIONS

Static Pressure P_f	Differential h_w	Meter Extension $P_f h_w$	24-Hour Coeff-icient	Gravity Factor F_g	Temp. Factor F_t	Compressability F_{pv}	Rate of Flow MCF/Da @ 15.025 psia Q
132.2	19.36	50.59	6.135	.9491	.9813	1.011	292.3

SHUT-IN DATA

Shut-in Date	Shut-in Time	Press. Taken Date	Press. Taken Time	Duration Hours	Wellhead Pressure (P_c) psia Tubing	Wellhead Pressure (P_c) psia Casing
	AM		AM		**Operator Did not not want well shut in**	
	PM		PM			

FLOW DATA

W.H. Working Pressure (P_w) and (P_t) psia Tubing	W.H. Working Pressure (P_w) and (P_t) psia Casing
Bad Valve	**400.2**

FRICTION CALCULATION (if necessary)

SUMMARY

P_c = ____ psia
Q = ____ MCF/Da.
P_w = ____ psia
P_d = ____ psia
D = ____ MCF/Da.

DELIVERABILITY CALCULATIONS

P_w ____ P_c ____ $P_w + P_c$ ____

$1-\frac{P_w}{P_c}$ ____ $1+\frac{P_w}{P_c}$ ____ $\left(1-\frac{P_w}{P_c}\right)\left(1+\frac{P_w}{P_c}\right)$ = M.

.36 + M ____ Log ____ x (n) **.777** ____ = ____ +

Company **El Paso Natural Gas Company** Log Q = ____
Address **P. O. Box 1384 - Jal, New Mexico** Log D = ____
Agent and Title Bobby Bass **Gas Tester**
Witnessed ____
Company ____ Antilog ____ = D

REMARKS

***Operator Did not want well shut-in.**

FORM 15-166R (5-58)

NEW MEXICO OIL CONSERVATION COMMISSION
State of New Mexico
Gas-Oil and Gas-Gas Dual Completion Test for Gas Wells
(Deliverability)

EXHIBIT NO._____

Pool Jalmat Formation Yates County Lea
Initial ____ Annual X Special ____ Date of test 2-20/2-27-59
Company Jal Oil Company Lease Watkins Well No. 2
Unit H Sec. 35 Twp. 24 Rge. 36 Purchaser El Paso Natural Gas Company
Casing 5½ Wt. 15.5 I.D. ____ Set at 2982 Perf. ____ To ____
Tubing 2 Wt. 4.7 I.D. ____ Set at 2869 Perf. ____ To ____
Gas Pay: From 2942 To 2954 L 2869 x G 0.669 = GL ____ Bar. Press 13.2
Producing Thru: Casing ____ Tubing X Type well Single
Series 40 Meter Run ____ Packer at ____ Single - Bradenhead-G.G. or G. O. Dual

FLOW DATA

Started Date	Started time	Taken Date	Taken time	Duration Hours	Type Taps	Line Size	Orfice Size	Static Press.	Differential	Flow Temp.
2-23	8:00 AM PM	2-24	8:00 AM PM	24	Flg.	4"	1.000	305.2	51.84	67

FLOW CALCULATIONS

Static Pressure p_f	Differential h_w	Meter Extension $p_f h_w$	24-Hour Coefficient	Gravity Factor F_g	Temp. Factor F_t	Compressability F_{pv}	Rate of Flow MCF/Da. @ 15.025 psia Q
305.2	51.84	125.8	6.135	0.9470	0.9933	1.030	747.8

SHUT-IN DATA

Shut-in Date	Shut-in Time	Press. Taken Date	Press. Taken Time	Duration Hours	Wellhead Pressure (Pc) psia Tubing	Wellhead Pressure (Pc) psia Casing	W.H. working Pressure (Pw) and (Pt) psia Tubing	W.H. working Pressure (Pw) and (Pt) psia Casing
2-24	AM	2-25	8:00 AM	24	843.2	844.2		
		2-26		48	220.2	844.2	357.2	639.2
	4:35 PM	2-27	PM	72	*NIL	844.2		

FRICTION CALCULATIONS (if necessary)

Be Measured

DELIVERABILITY CALCULATIONS

P_w 639.2 P_c 844.2 $P_w + P_c$ 0.7572

$1 - \frac{P_w}{P_c}$ 0.2428 $1 + \frac{P_w}{P_c}$ 1.7572 $\left(1 - \frac{P_w}{P_c}\right)\left(1 + \frac{P_w}{P_c}\right) = H$ 0.4266

.36 + H 0.8439 Log 9.926291 - 10 x (n) 0.819 = 9.939632 - 10

SUMMARY

P_c = 844.2 psia
Q = 747.8 MCF/Da.
P_w = 639.2 psia
P_d = 675.4 psia
D = 650.8 MCF/Da.

Company El Paso Natural Gas Company
Address P. O. Box 1384 - Jal, New Mexico
Agent and Title J. B. Munay Gas Tester
Witnessed ____
Company El Paso Natural Gas Company

Log Q = 2.873786
Log D = 12.813418 - 10
Antilog = 650.8 = D

REMARKS

* The 2½ pressure on this well did not have any pressure on 72 hour shut-in.

FORM 15-166R (5-58)

EL PASO NATURAL GAS COMPANY
State of New Mexico
One-point Back Pressure Test for Gas Wells
(Deliverability)

EXHIBIT NO.----------

Pool **Jalmat** Formation **Yates** County **Lea**
Initial **X** Annual ____ Special ____ Date of test **November 10-14, 1958**
Company **Jal Oil Company** Lease **Watkins** Well No. **2**
Unit **H** Sec. **35** Twp. **24** Rge. **36** Purchaser **El Paso Natural Gas Company**
Casing **5 1/2** Wt. **15.5#** I.D. ____ Set at **2982** Perf. ____ To ____
Tubing **2** Wt. **4.7#** I.D. ____ Set at **2869** Perf. ____ To ____
Gas Pay: From **2942** To **2951** L **2869** x G **.660 Assumed** GL **1894** Bar. Press **13.2**
Producing Thru: Casing ____ Tubing **X** Type Well **Single**
Series ____ Meter Run ____ Packer at ____ Single - Bradenhead-G.G. or G. O. Dual

FLOW DATA

Started Date	Started time	Taken Date	Taken time	Duration Hours	Type Taps	Line Size	Orfice Size	Static Press.	Differential	Flow Temp.
11-10-58	8:00 AM PM	11-11-58	8:00 AM PM	24	Flg.	4"	1.500	256.2	43.56	85

FLOW CALCULATIONS

Static Pressure p_f	Differential h_w	Meter Extension $p_f h_w$	24-Hour Coefficient	Gravity Factor F_g	Temp. Factor F_t	Compressability F_{pv}	Rate of Flow MCF/Da. @ 15.025 psia Q
256.2	43.56	105.64	13.99	.9535	.9768	1.022	1,406

SHUT-IN DATA

Shut-in Date	Shut-in Time	Press. Taken Date	Press. Taken Time	Duration Hours	Wellhead Pressure (Pc) psia Tubing	Wellhead Pressure (Pc) psia Casing	FLOW DATA W.H. working Pressure (Pw) and (Pt) psia Tubing	FLOW DATA W.H. working Pressure (Pw) and (Pt) psia Casing
11-11-58	8:00 AM PM	11-12-58 11-13-58 11-14-58	8:00 AM PM	24 48 72	723.2 712.2 633.2	728.2 745.2 747.2	376.2	584.2

FRICTION CALCULATIONS (if necessary)

Pw Measured.

DELIVERABILITY CALCULATIONS

P_w **584.2** P_c **747.2** $P_w + P_c$ **.7818**

$1 - \frac{P_w}{P_c}$ **.2182** $1 + \frac{P_w}{P_c}$ **1.7818** $\left(1 - \frac{P_w}{P_c}\right)\left(1 + \frac{P_w}{P_c}\right) = M.$ **.3888**

.36 + M **.9259** Log **9.966564-10** x (n) **.819** = **9.972652-10** +

SUMMARY

P_c = **747.2** psia
Q = **1,406** MCF/Da.
P_w = **584.2** psia
P_d = **597.8** psia
D = **1,320** MCF/Da.

Company **El Paso Natural Gas Company**
Address **P. O. Box 1384 - Jal, New Mexico**
Agent and Title **J. B. Murray**
Witnessed ____
Company ____

Log Q = **3.147985**
Log D = **13.120637**
Antilog = **1320** = D

REMARKS

Form 15-100 (9-54) EL PASO NATURAL GAS COMPANY EXHIBIT NO._____

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates County Lea

Initial X Annual _____ Special _____ Date of Test 8-22-58

Company Jal Oil Company, Inc. Lease Watkins Well No. 2

Unit H Sec. 35 Twp. 24 Rge. 36 Purchaser _____

Casing 5 1/2 Wt. 15.5 I.D. _____ Set at 2982 Perf. _____ To _____

Tubing 2 Wt. _____ I.D. _____ Set at 2869 Perf. _____ To _____

Gas Pay: From 2942 To 2954 L _____ x G _____ = GL _____ Bar. Press. 13.2

Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G. O. Dual

Date of Completion: 8-22-58 Packer: None

No.	Flow Data: [redacted] Line Size x [redacted] Orifice Size	Press. psig	Diff. hw	Temp. °F.	Tubing Data: Press. psig	Tubing Data: Temp. °F.	Casing Data: Press. psig	Casing Data: Temp. °F.	Duration of Flow Hr.
SI							1018		72
1.	4 x 2.000	285	4.41	81	660		838		24
2.	4 x 2.000	312	11.56	88	507		688		24
3.	4 x 2.000	323	3.6	76	440		583		24
4.									
5.									

No.	Coefficient (24-Hour) [redacted]	$\sqrt{h_w p_w}$	Pressure psia	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	25.98	36.25		.9804	.9608	1.025	895
2.	25.98	61.30		.9741	.9608	1.027	1507
3.	25.98	65.99		.9850	.9608	1.029	1644
4.							
5.							

Gas Liquid Hydrocarbon Ratio ____ Mcf/bbl. Specific Gravity Separator Gas _____

Gravity of Liquid Hydrocarbons _____ deg. Specific Gravity Flowing Fluid _____

P_c Measured $(1-e^{-s})$ _____ P_c 1031.2 P_c^2 1063.4

No.	[redacted] P_t (psia)	P_t^2	$P_c^2 - P_t^2$	F_cQ	$(F_cQ)^2$	$(F_cQ)^2(1-e^{-s})$	P_w^2	$P_c^2 - P_w^2$
1.	673.2	453.2	610.2				724.5	338.9
2.	520.2	270.6	792.8				491.7	571.7
3.	453.2	205.4	858.0				355.5	707.9
4.								
5.								

Well was flowing load oil and water

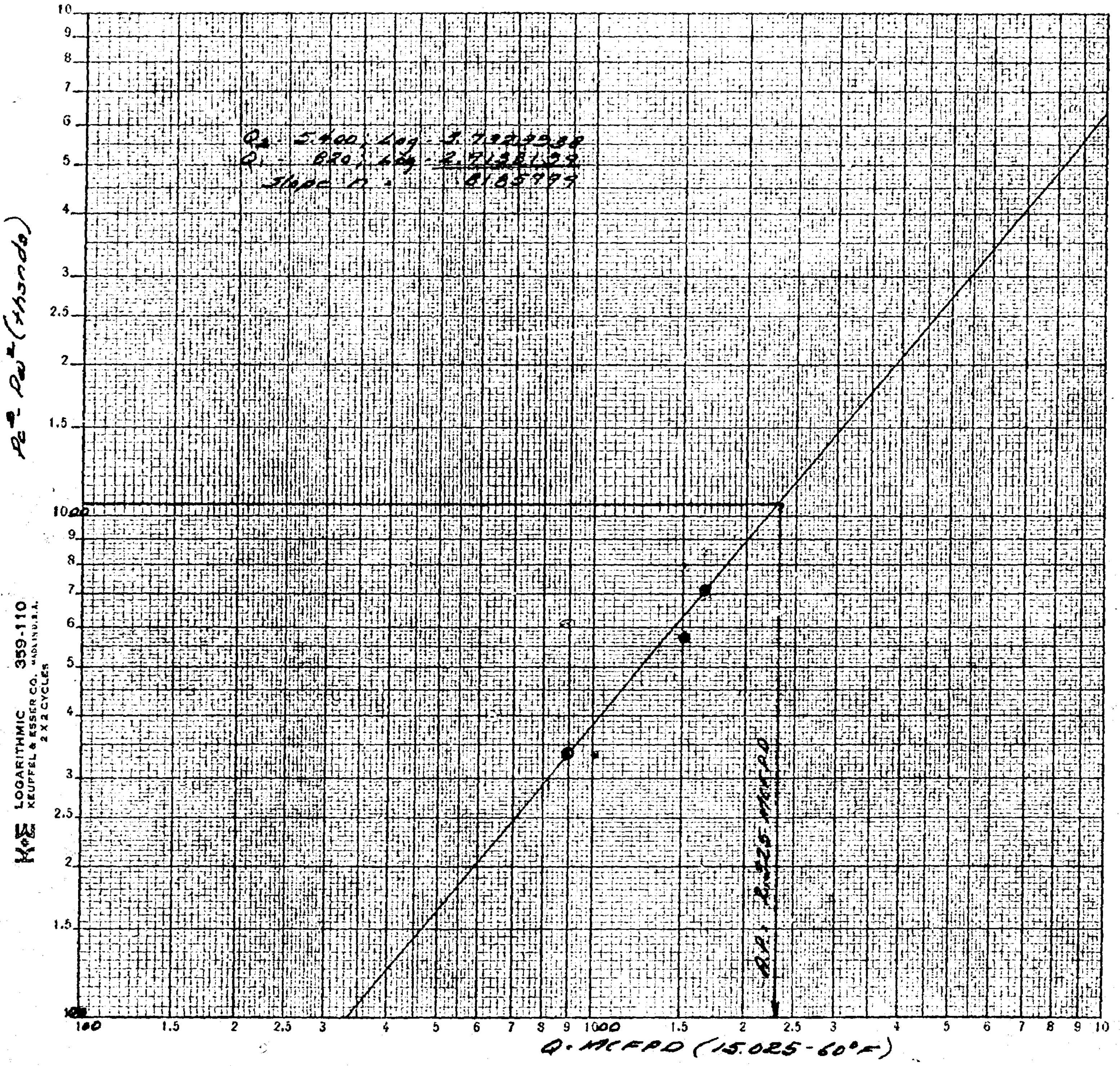
Wellhead Potential: 2,000 MCFPD; θ_t 50.5 ; n_t .819 Conducted by: H.H. Kerby

Potential: [redacted] MCFPD; θ 50.5 ; n .819 Witnessed by: _____

Calculated by: H.H. Kerby

EXHIBIT NO.____________

JAL OIL CO., INC
WATKINS #2
UNIT H, 35-24-36; LEA CO., N.M.
8-22-58



W. D. GIRAND
LOWELL STOUT
ROBERT F. PYATT

GIRAND & STOUT
LAWYERS
204 LEA COUNTY STATE BANK BUILDING
HOBBS, NEW MEXICO

TELEPHONE:
EXPRESS 3-9116
POST OFFICE BOX 1445

March 29, 1960

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

Attention: Mr. A. L. Porter

Gentlemen:

I am enclosing herewith application of Jal Oil Company in quadruplicate. I would appreciate this application being set for as early hearing as possible.

You will note in the application that we have requested that the subject wells be excused from regulatory action due to over-production or requirement of the taking of deliverability tests pending hearing on the application.

This is the application which I discussed briefly with you by phone today, and would appreciate any action taken to expedite and alleviate the situation.

Respectfully submitted.

GIRAND & STOUT

BY: [signature]

Docket Mailed 4-1-60

G/mc
Enclosures

cc: Jal Oil Company, Box 1744, Midland, Texas, attn. Howard Olsen

R. Olsen, Liberty Bank Bldg., Oklahoma City 2, Oklahoma

AIR MAIL

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

APPLICATION OF JAL OIL COMPANY FOR AN EXCEPTION TO RULE 10 OF ORDERS NO. R520 AND R967, AND FOR EXEMPTION FROM THE REQUIREMENTS OF RULE 6(c), ORDERS NO. R967 AND R1092A INSOFAR AS SAID ORDERS EFFECT THE JAL OIL COMPANY'S GAS WELLS DESIGNATED AS LEGAL #2, LOCATED IN THE NE/4 SE/4 OF SECTION 31; DYER #3 LOCATED IN THE SE/4 NE/4 OF SECTION 31; JENKINS #1 LOCATED IN THE SW/4 SW/4 OF SECTION 29; AND THE EVA OWENS #1 LOCATED IN THE SW/4 SW/4 OF SECTION 21, ALL IN TOWNSHIP 25 SOUTH, RANGE 37 EAST; AND THE WATKINS #2 LOCATED IN THE SE/4 NE/4 OF SECTION 35, TOWNSHIP 24 SOUTH, RANGE 36 EAST; ALL IN THE JALMAT GAS POOL, LEA COUNTY, NEW MEXICO, AND FOR RELIEF FROM ANY ORDER OR ACTION ON THE PART OF THE COMMISSION SHUTTING IN SAID WELLS.	)	CASE NO. 1941

COMES NOW the Jal Oil Company, a New Mexico corporation, with principal office in Jal, Lea County, New Mexico, and files this, its application for an exception to Rule 10 of Orders No. R520 and R967; exemption from Rule 6, sub-paragraph "c" of Orders R967 and R1092A, and for permanent relief from threatened shut in to any of the above designated gas wells, and for cause would show:

1.

That all of said wells are producing water in such quantities that in order to produce any gas the wells must be produced by mechanical means. That all of said wells are being mechanically produced, i.e., either by pumping or through the operation of a mechanical lift known as a free floating piston.

2.

That all of the above wells have been the subject matter of prior hearings before this Commission in the consolidated Case No. 1779.

3.

Applicant would show that in the use of the methods of production employed by Applicant, Applicant's well denominated as Dyer #3 has exceeded the allowable permitted by the Commission in Order No. R1519 wherein the Commission authorized it to make up its over-production at the rate of 75% of the well's current allowable. The control on the production of this gas, when considering the methods employed to produce the same, cannot be regulated to an extent required by the Commission without permanently damaging the productivity of this lease.

4.

That in connection with the operation of the Legal #2 Applicant has found that the present production method employed to produce this well will not allow Applicant to stay within the limits of the production authorized by the Commission in its Order No. R1519.

5.

In this connection, Applicant has maintained close production records on the subject wells from the date of the Commission's Order No. R1519, and believe that the facts surrounding the production of all of said wells will warrant the Commission in making an exception to Orders R520 and R967 covering or controlling the allowable of the subject wells.

6.

Applicant would further show the Commission that due to the characteristics of the subject wells in that all of said wells are making appreciable amounts of water and will not produce gas unless the encroaching water is continually removed from the well bore, the water will plug the well bore and destroy the wells' ability to produce gas. In this connection, Applicant would show that a continued shut in of a

well producing such as the wells covered by this application will result in a complete loss of the gas reserve and well. This was established by the fact that the Commission shut in Applicant's well known as "Repollo #1" and after Applicant was authorized to reproduce that well and attempted to bring the well back through pumping process over a period of several months, the well never was and isn't today capable of producing gas.

7.

Applicant would further show that the requirement of Order No. R967 and Order No. R1092A requiring a deliverability test to be taken annually should be suspended insofar as the subject wells are concerned for the reason that such a test made on these wells would result in the wells being unable to produce any gas, and would thereby discriminate against said wells, since 75% of the wells' allowable are determined on the wells' deliverability. The true capability of a well producing water and being produced through the means employed by Applicant could only be arrived at by taking a test on the total volume of gas produceable employing the artificial means.

Applicant would further show the Commission that it is charged by law with the obligation to protect the correlative rights of all producers, and is granted great latitude in assigning minimum allowables to prevent the premature abandonment of wells.

WHEREFORE, Applicant prays that this application be set down for hearing, and that upon the hearing the Commission grant unto Applicant:

1. That the subject wells be excused from any regulatory action due to over-production or requirement of the taking of deliverability tests until hearing is had on this application.

2. That the subject wells be exempted from the force and effect of Rule 10 of Order R520 and R967.

3. That the subject wells be excepted from the requirements of taking a deliverability test as required by Order R967 and R1092A.

4. That the deliverability tests required of a well producing under artificial means such as the subject wells, be allowed to establish their deliverability by a showing of the

total volume of gas produceable through the means employed and that this factor be used in place of the shut in procedure.

5. That the Commission set special allowables for gas wells producing under artificial means that will be fair, equitable, and just to all operators producing gas in such a manner.

6. That the Commission enter its order prohibiting the shut in of any of the subject wells without notice to Applicant and hearing thereon.

7. That the excess allowable attributable to the subject wells be excused, and that the Commission formulate a realistic allowable for the subject wells;

And for such other appropriate order as the Commission deems proper in order to prevent waste of the natural reserves and to protect the correlative rights of the Applicant.

GIRAND & STOUT

BY: _____

(ATTORNEYS FOR APPLICANT)
POST OFFICE BOX 1445,
HOBBS, NEW MEXICO

G/mc

No. 11-60

SUPPLEMENTAL DOCKET: REGULAR HEARING APRIL 13, 1960

Oil Conservation Commission 9 a.m., HOBBS AUDITORIUM, 1300 EAST SCHARBAUER, HOBBS, NEW MEXICO

CASE 1941: Application of Jal Oil Company for exceptions to various provisions of Orders R-520, R-967, and R-1092-A for 5 wells in the Jalmat Gas Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order cancelling the overproduction incurred by the following-described wells in the Jalmat Gas Pool:

Legal Well No. 2, NE/4 SE/4, Section 31
Dyer Well No. 3, SE/4 NE/4, Section 31
Jenkins Well No. 1, SW/4 SW/4, Section 29
Owens Well No. 1, SW/4 SW/4, Section 21
all in Township 25 South, Range 37 East, and the

Watkins Well No. 2, SE/4 NE/4, Section 35,
Township 24 South, Range 36 East.

Applicant further seeks an exception to the deliverability test requirements of said Orders for each of the above-described wells and also seeks an exemption from prorationing as required by the Special Rules and Regulations for the Jalmat Gas Pool.

No. 11-60

DOCKET: REGULAR HEARING APRIL 12, 1960

OIL CONSERVATION COMMISSION - 9 a.m. - HOBBS AUDITORIUM, 1300 EAST SCHARBAUER

HOBBS, NEW MEXICO

ALLOWABLE: (1) Consideration of the oil allowable for May, 1960

(2) Consideration of the allowable production of gas for May, 1960 from six prorated pools in Lea County, New Mexico; also consideration of the allowable production of gas from seven prorated pools in San Juan, Rio Arriba and Sandoval Counties, New Mexico for May, 1960.

CASE 1934: In the matter concerning purchaser prorationing by Indiana Oil Purchasing Company in all oil pools from which it purchases in New Mexico.

CASE 1935: In the matter concerning purchaser prorationing by Sinclair Crude Oil Company in all oil pools from which it purchases in New Mexico.

CASE 1936: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider changing the date of the Regular Commission Hearing in June, 1960, from the 15th to the 10th.

CASE 1937: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider consolidating the rules governing the six prorated gas pools in Southeast New Mexico into one order, and to consider consolidating the rules governing the seven prorated gas pools in Northwest New Mexico into one order.

CASE 1938: Southeastern New Mexico nomenclature case calling for an order creating new pools and extending existing pools in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico.

(a) Create a new pool classified as an oil pool for San Andres production, designated as the Button Mesa-San Andres Pool, and described as:

TOWNSHIP 8 SOUTH, RANGE 32 EAST, NMPM
SECTION 20: NE/4

(b) Create a new pool classified as an oil pool for San Andres production, designated as the Echol-San Andres Pool, and described as:

TOWNSHIP 10 SOUTH, RANGE 37 EAST, NMPM
SECTION 8: NW/4

(c) Create a new pool classified as an oil pool for Wolfcamp production, designated as the Echol-Wolfcamp Pool, and described as:

TOWNSHIP 11 SOUTH, RANGE 38 EAST, NMPM
SECTION 16: NW/4

(d) Create a new pool classified as an oil pool for Devonian production, designated as the Reeves-Devonian Pool, and described as:

TOWNSHIP 18 SOUTH, RANGE 35 EAST, NMPM
SECTION 24: NW/4

(e) Extend the Bluitt-Pennsylvanian Pool to include:

TOWNSHIP 8 SOUTH, RANGE 36 EAST, NMPM
SECTION 24: NE/4

(f) Extend the Caprock-Queen Pool to include:

TOWNSHIP 13 SOUTH, RANGE 31 EAST, NMPM
SECTION 3: SE/4

(g) Extend the West Crossroads-San Andres Pool to include:

TOWNSHIP 9 SOUTH, RANGE 35 EAST, NMPM
SECTION 20: E/2

(h) Extend the East Dayton (Grayburg) Pool to include:

TOWNSHIP 18 SOUTH, RANGE 27 EAST, NMPM
SECTION 28: NW/4
SECTION 29: NE/4

(i) Extend the Empire-Abo Pool to include:

TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM
SECTION 33: SW/4

(j) Extend the North Hackberry-Yates Pool to include:

TOWNSHIP 19 SOUTH, RANGE 31 EAST, NMPM
SECTION 20: SE/4
SECTION 29: N/2 NE/4 and NE/4 NW/4

(k) Extend the East Hightower-Devonian Gas Pool to include:

TOWNSHIP 12 SOUTH, RANGE 34 EAST, NMPM
SECTION 30: E/2 NE/4

(l) Extend the Hume-Queen Pool to include:

TOWNSHIP 16 SOUTH, RANGE 34 EAST, NMPM
SECTION 7: NE/4

(m) Extend the Jalmat Gas Pool to include:

TOWNSHIP 22 SOUTH, RANGE 35 EAST, NMPM
SECTION 3: N/2

(n) Extend the Leamex-Pennsylvanian Pool to include:

TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM
SECTION 23: NE/4

(o) Extend the Pearl-Queen Pool to include:

TOWNSHIP 19 SOUTH, RANGE 35 EAST, NMPM
SECTION 34: SE/4

(p) Extend the Ranger Lake-Pennsylvanian Pool to include:

TOWNSHIP 12 SOUTH, RANGE 34 EAST, NMPM
SECTION 22: SE/4

(q) Extend the East Red Lake-Queen Pool to include:

TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM
SECTION 2: W/2 NE/4

(r) Extend the Sawyer-San Andres Gas Pool to include:

TOWNSHIP 10 SOUTH, RANGE 38 EAST, NMPM
SECTION 4: NW/4

(s) Extend the Sugart-Pennsylvanian Gas Pool to include:

TOWNSHIP 18 SOUTH, RANGE 31 EAST, NMPM
SECTION 26: S/2
SECTION 27: SE/4

(t) Extend the Tubb Gas Pool to include:

TOWNSHIP 22 SOUTH, RANGE 38 EAST, NMPM
SECTION 28: SW/4

(u) Extend the Turkey Track Pool to include:

TOWNSHIP 18 SOUTH, RANGE 29 EAST, NMPM
SECTION 28: N/2 and SE/4

CASE 1939: Northwestern New Mexico nomenclature case calling for an order creating new pools and extending existing pools in San Juan and Rio Arriba Counties, New Mexico.

(a) Create a new pool classified as an oil pool, designated as the Chiquito-Gallup Oil Pool and described as:

TOWNSHIP 26 NORTH, RANGE 1 EAST, NMPM,
SECTION 5: NE/4

(b) Extend the Pine Lake-Pictured Cliffs Pool to include:

TOWNSHIP 26 NORTH, RANGE 2 WEST, NMPM
SECTION 30: All (partial)

(c) Extend the Tapacito-Pictured Cliffs Pool to include:

TOWNSHIP 27 NORTH, RANGE 5 WEST, NMPM
SECTION 12: SW/4
SECTION 13: NW/4

(d) Extend the West Kutz-Pictured Cliffs Pool to include:

TOWNSHIP 27 NORTH, RANGE 12 WEST, NMPM
SECTION 9: SE/4

(e) Extend the Blanco-Mesaverde Pool to include:

TOWNSHIP 32 NORTH, RANGE 13 WEST, NMPM
SECTION 26: W/2

(f) Extend the Angels Peak-Gallup Oil Pool to include:

TOWNSHIP 27 NORTH, RANGE 10 WEST, NMPM
SECTION 19: SE/4
SECTION 29: NW/4
SECTION 30: NE/4

(g) Extend the Horseshoe-Gallup Oil Pool to include:

TOWNSHIP 30 NORTH, RANGE 16 WEST, NMPM
SECTION 10: S/2 SW/4

TOWNSHIP 31 NORTH, RANGE 16 WEST, NMPM
SECTION 27: SE/4 NW/4, NE/4 SW/4, & SE/4

(h) Extend the Verde-Gallup Oil Pool to include:

TOWNSHIP 31 NORTH, RANGE 14 WEST, NMPM
SECTION 30: S/2 SE/4
SECTION 31: NE/4 NE/4

(i) Extend the Angels Peak-Dakota Pool to include:

TOWNSHIP 26 NORTH, RANGE 9 WEST, NMPM
SECTION 6: W/2
SECTION 7: W/2

TOWNSHIP 26 NORTH, RANGE 10 WEST, NMPM
SECTION 1: All

TOWNSHIP 27 NORTH, RANGE 10 WEST, NMPM
SECTION 19: E/2
SECTION 20: All

(j) Extend the South Blanco-Dakota Pool to include:

TOWNSHIP 27 NORTH, RANGE 6 WEST, NMPM
SECTION 19: W/2
SECTION 27: S/2

TOWNSHIP 27 NORTH, RANGE 7 WEST, NMPM
SECTION 24: S/2

(k) Extend the West Kutz-Dakota Pool to include:

TOWNSHIP 28 NORTH, RANGE 13 WEST, NMPM
SECTION 9: All (partial)
SECTION 10: All (partial)
SECTION 15: All
SECTION 16: N/2

TOWNSHIP 29 NORTH, RANGE 13 WEST, NMPM
SECTION 27: All
SECTION 28: All
SECTION 33: All
SECTION 34: W/2

CASE 1893: (De Novo)

Application of Petro-Atlas, Inc. for a hearing de novo before the Oil Conservation Commission in Case No. 1893, Order No. R-1619, which was an application to cancel the overproduction charged against one gas well in the South Blanco-Pictured Cliffs Pool, San Juan County, New Mexico. Said Order No. R-1619 denied the requested relief.

ig/

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

April 27, 1960

COPY

Mr. W. D. Girand
Girand & Stout
Box 1445
Hobbs, New Mexico

Dear Sir:

On behalf of your client, Jal Oil Company, we enclose two copies of Order R-1655 in Case 1941 issued by this Commission on April 25, 1960.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

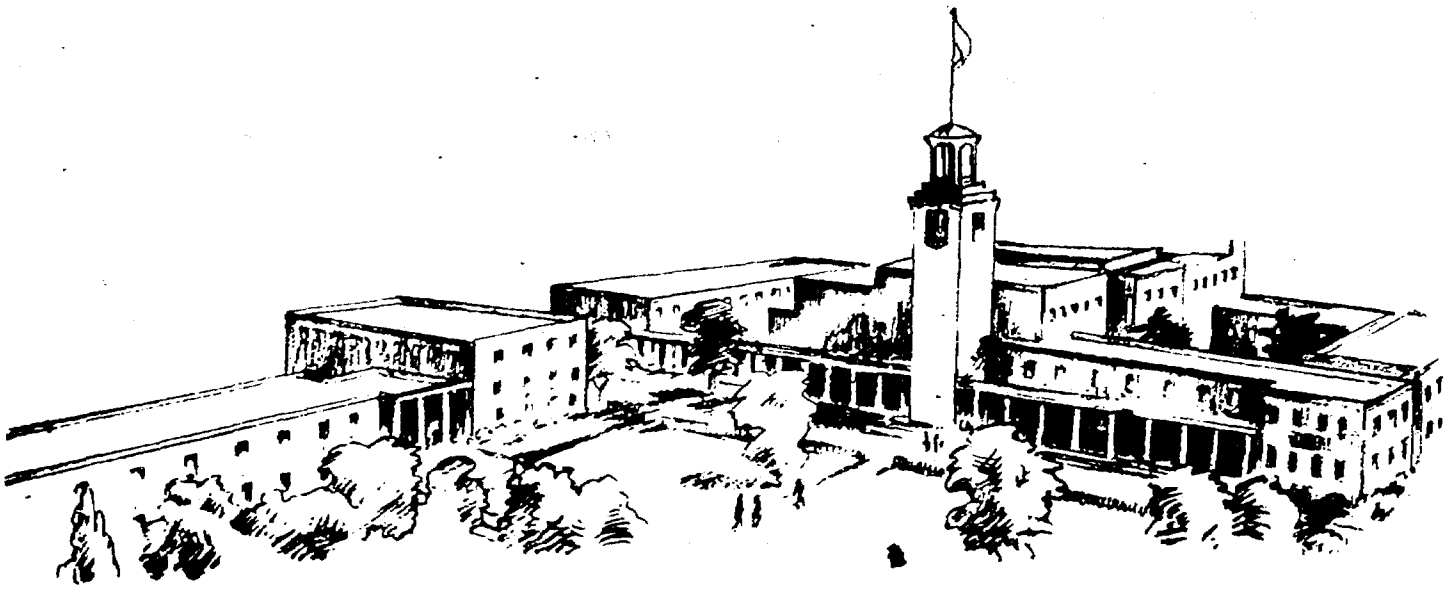
Enclosures: (2)

EXHIBIT NO._____

SOUTHEAST GAS PRORATION SCHEDULE

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 1
CASE 1944

NEW MEXICO
OIL CONSERVATION COMMISSION



ORDER NO. AG-13-4

APRIL 1960

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

ORDER NO. AG-13-4

SUPPLEMENTARY GAS PRORATION ORDER FOR THE MONTH OF APRIL, 1960

The Commission held public hearing at Santa Fe, New Mexico, on March 16, 1960, at 9 o'clock a.m., pursuant to legal notice, for the purpose of setting the allowable production of gas from the following six gas pools in Lea County, New Mexico, for the month of April, 1960.

Blinebry, Crosby-Devonian, Eumont, Jalmat, Justis, and Tubb

NOW, on this day the Commission, a quorum being present, having considered the supplementary nominations of purchasers, the capacity of producing wells, and being otherwise fully advised in the premises,

FINDS:

(1) That total nominations of purchasers of gas from the above-listed six gas pools for the month of April, 1960, is 16,470,750 MCF. The individual pool nominations, which total 16,470,750 MCF, are as follows:

Blinebry	2,282,430 MCF
Crosby-Devonian	930,660 MCF
Eumont	5,380,920 MCF
Jalmat	5,613,940 MCF
Justis	283,330 MCF
Tubb	1,979,470 MCF

(2) The potential producing capacity of all gas wells in the six gas pools listed above is in excess of the nominations of purchasers of gas, and in order to prevent waste and protect correlative rights, the production of gas from the above-listed six gas pools should be limited, allocated, and distributed during the month of April, 1960.

(3) That all producing gas wells, together with the expected completed or recompleted wells in the six gas pools listed above, can produce a total of 16,470,750 MCF without causing waste during the month of April, 1960, and an allocation based upon such production would be reasonable and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That for the month of April, 1960, the allowable production to be assigned the six allocated gas pools in

Lea County, New Mexico, be and the same hereby is as follows:

Blinebry	2,282,430 MCF
Crosby-Devonian	930,660 MCF
Eumont	5,380,920 MCF
Jalmat	5,613,940 MCF
Justis	283,330 MCF
Tubb	1,979,470 MCF

(2) That the allocation hereby set for the month of April, 1960, in the six allocated pools in Lea County, New Mexico, shall be in accordance with the provisions of Orders R-520, R-586, R-586-B, R-610, and R-639-A, and the Commission's Rules and Regulations.

(3) A proration schedule, duly prepared by the Commission and thereafter adopted for the month of April, 1960, is hereto attached and made a part hereof; it distributes and allocates the allowable production among the gas wells in the six gas pools listed above for the period stated, in accordance with the Rules and Regulations and Orders R-520, R-586, R-586-B, R-610, and R-639-A.

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

DONE at Santa Fe, New Mexico, on this 18th day of March, 1960.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JOHN BURROUGHS, Chairman

MURRAY E. MORGAN, Member

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

S E A L

esr/

Lea County, New Mexico, be and the same hereby is as follows:

Blinebry	2,282,430 MCF
Crosby-Devonian	930,660 MCF
Eumont	5,380,920 MCF
Jalmat	5,613,940 MCF
Justis	233,330 MCF
Tubb	1,979,470 MCF

(2) That the allocation hereby set for the month of April, 1960, in the six allocated pools in Lea County, New Mexico, shall be in accordance with the provisions of Orders R-520, R-586, R-586-B, R-610, and R-639-A, and the Commission's Rules and Regulations.

(3) A proration schedule, duly prepared by the Commission and thereafter adopted for the month of April, 1960, is hereto attached and made a part hereof; it distributes and allocates the allowable production among the gas wells in the six gas pools listed above for the period stated, in accordance with the Rules and Regulations and Orders R-520, R-586, R-586-B, R-610, and R-639-A.

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

DONE at Santa Fe, New Mexico, on this 18th day of March, 1960.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JOHN BURROUGHS, Chairman

MURRAY E. MORGAN, Member

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

S E A L

esr/

APRIL 1960 SOUTHEAST GAS PRORATION POOL BALANCING SCHEDULE

	Blinebry Pool		Crosby Devonian Pool		Eumont Pool	
April Nominations		2,282,430		930,660		5,380,920
Feb. Net Allow.	2,518,151		1,033,955		7,259,095	
Feb. Production	2,095,030	- 423,121	859,866	- 194,089	3,446,872	- 3,812,223
March Nominations	2,309,330		915,110		5,255,390	
March Current Allow.	2,466,389	- 157,059	729,235	+ 185,875	2,867,973	+ 2,387,417
Total April Pool Alloc.		1,702,250		922,446		3,956,114
Less: April Low Acreage N-M	-0-		-0-		-0-	
Less: April Marg. Allocation	15,720	15,720	-0-	-0-	33,612	33,612
Total April N-M Pool Alloc.		1,686,530		922,446		3,922,502
N-Marg. Acreage Alloc. Factor	12923.58		70957.38		7990.27	
N-Marg. A x D Alloc. Factor						
Actual Pool Allocation		1,702,298		922,441		3,956,014
April Supple. to Feb. Net Allow.		+ 5,184		-0-		- 23,359
April Supple. to March Current Allow.		-0-		-0-		+ 3,710
Participating N-Marg. Acre Factors		130.48		13.00		490.91
Total Number of Wells		147		13		390

	Justis Pool		Tubb Pool		Jalmat Pool	
April Nominations		283,330		1,979,470		5,613,940
Feb. Net Allow.	392,171		2,703,686		2,725,137	
Feb. Production	200,946	- 191,225	975,723	-1,727,963	6,360,562	+ 3,635,425
March Nominations	299,200		1,961,850		5,862,470	
March Current Allow.	120,672	+ 178,528	1,079,746	+ 882,104	8,569,906	- 2,707,436
Total April Pool Alloc.		270,633		1,133,611		6,541,929
Less: April Low Acreage N-M	-0-		-0-		-0-	
Less: April Marg. Alloc.	8,836	8,836	20,683	20,683	75,945	75,945
Total April N-M Pool Alloc.		261,797		1,112,928		6,465,984
N-Marg. Acreage Alloc. Factor	15399.82		8887.07		4063.18	
N-Marg. A x D Alloc. Factor					5.768057	
Actual Pool Allocation		270,636		1,133,610		6,541,926
April Supple. to Feb. Net Allow.		-0-		+ 17,966		- 50,484
April Supple. to March Current Allow.		-0-		-0-		- 31,039
Participating N-Marg. Acre Factors		17.00		125.23		397.84
Total Number of Wells		11		143		385

ALL FIGURES ARE IN MCF GAS

SOUTHEAST GAS PRORATION SCHEDULE

EXPLANATION OF CURRENT STATUS CODE COLUMN

N — NON-MARGINAL
Signifies a non-marginal well with allocation based upon the appropriate formula.

M — MARGINAL
Signifies a marginal well with a constant allowable granted on the basis of the highest producing month during the preceding six months period.

NC — NEW CONNECTION
Signifies newly connected non-marginal wells.

P — SIX TIMES OVER-PRODUCED FLAG
This flag in the over/under produced field of the schedule signifies those wells which have over produced six or more times the latest current allowable shown in the schedule.

EN — EXEMPT FROM TOTAL SHUT-IN
Identifies a well which, after notice and hearing, has been granted an exception to the overproduction shut-in provisions. Notwithstanding the current allowable shown in this proration schedule, these wells shall not produce more gas each month than provided for in the order covering the well so identified. Violation of these orders will not be tolerated.

NOTE: Some of the wells listed on this schedule may have been shut-in by the Commission. In all such cases both the operator and transporter are individually notified by supplements which take precedence over this schedule. In no event shall a shut-in well be produced until released by the Commission.

SOUTHEAST GAS PRORATION FACTORS BY PIPELINES

ACRE FACTORS		ACREAGE			ALLOCATION		NOMINATIONS	N-MARG.
N-MARGINAL	TOTAL	N-MARGINAL	TOTAL		MARGINAL	TOTAL	TOTAL	WELLS
BLINEBRY POOL								
CONTINENTAL								
1.00	1.00	160	160			12926	20000	1
EL PASO								
61.74	61.74	9879	9879			798049	1571430	67
MOBIL								
.75	.75	120	120			9694	27000	1
PERMIAN								
65.24	67.24	10439	10759		0563	851852	621000	72
SHELL							15000	
SKELLY OIL CO								
.00	1.00		160		3147	3147		
SO UNION								
1.75	1.75	280	280			22620	28000	2
WARREN PET								
.00	1.00		160		4010	4010		
TOTAL								
130.48	134.48	20878	21518		15720	1702298	2282430	143
CROSBY DEVONIAN POOL								
EL PASO								
13.00	13.00	2080	2080			922441	930660	13
TOTAL								
13.00	13.00	2080	2080			922441	930660	13
EUMONT POOL								
CONTINENTAL								
.00	.00						25000	
EL PASO								
212.37	217.31	33929	34729		9471	1705803	2650000	165
GULF							4000	
PERMIAN								
254.38	257.16	40704	41149		16633	2049182	2481000	189
PHILLIPS								
5.75	6.25	920	1000		7508	53451	74000	6
SKELLY								
.50	.50	80	80			3995		1
SO UNION								
15.97	15.97	2553	2553			127603	142500	20
WARREN PET								
2.00	2.00	320	320			15980		2
TIDEWATER								
							4420	
TOTAL								
490.91	499.19	78506	79831		33612	3956085	5380920	383
JUSTIS POOL								
EL PASO								
17.00	18.00	2720	2880		8836	270636	283330	10
TOTAL								
17.00	18.00	2720	2880		8836	270636	283330	10

SOUTHEAST PRORATED GAS POOLS — YEAR: 1960 — PAGE: 1

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
BLINEBRY POOL									
CONTINENTAL OIL COMPANY PIPELINE SYSTEM									
CONTINENTAL OIL									
HAWK B 9									
2J 92137	N	100	76926-		76926 EX	18782	58144-	12926	160
PIPELINE TOTAL			76926-		76926 EX	18782	58144-	12926	
EL PASO NATURAL GAS PIPELINE SYSTEM									
CITIES SERVICE									
STATE S									
1E15 2137	N	50	3361-	10866	14227 EX	9391	4836-	6463	80
CONTINENTAL OIL									
ELLIOTT A 15 UNIT									
6P15 2237	N	100	11365-	27674	39039 EX	18782	20257-	12926	160
HAWK B 3									
3R 32137	N	100	47884-	2298	50182 EX	18782	31400-	12926	160
HAWK B 9									
1F 92137	N	100	18118-	36993	55111 EX	18782	36329-	12926	160
6N 92137	N	100	52743	8245	44498	18782	63280	12926	160
LOCKHART A 27									
5A27 2137	N	100	32405-	3254	35659 EX	18782	16877-	12926	160
7D27 2137	N	100	26276-	583	26859 EX	18782	8077-	12926	160
LOCKHART A 35									
1D35 2137	N	100	1199-	26832	28031 EX	18782	9249-	12926	160
LOCKHART B 1									
3E11 2137	N	100	7320-	41965	49285 EX	18782	30503-	12926	160
LOCKHART B 35									
2B35 2137	N	100	33637	11632	22005	18782	40787	12926	160
LJ NOLAN UNIT									
1M11 2137	N	100	13560-	22331	35891 EX	18782	17109-	12926	160
STATE									
2E10 2137	N	100	18777	22693	3916 EX	18782	14866	12926	160
WANTZ									
2L21 2137	N	100	30994	15593	15401	18782	34183	12926	160
GULF OIL CORP									
VIVIAN									
5D30 2238	N	100	22369-	18475	40844 EX	18782	22062-	12926	160
HARPER OIL CO									
SARKEYS									
1G26 2137	N	100	5551-	18428	23979 EX	18782	5197-	12926	160
HUMBLE OIL REF CO									
BLINEBRY GAS UNIT									
1O10 2137	N	100	32276-	43578	75854 EX	18782	57072-	12926	160
WBFEERREL									
2I22 2237	N	100	48097	8152	39945	18782	58727	12926	160
LGREENWOOD									
11I 92237	N	100	10490	23903	13413 EX	18782	5369	12926	160
HARDISON B									
4B34 2137	N	100	29536-	2620	32156 EX	18782	13374-	12926	160
8I27 2137	N	100	6533-	14960	21493 EX	18782	2711-	12926	160
NEW MEXICO STATE									
12A 22337	N	100	1664-	22032	23696 EX	18782	4914-	12926	160
14C 22337	N	100	83653-	6055	084258 EX	18782	65476-	12926	160
12LP 22337	N	100	14250-	15426	29676 EX	18782	10894-	12926	160
23P 22337	N	100	4417-	21417	25834 EX	18782	7052-	12926	160
NEW MEXICO STATE V									
11K10 2137	N	75	593-	22643	23236 EX	14086	9150-	9694	120

BLINEBRY POOL EL PASO SYSTEM CTD YEAR:1960 PAGE: 2

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
PENROSE									
1B132237	N	100	3341	27765	24424EX	18782	5642-	12926	160
N B HUNT									
M WEATHERLY									
3C212137	N	100	17493	16163	1330	18782	20112	12926	160
WEATHERLY E									
1G212137	N	100	39931	7699	32232	18782	51014	12926	160
KIRBY PET CO									
WILLIAMSON									
2C232137	N	100	24580-	2370	26950EX	18782	8168-	12926	160
MARKM CONE REDFRN									
EUBANKS									
1M142137	N	75	4439-	27614	32053EX	14086	17967-	9694	120
MORAN OIL CORP									
OWEN									
2P142137	N	100	7988	23020	15032EX	18782	3750	12926	160
OHIO OIL CO									
MUNEY									
2K242237	N	100	3645-	42620	46265EX	18782	27483-	12926	160
3N242237	N	100	21036-	29158	50194EX	18782	31412-	12926	160
2H232237	N	100	9623-	14581	24204EX	18782	5422-	12926	160
OLSEN OILS INCORPORATED									
BOYD									
S E CONE									
1L262137	N	50	17781-	4249	22030EX	9391	12639-	6463	80
DANGLADE									
2P132237	N	100	4718-	30895	35613EX	18782	16831-	12926	160
DANGLADE UNIT									
1L132237	N	100	5875-	23049	28924EX	18782	10142-	12926	160
DRINKARD									
1E252237	N	100	10522-	46529	57051EX	18782	38269-	12926	160
OWEN									
1M252137	N	100	94329	4050	90279	18782	109061	12926	160
SIMS									
1F252237	N	100	10058-	24556	34614EX	18782	15832-	12926	160
J. W. PEERY									
HARDY FED									
2P192137	N	50	3837	13147	9310EX	9391	81	6463	80
LOCKHART									
1L172137	N	50	5184	13202	8018EX	9391	1373	6463	80
N G PENROSE INC									
HARDY									
1N172137	N	75	10069-	607	10676EX	14086	3410	9694	120
PHILLIPS PET CO									
SIMS									
1L242237	N	50	14312-	4803	19115EX	9391	9724-	6463	80
4D242237	N	100	16750	24966	8216EX	18782	10566	12926	160
SAMEBAN OIL CORP									
PARKS									
6L142237	N	100	5721-	27116	32837EX	18782	14055-	12926	160
PARKS A									
5O142237	N	100	6675-	33818	40493EX	18782	21711-	12926	160
SHELL OIL CO									
ARGO									
3K152137	N	100	13967-	2380	16347EX	18782	2435	12926	160

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
ARGO A									
5F 22 21 37	N	100	34678-	14287	48965 EX	18782	30183-	12926	160
LIVINGSTON N									
8N 32 21 37	N	100	33173	13950	19223	18782	38005	12926	160
9V 32 21 37	N	100	2664	62757	60093 EX	18782	41311-	12926	160
LONG									
5N 11 22 37	N	100	20141-	8126	28267 EX	18782	9485-	12926	160
SARKEYS									
2K 23 21 37	N	100	4223-	6364	10587 EX	18782	8195	12926	160
STATE 15									
2H 15 21 37	N	50	4772-	8435	13207 EX	9391	3816-	6463	80
TAYLOR GLE N									
1K 32 21 37	N	75	14965-	45449	P060414 EX	14086	46328-	9694	120
TURNER									
5I 22 21 37	N	100	91828-	9750	P101578 EX	18782	82796-	12926	160
13N 22 21 37	N	100	42000-	11633	53633 EX	18782	34851-	12926	160
SINCLAIR OIL GAS									
BOYD									
4F 23 22 37	N	100	11265	13119	1854 EX	18782	16928	12926	160
SARKEYS									
1J 23 21 37	N	100	19487-	15085	34572 EX	18782	15790-	12926	160
TURNER GAS UNIT									
3N 29 21 37	N	100	104250		104250	18782	123032	12926	160
YORK GAS UNIT									
1H 20 21 37	N	50	20365-	177	20542 EX	9391	11151-	6463	80
SUNRAY MID CONT									
WALTER LYNCH									
4L 12 23 37	N	100	9441-	31127	40568 EX	18782	21786-	12926	160
EVA OWENS									
3C 32 23 37	N	49	3882	2975	907	9203	10110	6334	79
TIDEWATER OIL CO									
SARKEYS									
3C 26 21 37	N	100	14377-	27011	41388 EX	18782	22606-	12926	160
STATE Q									
1N 36 21 37	N	75	2915-	44886	47801 EX	14086	33715-	9694	120
STATE S									
2C 15 21 37	N	100	34506-	1226	35732 EX	18782	16950-	12926	160
WESTERN OIL FIELD									
DRINKARD									
4H 25 22 37	N	100	3461-	49539	53000 EX	18782	34218-	12926	160
PIPELINE TOTAL			303685-	1253451	1557136 EX	1159598	397538-	798049	
MOBIL OIL COMPANY PIPELINE SYSTEM									
SOCONY MOBIL OIL COMPANY INCORPORATED									
E O CARSON									
19L 28 21 37	N	75	53408-		53408 EX	14086	39322-	9694	120
PIPELINE TOTAL			53408-		53408 EX	14086	39322-	9694	
PERMIAN BASIN PIPELINE SYSTEM									
AMERADA PETROLEUM									
A B BAKER									
31 10 22 37	N	50	23749	12260	11489	9391	20880	6463	80
J G RANDLE A UNIT									
1F 20 21 37	N	50	27377	6366	21011	9391	30402	6463	80
STATE DA									
4I 16 21 37	N	100	40354	7506	32848	18782	51630	12926	160
E W WALDEN									
7N 15 22 37	N	100	49080	15153	33927	18782	52709	12926	160
E WOOD									

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
10H22237	N	100	51270	11860	39410	18782	58192	12926	160
ANDERSON PRICHARD									
LEE									
11232237	N	75	15441	13115	2326	14086	16412	9694	120
CITIES SERVICE									
BRUNSON B									
6M 32237	N	100	81248	5339	75909	18782	94691	12926	160
BRUNSON C									
7P 32237	N	100	40098	11987	28111	18782	46893	12926	160
STATE D									
1F32238	N	100	46175	20091	26084	18782	44866	12926	160
GETTY OIL CO									
D C HARDY									
5P20237	N	100	35064	11265	23799	18782	42581	12926	160
GULF OIL CORP									
AMANDA									
1J25237	N	100	28684	12305	16379	18782	35161	12926	160
T R ANDREWS									
2G32238	N	100	35315	13312	22003	18782	40785	12926	160
BOYD									
3K23237	N	100	38410	13525	24885	18782	43667	12926	160
J N CARSON									
4O28237	N	100	48831	8745	40086	18782	58868	12926	160
J N CARSON NCT									
6P28237	N	75	30732	3718	27014	14086	41100	9694	120
DRINKARD B									
1P30238	N	100	17641	14312	3329	18782	22111	12926	160
EAVES									
6A10237	N	100	42796	15149	27647	18782	46429	12926	160
EUBANK									
4H22237	N	100	47834	9248	38586	18782	57368	12926	160
EUNICE KING									
5F28237	N	100	41614	12424	29190	18782	47972	12926	160
9G28237	N	100	37137	11261	25876	18782	44658	12926	160
GUTMAN									
2C19238	N	100	45620	12302	33318	18782	52100	12926	160
GUTMAN B									
1N19238	N	100	46337	13030	33307	18782	52089	12926	160
C L HARDY									
5L20237	N	100	45159	19670	25489	18782	44271	12926	160
HUGH									
6H14237	N	100	44529	12275	32254	18782	51036	12926	160
7C14237	N	100	43882	11161	32721	18782	51503	12926	160
H LEONARD E									
4A16237	N	100	46777	11591	35186	18782	53968	12926	160
MARK									
7H 32237	N	100	45693	5958	39735	18782	58517	12926	160
W T MCCORMACK									
9D32237	N	100	57729	8530	49199	18782	67981	12926	160
MARK OWEN									
6O34237	N	100	52736	9396	43340	18782	62122	12926	160
ALICE D ADDOCK									
5B12237	N	100	104186	7048	97138	18782	115920	12926	160
SCARBOROUGH									
3I31238	N	100	53587	24616	28971	18782	47753	12926	160
4F31238	N	100	45563	17886	27677	18782	46459	12926	160
VIVIAN									
4H30238	N	100	48429	2573	45856	18782	64638	12926	160
OHIO OIL CO									
EDITH BUTLER A									
1L18238	M	100	466	466		1179	1179	1179	160
LYNCH WALTER									

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
4D 1 2 2 3 7 MARSHALL B	N	100	43752	11168	32584	18782	51366	12926	160
4L 27 21 37 OWEN	N	100	30866	9208	21658	18782	40440	12926	160
2M 35 21 37 WM TURNER	N	100	48281	12290	35991	18782	54773	12926	160
3I 29 21 37 WARLICK C	N	50	17319	1270	16049	9391	25440	6463	80
2O 15 21 37 LOU WORTHAM	N	100	46082	9651	36431	18782	55213	12926	160
9E 11 22 37	N	100	40531	14872	25659	18782	44441	12926	160
12H 1 1 22 37 PAN AMERICAN	N	100	48106	8900	39206	18782	57988	12926	160
2F 3 22 37 EVA OWEN B	N	50	30186	5899	24287	9391	33678	6463	80
4N 34 21 37 SOUR OYALTY	N	100	50585	10774	39811	18782	58593	12926	160
5Q 4 21 37 STATE	N	100	45797	6883	38914	18782	57696	12926	160
6H 9 21 37 STATE	N	100	47721	11087	36634	18782	55416	12926	160
4F 16 21 37 STATE	N	100	49444	8297	41147	18782	59929	12926	160
5E 36 21 37 WH TURNER	N	100	45907	10185	35722	18782	54504	12926	160
3P 29 21 37 NGPENROSE INC	N	50	23626	7963	15663	9391	25054	6463	80
3 12 22 37 TINN	N	100	40116	13692	26424	18782	45206	12926	160
5P 10 22 37 ELLIOTT	N	75	28098	4569	23529	14086	37615	9694	120
1E 1 22 37	N	100	15002	14933	69	18782	18851	12926	160
INCLAIR OIL GAS SOYBEAN									
2B 32 21 37 STATE	N	75	42103	6375	35728	14086	49814	9694	120
2L 26 21 37 STATE	N	100	45290	5521	39769	18782	58551	12926	160
3K 36 21 37	N	100	41505	9464	32041	18782	50823	12926	160
SKELLY OIL CO BAKER B									
15J 10 22 37	N	150	64454	19491	44963	28173	73136	19388	240
SOCONY MOBIL OIL COMPANY INCORPORATED									
SRCUNS YON 9 22 37	N	100	45220	8086	37134	18782	55916	12926	160
6E 1 22 37	N	100	37290	2377	34913	18782	53695	12926	160
8F 33 21 37 ELLIS	N	100	93728	13382	80346	18782	99128	12926	160
2H 33 21 37	N	49	22873	16898	5975	9203	15178	6334	79
7B 33 21 37	M	100	2986	2986		7384	7384	7384	160
8J 11 22 37 MARSH	N	100	37552	9735	27817	18782	46599	12926	160
3D 34 21 37 WILLIAMSON	N	100	38722	13741	24981	18782	43763	12926	160
1A 2 21 37	N	25	21114-		PO21114EX	4695	16419-	3231	40
SUNRAY MID CONT LINAM HARDY									
1A 29 21 37	N	100	38898	18187	20711	18782	39493	12926	160

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE +	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION +	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE +	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
STATE LAND 15									
2N1621 37	N	50	22894	8869	14025	9391	23416	6463	80
TEXACO									
BLINEBRY NCT 1 FD									
10192238	N	100	48635	20918	27717	18782	46499	12926	160
T P COAL AND OIL									
ELLIOTT B 13 FED									
1E1322 37	N	100	53946	11801	42145	18782	60927	12926	160
ELLIOTT 4 B 15									
4A1522 37	N	100	23063	17769	5294	18782	24076	12926	160
WALDEN C									
3C1522 37	N	100	43048	14603	28445	18782	47227	12926	160
WESTERN DEVELOPMENT COMPANY OF DELAWARE									
GULF STATE									
1C1622 37	N	100	55198	25143	30055	18782	48837	12926	160
WESTERN OIL FIELD									
GULF DRINKARD									
1M3022 38	N	100	20666	23205	2539 CX	18782	16243	12926	160
GULF HILL									
1R 4 21 37	N	50	24702	6419	18283	9391	27674	6463	80
CARL J. WESTLUND INCORPORATED									
DANGLADE UT									
1B24 22 37	N	50	28379	11176	17203	9391	26594	6463	80
PIPELINE TOTAL			2921000	813230	2107770	1233898	3341668	851852	
SKELLY OIL COMPANY PIPELINE SYSTEM									
N G PENROSE INC									
WARLICK BLINEBRY									
1A1921 37	M	100	4340	4340		3147	3147	3147	160
PIPELINE TOTAL			4340	4340		3147	3147	3147	
SOUTHERN UNION GAS COMPANY PIPELINE SYSTEM									
AZTEC OIL AND GAS									
DAURON B									
2A1021 37	N	100	11709	9369	2340	18782	21122	12926	160
FAMARISS PET CORP									
HILL									
1J 42137	N	75	11528	11047	481	14086	14567	9694	120
PIPELINE TOTAL			23237	20416	2821	32868	35689	22620	
WARREN PETROLEUM COMPANY PIPELINE SYSTEM									
GULF OIL CORP									
R E COLE A									
MC CORMACK									
10H3221 37	M	100	3593	3593		4010	4010	4010	160
PIPELINE TOTAL			3593	3593		4010	4010	4010	
POOL TOTAL			2518151	2095030	423121	2466389	2889510	1702298	
CROSBY DEVONIAN POOL									
EL PASO NATURAL GAS PIPELINE SYSTEM									
ANDERSON PRICHARD									

CROSBY DEVONIAN POOL EL PASO SYSTEM CTD — YEAR: 1960 — PAGE: 7

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
AM REPUBLIC FED									
1 K 28 25 37	N	100	30162	35282	5120 EX	56095	50975	70957	160
COLL									
1 H 29 25 37	N	100	57182	96899	39717 EX	56095	16378	70957	160
EL PASO NAT GAS									
GREGORY FED									
3 J 33 25 37	N	100	148476	12632	135844	56095	191939	70957	160
4 K 33 25 37	N	100	325187	5849	319338	56095	375433	70957	160
X 2 C 33 25 37	N	100	26772	152728	125956 EX	56095	69861-	70957	160
GULF OIL CORP									
ARNOTT RAMSAY B									
3 A 32 25 37	N	100	93052	69566	23486	56095	79581	70957	160
G W SHAHAN									
2 B 33 25 37	N	100	24690	127217	102527 EX	56095	46432-	70957	160
JAL OIL CO INC									
GUTMAN D									
1 I 29 25 37	N	100	22613	18805	3808	56095	59903	70957	160
PAN AMERICAN									
PC MFARNSW ORTH C									
6 A 42 6 37	N	100	99452	43098	56354	56095	112449	70957	160
7 C 42 6 37	N	100	60848	65433	4585 EX	56095	51510	70957	160
PHILLIPS PET CO									
COPPER									
1 J 28 25 37	N	100	80681	75834	4847	56095	60942	70957	160
SINCLAIR OIL GAS									
ST LANE HARTGAS UNIT									
1 F 28 25 37	N	100	30619	61353	30734 EX	56095	25361	70957	160
SUN OIL CO									
B T LANE HART									
3 D 20 25 37	N	100	54221	95170	40949 EX	56095	15146	70957	160
PDL PDEL LINE TOTAL			10 53955	85 98 66	194089	729235	923324	922441	
POOL TOTAL			10 53955	85 98 66	194089	729235	923324	922441	
EUMONT POOL									
EL PASO NATURAL GAS PIPELINE SYSTEM									
AIKMAN CLAUDE									
CURRIE									
11 7 21 37	N	100	76571	4908	71663	5774	77437	7990	160
AMERADA PETROLEUM									
STATE E US GAS UNT									
1 G 8 19 37	N	100	36610-	7840	44450 EX	5774	38676-	7990	160
STATE WE AB									
2 C 12 21 35	N	100	7935-	9271	17206 EX	5774	11432-	7990	160
STATE WE BB									
3 F 1 21 35	N	74	14647	5776	8871	4272	13143	5913	118
STATE WE EE									
1 K 13 21 35	N	200	24748	27534	2786 EX	11547	8761	15981	320
STATE WE EF									
1 N 1 21 35	N	100	7340-	5106	12446 EX	5774	6672-	7990	160
STATE WE GG UNIT									
1 H 34 20 36	N	100 TOU	127877	5230	122647	5774	128421	7990	160
L W WHITE GAS UNIT									
1 P 34 20 36	N	150	60260	5929	54331	8660	62991	11985	240
BELL OIL CO LTD									
SINCLAIR STATE									
1 G 32 20 36	N	100	18375-	265	18640 EX	5774	12866-	7990	160

EUMONT POOL EL PASO SYSTEM CTD YEAR:1960 PAGE: 8

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
CHARM OIL CO									
SUPERIOR STATE									
1K122135	N	50	5192	422	4770	2887	7657	3995	80
WILSON ST									
1A112135	N	100	4698-	2046	6744EX	5774	970-	7990	160
CONTINENTAL OIL									
BRITT A 6 FED									
4L 62037	N	50	24275-		P024275EX	2887	21388-	3995	80
BRITT A 18									
1C182037	N	100	18976-		18976EX	5774	13202-	7990	160
BRITT B 8 FED									
1C 82037	N	25	6120-	31752	P037872EX	1443	36429-	1998	40
BRITT B 10 FED									
1M102037	N	125	1331	5553	4222EX	7217	2995	9988	200
3P102037	N	200	211-	7821	8032EX	11547	3515	15981	320
BRITT B 15 FED									
3L152037	N	200	71861	3529	68332	11547	79879	15981	320
8J152037	N	100	8622	31701	23079EX	5774	17305-	7990	160
BRITT B 18									
3J182037				6423					
6P182037									
6P3J182037	N	100	9871-	6423	16294EX	5774	10520-	7990	160
ELLIOTT B 20									
1E202237	N	75	25632	1483	24149	4330	28479	5993	120
HAWK B 8 FED									
30 82137	N	150	17713		17713	8660	26373	11985	240
LOCKHART A 17									
2I172137	N	75	5936-	657	6593EX	4330	2263-	5993	120
LOCKHART A 18 FD									
1P182136	N	97	34058-		34058EX	5600	28458-	7751	155
3K182136	N	47	10136-		10136EX	2714	7422-	3755	75
LOCKHART A 30 FD									
1H302136	N	100	24665-		24665EX	5774	18891-	7990	160
5K302136	N	94	409	5953	5544EX	5427	117-	7511	150
6F302136	N	100	1221-	1099	2320EX	5774	3454	7990	160
LOCKHART B 1 FED									
4G 12236	N	100	23017-		23017EX	5774	17243-	7990	160
6P 12236	N	100	13556-		13556EX	5774	7782-	7990	160
LOCKHART B 14									
4H142136	N	300	155634	24364	131270	17321	148591	23971	480
5L142136	N	100	1986		1986	5774	7760	7990	160
LOCKHART B 28 FD									
3L282136	N	150	27176	10286	16890	8660	25550	11985	240
6A282136	N	50	26687-	512	P027199EX	2887	24312-	3995	80
MEYERS A 8 FED									
3M 82136	N	100	92892-		P092892EX	5774	87118-	7990	160
MEYER A 17									
4K172136	N	150	69360-		69360EX	8660	60700-	11985	240
MEYER A 18									
4G182136	N	150	1307-	7505	8812EX	8660	152-	11985	240
MEYER B 4									
7R 42136	N	225	70284-		70284EX	12990	57294-	17978	360
14G 42136	N	225	83280-		83280EX	12990	70290-	17978	360
MEYER B 8 FED									
4D 82136	N	100	25945-		25945EX	5774	20171-	7990	160
MEYER B 9									
2F 92136	N	100	10326-	3969	14295EX	5774	8521-	7990	160
MEYER B 17									
1I172136	N	50	10927-		10927EX	2887	8040-	3995	80
MEYER B 18									
2C182136	N	100	33242-	3608	36850EX	5774	31076-	7990	160
MEYER B 27									
1E272037	N	100	45711-		45711EX	5774	39937-	7990	160
MEYER B 28 A									
1G282037	N	150	26292-		26292EX	8660	17632-	11985	240
2O282037	N	225	8574-	13563	22137EX	12990	9147-	17978	360

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
REED A3									
3I 32036	N	200	13756-	3686	17442EX	11547	5895-	15981	321
REED B 22									
2A222036	M	100	454	454		71	71	71	160
REED B 24									
2K242036	N	100	15933-		15933EX	5774	10159-	7990	160
SANDERSON A11 FED									
4O112036	N	150	43797	11302	32495	8660	41155	11985	240
SANDERSON A14									
7G142036	N	400	49261	29678	19583	23094	42677	31961	640
SANDERSON B 10									
2H102036	N	100	17229	1279	15950	5774	21724	7990	160
SEMU EUMONT									
64G262037	N	300	6421	21708	15287EX	17321	2034	23971	480
65L262037	N	200	938-	10363	11301EX	11547	246	15981	320
66L142037	N	300	8336-	4032	12368EX	17321	4953	23971	480
67K AND 69F SEC. 24 TWP. 20 R. 37 COMBINED									
KF242037	N	400	125635	37721	87914	23094	111008	31961	640
67K242037				37721					
68J232037	N	400	76667	21400	55267	23094	78361	31961	640
69F242037									
SEMU PERMIAN									
46I142037	M	150	51654	51654		2423	2423	2423	240
STATE A 3									
1I 32037	N	100	38488		38488	5774	44262	7990	160
STATE A 6									
1M 61937	N	100	1631	8842	7211EX	5774	1437-	7990	160
STATE A 7									
1I 71937	N	50	9592-	4683	14275EX	2887	11388-	3995	80
STATE A 17									
3L171937	N	100	2226-	40787	43013EX	5774	37239-	7990	160
5G171937	N	100	16278-	418	16696EX	5774	10922-	7990	160
STATE A 19									
1L191937	N	25	12431-		P012431EX	1443	10988-	1998	40
STATE A 26									
1M261936	N	100	19995	5626	14369	5774	20143	7990	160
STATE C 20									
5M202136	N	200	8560	25992	17432EX	11547	5885-	15981	320
STATE C 30									
5C301937	N	98	6931-	6808	13739EX	5658	8081-	7830	156
STATE D 15									
8P152136	N	200	11632-	13961	25593EX	11547	14046-	15981	320
STATE F 1									
1U 12136	N	200	44192-		44192EX	11547	32645-	15981	320
5K 12136	M	150							240
STATE J 2									
9G 22236	N	300	57758-	3585	61343EX	17321	44022-	23971	48[illegible]
DALPORT OIL CORP									
R B MCQUATTERS									
1E122136	N	100	28862-	2247	31109EX	5774	25335-	7990	160
ELLIOTT INC									
ELLIOTT FED									
2J262036	N	100	24384	8402	15982	5774	21756	7990	160
EL PASO NAT GAS									
BROWNLEE									
1O252136	N	100	38268-		38268EX	5774	32494-	7990	160
SHELL STATE									
5L 22136	N	147	2017	4712	2695EX	8487	5792	11746	235
6I322037	N	100	36662-	3499	40161EX	5774	34387-	7990	160
7K322037	N	100	41699-	1688	43387EX	5774	37613-	7990	160
ST SHELL									
9J 62136	N	144	55433		55433	8314	63747	11506	230
10H362036	N	100	85590-	2773	P088363EX	5774	82589-	7990	160
11C132036	N	100	33731-	39609	P073340EX	5774	67566-	7990	160
12O362136	N	200	69045-		69045EX	11547	57498-	15981	320

EUMONT POOL EL PASO SYSTEM CTO — YEAR: 1960 —

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE +	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION +	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE +	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
GULF OIL CORP									
H LEONARD	U								
1G 24 21 36	N	200	44075	9744	34331	11547	45878	15981	320
MATTERN C									
3L 18 21 37	N	146	147-	5460	5607 EX	8429	2822	11666	234
W A RAMSAY A									
17J 27 21 36	N	400	16224-	7164	23388 EX	23094	294-	31961	640
HUMBLE OIL REF CO									
ADKINS									
4L 10 21 36	N	175	55813-	1473	57286 EX	10104	47182-	13983	280
AGGIES									
4F 31 20 37	N	200	35599-	1823	37422 EX	11547	25875-	15981	320
7B 31 20 37	N	100	33669-	82320	P115989 EX	5774	110215-	7990	160
EUMONT GAS U	U	1							
1J 4 20 37				16295					640
2L 4 20 37				11283					640
1J 2L 4 20 37	N	400	6564-	27578	34142 EX	23094	11048-	31961	640
EUMONT GAS U	U	2							
1-29 21 36	N	200	22757-	1532	24289 EX	11547	12742-	15981	320
EUMONT GAS U	U	3							
1A 35 20 36	N	100	13827-		13827 EX	5774	8053-	7990	160
EUMONT GAS U	U	4							
1N 25 20 36	N	150	37761	6453	31308	8660	39968	11985	240
J L GREENWOOD									
5 9 22 37	N	200	9627	9765	138 EX	11547	11409	15981	320
J D KNOX									
1J 10 21 36	N	200	43814-	910	44724 EX	11547	33177-	15981	320
STATE B									
1E 29 21 36	N	50	10652-		10652 EX	2887	7765-	3995	80
STATE F									
1K 17 20 37	N	100	26436-	1998	28434 EX	5774	22660-	7990	160
NEW MEXICO STATE G									
9G 23 21 36	N	400	56277	31672	24605	23094	47699	31961	640
STATE G									
2P 26 21 36	N	200	59360	11607	47753	11547	59300	15981	320
4G 26 21 36	N	200	8296	14874	6578 EX	11547	4969	15981	320
STATE M									
1J 18 22 37	N	200	66760	9992	56768	11547	68315	15981	320
4C 19 22 37	N	96	5947	12770	6823 EX	5543	1280-	7671	154
KELLY J M CONT STATE F									
1D 12 21 36	N	100	17414-	9369	26783 EX	5774	21009-	7990	160
HUSTON									
1P 8 19 37	N	100	6644-	4584	11228 EX	5774	5454-	7990	160
PHILLIPS STATE									
1P 12 19 36	N	250	19070-	15966	35036 EX	14434	20602-	19976	400
TIDEWATER ST B									
1D 36 20 37	N	100	36467	4360	32107	5774	37881	7990	160
LATE OIL CO RECTOR									
1G 31 21 36	N	50	145985-		P145985 EX	2887	143098-	3995	80
ROSS L. MALONE JR. EX. OF EST. F. J. DANGLADE									
ALEXANDER									
1E 7 21 37	N	98	12273	12255	18	5658	5676	7830	157
B CURRIE Q									
1U 6 21 37	N	100	96217	3591	92626	5774	98400	7990	160
OIL WELL DRILLING COMPANY									
WOOD STATE A									
2F 16 20 37	N	50	14288-	9230	23518 EX	2887	20631-	3995	80
PAN AMERICAN									

EUMONT POOL EL PASO SYSTEM CTD YEAR:1960

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
STATE I									
2C222136	N	100	49537-	654	P050191EX	5774	44417-	7990	160
N G PENROSE INC									
ALVES B									
1F 82137	N	100	5023-	15122	20145EX	5774	14371-	7990	160
MARSHALL 1									
11132136	N	100	467-	5493	5960EX	5774	186-	7990	160
MATTERN									
7N 72237	N	100	6225-	24629	30854EX	5774	25080-	7990	160
WARLICK QUEEN									
1A192137	N	100	4494	7560	3066EX	5774	2708	7990	160
PHILLIPS PET CO									
MONUMENT									
1H121936	N	150	2061	9223	7162EX	8660	1498	11985	240
RODMAN E G									
W E LEE									
4F202137	N	150	8765	14934	6169EX	8660	2491	11985	240
SCHERMERHORN OIL									
CARTER									
1G122136	N	50	20339-	6069	P026408EX	2887	23521-	3995	80
CURRIE									
1V 52137	N	200	122570	13737	108833	11547	120380	15981	320
HUSTON									
1K211937	N	200	15848-	4398	20246EX	11547	8699-	15981	320
SHELL OIL CO									
DEV STATE									
1G202136	N	200	52580-	17502	70082EX	11547	58535-	15981	320
FOSTER									
20341936	N	100	20168-	5565	25733EX	5774	19959-	7990	160
STATE									
1E 71937	N	100	27646-	7752	35398EX	5774	29624-	7990	160
STATE A									
1P351936	N	100	54446-	5318	P059764EX	5774	53990-	7990	160
2A122135	N	100	12964	4227	8737	5774	14511	7990	160
STATE B									
1E361936	N	100	25438-	6091	31529EX	5774	25755-	7990	160
STATE C									
1A241936	N	50	16264-		16264EX	2887	13377-	3995	80
2H242135	N	125	45914-	6997	52911EX	7217	45694-	9988	200
STATE H									
41132135	N	200	25170-	10419	35589EX	11547	24042-	15981	320
STATE L									
2X 12135	N	100	9700-	4239	13939EX	5774	8165-	7990	160
STATE M									
4P 12135	N	197	41530-	17013	58543EX	11374	47169-	15741	315
SINCLAIR OIL GAS									
ADKINS E C									
5H 92136	N	100	7704	11062	3358EX	5774	2416	7990	160
90 92136	N	100	45337-	4129	P049466EX	5774	43692-	7990	160
BARBER GAS UNIT									
1E 82037	N	200	87758-	7952	95710EX	11547	84163-	15981	320
BROWNLEE									
4N252136	N	100	38005-	4803	42808EX	5774	37034-	7990	160
W P BYRD									
7C112036	N	200	34602-	7460	42062EX	11547	30515-	15981	320
SELBY MAVEETY									
2K351936	N	50	54848-	3725	P058573EX	2887	55686-	3995	80
PHILLIPS JR A									
6L311937	N	100	34412-	1825	36237EX	5774	30463-	7990	160

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
J R PHILLIPS B									
5E 31 19 37	N	100	23318-	3478	26796 EX	5774	21022-	7990	160
STATE 407									
2F 22 13 5	N	74	73749-	25927	PO 99676 EX	4272	95404-	5913	118
SKELLY OIL CO									
CHRISTMAS									
1M 25 19 36	N	50	14567-	11017	PO 25584 EX	2887	22697-	3995	80
MONSTATE									
2I 13 19 36	N	100	46143-	7854	PO 53997 EX	5774	48223-	7990	160
SOUTHERN PETROLEUM EXPLORATION COMPANY INC.									
MCQUATTERS									
1J 11 21 36	N	75	35916-	193	PO 36109 EX	4330	31779-	5993	120
STANDARD OF TEXAS									
MEREDITH									
1H 19 21 36	N	100	43580-	2372	45952 EX	5774	40178-	7990	120
STATE 135									
1M 35 19 37	N	100	19601	2620	16981	5774	22755	7990	160
SUN OIL CO									
AKEN									
1T 32 21 36	N	100	29662-	5684	35346 EX	5774	29572-	7990	160
6Q 32 21 36	N	100	17131-	1540	18671 EX	5774	12897-	7990	160
SUNRAY MID CONT									
COOPER									
3D 7 20 37	N	100	37967-	8210	46177 EX	5774	40403-	7990	160
COOPER A									
4H 12 20 36	N	100	35329-	1984	37313 EX	5774	31539-	7990	160
A B REEVES									
2D 29 20 37	N	100	31162-	5996	37158 EX	5774	31384-	7990	160
SUPERIOR OIL CO									
STATE 12									
1L 12 21 35	N	50	33015-	2829	PO 35844 EX	2887	32957-	3995	80
STATE A									
6A 22 20 36	N	100	26855-	1712	28567 EX	5774	22793-	7990	160
TEXACO									
RECTOR									
2 30 22 13 6	N	25	2352		2352	1443	3795	1998	40
3 30 22 13 6	N	50	49924-	777	PO 50701 EX	2887	47814-	3995	80
4Q 30 22 13 6	N	75	14528-	7126	21654 EX	4330	17324-	5993	120
TP OAL AND OIL									
CROSBY									
1 SC 18 22 37	N	50	18343	1117	17226	2887	20113	3995	80
ELLIOTT 6	B								
1M 6 22 37	N	46	44-	2125	2169 EX	2656	487	3676	74
HATTER	N								
1L 7 22 37	N	98	57229-		PO 57229 EX	5658	51571-	7830	157
WALDEN									
6D 15 22 37	N	50	8178-		8178 EX	2887	5291-	3995	80
TIDEWATER OIL CO									
COLEMAN									
3A 17 21 36	NDM	100	47893-	5989	PO 53882 EX	5774	48108-	7990	160
MARSHALL									
1H 13 21 36	DM	100	363	363		6977	6977	6977	160
STATE A									
4A 8 21 36	N	100	8441-	6104	14545 EX	5774	8771-	7990	160
STATE AC									
1F 5 19 37	N	104	287	5259	4982 EX	6004	1022	8310	166
STATE AF									
1C 18 21 37	N	71	62187-	555	PO 62742 EX	4099	58643-	5673	113
STATE E									

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DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
2P162136	N	100	22716-	1070	23786EX	5774	18012-	7990	160
STATE H									
2K321937	N	75	8916-	9432	18348EX	4330	14018-	5993	120
STATE I									
3N162037	N	100	69035-	2293	P071328EX	5774	65554-	7990	160
STATE J									
3F171937	N	100	28302	3323	24979	5774	30753	7990	160
STATE K									
1K132036	N	100	33467-	2665	36132EX	5774	30358-	7990	160
V E M OIL CO									
STATE A 20									
1I202037	N	100	33287-	5742	39029EX	5774	33255-	7990	160
PIPELINE TOTAL			1527935-	1260768	2788703EX	1235280	1553494-	1705803	
PERMIAN BASIN PIPELINE SYSTEM									
AMERADA PETROLEUM									
E S ADKINS									
3M 52037	N	25	28932-		P028932EX	1443	27489-	1998	40
ANDERSON T									
4K 82037	N	50	20556	497	20059	2887	22946	3995	80
ANDREWS									
1D122036	N	150	46381	4944	41437	8660	50097	11985	240
W P BYRD GAS UNIT									
1F122036	N	200	65951	9470	56481	11547	68028	15981	320
M E GAITHER									
1I341936	N	100	39237	5582	33655	5774	39429	7990	160
H L HOUSTON									
3B 72136	N	194	17756	11522	6234	11201	17435	15501	310
LAMBERT									
1B 62037	N	100	39642	7345	32297	5774	38071	7990	160
LAUGHLIN									
1D 92037	N	100	32391	5821	26570	5774	32344	7990	160
J R PHILLIPS UNIT									
3G 12036	N	200	63728	16790	46938	11547	58485	15981	320
PHILLIPS									
2K331937	N	150	54082	17308	36774	8660	45434	11985	240
PHILLIPS A UNIT									
1G311937	N	100	29917	7258	22659	5774	28433	7990	160
STATE G									
1M181937	N	50	12053	478	11575	2887	14462	3995	80
STATE J GAS UNIT									
3K 22036	N	275	96114	23609	72505	15877	88382	21973	440
STATE O									
1B301937	N	100	34164	5402	28762	5774	34536	7990	160
STATE P									
2M291937	N	100	33645	4421	29224	5774	34998	7990	160
STATE PA									
1K182237	N	50	18734	5584	13150	2887	16037	3995	80
STATE Q									
3O162037	N	100	28998	5761	23237	5774	29011	7990	160
STATE T									
3F251936	N	100	38134	6495	31639	5774	37413	7990	160
5G201937	N	200	15312	10579	4733	11547	16280	15981	320
STATE V									
3H361936	N	100	30881	2968	27913	5774	33687	7990	160
STATE W									
2G302037	N	100	29642	5024	24618	5774	30392	7990	160
STATE F GAS UNIT									
1M361936	N	200	67786	18043	49743	11547	61290	15981	320
STATE M T UNIT									
1N 51937	N	100	33065	5862	27203	5774	32977	7990	160
STATE U GAS UNIT									
1E321937	N	150	54751	16637	38114	8660	46774	11985	240

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
W A WEIR GAS UNIT									
4F 35 1936	N	175	50412	5379	45033	10104	55137	13983	280
7O 26 1936	N	100	30390	3507	26883	5774	32657	7990	160
WEIR B									
1G 26 1936	N	100	33567	2855	30712	5774	36486	7990	160
ANDERSON PRITCHRD									
BRITT FED									
3G 7 2037	N	200	21147	14759	6388	11547	17935	15981	320
BRITT A FED									
2K 6 2037	N	50	15238	1970	13268	2887	16155	3995	80
BRITT B									
1N 5 2037	N	25	2036-	533	2569 EX	1443	1126-	1998	40
ATLANTIC REFINING									
CRUTCHFIELD									
1I 32 1937	N	25	8210	939	7271	1443	8714	1998	40
STATE G									
1V 5 2136	N	150	46951	13901	33050	8660	41710	11985	240
STATE H									
1O 5 2136	N	100	38632	12029	26603	5774	32377	7990	160
STATE J									
1H 29 2136	N	100	8753	6623	2130	5774	7904	7990	160
STATE K									
2S 6 2136	N	93	33977	10883	23094	5369	28463	7431	150
AZTEC OIL AND GAS									
BURK									
1P 28 1937	N	100	32830	7293	25537	5774	31311	7990	160
STATE UNIT E									
1M 35 2037	N	200	91204	9726	81478	11547	93025	15981	320
CHARM OIL CO									
GULF STATE									
1V 1 2135	N	100	33282	17729	15553	5774	21327	7990	160
CITIES SERVICE									
FELTON									
1C 28 2136	N	100	33032	7107	25925	5774	31699	7990	160
LAUGHLIN B									
5O 5 2037	N	100	35006	3049	26957	5774	32731	7990	160
STATE AO									
1G 2 2136	N	97	31397	8602	22795	5600	28395	7751	155
STATE AT									
1M 4 1937	N	100	40555	8712	31843	5774	37617	7990	160
STATE CC									
3K 16 2136	N	100	30959	3275	27684	5774	33458	7990	160
STATE CD									
3A 32 2136	N	200	70390	17138	53252	11547	64799	15981	320
STATE E									
5N 30 1937	N	98	30093	2217	27876	5658	33534	7830	157
STATE F									
2I 30 2037	N	75	27495	6590	20905	4330	25235	5993	120
STATE N									
5M 2 2236	N	100	25455	730	24725	5774	30499	7990	160
DRLG EXPLORATION									
ENDURA STATE									
4I 12 2135	N	100	34706	10054	24652	5774	30426	7990	160
STATE F									
3K 19 2136	N	116	38504	4244	34260	6697	40957	9269	185
GULF OIL CORP									
ANDERSON CT									
1O 8 2037	N	100	6788	3929	2859	5774	8633	7990	160
4B 17 2037	N	150	54697	21526	33171	8660	41831	11985	240
R R BELL A	ST								

EUMONT POOL PERMIAN BASIN SYSTEM CTD — YEAR: 1960 —

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE +	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION +	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE +	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
2P 8213 6	N	150	45023	13910	31113	8660	39773	11985	240
RR BELL C	N	200	74793	20971	53822	11547	65369	15981	320
4F 1521 36	N	200	74793	20971	53822	11547	65369	15981	320
RR BELL F	N	200	78740	22214	56526	11547	68073	15981	320
2K 3622 036	N	100	38344	4775	33569	5774	39343	7990	160
RR BELL G	N	125	39025	7705	31320	7217	38537	9988	200
1P 1322 036	N	194	67093	14602	52491	11201	63692	15501	310
RR BELL H	N	910	38797	11482	27315	5254	32569	7271	148
1H 2319 36	N	200	72012	7314	64698	11547	76245	15981	320
2K 7213 6	N	200	71564	15381	56183	11547	67730	15981	320
CAMPBELL C	N	298	92663	9767	82896	17205	100101	23811	477
7H 1822 37	N	100	38178	9049	29129	5774	34903	7990	160
RE COLE B	N	200	72012	7314	64698	11547	76245	15981	320
6B 1622 37	N	200	71564	15381	56183	11547	67730	15981	320
HC COLE S	N	197	73506	21569	51937	11374	63311	15741	315
4K 1421 36	N	100	33112	6908	26204	5774	31978	7990	160
CULP A	N	100	23500	1119	22381	5774	28155	7990	160
3F 1919 37	N	200	60374	12312	48062	11547	59609	15981	320
VV CULP B	N	150	50145	11724	38421	8660	47081	11985	240
1J 3119 37	N	100	33871	5711	28160	5774	33934	7990	160
UNIT CONE	N	192	75928	24948	50980	11085	62065	15341	307
1K 19 21 37	N	197	73506	21569	51937	11374	63311	15741	315
EVANS STATE	N	100	33112	6908	26204	5774	31978	7990	160
3P 3213 6	N	100	23500	1119	22381	5774	28155	7990	160
SEFFEL	N	200	60374	12312	48062	11547	59609	15981	320
1P 2821 36	N	150	50145	11724	38421	8660	47081	11985	240
GRAHAM	N	100	33871	5711	28160	5774	33934	7990	160
1J 2419 36	N	150	51547	17171	34376	8660	43036	11985	240
8A 2519 36	N	148	51233	11241	39992	8545	48537	11826	237
GRAHAM	N	150	62572	11648	50924	8660	59584	11985	240
2A 6221 36	N	100	37931	5740	32191	5774	37965	7990	160
GRAHAM	N	200	64335	16529	47806	11547	59353	15981	320
4A 3621 36	N	100	14066	15454	1388 EX	5774	4386	7990	160
1A 6219 37	N	200	74220	15540	58680	11547	70227	15981	320
HC COLE A	N	300	107888	18966	88922	17321	106243	23971	480
1H 1922 37	N	100	33073	4556	28517	5774	34291	7990	160
HC COLE C	N	100	41017	10947	30070	5774	35844	7990	160
1A 1922 37	N	200	75586	27996	47590	11547	59137	15981	320
7L 3622 36	N	100	36989	10718	26271	5774	32045	7990	160
9E 3621 36	N	200	69466	17667	51799	11547	63346	15981	320
2T 1922 37	N	100	36673	9301	27372	5774	33146	7990	160
1T 2122 37	N	200	71347	21526	49821	11547	61368	15981	320
50 0304 37	MN	100	1926	1926		1533	1533	1533	160
10 C31 21 37	MN	293	117178	15770	101408	16916	118324	23411	468

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE +	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION +	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE +	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
H T MATTER	N	0							
6N 6223737	N	1 4 6	54051	17102	36949	8429	45378	11666	234
7D 6223737	N	1 4 7	51740	3977	47763	8487	56250	11746	235
H T MATTER	N	E							
10N 1223236	N	3 0 0	101676	36520	65156	17321	82477	23971	480
MATHE WS									
2 JUT 6203737	N	1 0 0	31564	6471	25093	5774	30867	7990	160
ORCUT A ST	T	TE							
1N 5213636	N	1 0 0	31496	6305	25191	5774	30965	7990	160
ORCUTT B ST	T	TE							
1G 5213636	N	1 0 0	35543	10013	25530	5774	31304	7990	160
ORCUTT C									
5P 3620336	N	1 0 0	33583	10822	22761	5774	28535	7990	160
8B 6213636	N	1 9 1	69752	19730	50022	11027	61049	15261	305
ORCUTT D									
2G 1320336	N	1 0 0	35651	6718	28933	5774	34707	7990	160
ORCUTT E ST	T	TE							
1E 2203736	N	1 0 0	33695	10552	23143	5774	28917	7990	160
A RAMSAY C									
13F 2132136	N	4 0 0	35396	25403	9993	23094	33087	31961	640
A RAMSAY D									
3F 3321336	N	3 0 0	95938	23874	72064	17321	89385	23971	480
BELL RAMSAY	Y	A							
5 4213636	N	7 5	27488	7991	19497	4330	23827	5993	120
8 4213636	N	7 5	26804	9184	17620	4330	21950	5993	120
BELL RAMSAY	Y	B							
1M 2920376	N	1 0 0	33980	8795	25185	5774	30959	7990	160
2M 3320376	N	1 0 0	33994	9153	24841	5774	30615	7990	160
3L 2820376	N	1 0 0	40147	6180	33967	5774	39741	7990	160
BELL RAMSAY	Y	C							
1 3420376	N	3 0 0	104345	32912	71433	17321	88754	23971	480
WA RAMSAY	Y								
2E 3521366	N	4 0 0	151047	29431	121616	23094	144710	31961	640
WA RAMSAY	Y								
14F 3421366	N	3 0 0	104644	27896	76748	17321	94069	23971	480
WA RAMSAY	Y	B							
2E 2521366	N	2 0 0	68982	18685	50297	11547	61844	15981	320
REEVES									
1L 2920376	N	1 0 0	33032	4940	28092	5774	33866	7990	160
2E 292037	N	1 0 0	39524	9559	29965	5774	35739	7990	160
SH-D-A									
1F 2119376	N	2 0 0	13998	6007	7991	11547	19538	15981	320
SH-D-B									
2E 8193776	N	2 0 0	75074	25040	50034	11547	61581	15981	320
ELBERT SHELL	D	B							
3H 7193776	N	1 0 0	37488	8974	28514	5774	34288	7990	160
SUNSHINE									
2N 3020376	N	1 0 0	36584	11829	24755	5774	30529	7990	160
LWH-A									
2-I 2520366	N	2 0 0	70172	16725	53447	11547	64994	15981	320
LWH-B									
5M 3520366	N	1 0 0	39209	5824	33385	5774	39159	7990	160
BWH-TMIRE									
2B 8203776	N	1 2 5	35010	12060	22950	7217	30167	9988	200
HONEYMAN RE JR									
WULFF STATE									
2E 1720376	N	5 0	17563	147	17416	2887	20303	3995	80
WILLIAM A. AND EDWARD R HUDSON									
BHILLIPS UNIT									
1B 3020376	N	1 0 0	37727	8504	29223	5774	34997	7990	160
KELLY J M									
HUMBLE ST									
1K 1619376	N	1 5 0	16928	11980	4948	8660	13608	11985	240
KELLY STATE									
1E 1319366	N	1 0 0	36918	8028	28890	5774	34664	7990	160

EUMONT POOL PERMIAN BASIN SYSTEM CTD						YEAR:1960		PAGE: 17	
DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
OHIO OIL CO									
BARBER									
110 52037	N	200	72286	18961	53325	11547	64872	15981	320
STATE ELLIOTT									
4P301937	N	100	38482	8674	29808	5774	35582	7990	160
STATE HANSEN									
4H162037	N	100	34348	7550	26798	5774	32572	7990	160
W H LAUGHLIN									
3G 92037	N	100	37430	7746	29684	5774	35458	7990	160
ST MCDONALD ACC 2									
11A132236	N	100	37817	4462	33355	5774	39129	7990	160
26J132236	N	300	134662	5456	129206	17321	146527	23971	480
STATE MCGRAIL									
1N261936	N	50	13786	533	13253	2887	16140	3995	80
C J SAUNDERS									
1C 12236	N	50	17602	3735	13867	2887	16754	3995	80
STATE D 164									
1J281937	N	100	46933	18261	28672	5774	34446	7990	160
PAN AMERICAN									
GILLULLY B RA A									
3N332037	N	225	71019	18045	52974	12990	65964	17978	360
4D222037	N	150	52772	16626	36146	8660	44806	11985	240
X6A212037	N	200	77528	16285	61243	11547	72790	15981	320
GILLULLY B									
7K222037	N	150	55270	14612	40658	8660	49318	11985	240
GILLULLY GAS UNIT									
4B242036	N	300	112477	26893	85584	17321	102905	23971	480
R B MCQUATTERS									
1A112136	N	50	12893	907	11986	2887	14873	3995	80
STATE C TR 11									
1X 22136	N	200	72772	19400	53372	11547	64919	15981	320
N G PENROSE INC									
ALVES									
2G182137	N	100	15157	162	14995	5774	20769	7990	160
ALVES A									
1P 72137	N	100	36044	944	35100	5774	40874	7990	160
R H GILL									
1M312137	N	96	31072	8803	22269	5543	27812	7671	154
STAN FEDERAL									
1E352037	N	100	37401	12112	25289	5774	31063	7990	160
TURLAND FED									
1K272037	N	100	31271	9457	21814	5774	27588	7990	160
PHILLIPS PET CO									
BERN A									
1P141936	N	100	35176	7080	28096	5774	33870	7990	160
HOBBS									
4N182037	N	100	18710-	1025	19735EX	5774	13961-	7990	160
LAND OFFICE									
1K191937	N	25	8017	421	7596	1443	9039	1998	40
MEXICO									
3H182037	N	100	35431	12020	23411	5774	29185	7990	160
NEW STATE									
2H262036	N	50	16691	2330	14361	2887	17248	3995	80
QUAPAW									
1P192037	N	100	40333	9272	31061	5774	36835	7990	160
SCHERMERHORN OIL									
CHRISTMAS									
1D112037	N	100	38187	5993	32194	5774	37968	7990	160
GULF STATE									
1P311837	N	50	18699	8459	10240	2887	13127	3995	80
LINAM A									

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
1J 32 1837	N	250	24415	12563	11852	14434	26286	19976	400
LINAM B 2N 33 1837	M	178	2206	2206		15100	15100	15100	285
SHELL OIL CO									
STATE F 1 29 1937	N	100	11936	7670	4266	5774	10040	7990	160
SINCLAIR OIL GAS									
BERRYMAN 10 11 2136	N	25	8109	49	8060	1443	9503	1998	40
W C ROACH 1D 21 2037	N	200	75888	23452	52436	11547	63983	15981	320
STATE 176 3J 19 2136	N	150	57134	16161	40973	8660	49633	11985	240
J H WILLIAMS 3E 34 1937	SN	125	49626	11038	38588	7217	45805	9988	200
SKELLY OIL CO									
BAKER B 2K 10 2237	N	150	49882	8458	41424	8660	50084	11985	240
MEXICO V 1G 16 2136	N	100	40562	6623	33939	5774	39713	7990	160
MEXICO W 1X 22 2135	N	100	35994	9062	26932	5774	32706	7990	160
4I 22 2135	N	100	30329	5882	24447	5774	30221	7990	160
MEXICO X 1H 9 1937	N	100	33818	7615	26203	5774	31977	7990	160
MONSANTO 4I 13 1936	N	100	35174	7392	27782	5774	33556	7990	160
5I 13 1936	N	100	35932	7041	28891	5774	34665	7990	160
STATE A 2O 17 2037	N	100	36625	12254	24371	5774	30145	7990	160
STATE E 1E 25 2036	N	100	40703	13113	27590	5774	33364	7990	160
SOCONY MOBIL OIL COMPANY INCORPORATED									
STATE G 1D 16 2037	N	25	1599	441	1158	1443	2601	1998	40
SUN OIL CO									
UL BARR 2L 24 1936	N	100	37779	10216	27563	5774	33337	7990	160
W B MAVEETY 5G 35 1936	N	100	38035	13409	24626	5774	30400	7990	160
WEATHERLY 1K 7 2137	N	100	33541	3514	30027	5774	35801	7990	160
SUNRAY MID CONT									
MARSHALL 2I 11 2136	N	100	36627	8161	28466	5774	34240	7990	160
TENNESSEE GAS									
WEIR 1L 32 2037	N	100	36616	10037	26579	5774	32353	7990	160
TEXACO									
STATE AG 2 4I 31 2037	GIN	100	34979	9210	25769	5774	31543	7990	160
J WIC OPER 5G 5 2037	N	150	34134	396	33738	8660	42398	11985	241
HENDERSON 4C 30 2137	NTX	196	65602	17322	48280	11316	59596	15661	314
KEOHANE 1C 18 1937	INTN	198	19178	12359	6819	11432	18251	15821	317
H T MATTERN 5L 20 1937	N	100	30772	8658	22114	5774	27888	7990	160

EUMONT POOL PERMIAN BASIN SYSTEM CTD YEAR:1960 PAGE: 19

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
PHILLIPS									
1D102037	N	175	61831	16823	45008	10104	55112	13983	280
PHILLIPS JR									
10F 62037	N	100	35843	8179	27664	5774	33438	7990	160
RIDDEL									
1N122136	N	100	34798	6696	28102	5774	33876	7990	160
2A122136	N	100	120476	1097	119379	5774	125153	7990	160
SAUNDERS ST K GU									
10181937	N	150	50112	7462	42650	8660	51310	11985	240
STATE C NCT 2									
9B192037	N	100	36892	8771	28121	5774	33895	7990	160
STATE C NCT 6									
1J 61937	N	203	65981	14526	51455	11720	63175	16220	325
STATE E NCT 1									
1M 12036	N	100	39613	8479	31134	5774	36908	7990	160
STATE G									
2M191937	N	100	35815	5368	30447	5774	36221	7990	160
STATE H NCT 2									
26C202037	N	300	113008	29825	83183	17321	100504	23971	480
STATE H NCT 3									
25D192037	N	100	36948	7826	29122	5774	34896	7990	160
STATE NCT 4									
27L192037	N	100	36794	7184	29610	5774	35384	7990	160
STATE J									
3F241936	N	100	35150	13422	21728	5774	27502	7990	160
WEIR									
1E251936	N	100	40248	10010	30238	5774	36012	7990	160
2N231936	N	100	37595	10874	26721	5774	32495	7990	160
PIPELINE	TOTAL		8384970	1994998	6389972	1485343	7875315	2049182	
PHILLIPS PETROLEUM COMPANY PIPELINE SYSTEM									
ATLANTIC REFINING									
SEALE FED									
2K342036	M	50	2443	2443		7508	7508	7508	80
4N342036	N	50	1792	3481	1689EX	2887	1198	3995	80
STATE AK									
40 32135	N	100	54856	705	54151	5774	59925	7990	160
AZTEC OIL AND GAS COMPANY									
ATATE E 33									
2D332036	N	100	36754	4081	32673	5774	38447	7990	160
HUNT N B									
WANTZ									
1M212137	N	100	59831	360	59471	5774	65245	7990	160
2L212137	N	75	64257-	12217	P076474EX	4330	72144-	5993	120
WEATHERLY									
1E212137	N	150	92432	3878	88554	8660	97214	11985	240
PIPELINE	TOTAL		183851	27165	156686	40707	197393	53451	
SKELLY OIL COMPANY PIPELINE SYSTEM									
PAN AMERICAN									
W. H. TURNER									
1P292137	N	50	8138	2830	5308	2887	8195	3995	80
PIPELINE	TOTAL		8138	2830	5308	2887	8195	3995	
SOUTHERN UNION GAS COMPANY PIPELINE SYSTEM									
ANTWEIL MORRIS R									
L W WHITE									
1A 22135	N	72	34072	2917	31155	4157	35312	5753	113

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
ATLANTIC REFINING									
COLEMAN									
1C 17 21 36	N	50	4752	3575	1177	2887	4064	3995	80
STATE O									
2D 32 20 37	N	50	2858	5496	2638 EX	2887	249	3995	80
AZTEC OIL AND GAS									
STATE E 20									
1G 20 20 36	N	100	38372	3277	35095	5774	40869	7990	160
WILLIAMS									
1B 33 19 37	N	75	12080	3591	8489	4330	12819	5993	120
2I 33 19 37	N	75	17616	3693	13923	4330	18253	5993	120
CLARK E B									
COOPER C									
2B 32 20 37	N	100	42706	3944	38762	5774	44536	7990	160
CONTINENTAL OIL									
PHILLIPS HOPPER									
1O 27 20 37	N	100	3889	7420	3531 EX	5774	2243	7990	160
STATE DD 11									
1L 11 21 36	N	125	11438	10924	514	7217	7731	9988	200
FIELDS BERT									
STATE TURNER									
2C 32 20 37	N	100	2298	3409	1111 EX	5774	4663	7990	160
GETTY OIL CO									
STATE DO									
1H 32 20 37	N	50	605	2876	2271 EX	2887	616	3995	80
GREAT WESTRN DRLG									
BODAGES FEE DN									
1D 33 19 37	N	75	3061	10028	6967 EX	4330	2637-	5993	120
MEX									
WALLACE ST									
3J 32 21 36	N	100	2694	12020	9326 EX	5774	3552-	7990	160
3N 32 21 36	N	50	1192	8608	7416 EX	2887	4529-	3995	80
NOLAN LANE									
SINCLAIR WMS									
1O 34 19 37	N	50	16694	644	16050	2887	18937	3995	80
N G PENROSE INCD									
PHILLIPS CRAWFORD									
1A 34 20 37	N	100	5876	6564	688 EX	5774	5086	7990	160
SKELLY OIL CO									
STATE B									
7E 16 21 36	N	100	7581	13050	5469 EX	5774	305	7990	160
STATE G									
1J 30 20 37	N	25	24384-		PO 24384 EX	1443	22941-	1998	40
VAN E TEN									
9L 9 22 37	N	100	5784	11074	5290 EX	5774	484	7990	160
10O 9 22 37	N	100	6962	10299	3337 EX	5774	2437	7990	160
PIPELINE TOTAL			196146	123409	72737	92208	164945	127603	
WARREN PETROLEUM COMPANY PIPELINE SYSTEM									
NOLAN LANE									
J H WILLIAMS									
3N 34 19 37	N	100	7038	6477	561	5774	6335	7990	160
TEXACO									

EUMONT POOL WARREN PIPELINE SYSTEM — YEAR: 1960 —

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
C. H. WEIR B									
3A112037	N	100	6887	31225	24338 EX	5774	18564 -	7990	160
PIPELINE TOTAL			13925	37702	23777 EX	11548	12229 -	15980	
POOL TOTAL			7259095	3446872	3812223	2867973	6680196	3956085	
JUSTIS POOL									
EL PASO NATURAL GAS PIPELINE SYSTEM									
CITIES SERVICE									
HODGES B									
1M 12537	M	100	6010	6010		8836	8836	8836	160
CONTINENTAL OIL									
STATE A 2									
10 22537	N	100	73062	11465	61597	6579	68176	15400	160
EL PASO NAT GAS									
CARLSON FED									
B01K22537	N	200	19370 -	83014	102384 EX	13157	89227 -	30800	320
JUSTIS FED									
1P112537	N	200	167469	9651	157818	13157	170975	30800	320
GULF OIL CORP									
LEAREY MCBURNINGTON									
30132537	N	200	35700	24033	11667	13157	24824	30800	320
ARNOTT RAMSAY									
3B362537	N	200	38463 -	4526	42989 EX	13157	29832 -	30800	320
OLSEN OILS INCORPORATED									
WIMBERLY									
1H232537	N	100	54490 -	2216	56706 EX	6579	50127 -	15400	160
TIDEWATER OIL CO									
COATES C FED									
1F242537	N	200	47744	30495	17249	13157	30406	30800	320
13K242537	N	200	148210	11093	137117	13157	150274	30800	320
WESTATES PETROLEUM COMPANY									
CARLSON FED									
A1J252537	N	200	37882	17798	20084	13157	33241	30800	320
WESTERN NAT GAS									
EATON B									
1E122537	N	100	11583 -	645	12228 EX	6579	5649 -	15400	160
PIPELINE TOTAL			392171	200946	191225	120672	311897	270636	
POOL TOTAL			392171	200946	191225	120672	311897	270636	
TUBB POOL									
J. R. CONE PIPELINE SYSTEM									
CONE J R									
ANDERSON									
11212137	N	25	9841	1616	8225	2114	10339	2222	40
PIPELINE TOTAL			9841	1616	8225	2114	10339	2222	
CONTINENTAL OIL COMPANY PIPELINE SYSTEM									
CONTINENTAL OIL									
WANTZ D 21									
3J212137	N	75	32488	26535	5953	6343	12296	6665	120
PIPELINE TOTAL			32488	26535	5953	6343	12296	6665	

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
EL PASO NATURAL GAS PIPELINE SYSTEM									
CITIES SERVICE STATE S									
2F 15 21 37	N	50	2667-	1012	3679 EX	4228	549	4444	80
CONTINENTAL OIL CO									
ELLIOTT B 1	15	ACO 1							
3 15 23 37	N	100	45007	4389	40618	8457	49075	8887	160
ELLIOTT B 1	15	ACO 2							
1G 15 22 37	M	100	3054	3054		1673	1673	1673	160
HAWK B 3									
2R 3 21 37	N	100	27282-		27282 EX	8457	18825-	8887	160
HAWK B 9									
3C 9 21 37	N	100	37605-	701	38306 EX	8457	29849-	8887	160
5K 9 21 37	N	000	92	92		698	698	698	160
7D 9 21 37	N	000	91113-	9197	P100310 EX	8457	91853-	8887	160
HAWK B 1		TO							
1B 1 21 37	N	100	1958	1958		1967	1967	1967	160
LOCKHART A									
1G 7 21 37	N	100	5277-	8968	14245 EX	8457	5788-	8887	160
1D 7 21 37	N	100	6616-		6616 EX	8457	1841	8887	160
LOCKE A 3		FED							
3C 3 21 37	N	100	10187	13249	3062 EX	8457	5395	8887	160
LOCKHART A									
2B 1 21 37	N	100	1393-	15900	17293 EX	8457	8836-	8887	160
LOCKE B 3		FED							
1G 3 21 37	N	100	50873	4486	46387	8457	54844	8887	160
WANTZ D 2									
4K 2 21 37	N	100	26233	12173	14060	8457	22517	8887	160
GREENBRIER OIL CO									
SARKEYS									
1B 26 21 37	N	100	6202-	13719	19921 EX	8457	11464-	8887	160
HUMBLE OIL REF CO									
HF SHARP D ISOM	N								
2A 34 21 37	N	100	15617	6831	8786	8457	17243	8887	160
7D 27 21 37	N	100	34495	5879	28616	8457	37073	8887	160
N MST ATE S									
13 B 22 22 37	N	000	9127-	4572	13699 EX	8457	5242-	8887	160
2 22 22 37	N	000	12322-	1411	13733 EX	8457	5276-	8887	160
13 D 22 22 37	N	000	8709-	9694	18403 EX	8457	9946-	8887	160
2 22 22 37	N	000	905	5194	4289 EX	8457	4168	8887	160
NE MEXICO E V									
1K 1 0 21 37	N	75	25261	17375	7886	6343	14229	6665	120
PENROSE									
2H 13 22 37	N	100	46060-		46060 EX	8457	37603-	8887	160
TUBB GAS UNIT									
10 10 21 37	N	100	29927	9115	20812	8457	29269	8887	160
HUNT N B									
WEATHERLY E									
1G 21 21 37	N	150	10892-	16271	27163 EX	12685	14478-	13331	240
MARKM CONE REDFERN									
MARKHAM EUBANKS									
2L 19 21 37	N	100	13260	17717	4457 EX	8457	4000	8887	160
MORAN OIL CORP									
OWEN									
1E 14 21 37	N	100	14885	21552	6667 EX	8457	1790	8887	160
OHIO OIL CO									
J L MUNCY									
1P 24 22 37	N	100	3776	27228	23452 EX	8457	14995-	8887	160

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
2K 24 2237	N	100	11885	15163	3278 EX	8457	5179	8887	160
OLSEN OILS INCORPORATED									
BOYD									
5B 23 2237	N	100	9245	12318	3073 EX	8457	5384	8887	160
S E CONE									
1J 26 2137	N	50	22839-	18333 P	041172 EX	4228	36944-	4444	80
OWENS									
1M 25 2137	N	100	4054	10107	6053 EX	8457	2404	8887	160
SIMS									
2F 25 2237	N	100	24253	7712	16541	8457	24998	8887	160
PHILLIPS PET CO									
SIMS									
3F 24 2237	N	100	830	4433	3603 EX	8457	4854	8887	160
SAMEDAN OIL CORP									
PARKS									
6L 14 2237	N	100	18789-		18789 EX	8457	10332-	8887	160
PARK A									
4I 14 2237	N	100	548-	6657	7205 EX	8457	1252	8887	160
SHELL OIL CO									
ARGO									
1M 15 2137	N	100	41937-	2740	44677 EX	8457	36220-	8887	160
ARGO A									
1D 22 2137	N	100	7062-	25899	32961 EX	8457	24504-	8887	160
LIVINGSTON									
2W 3 2137	N	100	52116-	1551 P	053667 EX	8457	45210-	8887	160
LONG									
5N 11 2237	N	100	21563-	6726	28289 EX	8457	19832-	8887	160
SARKEYS									
1M 23 2137	N	100	18630-	17682	36312 EX	8457	27855-	8887	160
STATE 15									
1G 15 2137	N	50	8555	2776	5779	4228	10007	4444	80
TAYLOR GLEN									
2I 3 2137	N	100	29102	4522	24580	8457	33037	8887	160
TURNER									
2L 22 2137	N	100	27229-	3620	30849 EX	8457	22392-	8887	160
3J 22 2137	N	100	795-	3333	4128 EX	8457	4329	8887	160
SINCLAIR OIL CO									
SJ SARKEYS									
2O 23 2137	N	100	35407-	2920	38327 EX	8457	29870-	8887	160
TURNER GAS UNIT									
3K 29 2137	N	100	20138	2393	17745	8457	26202	8887	160
SUNRAY MID CONT									
WALTER LYNCH									
4L 1 2237	N	100	13517-	1143	14660 EX	8457	6203-	8887	160
EVA OWENS									
1D 3 2237	N	49	7152-	9195	16347 EX	4144	12203-	4355	79
TIDEWATER OIL CO									
PERCY HARDY TUBB									
2O 17 2137	M	75	744	744		8508	8508	8508	120
SARKEYS									
4F 26 2137	N	100	13946	9948	3998	8457	12455	8887	160
STATE									
1N 36 2137	N	75	34233-	1224	35457 EX	6343	29114-	6665	120
STATE									
2C 15 2137	N	100	25023-	4210	29233 EX	8457	20776-	8887	160
D A WILLIAMSON									
2E 23 2137	N	100	20710	8349	12361	8457	20818	8887	160
WESTERN OIL FIELD									
DRINKARD									
1 13 0223 8	N	100	30613-	713	31326 EX	8457	22869-	8887	160

TUBB POOL MOBIL OIL COMPANY PIPELINE SYSTEM — YEAR: 1960 —

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
2L 30 2238	N	100	73118	2868	70250	8457	78707	8887	160
5G 25 2237	N	100	56852	4063	52789	8457	61246	8887	160
PIPELINE TOTAL			73756-	42307 9	496835 EX	444067	52768-	465996	
MOBIL OIL COMPANY PIPELINE SYSTEM									
SOCONY MOBIL OIL COMPANY INCORPORATED									
E O CARSON									
8F 33 2137	N	100	16973	27701	10728 EX	8457	2271-	8887	160
19L 28 2137	N	75	48397-	1466	PO 49863 EX	6343	43520-	6665	120
PIPELINE TOTAL			31424-	29167	60591 EX	14800	45791-	15552	
PERMIAN BASIN PIPELINE SYSTEM									
AMERADA PETROLEUM									
A B BAKER									
3 1102237	N	50	17114	3132	13982	4228	18210	4444	80
H CORRIGAN									
4A 42237	N	100	25150	521	24629	8457	33086	8887	160
HARE									
7M 33 2137	N	100	37828	8858	28970	8457	37427	8887	160
STATE D A									
3J 16 2137	N	100	45755	10309	35446	8457	43903	8887	160
STATE D B									
1F 32 2137	N	50	22438	8214	14224	4228	18452	4444	80
E WOOD									
7A 22 2237	N	100	49125	5960	43165	8457	51622	8887	160
CITIES SERVICE									
BRUNSON C									
6I 32 2237	N	100	65911		65911	8457	74368	8887	160
OWEN									
3J 35 2137	N	100	30954	6221	24733	8457	33190	8887	160
STATE P									
1F 32 2238	N	100	41052	6716	34336	8457	42793	8887	160
COSDEN PETROLEUM									
ED ITH BUTLER									
2E 18 2238	N	50	19680	5854	13826	4228	18054	4444	80
3N 18 2238	N	100	134596	10238	124358	8457	132815	8887	160
GULF OIL CORP									
AMANDA									
1J 25 2237	N	100	33327	9890	23437	8457	31894	8887	160
T R ANDREWS									
2G 32 2238	N	100	32344	8730	23614	8457	32071	8887	160
3J 32 2238	N	100	46107	13620	32487	8457	40944	8887	160
J N CARSON									
6J 28 2137	N	100	29178	15901	13277	8457	21734	8887	160
J N CARSON									
3D 28 2137	N	75	29763	10076	19687	6343	26030	6665	120
DANGLADE									
1M 13 2237	N	100	9788	3905	5883	8457	14340	8887	160
EAVES									
5H 10 2237	N	100	34083	8402	25681	8457	34138	8887	160
EUBANK									
1B 22 2137	N	100	44301	8931	35370	8457	43827	8887	160
EUNICE KING									
13A 28 2137	N	100	36583	10813	25770	8457	34227	8887	160
12C 28 2137	N	100	30736	5469	25267	8457	33724	8887	160
GUTMAN									
2C 19 2238	N	100	38833	7569	31264	8457	39721	8887	160
GUTMAN BLT									
1N 19 2238	N	100	39219	6985	32234	8457	40691	8887	160
HUGH									
4A 14 2237	N	100	35751	7485	28266	8457	36723	8887	160

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
7C 14 22 37 NAOMI KEENEY	N	100	37404	8668	28736	8457	37193	8887	160
2O 14 21 37 HLEONARD ESTE	N	50	23009	7167	15842	4228	20070	4444	80
4A 16 21 37 MARK	N	100	12020	331	11689	8457	20146	8887	160
5A 32 23 37 WT MCCORMACK	N	100	36055	7771	28284	8457	36741	8887	160
7I 32 21 37	N	100	131146	6620	124526	8457	132983	8887	160
13A 32 21 37 OWEN MARK	N	100	33063	8368	24695	8457	33152	8887	160
5P 34 21 37 PADDOCK	N	100	34975	7895	27080	8457	35537	8887	160
5B 1 22 37 ALICE PADDOCK	N	100	39891	3772	36119	8457	44576	8887	160
3P 1 22 37 SCARBOROUGH	N	100	15688	616	15072	8457	23529	8887	160
2H 31 22 38	N	100	27082	4538	22544	8457	31001	8887	160
4F 31 22 38 LEE STEEBBINS	N	100	29132	3180	25952	8457	34409	8887	160
3A 5 22 37 VIVIAN	N	50	11430	244	11186	4228	15414	4444	80
1C 30 22 38	N	100	15461	5866	9595	8457	18052	8887	160
2G 30 22 38 WATKINS	N	100	36982	10065	26917	8457	35374	8887	160
10 29 22 38	N	100	69833	1082	68751	8457	77208	8887	160
OHIO OIL CO									
LYNCH WALL ETAL									
4D 1 22 37	N	100	43303	9895	33408	8457	41865	8887	160
MARSHALL B									
2M 27 21 37	N	100	27872	7279	20593	8457	29050	8887	160
OLSEN BUTLER B									
1I 13 22 37	N	100	6242	4152	2090	8457	10547	8887	160
OWEN									
3N 35 21 37	N	100	37520	9585	27935	8457	36392	8887	160
WM TUBB									
3I 29 21 37	N	50	13078	1240	11838	4228	16066	4444	80
WARL									
1J 15 21 37	N	100	38588	5261	33327	8457	41784	8887	160
LOU WORTHAM									
9E 11 22 37				11076					160
9E 11F 11 22 37	N	200	70780	16778 5702	54002	16914	70916	17774	320
DAN AMERICAN									
DEVA OWEN									
2L 34 21 37	N	100	35517	10518	24999	8457	33456	8887	160
SOUTHLAND ROYALTY									
2B 9	N	100	15139	449	14690	8457	23147	8887	160
4X 4 22 37 STATE 12	N	100	13838	395	13443	8457	21900	8887	160
6C 16 21 37	N	100	18600	459	18141	8457	26598	8887	160
STATE 36	N	100	40087	9534	30553	8457	39010	8887	160
STATE									
3E 32 22 38	N	100	36542	11877	24665	8457	33122	8887	160
TURNER									
3P 29 21 37	N	50	14568	382	14186	4228	18414	4444	80
NIGH PENROSE									
NIGHTON									
1E 1 22 37	N	100	3746	311	3435	8457	11892	8887	160
3N 11 22 37	N	100	373300	115900	257400	8457	341197	8887	160
5P 11 22 37	N	100	403662	64662	339000	8457	423357	8887	160
10 D 13 22 37	N	100	34276	8497	25779	8457	34236	8887	160

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
SINCLAIR OIL CO									
ROY G BARTON									
1G2 3 2137	N	75	30747	6953	23794	6343	30137	6665	120
J R CONE A									
1M2 6 2137	N	100	40735	3922	36813	8457	45270	8887	160
ALEXANDER ROGERS									
2A1 2 2237	N	50	3567	1663	1904	4228	6132	4444	80
STATE 367									
3K3 6 2137	N	100	154835	5390	149445	8457	157902	8887	160
SKELLY OIL CO									
BAKER B									
15J1 0 2237	N	150	60578	11028	49550	12685	62235	13331	240
STATE K									
3C3 2 2137	N	50	19098	4371	14727	4228	18955	4444	80
SOCONY MOBIL OIL COMPANY INCORPORATED									
BRUNSON ARG									
6E1 0 2237	N	100	58972	3961	55011	8457	63468	8887	160
CARSON WATSON UNIT									
2H3 3 2137	N	49	17761	437	17324	4144	21468	4355	79
CORRIGAN									
7B3 3 2137	N	100	63063	5463	57600	8457	66057	8887	160
LONG									
8J1 1 2237	N	100	14370	27033	12663 EX	8457	4206-	8887	160
WILLIAMSON									
1A2 3 2137	M	25	924	924		2786	2786	2786	40
SUNRAY MID CONT									
ELLIOTT A									
2H2 1 2137	N	50	10545	423	10122	4228	14350	4444	80
LINAM HARDY UNIT									
1A2 9 2137	N	100	32078	3869	28209	8457	36666	8887	160
STATE LAND 15									
4P1 6 2137	N	100	26483	4863	21620	8457	30077	8887	160
TEXACO									
BLINEBRY NCT 1									
1O1 9 2238	N	100	24062	504	23558	8457	32015	8887	160
3F1 9 2238	N	100	36442	11491	24951	8457	33408	8887	160
7G1 9 2238	N	100	36697	5296	31401	8457	39858	8887	160
BLINEBRY NCT 3									
1D3 1 2238	N	100	41826	11399	30427	8457	38884	8887	160
T P COAL AND OIL									
WALDEN									
3C1 5 2237	M	100	4319	4319		5051	5051	5051	160
WESTERN OIL FIELD									
GULF STATE									
1A3 6 2237	N	100	43204	4042	39162	8457	47619	8887	160
CARL J. WESTLUND INCORPORATED									
DANGLADE LT									
1B2 4 2237	N	50	20206	829	19377	4228	23605	4444	80
PIPELINE TOTAL			2750687	492826	2257861	608194	2866055	638731	
SINCLAIR OIL AND GAS PIPELINE SYSTEM									
SINCLAIR OIL AND GAS COMPANY									
R. L. BRUNSON									
1J 4 2237	N	50	15850	2500	13350	4228	17578	4444	80
PIPELINE TOTAL			15850	2500	13350	4228	17578	4444	

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
WARREN PETROLEUM COMPANY PIPELINE SYSTEM									
CITIES SERVICE									
BRUNSON B									
3M 32237	M	100							160
GULF OIL CORP									
R E COLE A									
6B162237	M	100							160
PIPELINE	TOTAL								
POOL TOTAL			2703686	975723	1727963	1079746	2807709	1133610	
JALMAT POOL									
EL PASO NATURAL GAS PIPELINE SYSTEM									
AMERADA PET									
C C CAGLE C									
1D 32637	N	200	301738	29548	272190	53929	326119	41050	2854
ARGO OIL CORP									
LANEHART									
1H212537	EN	100	114258-	2576	P116834EX	8721	108113-	6642	447
ATLANTIC REFINING									
SELBY									
1F332236	N	100	16818-	6521	23339EX	11518	11821-	8770	816
STATE 24									
1N322437	N	25	6195-	1111	7306EX	2023	5283-	1541	364
CITIES SERVICE									
CLOSSON B									
11H302236	N	200	3640	15286	11646EX	22247	10601	16940	764
CLOSSON C FED									
1A182236	N	196	504777	11128	493649	65911	559560	50169	3733
3I182236	N	196	290202		290202	57604	347806	43847	3174
DABBS									
1D232537	N	50	31237-		P031237EX	3007	28230-	2291	90
STATE AS									
1F 22436	N	200	107104	40827	66277	53701	119978	40877	2839
STATE H									
2H172236	N	100	15044-	18871	33915EX	24691	9224-	18795	2554
STATE Q									
1L362336	N	50	11971-	4359	16330EX	8010	8320-	6098	1409
STATE W									
1P362436	N	125	5135	14966	9831EX	17906	8075	13633	118[illegible]
THOMAS									
1O192437	N	100	11922-	6278	18200EX	9865	8335-	7512	598
2G192437	N	100	35268-	9307	44575EX	15209	29366-	11579	1303
CONE J R									
MOBIL MYERS									
4I222436	N	75	7883-	2259	10142EX	4720	5422-	3595	132
CONTINENTAL OIL									
ASCARTE C 24		FED							
1B242536	EM	50	222	222		497	497	497	6
ASCARTE D 24		FED							
1J242536	N	50	4998-	1116	6114EX	3023	3091-	2303	95
DANCIGER A 8		FED							
2P 82336	EN	200	5793-	14950	20743EX	16547	4196-	12602	388
3A 82336	N	200	44719	18703	26016	24415	50431	18590	907
FARNEY A 5		FED							
3A 52336	N	102	32226-	10561	42787EX	15884	26903-	12093	1351
JACK A 20		FED							
4G202437	EN	150	29470-	12362	41832EX	12501	29331-	9521	396

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DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
JACK A 21	FED								
1M212437	N	75	27423-	2498	29921EX	9063	20858-	6900	891
JACK A 29	FED								
3H292437	N	200	4512	18566	14054EX	22020	7966	16767	749
JACK B 17	FED								
3A172437	N	200	125204	1142	124062	38543	162605	29341	1839
JACK B 30	FED								
1H302437	N	100	21069-	8643	29712EX	11707	18005-	8914	841
LOCKHART B 31	FED								
4P312136	N	150	52921	899	52022	20323	72345	15474	1084
6F312136	N	100	6544	3128	3416	6121	9537	4663	104
LYNN A 28	FED								
5A282336	N	175	27974	14503	13471	19716	33187	15013	783
LYNN B 25	FED								
1J252336	N	100	3689-	10472	14161EX	12101	2060-	9214	893
2M252336	N	100	16995-	35000	51995EX	55614	3619	42328	6634
LYNN B 26	FED								
1J262336	N	400	376928	47665	329263	111374	440637	84777	2970
LYNN B 27	FED								
1A272336	N	100	14963-	5296	20259EX	6812	11447-	6711	459
MEYER A 29	FED								
1O292236	EN	100	31984-	2237	34221EX	10146	24075-	7726	635
3N292236	N	125	20687-	15917	36604EX	30245	6359-	23023	2489
4L292236	N	75	3147-	2319	5466EX	7494	2028	5706	614
5A292236	N	100	12080-	3671	15751EX	9911	5840-	7547	604
MEYER B 22	FED								
1I222236	N	200	266505	25272	241233	67177	308410	51133	3728
MEYER B 23	FED								
1C232236	N	100	2104-	5907	8011EX	22144	14133	16857	2218
2O232236	N	100	34220	12328	21892	22394	44286	17047	2251
3E232236	N	100	46407-	2651	49058EX	26502	22556-	20173	2793
MEYER B 28	FED								
1E282236	EN	100	46114-	3254	P049368EX	8137	41231-	6197	370
2A282236	N	100	16332-	4959	21291EX	9062	12229-	6901	492
MEYER B 33	FED								
1M332236	N	200	6381	14078	7697EX	23111	15414	17598	821
SHOLES A 13	FED								
3P132536	M	100	786	786		1254	1254	1254	17
SHOLES A 19	FED								
1L192537	M	100	2452	2452		19016	19016	19016	15
SHOLES B 19	FED								
1N192537	N	100	12404	13611	1207EX	8175	6968	6226	375
SHOLES B 30	FED								
2D302537	N	50	9357	1557	7800	2924	10724	2228	69
STATE A 32									
2G322236	N	100	48736-	28421	77157EX	29428	47729-	22400	3179
3P322236	N	100	22295-	25525	47820EX	24569	23251-	18703	2538
4F322236	EN	200	33290-	12463	45753EX	20625	25128-	15706	657
STEVENS A 34									
1E342336	EN	25	4281-	1339	5620EX	1409	4211-	1073	41
2G342336	N	175	9077-	11816	20893EX	24567	3674	18704	1149
STEVENS A 35									
1J352336	N	75	16612	9791	6821	14224	21045	10828	1799
2L352336	N	100	17020-	11311	28331EX	13852	14479-	10546	112[illegible]
STEVENS B 7									
1M 72337	N	100	5302	41462	36160EX	13473	22687-	10258	1074
2J 72337	N	100	14124-	19176	33300EX	11790	21510-	8978	852
STEVENS B 7	UNIT								
1D 72337	N	100	10468-	2670	13138EX	12465	673-	9491	941
STEVENS B 12									
1C122336	N	100	7360	43158	35798EX	51976	16178	39560	6154
2A122336	N	100	25226	53377	28151EX	59495	31344	45282	7146
STEVENS B 14									
1I142336	N	100	52198-	41026	93224EX	48118	45106-	36624	5645
STEVENS B 15									
2K152336	N	100	26537-	6811	33348EX	10426	22922-	7939	672

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DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
STEVENS B 18									
1F18 2337	N	100	348	31787	31439EX	19711	11728-	15005	1897
2K18 2337	N	100	87743	53799	33944	88145	122089	67085	10926
STEVENS NM B 18									
1B18 2337	N	100	3689-	4045	7734EX	6758	976-	5148	188
VAUGHN A 12									
1E12 2436	N	50	23699-	9184	32883EX	10746	22137-	8180	2132
VAUGHAN B 1									
1H 12436	N	100	29366	29766	400EX	28852	28452	21961	3103
2F 12436	N	100	18299-	34636	52935EX	13890	39045-	10575	1129
VAUGHAN B 12									
1H12 2436	N	50	64590-	18940	P083530EX	15195	68335-	11566	3307
WELLS B 1									
1A 12536	N	100	2723	7914	5191EX	6409	1218	4882	142
DALPORT OIL CORP									
CHRISTMAS									
1O25 2236	N	100	19258-	10011	29269EX	15876	13393-	12087	1391
CHRISTMAS B									
1J21 2236	N	100	80506	21026	59480	34271	93751	26086	3818
HARRISON									
1G 72537	N	50	6725-	1409	8134EX	4099	4035-	3122	378
JONES									
1P34 2236	N	100	32563-	10078	42641EX	25471	17170-	19389	2657
E F KING									
1M31 2237	N	100	5591-	5942	11533EX	16861	5328	12836	1521
W H KING									
1M 62337	N	100	8535-	52985	61520EX	39167	22353-	29812	4464
LAMAR LUNT B									
1P20 2236	N	100	23593	5914	17679	11843	29522	9018	859
WINTERS									
1B18 2537	N	100	1769	9933	8164EX	13473	5309	10258	1074
WINTERS B									
2L 72537	N	98	19785-	484	20269EX	9319	10950-	7097	552
WINTERS C									
1J 72537	N	100	7252-	7571	14823EX	10949	3874-	8337	741
EL PASO NAT GAS									
BLACK SHELL									
2O21 2437	N	75	9304-	6809	16113EX	5523	10590-	4207	269
CARLSON FED									
1L22 2537	N	200	136791	57087	79704	52413	132117	39897	2754
2N23 2537	N	100	8220	2307	5913	6083	11996	4634	99
ELLIOTT									
1F17 2637	N	100	39713	2867	36846	12404	49250	9445	933
2D21 2637	N	50	2733-	12696	15429EX	8343	7086-	6352	1499
ELLIOTT FED									
3H17 2637	N	100	31269	7603	23666	15656	39322	11919	1362
FARNSWORTH C									
2G 42637	N	175	34677	56174	21497EX	46881	25384	35686	2831
GREGORY FED									
1J33 2537	N	275	76383	52554	23829	72003	95832	54809	2751
HARRISON FED									
1L27 2537	N	100	9227	6727	2500	10388	12888	7910	667
2D27 2537	N	100	23602-	4285	27887EX	22364	5523-	17024	2247
JAL D									
3B 82537	N	100	8600-	5802	14402EX	17710	3308	13482	1633
LANGLIE A FED									
1J17 2537	N	100	26745	365	26380	5697	32077	4340	48
MOBERLY C									
3E21 2637	N	50	10092-	4963	15055EX	9162	5893-	6975	1715
PARKER A FED									
1D29 2637	N	200	24577	9288	15289	17381	32670	13237	443
PRICHARD									
1N15 2537	N	100	23940-	19626	43566EX	22129	21437-	16845	2216
PRICHARD A									
1G 92537	N	200	49885	45494	4391	39695	44086	30218	1915

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
SHELL STATE									
2 1 3 2 2 3 3 6	N	1 0 0	2 8 6 4 6 -	2 3 7 6 9	5 2 4 1 5 EX	2 2 0 0 7	3 0 4 0 8 -	1 6 7 5 3	2 2 0 0
3 1 2 2 2 3 3 3 6	N	1 0 0	1 8 8 4 9	1 6 8 8 4	1 9 6 5	1 5 1 4 8	1 7 1 1 3	1 1 5 3 3	1 2 9 5
4 K 2 2 3 3 3 6	N	1 0 0	5 2 3 8 9	5 5 6 4 3	3 2 5 4 EX	6 0 0 1 8	5 6 7 6 4	4 5 6 8 0	7 2 1 5
WELLS FEED									
1 5 2 2 5 3 3 7	N	1 2 5	5 5 6 9 8 -		5 5 6 9 8 EX	6 3 7 4 6	8 0 4 8	4 8 5 1 8	6 0 2 5
1 1 4 2 2 5 3 3 7	E N	1 0 0	3 7 8 7 0 -	4 7 2 7	4 2 5 9 7 EX	1 0 7 4 4	3 1 8 5 3 -	8 1 8 2	7 1 4
1 1 5 2 2 5 3 3 7	N	1 0 0	1 1 0 3 9 -	6 5 2 4	1 7 5 6 3 EX	1 7 6 2 7	6 4	1 3 4 1 9	1 6 2 2
2 3 4 2 2 5 3 3 7	N	1 0 0	4 2 4 8 4 -	3 0 5 5	4 5 5 3 9 EX	3 7 1 9 6	8 3 4 3 -	2 8 3 1 2	4 2 0 4
3 4 5 2 2 5 3 3 7	N	7 5	4 2 1 3 4 -	3 0 9 4 4	7 3 0 7 8 EX	3 7 0 0 0	3 6 0 7 8 -	2 8 1 6 2	5 8 0 5
8 9 4 7 -	N	1 0 0	3 1 8 2		1 2 1 2 9 EX	8 0 1 6	4 1 1 3 -	6 1 0 5	3 5 4
1 1 4 2 2 5 3 3 7	N	1 2 5	3 3 1 9 4 -	2 5 4 4	3 5 7 3 8 EX	3 3 8 6 8	1 8 7 0 -	2 5 7 8 1	2 8 7 1
1 1 3 L 5 2 2 5 3 3 7	E N	7 5	4 7 1 1 9 -	1 3 6 0 5	P O 6 0 7 2 4 EX	5 7 5 0	5 4 9 7 4 -	4 3 8 0	3 0 9
R O Y W H I T T E	N								
1 A 3 3 2 3 3 6	N	1 0 0	5 1 0 -	6 5 2 9	7 0 3 9 EX	6 2 8 8	7 5 1 -	4 7 9 0	1 2 6
A R E P P E N A U E R									
A F S B P S T U A T N									
2 C 2 2 2 5 3 7	N	7 5	3 7 8 3	2 6 0 6 6	2 2 2 8 3 EX	1 1 8 1 4	1 0 4 6 9 -	8 9 9 4	1 3 7 5
G A C K L E A L B E R T									
C O W D E N									
C O W 1 W L D E N 2 3 3 7	N	7 5	2 8 7 0 1 -	9 2 3 3	3 7 9 3 4 EX	1 3 5 9 5	2 4 3 3 9 -	1 0 3 5 0	1 6 8 9
C O W 1 W L D E N 2 3 3 7	N	5 0	2 7 9 1 1 -	5 3 5 6	3 3 2 6 7 EX	9 6 4 7	2 3 6 2 0 -	7 3 4 4	1 8 4 2
E S M C O A I R S T A T E									
1 2 3 2 3 3 6	N	1 9 8	1 1 2 1 7 -	7 0 7 9	1 8 2 9 6 EX	3 0 0 0 8	1 1 7 1 2	2 2 8 4 6	1 2 9 6
1 2 3 2 3 3 6	N	2 0 0	1 4 5 3 1	5 1 6 0 6	3 7 0 7 5 EX	7 8 5 1 6	4 1 4 4 1	5 9 7 6 2	4 4 7 6
GULF OIL CORP									
2 1 2 2 3 6	N	1 0 0	8 7 9 0 8	1 2 3 4 2	7 5 5 6 6	3 0 9 9 7	1 0 6 5 6 3	2 3 5 9 4	3 3 8 6
2 1 2 3 3 6	N	1 0 0	6 7 5 6 6 -	3 9 8 0	P O 7 1 5 4 6 EX	8 9 2 5	6 2 6 2 1 -	6 7 9 7	4 7 4
1 1 2 3 3 6	N	1 0 0	2 7 7 0 5 -	1 9 1 9 4	4 6 8 9 9 EX	2 2 3 5 6	2 4 5 4 3 -	1 7 0 1 8	2 2 4 6
2 2 3 3 6	N	0 4	8 5 0 6	4 1 4 1 4	3 2 9 0 8 EX	4 4 5 2 7	1 1 6 1 9	3 3 8 9 1	4 9 0 5
2 2 3 3 6	N	0 3	5 7 2 4 0	5 5 9 3 6	1 3 0 4	5 8 1 0 9	5 9 4 1 3	4 4 2 2 7	6 7 4 0
V I N S O N R A N C H									
2 H 1 2 2 6 3 6	N	1 0 0	2 5 1 1 2	5 9 6 9	1 9 1 4 3	1 1 4 8 7	3 0 6 3 0	8 7 4 7	8 1 2
HAYNES VT DRLG									
DUNN									
3 1 3 2 4 3 6	N	1 0 0	1 6 6 7 0 -	5 2 6 8	2 1 9 3 8 EX	1 2 3 4 4	9 5 9 4 -	9 3 9 9	9 2 5
LANE FEE									
1 2 5 2 3 3 6	N	7 5	1 6 9 6 -	6 1 5 6 8	6 3 2 6 4 EX	4 4 6 7 8	1 8 5 8 6 -	3 4 0 0 5	7 1 5 7
TEXAS STATE									
2 I 1 6 2 3 3 6	N	5 0	2 3 8 1 0 -	1 9 0 9 8	P O 4 2 9 0 8 EX	6 6 9 9	3 6 2 0 9 -	5 1 0 0	1 0 6 4
HUMBLE OIL									
HADLEY									
1 2 1 2 2 5 3 7	N	2 5	9 7 8 2	7 9 8	8 9 3 4	1 3 6 4	1 0 3 4 8	1 0 3 9	1 9
HARRIS									
1 1 2 2 5 2 4 3 6	N M	7 5	2 0 8 0	1 4 5 1 3	1 2 4 3 3 EX	8 7 2 9	3 7 0 4 -	6 6 4 7	8 3 3
3 K 2 2 5 2 4 3 6	M	2 5	7 2 4	7 2 4		2 9 5 5	2 9 5 5	2 9 5 5	4 9
HUNTER									
1 D 2 4 2 4 3 6	N	1 0 0	1 8 7 8 3 -	4 0 1 2	2 2 7 9 5 EX	8 3 3 4	1 4 4 6 1 -	6 3 4 7	3 9 6

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DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
LANEHART									
1K212537	N	25	5383-	325	5708EX	2190	3518-	1668	453
NEW MEX STATE Z									
1H 22436	N	100	35150	2684	32466	10608	43074	8078	696
NEW MEX STATE AA									
1H222336	N	100	51352-	16724	68076EX	27465	40611-	20906	2920
THOMAS									
1O232436	M	50	811	811		1435	1435	1435	34
HUSKY OIL CO									
LIBERTY ROYALTY									
3L 32537	N	100	8253-	5320	13573EX	8456	5117-	6440	412
MONTCTO WOOLWORTH									
2M332437E	N	50	134946-		P134946EX	5615	129331-	4275	778
N SHORE WOOLWORTH									
3E332437	N	100	20365	17425	2940	14026	16966	10679	1147
JAL OIL CO INC									
CHRISTMAS B A									
1L282236	N	100	6663-	9021	15684EX	8615	7069-	6561	433
2I282236	N	100	17784-	7866	25650EX	10532	15118-	8020	686
DYER									
3H312537E	N	100	44428-	3752	P048180EX	6993	41187-	5326	219
HODGE									
2B 82437	N	100	13155-	50718	63873EX	52916	10957-	40275	6278
JACKS									
1E 82437	N	100	21221-	20616	41837EX	19696	22141-	14994	1895
JENKINS									
1M292537E	N	100	54987-	11	P054998EX	9411	45587-	7166	538
LEGAL									
2I312537E	N	100	96200-	11013	P107213EX	9638	97575-	7339	568
OWEN									
1M212537	N	50	14568	1539	13029	3917	16946	2983	330
REPOLLO									
1E282537E	N	100	88040-		P088040EX	7387	80653-	5626	271
WATKINS									
2H352436	N	25	13231-	6849	P020080EX	2561	17519-	1950	651
KELLY JOHN M									
HAIR									
1L 82437	N	75	25930-	36396	62326EX	23804	38522-	18119	3484
SHAHAN									
3G332537E	N	75	16205-	3850	20055EX	4583	15472-	3492	103
KING WARREN DYE									
TOBY									
2K 72437	N	50	21668-	27504	49172EX	10958	38214-	8342	2188
LATE OIL CO.									
THOMAS									
1M172437	N	100	64053	18534	45519	28564	74083	21742	3065
LEONARD OIL CO									
BATES									
1L202537	N	100	22169	7489	14680	7826	22506	5961	329
2D292537	N	100	29644-		29644EX	6636	23008-	5055	172
JUSTIS									
1H192537	N	50	1383	4908	3525EX	3485	40-	2655	216
2H202537	N	100	6583-	7342	13925EX	8706	5219-	6630	445
B. M. JUSTIS									
7F202537	N	100	15229	7168	8061	9699	17760	7386	576
LANEHART									
LOWE RALPH									
COATES A									
2E312537	M	50				402	402	402	4
MAGGIE ROSE									
1M182537	N	50	583-	1193	1776EX	2977	1201	2268	83

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
3K18 2537 SHELL STATE B	N	50	1643	2375	732 EX	4053	3321	3087	366
1K16 2336 SHELL STATE C	M	25							
2N36 2336 OHIO OIL CO	N	50	9654-	6751	16405 EX	6229	10176-	4743	941
MCDONALD 6N16 2236				16395					
6N 25H16 2236	6N	375	235150	27184	207966	101681	309647	77399	2874
25H16 2236 OLSEN OILS				10789					
BLANKENSHIP 1J18 2437	N	100	4477-	8262	12739 EX	10184	2555-	7755	640
BLINEBRY A 8L29 2337	N	100	3611-	7982	11593 EX	12465	872	9491	941
CALLEY 1H 7 2537 S. R. COOPER B	N	50	11804-	657	12461 EX	3038	9423-	2314	97
1O 1 2436	N	100	8206-	16846	25052 EX	10388	14664-	7910	667
1H 2 2436	N	100	11300-	2156	13456 EX	5651	7805-	4305	42
5H14 2436 COOPER B	N	100	7093-	16861	23954 EX	10737	13217-	8176	713
2C14 2436 COOPER G SW	N	100	75426-		P075426 EX	7152	68274-	5448	240
1K11 2436 MJAMES	N	200	11976-	29822	41798 EX	34116	7682-	25973	1547
1G10 2236 KING	N	100	22247	26592	4345 EX	21628	17283	16465	2150
1E 1 2336 SEKING	N	100	15801-	27317	43118 EX	27798	15320-	21160	2964
10 1 2336 MEYERS B	N	100	4482-	5195	9677 EX	13033	3356	9924	1016
1F13 2436	N	100	18134-	11	18145 EX	6780	11365-	5165	191
2H11 2436 COURTLAND	N	100	11071-	6966	18037 EX	10714	7323-	8159	710
1L 6 2437	N	1000	22104-	7095	29199 EX	9373	19826-	7138	533
5M 5 2437 VAN ZANDT	N	1000	17765-	12238	30003 EX	9820	20183-	7478	592
1I 2 5436 WINGHAM	N	100	5750-	12897	18647 EX	9714	8933-	7397	578
1C 3 2537	N	100	27069	2242	24827	6280	31107	4784	125
2D19 2537	N	500	3657	2329	1328	3144	4472	2395	126
3-I 3 2537 DANIEL AMERICA	N	150	38681-	5281	43962 EX	12160	31802-	9261	366
4E18 2637 CM FARMER SW	N	300	34519	26625	7894	29891	37785	22762	611
GREGORY A 2	N	25	5068-	131	5199 EX	1576	3623-	1200	129
2L 9 2537 PLAINS GAS & OIL	N	100	26927-	5077	32004 EX	40675	8671	30960	4663
2D15 2537 LANGLEY B	N	75	51674-		P051674 EX	5493	46181-	4184	263
1D 7 2437 MEYER B	N	100	16107-	29544	45651 EX	26222	19429-	19960	2756
1G 7 2437 COURTLAND B	N	100	2874	30075	27201 EX	26206	995-	19948	2754
13L 9 2437 COOPER B	N	100	57567-	842	P058409 EX	9168	49241-	6982	506
WOOLWORTH 1M 6 2537	N	100	36564-		36564 EX	8728	27836-	6646	483
WOOLWORTH 2L 6 2537	N	100	115193-		P115193 EX	11684	103509-	8897	838
4J33 2437	N	200	21532-	12655	34187 EX	23717	10470-	18059	861

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
RESLER SHELDON STEELER A 1L 20 23 37	N	200	58865	11071	47794	22702	70496	17286	794
RODMAN E G HADFIELD 1O 22 12 5 37 2P 22 12 5 37				17293 9254					
2P 1O 22 12 5 37	N	100	44739-	26547	P071286EX	7212	64074-	5494	248
HUMBLE STATE L 1 1 32 24 37	N	75	109107	12032	97075	32650	129725	24851	5041
RODMAN NOEL OIL FEDERAL 1C 5 23 36	N	100	70626-	3608	P074234EX	7667	66567-	5840	308
SAMEDAN OIL CORP HUGHES B 1C 19 23 37	N	100	11696-	40338	52034EX	41289	10745-	31427	4744
SCHERMERHORN OIL AMERADA MILDRED U 1 12 42 23 5	XM	100	11321	11321		14683	14683	14683	
WOOLWORTH 3J 28 24 37	N	200	13213	55030	41817EX	41013	804-	31222	2002
SCOTT CLARA T TR VAUGHN B 3 1F 3 24 36	N	200	16356		16356	14668	31024	11172	264
E J WELLS 2A 1 22 5 36	N	50	3655	4462	807EX	3326	2519	2533	173
SHELL OIL CO CHRISTMAS 1M 23 22 36	N	100	4821	17982	13161EX	29913	16752	22769	3243
CHRISTMAS B 1L 25 22 36	N	100	19432-	16856	36288EX	25987	10301-	19781	2725
SHELL CHRISTMAS 2B 2 1 22 36	N	100	25302	7578	17724	15830	33554	12052	1385
STATE A 1D 36 24 36	N	100	12629-	14962	27591EX	9767	17824-	7437	585
SIMON JULIAN E SMITH 3I 4 25 37	N	75	11610-	969	12579EX	5879	6700-	4478	331
WOOLWORTH 1K 33 24 37	N	50	41550-	2390	P043940EX	6509	37431-	4956	1014
SINCLAIR OIL GAS CROSBY A FEDN 1O 29 25 37		50	2902-		2902EX	3470	568	2643	212
CROSBY B FEDN 1N 28 25 37	N	100	24807	2203	22604	6743	29347	5136	186
FEDERAL 714 HAIR 2E 9 24 37	N	50	13960-	8520	22480EX	7267	15213-	5533	1215
HANAGAN 4K 12 25 36	M	75	496	496		1137	1137	1137	30
JONES 1D 35 22 36	N	100	46404	4670	41734	12473	54207	9497	942
STATE 157 A 2J 9 22 36	N	100	2989	4579	1590EX	8963	7373	6826	479
STATE 157 B 2F 7 22 36	N	95	8852-	5523	14375EX	12911	1464-	9830	1090
STATE 157 C 1O 32 24 37	N	50	17906-	5609	23515EX	8404	15111-	6398	1515

JALMAT POOL EL PASO SYSTEM CTD — YEAR: 1960 — PAGE: 34

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
2P 32 24 37	N	25	25300-	5930	P031230EX	5434	25796-	4136	2165
STATE 157 E									
1G 32 24 37	N	50	6527-		6527EX	3189	3338-	2430	139
STATE 157 F									
1A 17 23 36	N	100	35248	330	34918	5492	40410	4184	21
SKELLY OIL CO									
E COATS									
2N 33 24 36				9133					
3M 33 24 36				9393					
2N 3M 33 24 36	N	200	10597	18526	7929EX	12924	4995	9845	149
LUCOOPER									
3N 12 24 36	N	100	114101-	20730	P134831EX	18961	115870-	14434	1798
ET JOHNS									
1L 21 24 37	N	25	6696-	2130	P008826EX	1462	7364-	1114	68
KING C									
1G 1 23 36	N	105	26255	33597	7342EX	49977	42635	38038	5577
KING D									
1E 6 23 37	N	101	13083-	8835	21918EX	20075	1843-	15282	1919
LIBERTY ROYALTY									
5J 7 24 37	N	100	60721-	101859	162580EX	55228	107352-	42034	6583
MEXICO D									
1J 36 23 36	N	50	9736-	4841	14577EX	9109	5468-	6934	1701
MEXICO E									
10 2 23 36	N	100	973-	27794	28767EX	27101	1666-	20629	2872
MEXICO G									
1D 16 24 37	N	100	8305-	13396	21701EX	15231	6470-	11596	1306
SHERRELL									
3B 6 25 37	N	50	9029-		9029EX	5509	3520-	4195	751
5N 31 24 37	N	150	5498-	1944	7442EX	12645	5203	9631	409
STATE M									
3K 32 24 37	N	75	18266-	3440	21706EX	6978	14728-	5314	524
S E TOBY									
1M 7 24 37	N	49	1880-	14626	16506EX	6623	9883-	5042	1081
SOU CAL PET CORP									
DABBS									
1M 34 25 37	N	100	6827-	472	7299EX	7546	247	5747	292
2E 34 25 37	M	100	2157	2157		1241	1241	1241	61
GUTMAN									
1G 18 24 37	N	100	8483	11909	3426EX	7637	4211	5817	304
HUNTER									
1K 13 24 36	N	100	6021-	12966	18987EX	11783	7204-	8972	851
MARTIN									
2A 31 24 37	N	100	8550-	9233	17783EX	7773	10010-	5920	322
MARTIN B									
1F 31 24 37	N	100	19052-	1581	20633EX	7015	13618-	5344	222
MOSLEY									
2L 34 24 37	M	50	2731	2731		9511	9511	9511	25
VAN ZANDT									
4G 25 24 36	N	25	19185-	3945	P023130EX	2614	20516-	1991	679
VOSBURG									
1I 18 25 37	N	50	1098-	4333	5431EX	3258	2173-	2481	151
WOOLWORTH									
4M 8 25 37	N	100	131-	7547	7678EX	7394	284-	5632	272
SUN OIL CO									
LANEHART									
2I 20 25 37	N	50	4026-	5519	9545EX	3477	6068-	2649	214
PEERLESS ET AL									
1C 22 20 36	N	100	194178	10681	183497	50241	233738	38239	5925
HS REDFORD UNIT									
1A 22 22 36	N	100	2857-	3137	5994EX	18536	12542	14111	1742
SUNRAY MID CONT									

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DESCRIPTION	STATES	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
H D GREER									
2D212236	N	200	9262-	39990	49252EX	52625	3373	40058	2768
TEXACO									
BLACK									
2K212437	N	125	26190	3084	23106	10433	33539	7946	398
CC FRISTOE	B	3							
1E302437	N	25	2516-	262	2778EX	1614	1164-	1229	150
FRISTOE B FED									
2M312437	EN	72	278479-	1153	P279632EX	10752	268880-	8186	1268
T P COAL AND OIL									
STATE A 1									
1N222336	N	100	8356	5012	3344	10040	13384	7645	621
2L212336	N	200	34200	18768	15432	22095	37527	16825	754
3E212336	N	150	7656	20942	13286EX	16890	3604	12861	782
4C212336	M	25	2445	2445		5772	5772	5772	83
6F212336	N	25	1660	2026	366EX	1485	1119	1131	83
8O212336	N	100	4988-	6550	11538EX	14921	3383	11360	1265
9M 92336	N	100	5208-	8703	13911EX	12488	1423-	9508	944
12O 92336	N	200	11705-	20860	32565EX	26582	5983-	20239	1050
13H142336	N	100	22846-	29505	52351EX	39690	12661-	30210	4533
14E 92336	N	100	1824-	12572	14396EX	8289	6107-	6313	390
15F 42336	N	100	7098-	19335	26433EX	14132	12301-	10760	1161
16A112336	N	100	13761-	32369	46130EX	38083	8047-	28987	4321
18M 42336	N	100	22853-	17229	40082EX	25797	14285-	19637	2700
19E222336	N	100	10910	976	9934	7599	17533	5788	299
20C132336	N	100	15568-	46913	62481EX	46474	16007-	35372	5428
21H132336	N	100	13223-	14533	27756EX	19976	7780-	15207	1932
22N132336	N	100	20795-	47118	67913EX	40228	27685-	30619	4604
23B 42336	N	100	14051	43188	29137EX	19999	9138-	15224	1935
24N242336	N	100	1894-	45391	47285EX	33020	14265-	25134	3653
25F242336	N	100	19057-	54435	73492EX	53507	19985-	40725	6356
26G232336	N	100	25091-	40441	65532EX	33270	32262-	25324	3686
27F232336	N	100	18657-	16656	35313EX	21757	13556-	16563	2167
28F142336	N	100	28899-	52782	81681EX	40804	40877-	31058	4680
29C112336	N	100	26059-	54613	80672EX	45875	34797-	34917	5349
30 I 32336	N	100	13012-	22944	35956EX	24721	11235-	18818	2558
31H152336	N	100	9345	49582	40237EX	38068	2169-	28975	4319
32J242336	N	100	26299-	10452	36751EX	34635	2116-	26362	3866
33F152336	N	100	19866-	10504	30370EX	24122	6248-	18362	2479
34K112336	N	100	19013-	79863	98876EX	46102	52774-	35090	5379
35L 32336	N	100	17142-	37701	54843EX	31232	23611-	23773	3417
37F102336	N	100	25166-	17923	43089EX	22644	20445-	17237	2284
38M102336	N	100	9939-	24106	34045EX	24008	10037-	18276	2464
39J172336	N	100	25124	13839	11285	17452	28737	13286	1599
STATE A 2									
5A 72236	N	100	20028-	13691	33719EX	16149	17570-	12294	1427
12 I 72236	N	196	9938-	2701	12639EX	18395	5756	14009	1535
36M112236	N	200	97833	43225	54608	70603	125211	53740	3954
37K 82236	N	200	190597	21569	169028	54171	223199	41235	2870
38K 92236	N	200	104332	33633	70699	64282	134981	48930	3537
40A 92236	N	100	25342-	17215	42557EX	17884	24673-	13615	1656
41M 52236	N	300	5236	19634	14398EX	45649	31251	34754	1304
42E112236	N	100	6493-	11345	17838EX	14367	3471-	10939	1192
43H 82236	N	200	37812	5441	32371	31145	63516	23712	1351
STATE A 3									
1A102336	N	100	1769	31862	30093EX	28935	1158-	22025	3114
2 I 102336	N	100	33064-	55343	88407EX	44314	44093-	33728	5143
THOMPSON AND CONE									
PAN AMERICAN MYERS									
1H222436	N	100	44567-	995	P045562EX	7205	38357-	5488	247
THREE STATES NAT									
STUART									
1M102537	N	25	3171-	433	3604EX	1674	1930-	1275	180

JALMAT POOL EL PASO SYSTEM CTD — YEAR: 1960 —

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
TIDEWATER OIL CO									
CHRISTMAS									
1F 26 22 36	N	100	7807-	31826	39633 EX	36007	3626-	27407	4047
E F KING									
1M 12 33 6	N	100	29993	43456	13463 EX	60867	47404	46326	7327
STATE T									
1I 22 43 6	N	100	24558-	54612	79170 EX	40509	38661-	30833	4641
WEIER DRILLING CO									
WOOLWORTH									
3M 28 24 37	N	50	24339-	11747	PO 36086 EX	6267	29819-	4771	950
4L 28 24 37	N	50	3069-	1023	4092 EX	3000	1092-	2285	88
WESTATES PETROLEUM COMPANY									
WELLS FED B									
1A 6 25 37	N	25	10169-	8738	PO 18907 EX	2296	16611-	1748	508
WESTERN NAT GAS									
BATES									
2D 18 24 37	N	98	32147-	9564	PO 41711 EX	8766	32945-	6676	477
BLINEBRY A FED									
2D 30 23 37	N	100	4113-	52679	56792 EX	66369	9577	50513	8053
7G 30 23 37	N	100	34161-	10561	44722 EX	24349	20373-	18535	2509
COMBEST C									
1H 35 23 36	N	200	42303	17341	24962	37588	62550	28614	1776
COOPER									
2F 1 22 43 6	N	50	17091-	6588	PO 23679 EX	3788	19891-	2885	295
COOPER C									
1G 1 22 43 6	N	50	5504-	3473	8977 EX	3697	5280-	2816	273
COWDEN									
1P 30 23 37	N	75	8312-	56	8368 EX	7729	639-	5885	657
CURRY									
1P 1 24 36	N	100	21404-	5452	26856 EX	14997	11859-	11417	1275
GUTHRIE									
1O 34 23 36	N	100	21957-	2860	24817 EX	7516	17301-	5724	288
HALE									
1K 34 22 36	N	100	5855	12952	7097 EX	11669	4572	8885	836
HARRINGTON									
1D 1 20 36	N	100	8358-	24275	32633 EX	50945	18312	38775	6018
HARRIS									
1D 7 25 37	N	98	8761-	4041	12802 EX	11669	1133-	8885	868
JONES									
1A 34 22 36	N	200	11675	22004	10329 EX	41301	30972	31441	2021
LANEXFORD									
1C 2 5N 33 6	N	100	61004	82099	21095 EX	45170	24075	34380	5256
MATTIX									
1P 15 23 36	N	100	5332-	916	6248 EX	11457	5209	8724	808
MCDONALD T									
1 14 22 36	N	100	33496	4347	29149	62110	91259	47272	7491
3 33 6 22 36	N	100	43318	55480	12162 EX	87986	75824	66964	10901
4 33 6 22 36	N	100	73336	46851	39515 EX	62906	23391	47877	7596
5 33 6 22 36	N	100	23013-	51617	74630 EX	42987	31643-	32771	4966
6 33 6 22 36	N	100	12033-	26765	38799 EX	34862	39337-	26553	4389
7 33 6 22 36	N	100	44447	30899	13358	23789	25147	18135	2434
8 33 6 22 36	N	100	19104	20009	17095	9464	26559	7200	5455
9 33 6 22 36	N	100	15601-	50998	20699 EX	20560	1399-	15651	2005
11 4 22 36	N	100	12141	60499	6092	23399	29491	17817	8407
12 33 6 22 36	N	100	40004	40004		12745	10133	12745	2371
13 33 6 22 36	N	100	84003	138	83865	17467	10133	13298	1601
14 G 15 22 36	N	100	238731		238731	50700	289431	38593	2641
MCDONALD T A									
1 15 22 36	N	100	77584-	36761	P 114345 EX	14481	99864-	11025	1207
OWENS									
1M 26 22 36	N	100	20084-	11083	31167 EX	21310	9857-	16222	2108
RECORD									
1P 10 22 36	N	200	16838	29610	12772 EX	32540	19768	24773	1443
SHIPLEY									

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DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
1N272236	N	100	3723-	5645	9368EX	20999	11631	15986	2067
STATE A 35									
1P352236	N	100	33423	51558	18135EX	44753	26618	34063	5201
STATE B									
1C 22537	N	25	1710-	1111	2821EX	1379	1442-	1050	26
STEELER C									
1P192337	N	100	14923-	3761	18684EX	9517	9167-	7247	552
2N192337	N	100	42524-	43714	86238EX	42464	43774-	32321	4899
TOBY									
1P122436	N	100	24729-	4889	29618EX	14330	15288-	10910	1187
TOBY A									
1A132436	N	100	19771-	6545	26316EX	16634	9682-	12663	1491
WELLS FED									
1G 62537	EN	100	179854-	8296	P188150EX	15845	172305-	12063	1387
WIMBERLY									
1F232537	N	75	449	6639	6190EX	7683	1493	5851	648
WOOLWORTH FED									
1A172537	N	100	35471-	21892	57363EX	21780	35583-	16580	2170
PIPELINE	TOTAL		655859	5265640	460978 1EX	7109634	2499853	5429116	

PERMIAN BASIN PIPELINE SYSTEM

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
AMERADA PETROLEUM									
FALBY									
3K192437	N	25	10727	4004	6723	3046	9769	2319	904
HODGES									
11 82437	N	100	81946	64271	17675	31338	49013	23853	3431
STATE JCT									
1B162336	N	50	8969	1143	7826	3568	11394	2718	239
2G162336	N	50	14333	3253	11080	3311	14391	2522	171
STATE LMT									
2F362336	N	100	54268	45336	8932	22803	31735	17359	2305
5A362336	N	100	12165-	3375	15540EX	10593	4947-	8066	694
F. STUART									
1G222537	N	38	9939		9939	2436	12375	1855	142
ANDERSON PRICHARD									
STATE A 32									
1E322437	N	75	32434	4099	28335	10200	38535	7766	1091
GULF OIL CORP									
CHRISTMAS A									
2H272236	N	200	76467	49075	27392	68557	95949	52183	3819
J H DAY									
3N 62236	N	142	49425	6276	43149	9225	52374	7027	154
CARTER EAVES A									
1C 62437	N	50	6590	8307	1717EX	12952	11235	9859	2714
FOWLER HAIR									
1M 82437	N	25	3728	10866	7138EX	13233	6095	10072	6281
J R HOLT A									
2N162437	N	175	15054	4482	10572	21331	31903	16241	965
J R HOLT B									
2P362336	N	50	24463	20318	4145	20743	24888	15788	4771
J F JANDA F									
7K 42236	N	200	77366	21912	55454	18669	74123	14217	528
JANDA G STATE									
1A242336	N	100	96996	53787	43209	66839	110048	50871	8115
C. E. LA MUNYON									
4D292337	N	100	52401	26639	25762	33028	58790	25140	3654
LEONARD D STATE									
3K 32236	N	300	542290	214417	327873	249769	577642	190094	10281
MANDA C									
1B352336	N	25	1841	2974	1133EX	2394	1261	1823	563
ARNOTT RAMSAY B STATE									
1M322537	N	200	73450	17161	56289	22383	78672	1704[illegible]	773
ARNOTT RAMSAY B									

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION +	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE +	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
2H 3 22537	N	200	5319-	5235	10554 FX	17942	7388	13664	480
RAMSAY E ST	T								
2 01625 37	N	175	125741	28468	97273	47540	144813	36187	2881
ARNOTT RAMSAY E	S								
5E 16 2537	N	175	181806	32631	149175	45312	194487	34492	2713
W A RAMSAY	NST								
1M 34 2136	N	400	636706	230484	406222	326628	732850	248590	10070
WOLWORTH									
3K 30 2437	N	198	82486	37409	45077	38095	83172	29000	1835
PAN AMERICAN									
C MEYER B	FED								
2M 4 2437	NN	100	40962	4456	36506	13693	50199	10425	1103
4E 21 2437	NN	50	24233	9382	14851	12899	27750	9818	2700
11B 6 2437	N	200	100336	64841	35495	69906	105401	53209	3908
WOOLWORTH									
4E 28 2437	N	100	16070-	4826	20896 FX	13488	7408-	10270	1076
SINCLAIR OIL & GAS									
STATE 157	G								
1H 5 2236	N	100	52062-	4169	P056231 FX	7440	48791-	5667	278
SKELLY OIL CO									
J C JOHNSON	N								
4D 20 2337	N	100	40028	6790	33238	13617	46855	10368	1093
E L STEELER	R								
7L 17 2337	N	100	18072-	2432	20504 FX	7417	13087-	5649	275
TEXACO									
STATE B NCT	2								
3D 16 2336	N	100	38559	9035	29524	9441	33965	7189	542
J D YOUNG									
30 5 2437	N	100	56211	18348	37863	36204	74067	27556	4073
PIPELINE TOTAL			2456067	1020201	1435866	1286040	2721906	978901	
PHILLIPS PETROLEUM COMPANY PIPELINE SYSTEM									
CARPER DRLG CO									
CARPER CON ST A									
1A 12 2235	N	100	4486	1555	2931	9403	12334	7161	537
SOCONY MOBIL OIL COMPANY INCORPORATED									
STATE C									
20 16 2336	N	50	7445	2151	5294	3606	8900	2747	249
TIDEWATER OIL CO									
DAY									
1C 6 2236	A		189821-		P189821 EX		189821-		
PIPELINE TOTAL			177890-	3706	181596 EX	13009	168587-	9908	
SCHERMERHORN OIL CORP PIPELINE SYSTEM									
KENWOOD OIL CO									
STATE B148									
1C 32 2437	XM	25	2465	2465		2570	2570	2570	
PIPELINE TOTAL			2465	2465		2570	2570	2570	
SOUTHERN UNION GAS COMPANY PIPELINE SYSTEM									
GACKLE ALBERT									
JONES RODMAN									
1M 35 2236	N	100	2773	13237	10464 EX	17187	6723	13084	1564
SINCLAIR STATE									
4H 32 336	N	206	17887	34098	16211 EX	39507	23296	30075	1827
PIPELINE TOTAL			20660	47335	26675 EX	56694	30019	43159	

DESCRIPTION	STATUS	ACREAGE FACTOR	FEBRUARY BEGINNING NET ALLOWABLE ±	FEBRUARY MCF PRODUCTION	FEBRUARY OVER/UNDER PRODUCTION ±	MAR. CURRENT ALLOWABLE	MAR. ENDING NET ALLOWABLE ±	APR. NEW ALLOCATION	ACREAGE OR DELIVERABILITY
UNITED CARBON COMPANY PIPELINE SYSTEM									
CITIES SERVICE									
CLOSSON FED									
1 LJ 6 22236	N	200	32216 -	15684	47900 EX	68936	21036	52471	3844
CLOSSON B FED									
6 E 20 22236	M	200	2142	2142		2727	2727	2727	61
8 LJ 19 22236	N	1920	171660 -		P171660 EX	15143	156517 -	11533	337
9 LJ 19 22236	N	200	30290 -	3389	33679 EX	15153	18526 -	11541	296
PIPELINE TOTAL			232024 -	21215	253239 EX	101959	151280 -	78272	
POOL TOTAL			2725137	636056	3635425 EX	856906	493481	654926	

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. 1941
Order No. R-1655

APPLICATION OF JAL OIL COMPANY
FOR EXCEPTIONS TO VARIOUS PROVI-
SIONS OF ORDERS R-520, R-967, AND
R-1092-A FOR 3 WELLS IN THE JALMAT
GAS POOL, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 13, 1960, at Hobbs, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 25th day of April, 1960, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, 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 is the owner and operator of the following-described wells in the Jalmat Gas Pool, Lea County, New Mexico:

Dyer Well No. 3, SE/4 NE/4 of Section 31,
Township 25 North, Range 37 East

Owens Well No. 1, SW/4 SW/4 of Section 21,
Township 25 South, Range 37 East

Watkins Well No. 2, SE/4 NE/4 of Section 35,
Township 24 South, Range 36 East.

(3) That according to the testimony presented, each of the above-described wells makes a considerable amount of water, the Dyer Well No. 3 approximately 35 barrels per day, the Owens Well No. 1 approximately 40 barrels per day, and the Watkins Well No. 2 approximately 250 barrels per day.

(4) That all of the above-described wells were the

subject of an Examiner Hearing in Case No. 1779, heard October 7, 1959, after which hearing the said Dyer Well No. 3, which was subject to complete shut-in for being more than six times over-produced, was exempt from complete shut-in and the operator was permitted to make up this well's over-production by producing it at a monthly rate not to exceed 75% of the well's current allowable or at a rate not to exceed 75% of the well's average monthly allowable for the preceding six-month proration period, whichever was greater.

(5) That at the time of the said Examiner Hearing the said Owens Well No. 1 and the said Watkins Well No. 2 were substantially in balance. Since these two wells were not subject to shut-in for over-production, it was the opinion of the Commission that no relief was necessary.

(6) That the latest gas production figures show that the Owens Well No. 1 is under-produced rather than over-produced and thus it apparently needs no relief.

(7) That the said Watkins Well No. 2 is approximately twelve times over-produced and, under the provision of Order R-520 and Order R-967, is subject to complete shut-in until such time as it becomes less than six times over-produced.

(8) That due to liquid problems, the applicant should be permitted to produce the said Watkins Well No. 2 at a monthly rate not to exceed 75% of the well's current allowable, or at a monthly rate not to exceed 75% of the well's average monthly allowable for the preceding six-month proration period, whichever is greater.

(9) That due to liquid problems, the applicant seeks an order cancelling the over-production incurred by each of the subject wells and exempting these wells from the requirements of an Annual Deliverability Test. In addition, the applicant requests that these wells be exempt from prorationing as it is now practiced under the Jalmat Gas Pool rules.

(10) That the said Watkins Well No. 2, which makes a substantial amount of water, is being produced without a free-piston or pump-jack installation, even though applicant's experience with other wells in the same general area has been that such mechanical devices are useful in keeping water unloaded from well bores.

(11) That the water produced from the said Owens Well No. 1 is being lifted by means of a free-piston installation. Such an installation requires that the water be lifted by gas production, and if the gas allowable assigned to this well is insufficient to keep the water unloaded from the well, the operator could install a pump-jack to accomplish this purpose.

(12) That a pump-jack has recently been installed in the said Dyer Well No. 3 and the evidence does not establish that this installation is inadequate to keep the water unloaded from this well.

(13) That a pump-jack installation operates independently of gas production and, from an engineering standpoint, there appears to be no reason why such an installation, if properly sized cannot keep the formation clear of water, while keeping the gas production at a level within the gas allowable assigned to the well.

(14) That the applicant has apparently made no study or investigation to determine where the water produced by the subject wells is coming from. Further, the applicant has apparently made no study to determine whether remedial work can be performed in order to shut off the water production.

(15) That the applicant has not made a study to determine whether or not it would be feasible to produce the wells in such a manner as to keep the formation clear of water and then re-inject the amount of produced gas which is in excess of the allowable assigned to well.

(16) That according to the applicant's testimony as to the recoverable reserves underlying the tracts dedicated to each of the subject wells, the applicant should be willing to perform the remedial work necessary to alleviate these water problems, or to install such mechanical installations as are necessary to keep the formation clear of water, since such work would apparently be economically feasible.

(17) That 160 acres is dedicated to the said Dyer Well No. 3, 80 acres is dedicated to the said Owens Well No. 1, and 40 acres is dedicated to the said Watkins Well No. 2, so that even in the event that the production from one or more of these wells is lost due to water encroachment, which event should not occur if the operator makes every effort to prevent it, there should be no ultimate loss of gas from the Jalmat Gas Pool, inasmuch as one well in this Pool will efficiently and economically drain 640 acres, and the gas underlying the tracts dedicated to each of the subject wells presumably would be produced from offset wells.

(18) That in regard to certain of the applicant's wells, a re-dedication of acreage would be feasible and could result in an increase of the per well allowable.

(19) That to cancel the over-production which the subject wells have thus far incurred would impair the correlative rights of other operators in the Jalmat Gas Pool, and to permit any well to consistently produce more gas than is assigned as an

allowable to such well in accordance with the proration formula for the pool would impair the correlative rights of other operators in the pool.

(20) That since the allowable assigned to wells in the Jalmat Gas Pool is dependent in part upon a well's calculated deliverability as determined by an Annual Deliverability Test, the subject wells should not be exempt from such test. Presumably the reason for the applicant's request that the subject wells be exempt from Deliverability Test is so that they will not have to be shut-in prior to the pre-flow period. This shut-in period can and should be dispensed with by allowing the applicant to use the highest of the shut-in pressures of the four nearest wells in the Jalmat Gas Pool in taking the Deliverability Test on each of the subject wells.

(21) That the applicant has failed to establish any compelling reason why the Commission should exempt the subject wells from gas prorationing, an action which would be a radical departure from present Commission policy and which would have far-reaching effects.

IT IS THEREFORE ORDERED:

(1) That the application of Jal Oil Company for an order exempting the following-described wells in the Jalmat Gas Pool from gas prorationing, and for an order cancelling the over-production incurred by each of the said wells and exempting them from deliverability tests be and the same is hereby denied:

Dyer Well No. 3, SE/4 NE/4 of Section 31,
Township 25 South, Range 37 East

Owens Well No. 1, SW/4 SW/4 of Section 21,
Township 25 South, Range 37 East

Watkins Well No. 2, SE/4 NE/4 of Section 35,
Township 24 South, Range 36 East

all in Lea County, New Mexico.

(2) That the operator be and the same is hereby authorized to compensate for the over-production incurred by the said Watkins Well No. 2 by producing it at a monthly rate not to exceed 75% of the well's current allowable or at a monthly rate not to exceed 75% of the well's average monthly allowable for the preceding six-month proration period, whichever is greater.

(3) That in taking the Annual Deliverability Test on each of the above-described wells, the operator be and the

same is hereby authorized to use the highest of the shut-in pressures of the four nearest wells in the Jalmat Gas Pool.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JOHN BURROUGHS, Chairman

MURRAY E. MORGAN, Member

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

esr/

GIRAND & STOUT
LAWYERS
204 NEW MEXICO BANK AND TRUST CO. BUILDING
HOBBS, NEW MEXICO

W. D. GIRAND
LOWELL STOUT

TELEPHONE:
EXPRESS 3-9116
POST OFFICE BOX 1445

May 10, 1960

Oil Conservation Commission
State Capitol
Santa Fe, New Mexico

Attention: Mr. A. L. Porter

Gentlemen:

I enclose original and two copies of Motion for Rehearing in Case No. 1941. I would appreciate your advising writer the action of the Commission in connection with the granting of the rehearing.

Respectfully submitted,

GIRAND & STOUT

BY: [signature]

Enclosures
G/jw

cc: Jal Oil Company
Box 1744
Midland, Texas

cc: Olsen Oils, Inc.
Liberty Bank Bldg.
Oklahoma City 2, Oklahoma

[signature]
5/16/60

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:

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SIONS OF ORDERS R-520, R-967, AND
R-1092-A FOR 3 WELLS IN THE JALMAT
GAS POOL, LEA COUNTY, NEW MEXICO.

MOTION FOR REHEARING

COMES NOW the Jal Oil Company, a New Mexico corporation with principal office in Midland, Midland County, Texas, and files this its Motion for Rehearing on the above entitled and numbered application, and for cause would show:

1. That the above numbered application was heard on April 13, 1960, and thereafter on April 25, 1960, the Commission entered its order thereon; that in said order the Commission made twenty-one findings and denied the relief prayed for by the applicant. Applicant excepts to the findings made by the Commission numbered 10, 13, 14, 15, 16, 17, 18, 19 and 21 for the reason that said findings are not supported by any evidence offered at the hearing.

2. That the Commission has ignored entirely the uncontroverted proof offered by the applicant to the effect that all of said wells are connected to low pressure gathering lines having an operating pressure of approximately 100 pounds, being the minimum required under contract; that the subject wells produce large volumes of water in connection with the production of gas and the only method of producing being that of artificial means, i.e. pump-jack or floating piston, that the rate of gas

flow cannot be regulated because of the rate of flow of the encroaching water; that tests show on the Watkins No. 2 that the minimum rate of gas the well should be allowed to produce in order to prevent premature abandonment of said well was 375 MCF's per day; this test was made by the El Paso Natural Gas Company, i.e. that the gas proration schedule for the Jalmat Gas Pool for the month of March disclosed 387 gas wells; that the applicant owned and operated 10 of these wells, thereby owning 2.584% of the producing gas wells in the pool. It further showed that the total daily allowable for gas from the Jalmat Gas Pool was 8,600,945 MCF's and that the allowable attributable to applicant's wells was 131,666 MCF's or 1.531% of the total gas allowable to said wells, i.e. that applicant had combined in the record the testimony in Case No. 1779 heard by the Commission on October 7, 1959, and that from said date of the subject wells involved in the prior application, three of said wells had been entirely lost and incapable of being placed back on production, this loss of wells due to shut-in being the undisputed testimony of all witnesses as shown by the record in two cases, i.e. that the Commission failed to find that the subject wells were allowed to produce for more than one year as marginal wells before being reclassified and upon their reclassification were charged with all production for a 12-month period, bringing about a considerable over-production which could have been averted had the wells been timely reclassified in accordance with the rules, i.e. that the Commission has ignored the mandate of the statute which requires the Commission to act to prevent the premature abandonment of wells due to the encroachment of water and the Commission failed to determine that there

is no basis for marginal wells under a gas proration order which provides for a deliverability test.

WHEREFORE, applicant prays that this application be set for rehearing and upon final determination the applicant be granted the relief as originally prayed for.

JAL OIL COMPANY

By _____
W. D. Girand, Attorney

SUMMARY OF MONTHLY ALLOCATION AND PRODUCTION FROM JAN. 1, 58 THRU JUNE 1960

	DYER #3 MCF		JENKINS #1 MCF		LEGAL #2 MCF	
	Allocation	Prod.	Allocation	Prod.	Allocation	Prod.
Jan. 1958	21,556	12,293	21,556	15,264	21,556	15,406
Feb.	21,105	11,616	21,105	12,719	21,105	13,501
March	19,938	11,627	19,938	13,586	19,938	13,637
April	14,944	10,044	14,944	10,868	14,944	9,550
May	15,119	9,360	16,033	12,822	17,880	10,853
June	15,119	11,830	16,033	14,162	17,880	13,934
July	15,119	11,976	16,033	14,489	17,880	12,014
Aug.	15,119	8,056	16,033	14,484	17,880	11,897
Sept.	15,119	10,386	16,033	8,989	17,880	13,009
Oct.	15,119	11,043	16,033	13,217	17,880	13,536
Nov.	15,119	10,527	16,033	13,664	17,880	11,248
Dec.	15,119	8,785	16,033	8,998	17,880	9,352
Total 1958	198,495	127,543	205,807	153,262	220,583	147,937
Jan. 1959	15,119	10,930	16,033	11,359	17,880	12,978
Feb.	15,119	9,286	16,033	11,007	17,880	7,629
March	15,119	10,229	16,033	10,828	17,880	12,560
April	15,119	8,850	16,033	12,373	17,880	10,847
May	15,119	8,460	16,033	11,751	17,880	7,991
June	15,119	5,645	16,033	7,688	17,880	6,084
July	10,192	6,412	13,702	9,863	14,033	10,138
Aug.	3,305	4,710	4,442	4,812	4,549	8,702
Sept.	5,312	5,059	7,133	6,760	7,304	8,894
Oct.	6,001	4,671	8,035	3,149	8,226	13,256
Nov.	6,691	663	8,970	1,534	9,185	13,238
Dec.	8,469	151	11,387	2,188	11,662	14,201
Total 1959	130,684	75,066	149,867	93,312	162,239	126,518
Jan. 1960	4,294	1,398	5,778	501	5,917	11,804
Feb.	2,542	3,752	3,422	11	3,505	11,013
March	6,993	4,892	9,411	144	9,638	8,886
April	5,326	3,434	7,166	150	7,339	2,286
May	4,607	3,751	6,200	100	6,350	2,784
June	3,416	6,566	4,591	970	4,702	7,086
	27,178	23,793	36,568	1,876	37,451	43,859
	356,357	226,402	392,242	248,450	420,273	318,314

E. OWEN #1 MCF		WATKINS #2 MCF	
Allocation	Prod.	Allocation	Prod.
10,778	17,925		
10,552	13,928		
9,969	14,597		
7,472	9,580		
23,847	7,266		
8,568	3,187		
1,145	-0-		
154	-0-		
1,587	-0-		
1,752	-0-		
2,997	-0-	10,211	
2,935	-0-	11,665	
81,756	66,483	21,876	
3,741	-0-	3,469	2,001
1,996	-0-	1,834	2,499
1,968	1,364	1,822	51
1,384	-0-	1,282	17
319	-0-	295	244
2,061	-0-	1,913	63
5,707	-0-	3,728	112
1,851	-0-	1,209	1,866
2,973	-0-	1,940	4,582
3,354	43	2,184	308
3,742	852	2,439	4,688
4,742	3,338	3,098	6,501
33,838	5,597	25,213	22,932
2,405	1,034	1,572	9,642
1,424	1,539	931	6,849
3,917	910	2,561	5,890
2,983	89	1,950	2,165
2,581	-0-	1,687	-0-
1,912	-0-	1,249	-0-
15,222	3,572	9,950	24,546
130,816	75,652	35,163	69,354

NEW MEXICO OIL CONSERVATION COMMISSION

PURCHASER"S NOMINATIONS FOR CRUDE OIL - AUGUST, 1960

SOUTHEAST NEW MEXICO

Continental	15,000	+1,500	
Famariss	10		
Atlantic	4,515	+ 305	
Cactus	4,902	+ 281	
Cities Service	10,800		
Gulf	20,000	-1,000	
Mobil	22,690	- 925	
Phillips	2,100		
Shell	37,600	+2,900	
Indiana	52,000		
Sinclair	29,000		
Texaco	32,000		
Tidewater	3,500		
McWood	5,772	+1,633	*(920)
Permian	3,264	- 147	
Graridge	255	- 7	
High Lonesome	400		
Neil H. Wills	464	+ 464	**
TOTAL SOUTHEAST NEW MEXICO	244,272	+5,004	

NORTHWEST NEW MEXICO

McWood	348	+ 34
El Paso	9,200	+300
Shell	33,000	
Gulf	3,200	+100
Oriental	275	+ 25
Vanadium	27	
TOTAL NORTHWEST NEW MEXICO	46,050	+459
TOTAL NEW MEXICO	290,322	+5,463

* Formerly Nominated By Mobil Oil Company
** Formerly Nominated By Continental Oil Company

No.

LEGAL #2
NE SE 31-25S-37E
Lea County, New Mexico

The Legal #2 is a Jalmat gas well produced with a free piston installation installed in March, 1958. This well was produced as a marginal well until the middle of 1959 when it was then reclassified as a non-marginal retroactive to July, 1958, and assessed with an over produced status of 77,837 mcf. This well's production was reduced some and each time the well was shutin or died it became more difficult to get it back on production.

This well, prior to the installation of the free piston, was averaging approx. 13,563 mcf per month. The latter month the production was dropping and the water encroachment was increasing, so the piston was installed. From March, 1958 to July, 1959 the well averaged 10,899 mcf. This average is lower than the approx. 9 months average prior to the piston installation because of the increasing water condition and pressure drop. From July, 1959, the well's production was restricted some, trying to determine a rate of flow in which the well would not log off, and its monthly average was 10,242 mcf.

In May, 1960, the well produced 2,784 mcf. 2,343 mcf's were produced from May 1st through 12th. The well was then shutin and same logged off. Approx. May 18, 1960, the well was allowed to produce unrestricted. The following is a daily summary of the well's activity.

5-23-60 Well was logged off. There was no production from May 12 to this date. The Oil Conservation Commission was notified of our plans to swab this well in.

5-24-60 Swab unit rigged up, fished piston and swabbed three hours. Free piston was allowed to run several times to air to unload fluid. Produced approx. 4 bbls. oil and 12 bbls. water. Piston setting was approx. 45 minuted on and 90 minutes off. Well produced approx. 97 mcf. Mr. L. A. Clements with the Oil Conservation Commission witnessed the above procedure. After the above swabbing, the unit was released and the well died approx. 3 times this day and was blown in each time. A continuous watch was kept on this well to see that same was not logged off for any period of time to avoid having to call a swab unit back. El Paso line pressure was approx. 173#, casing pressure was 225#.

5-25-60 Well produced approx. 6 mcf. El Paso's line pressure was approx. 222#. The well was blown in approx. three times but would not take the line and unload the fluid.

5-26-60 Well produced approx. 75 mcf. Well was blown in twice and took the line for only a short period of time before it logged off. El Paso's line pressure was approx. 205#. Piston setting was set for 30 minutes on and 30 minutes off. Tubing pressure 220#.

5-27-60 Well produced approx. 20 mcf. Casing pressure was 250#, El Paso line pressure was approx. 118#. Approx. 14 bbls. fluid were produced, same being approx. 12 bbls. water and 2 bbls. oil. Well was logged off most of this day. Well was blown in twice unloading above fluid but would not take the line.

5-28-60 Well produced approx. 193 mcf gas with approx. 15 bbls. fluid (12 bbls. water and 3 bbls. oil). El Paso's line pressure was approx. 205#. Gas flow was weak and logged, at 3:30 p. m. well was blown in.

5-29-60 Well produced approx. 35 mcf gas, approx. 1 bbl. oil and 6 bbls. water. Well was blown in twice as piston was not running, but well would not take El Paso's line for any length of time. El Paso's line pressure was approx. 212#.

5-30-60 Well produced approx. 7 mcf gas, approx. 1 bbl. oil and approx. 10 bbls. water. Casing pressure 250#, tubing pressure 200# and El Paso's line pressure approx. 243#. Well was blown in to relieve fluid from formation but well would not take El Paso's line.

5-31-60 Well produced approx. 8 mcf, piston setting still approx. 30 minutes on, 30 minutes off. Well was blown in for 1 hour and 45 minutes to unload fluid. Shutin for 2 hours to build pressure, then turned into El Paso's line. Well would not buck El Paso's line pressure of approx. 212#.

From May 24, 1960 to June 1, 1960, well produced 441 mcf gas.

6-1-60 Well produced approx. 29 mcf gas, approx. 2 bbls. oil and approx. 12 bbls. water. El Paso's line pressure approx. 192#. Free piston was not running, caught same and checked, found okay. Well too weak to take line, casing pressure 250#, well was blown in twice this day.

6-2-60 Well produced approx. 20 mcf. Well was blown in and produced approx. 1 bbl. oil and 6 bbls. water. El Paso's line pressure was approx. 205# average.

6-3-60 Well produced approx. 242 mcf with approx. 3 bbls. oil and 20 bbls. water. Well started out taking the line but was weak. El Paso's line pressure was approx. 179#. Well then started producing all right.

6-4-60 Well produced approx. 232 mcf. Water was not estimated. Well doing okay. El Paso's line pressure approx. 167#, casing pressure 250#.

6-5-60 Well produced approx. 260 mcf with approx. 3 bbls. oil and 20 bbls. water. Casing pressure 250#, El Paso line pressure approx. 158#.

6-6-60 Well produced approx. 265 mcf, approx. 3 bbls. oil and 20 bbls. water. Casing pressure 260#, El Paso's line pressure approx. 161#.

6-7-60 Well produced approx. 275 mcf, approx. 3 bbls. oil and 12 bbls. water. Casing pressure 260#, El Paso line pressure approx. 136#.

6-8-60 Well produced approx. 275 mcf with approx. 3 bbls. oil and 12 bbls. water. Casing pressure 260#, El Paso line pressure approx. 133#.

From June 1, 1960 to June 9, 1960, well produced 1,598 mcf gas.

6-9-60 Well produced approx. 313 mcf with approx. 3 bbls. oil and 18 bbls. water. Casing pressure 250#, El Paso line pressure approx. 144#. Well still set approx. 30 minutes on and 30 minutes off.

6-10-60 Well produced approx. 261 mcf with approx. 2 bbls. oil and 12 bbls. water. Casing pressure 240#, El Paso line pressure approx. 167#.

6-11-60 Well produced approx. 261 mcf with approx. 3 bbls. oil and 12 bbls. water. Casing pressure 240#, El Paso line pressure approx. 167#.

6-12-60 Well produced approx. 58 mcf with approx. 3 bbls. oil and 12 bbls. water. Casing pressure 200#. Blew well in twice but it would not take the line. El Paso's line pressure approx. 212#.

6-13-60 Well produced approx. 284 mcf. Casing pressure 220#. El Paso's line pressure approx. 176#.

6-14-60 Well produced approx. 309 mcf. Casing pressure 220#. El Paso's line pressure approx. 173#.

6-15-60 Well produced approx. 296 mcf with approx. 3 bbls. oil and 18 bbls. water. Casing pressure 230#. El Paso's line pressure approx. 176#.

6-16-60 Well produced approx. 292 mcf with approx. 2 bbls. oil and 12 bbls. water. Casing pressure 250#. El Paso's line pressure approx. 179#.

From June 9th to June 17, 1960, well produced 2,074 mcf.

6-17-60 Well produced approx. 292 mcf. El Paso line pressure approx. 185#.

6-18-60 Well produced approx. 293 mcf, approx. 2 bbls. oil and 14 bbls. water. Casing pressure 250#. Blew well in one time to catch piston and check same. El Paso line pressure approx. 185#.

6-19-60 Well produced approx. 280 mcf, approx. 2 bbls. oil and 16 bbls. water. Casing pressure 250#. El Paso line pressure approx. 192#.

6-20-60 Well produced approx. 257 mcf., approx. 2 bbls. oil and 18 bbls. water. Casing pressure 250#. El Paso line pressure approx. 185#. Well was blown in twice this day.

6-21-60 Well produced approx. 193 mcf, approx. 2 bbls. oil and 14 bbls. water. Casing pressure 250#.

6-22-60 Well produced approx. 286 mcf. Casing pressure 250#. El Paso line pressure approx. 176#. Gas Chart removed this date.

From June 17th to June 23, 1960, well produced 1601 mcf.

6-23-60 Well produced approx. 270 mcf, approx. 1 bbl. oil and 12 bbls. water. Casing pressure 250#, El Paso line pressure approx. 176#.

6-24-60 Well produced approx. 274 mcf. Blew well in as it was flowing weak. El Paso line pressure approx. 173#.

6-25-60 Well produced approx. 277 mcf, approx. 2 bbls. oil and 18 bbls. water. El Paso line pressure approx. 158#.

6-26-60 Well produced approx. 278 mcf, approx. 2 bbls. oil and 16 bbls. water. Blew well in once - El Paso line pressure approx. 161#.

6-27-60 Well produced approx. 100 mcf. El Paso line pressure approx. 231#.

6-28-60 Well produced approx. 110 mcf, approx. 1 bbl. oil and 16 bbls. water. Blew well in twice. El Paso line pressure approx. 225#.

6-29-60 Well produced approx. 241 mcf, approx. 1 bbl. oil and 16 bbls. water. El Paso line pressure approx. 185#. Line pressure dropped to approx. 155# allowing production to increase.

6-30-60 Well produced approx. 263 mcf, approx. 3 bbls. oil and 20 bbls. water. Casing pressure 250#. El Paso line pressure approx. 167#.

From June 23 to July 1, 1960, well produced 1,813 mcf.

DYER #3
SE NW 31-25S-37E
Lea Co. New Mexico

The Dyer #3 is a Jalmat gas well produced by a pump jack installed January 21, 1960. Prior to January 21st this well produced with a free piston installation which was installed in December 1956. This gas well had a water encroachment problem so great in 1956 that it was unable to produce naturally, consequently the free piston was installed. This procedure of producing worked satisfactorily for a long period of time. The well was reclassified in 1959 retroactive to July 1958 from a marginal well to a nonmarginal well and assessed with an over produced status of 63,666 mcf. Due to cut back in production the last half of 1959 the water encroachment became too great for the free piston, so the pump jack was installed to relieve the formation of the water and allow the gas to penetrate the well bore.

In 1958 and the first 6 months of 1959 this well averaged 10,052 mcf per month, after the cut back in July 1959 the well averaged 3,611 mcf per month for the last 6 months of 1959, dropping so badly in December 1959 it only produced 151 mcf. The pump jack was installed January 1960 and for the 4 months thereafter it averaged 3,957 mcf per month.

In May 1960 the well produced 3,751 mcf, 2,477 mcf up to May 11th when the well was shut down. The well was then allowed to produce unrestricted approximately May 18, 1960 and the following is a daily summary from the time the well was placed back on production.

5-23-60 The pump jack has been running and chart showed first production today. Well produced 89 mcf. El Paso line pressure approx. 164#.

5-24-60 Well produced approx. 185 mcf gas with a trace of oil and water was not gauged. Pump jack was running and producing water through tubing. Mr. L. A. Clements with Oil Conservation Commission took a look at this well on this date. El Paso line pressure approx. 159#.

5-25-60 Well produced approx. 140 mcf. El Paso line pressure up to approx. 227# average, line pressure was off the 250# chart for a short period and gas production dropped to -0-.

5-26-60 Well produced approx. 210 mcf. gas and approx. 12 bbls water, pump jack was shut down part of this day. El Paso line pressure was approx. 199#.

5-27-60 Well produced approx. 190 mcf. gas, water amount not shown. El Paso line pressure approx. 194#.

5-28-60 Well produced approx. 140 mcf. gas, water amount not shown. El Paso line pressure approx. 199#.

5-29-60 Well produced approx. 110 mcf gas, pump jack was down and was started. El Paso line pressure approx. 208#.

5-30-60 Well produced approx. 30 mcf gas and 6 bbls water, pump jack pumped approx. 1/2 day. El Paso line pressure approx. 237# causing drop in production.

5-31-60 Well produced approx. 180 mcf gas and 12 bbls water. El Paso line pressure approx. 210#.

From May 23 through May 31 well produced 1,274 mcf.

6-1-60 Well produced approx. 212 mcf. gas and 12 bbls water and small amount of oil. Pump jack was shut down part of this day as pump had pumped off. El Paso line pressure approx. 185#.

6-2-60 Well produced approx. 175 mcf., well down approx. 4 hrs. due to El Paso line repair, pump jack down also. Line pressure up to approx. 237# for approx. 16 hours. then dropped to approx. 181#. Well showed increased production when line pressure dropped.

6-3-60 Well produced approx. 185 mcf. pump jack shut down. El Paso line pressure approx. 176#.

6-4-60 Well produced approx. 174 mcf., pump jack shut down. El Paso line pressure approx. 159#.

6-5-60 Well produced approx. 160 mcf. El Paso line pressure 151#.

6-6-60 Well produced approx. 106 mcf. El Paso line pressure approx. 159#.

6-7-60 Well produced 300 mcf., pump jack running and El Paso line pressure approx. 132#.

6-8-60 Well produced approx. 308 mcf. El Paso line pressure approx. 130#. Pump jack shut down.

For the period June 1 to June 9, 1960 the well produced 1,620 mcf gas.

6-9-60 Well produced approx. 313 mcf, 2 bbls oil and 15 bbls. water. Casing pressure 125#. El Paso's line pressure was approx. 135#.

6-10-60 Well produced approx. 230 mcf. Casing pressure 210#, El Paso's line pressure approx. 155#. Line pressure caused drop in production.

6-11-60 Well produced approx. 192 mcf. Casing pressure 220#, El Paso's line pressure approx. 159#.

6-12-60 Well produced approx. 37 mcf, 2 bbls oil and 12 bbls water. Casing pressure 250#, El Paso's line pressure approx. 199#. Well would not buck line pressure most of this day. Pump jack was started.

6-13-60 Well produced approx. 158 mcf gas, 1 bbl oil and 6 bbls water. Casing pressure 220#. Pump jack found dead and started same. El Paso's line pressure approx. 155#.

6-14-60 Well produced approx. 288 mcf gas, approx. 2 bbls oil and 12 bbls water. Casing pressure 220#, El Paso's line pressure approx. 168#. Pump jack died about 2:00 p. m.

6-15-60 Well produced approx. 296 mcf gas. Casing pressure 225#. El Paso's line pressure approx. 168#.

6-16-60 Well produced approx. 272 mcf with approx 2 bbls oil and 12 bbls water. Casing pressure 230#. El Paso's line pressure approx. 159#.

From June 9 to June 17, 1960 well produced 1,786 mcf gas.

6-17-60 Well produced approx. 205 mcf, approx. 2 bbls oil and 12 bbls water. Casing pressure 230#. El Paso line pressure approx. 176#.

6-18-60 Well produced approx. 261 mcf with a trace of oil and 12 bbls water. Casing pressure 250#, El Paso's line pressure approx. 176#. Pump jack running.

6-19-60 Well produced approx. 242 mcf, approx. 1 bbl oil and 12 bbls water. Casing pressure 240#, El Paso's line pressure approx. 181#.

6-20-60 Well produced approx. 238 mcf, approx. 1 bbl oil and 18 bbls water. Casing pressure 250#, El Paso's line pressure approx. 176#. Pump jack down, repairing stuffing box.

6-21-60 Well produced approx. 203 mcf, Casing pressure 240#. El Paso's line pressure approx. 176#.

6-22-60 Well produced approx. 257 mcf. El Paso line pressure approx. 165#. Pump jack running. The 8 day gas chart was removed today.

From June 17 to June 23 well produced 1,406 mcf.

6-23-60 Well produced approx. 248 mcf, approx. 2 bbls oil and 12 bbls water. Pump jack running. Casing pressure 250#. El Paso's line pressure approx. 168#.

6-24-60 Well produced approx. 242 mcf, No estimate on water. Pump jack shut down. Casing pressure 250#. El Paso's line pressure ranged from approx. 151# to 199#.

6-25-60 Well produced approx. 267 mcf. Approx 1 bbl oil and 12 bbls water. Pump jack shut down and repaired stuffing box. El Paso's line pressure approx. 149#.

6-26-60 Well produced approx. 257 mcf. Pump jack was started. El Paso's line pressure approx. 153#.

6-27-60 Well produced approx. 127 mcf. El Paso's line pressure approx. 227#. Pump jack running.

6-28-60 Well produced approx 141 mcf. Pump jack started. Casing pressure 250#. El Paso's line pressure approx. 217#.

6-29-60 Well produced approx. 226 mcf. Pump jack died during night. Casing pressure 250#. El Paso's line pressure approx. 181#. The line pressure varied this day dropping to approx 147# for part of the day.

6-30-60 Well produced approx. 246 mcf. El Paso's line pressure approx. 159#. Pump jack not running.

Well produced 1,754 mcf from June 23 to July 1, 1960.

EVA OWEN #1
SW SW 21-25S-37E
Lea County, New Mexico

The Eva Owen #1 is a Jalmat gas well operated by a free piston installation installed in November, 1956. This installation was necessary to keep the well on a producing status as the water problem was too great for the well to flow naturally.

The first quarter of 1958 the well averaged 15,483 mcf per month. It averaged 11,080 mcf for the first half of 1958 at which time it was shutin by the Oil Conservation Commission for over production and was shutin until October, 1959. The well at this time was in balance and a considerable amount of time and expense was devoted to trying to bring the well back to a producing status. The water encroachment problem had become so great during its shutin period that the well has not been restored to a producing status with the installation of the piston. In October, 1959, the well produced 43 mcf. In November, 1959, 852 mcf. In December, 1959, 3,338 mcf. In January, 1960, 1,034 mcf. In February, 1960, 1,539 mcf. In March, 1960, 910 mcf. April, 1960, 89 mcf and in May, 1960, production was -0-.

Approximately June 15, 1960, an extended effort was begun to bring the well to a producing status and the following is a summary of activity for this well. Prior to June 15, 1960, the well was blown in several times to see if same would take El Paso's line, but it would not do so.

6-15-60 The Oil Conservation Commission was notified and Mr. Clements witnessed the following work. Rigged up swab unit, fished piston, ran swab 3 times and flowed well to air for approx. 1 hour and well died. Pulled swab 1 time and well flowed approx. 45 minutes and died. Ran swab twice to kick well off. Well producing sulphur water, amount unexamined at this time. Casing pressure at 2:00 p. m. 280#.

6-16-60 Well producing approx. 40 bbls. water but unable to buck El Paso line. Casing pressure 500#, tubing pressure 300#. Intermitter set 1 hour on and 2 hours off. Well was blown at 8:30 a. m. and 4:30 p. m.

6-17-60 Well was blown in one time and vented to air to unload water but well logged off. Well produced approx. 40 bbls. water. Casing pressure 500#.

6-18-60 Well logged off and master valve shut in to build up pressure to blow well in. Casing pressure 500#.

6-19-60 Tried to blow well in but it did not respond.

6-20-60 Well logged off and will not respond to blowing in.

6-21-60 to 7-1-60 Well logged off.

JENKINS #1
SW SW 29-25S-37E
Lea County, New Mexico

The Jenkins #1 is a Jalmat Gas well produced by a free piston installation installed October, 1956. This installation was necessary due to a water encroachment problem which would not allow the well to flow if it had been shut down for a short period of time. This well was producing under a marginal well allowable until June, 1959, when it was reclassified as a non-marginal retroactive to July, 1958, and assessed with an over produced status of 82,897 mcf.

This well produced in 1958 and to June 1959 an average of 12,387 mcf per month. The last half of 1959 the well's production was cut back and averaged 5,142 mcf per month. The water encroachment problem and cut back on production has caused the well's ability to produce to drop almost to zero. For the first five months of 1960 the well has produced an average of 181 mcf's per month.

Approximately May 18, 1960, the well was allowed to produce unrestricted and the following is a daily summary of the well's activity.

5-23 to 6-2-60 well was logged off. Several attempts were made to restore it to a producing status but were unsuccessful.

6-2-60 Pulled 2" tubing to sand pump and cleaned out well. Mr. Joe D. Ramey was notified and witnessed the above.

6-3 to 6-7-60 Sand pumping well.

6-7-60 Ran 2" tubing and swabbed well.

6-8-60 Swabbing well.

6-9-60 Swabbed well - hooked up to intermitter and ran free piston several times. Well produced approx. 108 mcf, and a light show of oil with intermitter set approx. 30 minutes on and 30 minutes off. El Paso line pressure approx. 133#.

6-10-60 Well produced approx. 71 mcf gas, approx. 2 bbls. oil and 10 bbls. water. El Paso's line pressure approx. 150#, casing pressure 250#.

6-11-60 Well produced approx. 51 mcf gas, approx. 3 bbls. oil and 12 bbls. water. El Paso's line pressure approx. 155#. Free piston was caught and checked as well, appeared weak against line pressure. Casing pressure 225#.

6-12-60 Well produced approx. 32 mcf gas, approx. 2 bbls. oil and 16 bbls. water. Well was blown in for 1 hour to unload water as piston was not running. El Paso's line pressure approx. 199#. Casing pressure 250#.

6-13-60 Well produced approx. 57 mcf gas, approx. 2 bbls. oil and 12 bbls. water. El Paso's line pressure approx. 155#. Well was blown in twice as well was weak. Casing pressure 200#.

6-14-60 Well produced approx. 46 mcf. gas, approx. 1 bbl. oil and 12 bbls. water. Well was blown in twice to keep from logging off. El Paso's line pressure approx. 161#, casing pressure 225#.

6-15-60 Well produced approx. 46 mcf gas with trace of oil and approx. 18 bbls. water. El Paso's line pressure approx. 161#. Mr. Clements with the Oil Conservation Commission was on location today. Blew well to air piston, came up with estimated 2 bbls. fluid, same being muddy with a trace of oil.

6-16-60 Well produced approx. 48 mcf gas, approx. 1 bbl. oil and 18 bbls. water. El Paso line pressure approx. 167#. Well was blown in once this day, casing pressure 250#.

From June 9 to June 17 well produced 459 mcf.

6-17-60 Well produced approx. 44 mcf, approx. 1 bbl. oil and 16 bbls. water. Well was blown in once. Casing pressure 250#. El Paso's line pressure approx. 173#.

6-18-60 Well produced approx. 42 mcf, piston not running, blew in to unload fluid. Casing pressure 250#. El Paso's line pressure approx. 173#.

6-19-60 Well produced approx. 52 mcf, approx. 1 bbl. oil and 16 bbls. water. Casing pressure 240#. El Paso's line pressure approx. 179#.

6-20-60 Well produced approx. 48 mcf with a trace of oil and 18 bbls. water. Casing pressure 250#. El Paso's line pressure approx. 173#. Piston not running so well was blown in to unload fluid.

6-21-60 Well produced approx. 48 mcf., approx. 1 bbl. oil and 12 bbls. water. El Paso line pressure approx. 173#.

6-22-60 Well produced approx. 46 mcf with a trace of oil. El Paso's line pressure approx. 161# and 8 day chart was pulled this day.

Gas produced from 6-17-60 to 6-23-60 - 280 mcf.

6-23-60 Well produced approx. 56 mcf, approx. 1 bbl. oil and 16 bbls. water. El Paso line pressure approx. 167#. Casing pressure 250#.

6-24-60 Well produced approx. 18 mcf. El Paso line pressure ranged from approx. 144# to 167#.

6-25-60 Well produced about 10 mcf. El Paso line pressure approx. 150#. Shut in by El Paso - choke valve leaking in meter run.

6-26-60 Well produced approx. 7 mcf. El Paso line pressure approx. 138#. Shut in by El Paso checking for leak in meter run.

6-27-60 Well produced 6 mcf. El Paso line pressure approx. 225#. Choke closed by El Paso for text.

6-28-60 Well produced 23 mcf. El Paso line pressure approx. 198#. El Paso opened choke. Well heavily loaded with water. Ran piston several times to unload fluid.

6-29-60 Well produced approx. 49 mcf., approx. 1 bbl. oil and 15 bbls. water. Casing pressure 400#. El Paso line pressure ranged from approx. 143 # to 222#.

6-30-60 Well produced approx. 62 mcf. El Paso line pressure approx. 155#.

From June 23 to July 1, 1960, well produced 231 mcf.

WATKINS #2
SE NE 35-24S-36E
Lea County, New Mexico

The Watkins #2 is a Jalmat gas well completed in August, 1958, spaced on a 40 acre spacing. Well was connected to El Paso line November 7, 1958. For the balance of November and December, 1958 the well produced 21,876 mcf. Due to the low allowable, this well was shut in most of 1959, producing only a few days each month. The well averaged producing 1,911 mcf per month. During 1959 the water encroachment problem became so great the well would not unload the fluid naturally. The latter part of 1959 the well was producing approximately 200 to 250 barrels of water per producing day and had to be swabbed in each time it was shutin for any period of time.

Considerable study was given to this well to determine a minimum rate of flow at which the well would unload the fluid and not log off. On March 7, 1960, El Paso wrote two letters to Mr. Girand setting out various facts surrounding this well and that a minimum flow of 325 mcf per day would be reqired to keep the well from logging off. The casing pressure had dropped to 360# on March 31, 1960 where it had been 900# some months prior.

The wells production from January through May, 1960 ranged from 9,642 mcf in January to -0- in May. The latter part of May the Oil Conservation Commission was notified this well would be reworked to bring it back to a producing status. The following is a summary of this wells activity from May 23, 1960.

5-24-60 Set Baker plug at 2930' and perforated 3 sections. 2810-20, 2850-70, 2894-2902

5-26-60 Ran 2½" tubing with packer.

5-27-60 Set Halliburton packer at 2884, sand fracked with 3,000 gal., well sanded up, unable to swab. Lower zone only.

5-28-60 Freed swab, reverse circulated to bottom and rigged up to swab. Perfs. below Bridge Plug were not squeezed

5-29-60 Swabbed well in, well started to flow.

5-30-60 Flowed well in test tank, fluid 6 bbls. per hour, est. 95% water.

5-31-60 Well flowing in test tank 5 bbls. per hour, est. 98% water.

6-1-60 Well flowed an estimated 2 bbls. oil and 100 bbls. water in test tank - turned well into El Paso line.

6-2-60 to 6-14-60 Well logged off.

6-15-60 Rigged up swab unit. Found fluid in well 700' from top. Ran swab two times. Well flowing weak with large heads of water. Ran swab several more times and then started pulling tubing. This was witnessed by Mr. Clements with the Oil Conservation Commission.

6-16-60 Pulling tubing.

6-17-60 Tried to run Halliburton plug on line. Same would not go. Ran back in hole on tubing.

6-18-60 Set plug. Ran Halliburton R-3 packer for treating zone from 2850' to 2870'.

6-19-60 Stand by to treat well.

6-20-60 Swab tested zone from 2850' to 2870'.

6-21-60 Ran swab and recovered 300' sulphur water. Rig down unit.

6-22-60 Pulled tubing and packer to test zone 2810' to 2820'.

6-23-60 Plugged off bottom and swab tested zone 2810' to 2820'.

6-24-60 Swab tested. No gas.

6-25-60 Rigged down and moved swab unit.

6-26-60 to 7-1-60
Shut in pending additional rework.

S. R. COOPER #1
SW SE NE Section 23-24-36E
Lea County, New Mexico

The S. R. Cooper #1 is a Jalmat gas well produced by free piston installed in the spring of 1958. Prior to this installation the well was re-completed in January 1955 by plugging back to 3127 feet, with a 4½ inch liner set from 3132 to 2733 feet. The well was perforated in the Yates from 3020 to 3104 and completed as a Jalmat gas well. The well was originally completed at 3160, being plugged from total depth of 3600. The 1955 recompletion was done in an effort to shut off water.

From September, 1958, through June, 1959, this well averaged 5,268 mcf per month. (For the period July, 1959, through April, 1960, after the cutback the well averaged 3,529 mcf per month.) During the same period it produced an average of 16 barrels of water per day for the first 10 months but, during the last 10 months after the well was required to be shut in much of the time, it increased in water to an average of 25 barrels per day. In May, 1960, the well made no gas the entire month, being shut in during said period.

In June, 1960, the well produced approximately as follows:

6/ 1/60: No production.

6/ 2/60: No production.

6/ 3/60: No production.

6/ 4/60: No production.

6/ 5/60: No production.

6/ 6/60: No production.

6/ 7/60: No production.

6/ 8/60: No production.

6/ 9/60: No production.

6/10/60: No production.

6/11/60: No production.

6/12/60: No production.

6/13/60: No production.

6/14/60: No production.

6/15/60: No production.

6/16/60: Produced approx. 250 mcf gas, 16 barrels water, 1.000 orifice. Line pressure 169#. On approx. 22 hours.

6/17/60: Produced approx. 215 mcf gas, 25 barrels water, 1.000 orifice. Line pressure 169#. On 22 hours.

6/18/60: Produced approx. 201 mcf gas, 25 barrels water, 1.000 orifice. Line pressure 165#. Hours not shown.

6/19/60: Produced approx. 195 mcf gas, 16 barrels water, 1.000 orifice. Line pressure 115#. On approx. 22 hours.

6/20/60: Produced approx. 204 mcf gas, 23 barrels water, 1.000 orifice. Line pressure 112#. Hours not shown.

6/21/60: No production.

6/22/60: No production.

6/23/60: No production.

6/24/60: No production.

6/25/60: No production.

6/26/60: No production.

6/27/60: No production.

6/28/60: No production.

6/29/60: No production.

6/30/60: No production.

El Paso shows this well produced 1,076 mcf gas during this period.

Since we do not have access at this time to the integrated charts of El Paso for the period subsequent to July 1, we must rely on the field reports, as follows:

7/1/60: Field shows 195 mcf gas, 25 barrels water, 1.000 orifice, 116# line pressure. Hours not shown.

7/2/60: Field shows 207 mcf gas, 25 barrels water, 1.000 orifice, 122# line pressure. Hours not shown.

7/3/60: Field shows 205 mcf gas, 17 barrels water, 1.000 orifice, 122# line pressure, produced approx. 20 hrs.

7/4/60: Field shows 205 mcf gas, 25 barrels water, 1.000 orifice, 120# line pressure, prod. approx. 22 hrs.

7/5/60: Field shows 137 mcf gas, 25 barrels water, 1.000 orifice, 107# line pressure, prod. approx. 22 hrs.

7/6/60: Field shows 196 mcf gas, 18 barrels water, 1.000 orifice, 113# line pressure, prod. approx. 19 hrs.

7/7/60: Field shows 215 mcf gas, 23 barrels water, 1.000 orifice, 114# line pressure, prod. approx. 22 hrs.

7/8/60: Field shows 197 mcf gas, 17 barrels water, 1.000 orifice, 116# line pressure, prod. approx. 22 hrs.

El Paso shows total 7/1/60 to 7/8/60 as 1,597 mcf.

WINNINGHAM #3
NE SE Section 30-25S-37E
Lea County, New Mexico

The Winningham #3 is a Jalmat gas well produced by pump jack installed September 23, 1959. Prior to this installation this well, due to the encroachment of water, produced with a free piston installation, installed subsequent to the time it was plugged back and recompleted in the Yates zone in September, 1954. Prior to plugging back, the well was completed, according to records in our files, through open hole from the bottom of liner at 3050 to 3075 feet.

The free piston installation was unsatisfactory for the reason it could not handle the volume of water necessary to be lifted to allow the gas to feed into El Paso's line. Therefore, the pump jack was installed in an effort to keep the well producing.

From September, 1958, through June, 1959, this well averaged 11,251 mcf per month. For the period July, 1959, through April, 1960 after the cutback the well averaged 5,798 mcf per month. During the same period, it produced an average of 7.5 barrels of water per day for the first 10 months but, during the last 10 months after the well was required to be shut in much of the time, it increased in water to an average of 30 barrels per day. In May the well made 1,293 mcf of gas for the entire month while producing 30 barrels of water per day or a total for the month of approximately 930 barrels.

Attached is the daily production record of the well.

In June 1960 the well produced approximately as follows:

6/ 1/60: No production.

6/ 2/60: No production.

6/ 3/60: Produced 478 mcf (approximately) of gas, 30 barrels water, 1.250 orifice. Line pressure 170#.

6/ 4/60: Produced approx. 500 mcf gas, 30 barrels water, 1.250 orifice. Line pressure 116#.

6/ 5/60: Produced approx. 505 mcf gas, 30 barrels water, 1.250 orifice. Line pressure 116#.

6/ 6/60: Produced approx. 466 mcf gas, 30 barrels water, 1.250 orifice. Line pressure 117#.

6/ 7/60: Produced approximately 562 mcf gas, 30 barrels water, 1.250 orifice. Line pressure 114#.

6/ 8/60: Produced approx. 573 mcf gas, 30 barrels water, 1.250 orifice. Line pressure 114#.

6/ 9/60: Produced approx. 534 mcf gas, 23 barrels water, 1.250 orifice. Line pressure 114#.

6/10/60: Produced approx. 506 mcf gas, 30 barrels water, 1.250 orifice. Line pressure 115#.

6/11/60: No production.

6/13/60: No production.

6/14/60: No production.

6/15/60: No production.

6/16/60: No production.

6/17/60: No production.

6/18/60: No production.

6/19/60: No production.

6/20/60: No production.

6/21/60: No production.

6/22/60: No production.

6/23/60: No production.

6/24/60: No production.

6/25/60: No production.

6/26/60: No production.

6/27/60: No production.

6/28/60: No production.

6/29/60: No production.

6/30/60: Produced approx. 469 mcf gas, 26 barrels water, 1.250 orifice. Line pressure 114#.

7/ 1/60: Produced approx. 354 mcf gas, 30 barrels water, 1.250 orifice. Line pressure 116#.

El Paso shows this well produced 5027 mcf gas during this period.

For the month of July up to date, we are unable to ascertain the amounts produced from El Paso's integrated charts, as they are not yet available to us. However, we do have the reports from the field (being field calculations) as set out below:

7/ 2/60: Field shows 734 mcf gas, 30 barrels water, 1.250 orifice, line pressure 134#.

7/ 3/60: Field sees 735 mcf gas, 30 barrels water, 1.250 orifice, line pressure 138#.

7/4/60: Field shows 725 mcf gas, 30 barrels water, orifice 1.250, line pressure 154#.

7/5/60: Field shows 667 mcf gas, 30 barrels water, 1.250 orifice, line pressure 158#.

7/6/60: Field shows 462 mcf gas, 30 barrels water, 1.250 orifice, line pressure not shown.

7/7/60: Field shows 481 mcf gas, 30 barrels water, 1.250 orifice, line pressure 138#.

7/8/60: Field shows 490 mcf gas, 30 barrels water, 1.250 orifice, line pressure 136#.

7/9/60: Field shows 707 mcf gas, 30 barrels water, 1.250 orifice, line pressure 149#.

El Paso shows total 7/2/60 to 7/9/60 as 4,148 mcf.

PROPOSED SPECIAL POOL RULES FOR JALMAT GAS POOL
TO PROVIDE FOR CLASSIFICATION OF DISTRESSED WELLS

(All rules below will be added as amendments or additions to the Special Rules and Regulations for the Jalmat Gas Pool in Order R-1670.)

Rule 8 (A) 1:

The Pool Allowable remaining after deducting the total allowable assigned to marginal wells and distressed wells shall be allocated among the non-marginal wells in the Pool as follows:

Existing Rule 8 (A) 1 (a).

Rule 8 (A) 4:

No well except a distress well shall be assigned an allowable until a deliverability test has been filed with the Commission and approved.

Rule 10 (A):

A marginal well shall be assigned an allowable equal to its maximum production during any month of the preceding gas proration period. A distress well, as hereinafter defined, shall be allowed to produce the amount of gas necessary to maintain production under production methods approved by the Commission.

Rule 10 (B):

The Pool Allowable remaining after deducting the total allowable assigned to marginal wells and distress wells, shall be allocated among the non-marginal wells entitled to an allowable in the Jalmat Gas Pool.

Rule 15 (A):

A well classified as a distress well shall be exempt from the provisions of General Rule 15 (A).

Rule 20:

All wells not classified as marginal wells or distress wells shall be classified as non-marginal wells.

Rule 16 (C):

The Secretary-Director of the Commission may classify a well as a distress well without notice and hearing where application has been filed in due form and where the following facts exist and the following provisions are complied with:

1) The operator shows that he has exercised due diligence and used all feasible means to maintain the well in a producible condition and or restore

a) The well is producing through artificial means with a free flowing piston or pump jack, or from other mechanical means, and the well is making water in such amounts as after a 72-hour shut-in period the well becomes logged off and is unable to be restored to production after being swabbed for not less than 24 hours, or; actively

b) The operator shows that it is uneconomically feasable to utilize mechanical aids to maintain the well on production;

2) That all acreage belonging to the operator capable of being assigned to said well has been dedicated;

3) The operator must furnish to the Commission a report giving in detail all pertinent data with respect to the method employed by the operator in producing the well sought to be classified as a distress well, and such other and further information as the Commission may desire from time to time;

4) The applicant presents written consent in the form of waivers from all operators offsetting acreage dedicated to the proposed distressed well;

5) In lieu of 4) of this Rule, the applicant may furnish proof of the fact that said offset operators were notified by registered mail and furnished the same information as was furnished in their application to the Commission with respect to the proposed distress well. The Secretary-Director of the Commission may classify the well as a distress well if, after a period of twenty days following the mailing of said notice, no operator has made objection to the classification of the proposed distress well.

If protest is received a hearing is necessary

Should include low Pressure line.

BEFORE THE
OIL CONSERVATION COMMISSION
HOBBS, NEW MEXICO
APRIL 13, 1960

IN THE MATTER OF:

CASE 1941 Application of Jal Oil Company for exceptions to various provisions of Orders R-520, R-967, and R-1092-A for 5 wells in the Jalmat Gas Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order cancelling the over-production incurred by the following described wells in the Jalmat Gas Pool:

Legal Well No. 2, NE/4 SE/4, Section 31
Dyer Well No. 3, SE/4 NE/4, Section 31
Jenkins Well No. 1, SW/4 SW/4, Section 29
Owens Well No. 1, SW/4 SW/4, Section 21

all in Township 25 South, Range 37 East, and the

Watkins Well No. 2, SE/4 NE/4, Section 35, Township 24 South, Range 36 East.

Applicant further seeks an exception to the deliverability test requirements of said Orders for each of the above-described wells and also seeks an exemption from prorationing as required by the Special Rules and Regulations for the Jalmat Gas Pool.

BEFORE:

John Burroughs
~~Daniel S. Nutter~~
A. L. Porter

TRANSCRIPT OF PROCEEDINGS

MR. PORTER: We will proceed at this time to Case 1941.

MR. PAYNE: Case 1941. Application of Jal Oil Company for exceptions to various provisions of Orders R-520, R-967, and

MR. GIRAND: If the Commission please, I would like to have the record show W. D. Girand of Hobbs, New Mexico, Mr. T. Murray Robinson of Oklahoma City, appearing on behalf of the Applicant.

At this time, if the Commission please, in regard to the application of 1941, we desire to delete the wells designated as Legal Well No. 2 and the Jenkins Well No. 1. The applicant will attempt to recomplete those wells, and there will be some testimony offered in the course of what they propose to do in regard to those.

At this time we would like to have Mr. Hardwick and Mr. Dewey Watson sworn, please. This will be all my witnesses.

(Witnesses sworn)

MR. GIRAND: Call Mr. Hardwick, please.

E. D. HARDWICK,

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

DIRECT EXAMINATION

BY MR. GIRAND:

Q State your name, please.

A E. D. Hardwick.

Q And where do you live, Mr. Hardwick?

A Midland, Texas.

Q By whom are you employed and in what capacity?

A Jal Oil Company, Inc. Vice president.

Q Mr. Hardwick, you are familiar with the application filed by the Jal Oil Company in Case 1941 where the Jal Oil Company desires exceptions to various provisions of Orders R-520, R-967, and R-1092-A for 5 wells in the Jalmat Gas Pool, Lea County, New Mexico?

A I am.

Q In connection with that application, did you at my request, prepare certain information in regard to each of the wells?

A I did.

(Whereupon, Applicant's Exhibit No. 1 was marked for identification.)

Q Mr. Hardwick, I hand you here what has been identified as Applicant's Exhibit No. 1, being a copy of the "Southeast Gas Proration Schedule" prepared by the New Mexico Oil Conservation Commission for the month of April. I direct your attention to the page showing the April, 1960 Southeast Gas Proration Pool Balancing Schedule.

MR. PORTER: Does that page have a number?

MR. GIRAND: No, sir, the pages are unnumbered. It's the third page.

Q (By Mr. Girand) In the lower right hand corner of that Exhibit, that page of the Exhibit, there appears a computation in regard to the Jalmat Gas Pool, does it not?

A Yes.

Q Now, what is the allowable as established for the month of April, by that schedule?

A Six million, five hundred and forty-one thousand, nine hundred and twenty-six MCF.

Q All right. And how much of that allowable is assigned to marginal wells? Is that shown on the Exhibit?

A I don't believe any of it is assigned margins.

Q There is no allowable assigned to the margin of wells in that Exhibit?

A I don't see it.

Q All right. How many wells does it show are producing in the Jalmat Pool for the month of April?

A Three hundred and eighty-five wells.

Q All right. Now, directing your attention to Page 31 of the Exhibit, I will ask you whether or not the Exhibit shows on Page 31 the allowable assigned to the wells in question, the Dyer No. 3, the Watkins No. 2, and the Owens No. 1?

A Yes. It does show for April.

Q Now, directing your attention to those particular wells, will you read into the record the figures that are shown in regard to the particular wells.--

A The Dyer No. 3 --

Q -- and identify them by calling them as designated in the report?

A Dyer No. 3 has an allowable of 5,326 MCF's under "April New Allocation" column.

Q All right. What was the Watkins No. 2?

A Watkins No. 2 has an allowable of 1,950 MCF's for April, new allocation.

Q And in regard to the Eva Owen No. 1?

A Eva Owen No. 1 has 2,983 MCF's for April, new allocation.

Q Are all of these wells overproduced at the present time?

A No. The Eva Owen No. 1 is not overproduced, according to this schedule.

Q Now, in regard to the Dyer No. 3 and the Watkins No. 2, are those wells overproduced at the present time?

A Yes.

Q Are they overproduced more than the tolerance allowed by the Orders of the Commission?

A Appears so.

Q Mr. Hardwick, has the Jal Oil Company had their properties evaluated by a petroleum engineer to determine the reserves under additional wells?

A They have.

Q Who prepared that report?

A Ira Brinkerhoff, oil and gas consultant.

(Whereupon, Applicant's Exhibit No. 2 was marked for identification.)

Q Mr. Hardwick, I hand you here what has been identified as Applicant's Exhibit No. 2, and ask you to state whether or not that is a reproduction of a part of the report prepared by the petroleum engineer you referred to?

A Yes, it is.

Q Now, in connection with that Exhibit, does that Exhibit show the reserves as of October the 1st, 1959, attributable to the wells in question?

A Yes, sir.

Q Directing your attention to those particular wells, being the Legal No. 2, the Eva Owen No. 1, and the Watkins No. 2, I will ask you to read into the record the reserves as determined by the engineer attributable to those particular wells and identify it by wells, please sir.

A The Dyer No. 3, being the first one on the list; all the reserves on this report listed under high pressure gas are for the Dyer No. 3. The reserves unrecovered are future reserves, October, '59 were 2,648,289 MCF. That is the Dyer No. 3 listed under "Gas Wells" column.

Q The Exhibit shows it as one--

A It shows it as one gas well.

Q --one gas well.

A Which is all in the zone leased.

Q It doesn't give the well number. Proceed, Mr. Hardwick.

A The next well in question is the Jenkins No. 1, which, according to this report, there are two gas wells listed on this report. In discussing, it was decided that for this information, the reserves would be divided in half, and the original reserves being 2,358,190 MCF's, and I did not divide the production listed

"Cumulated to 10-1-59", but I do have it through December 1959, which is 891,756, leaving a remaining future recovery of 1,466,443 MCF's.

Q Now, that is exhibited as of the end of December?

A Yes, because there were two wells listed in this. I quoted it in that manner.

Q All right. Now, directing your attention to the Eva Owen No. 1 --

A The Eva Owen No. 1, as listed on the October 1959 report, shows an unrecovered future reserve of 1,897,873 MCF.

Q Now, Mr. Hardwick, in connection with your study --withdraw that question. Go ahead with Watkins No. 2, if you will, please.

A The last well under question of this report is on the 2nd page of the reserves report, same being Watkins No. 2, showing unrecovered future reserves of 2,871,421 MCF.

Q Now, Mr. Hardwick, in connection with your study of the problem, did you prepare an analysis showing the number of Jalmat wells and the number of Jal Oil Company wells, and the percentage of Jal Oil Company wells to total wells in the Jalmat area, and also the total Jalmat allowable and the amount of gas that was assigned to the Jal Oil Company, Jalmat allowable, and the percentage of Jal's allowable to the total allowable of the pool?

A I did.

(Thereupon, Applicant's Exhibit No. 3 was marked for identification.)

Q Now, that Exhibit No. 3, directing your attention to it, covers the allowables as established for the month of March, 1960; is that correct?

A That's correct.

Q For the purpose of the record, will you read what that report shows?

A. It shows the total Jalmat wells, 387. Jal Oil Company has 10 wells in this pool, for a percentage of 2.584 percent.

Q All right. Now, what does it show in regard to the allowable assigned to the Jalmat Pool for the month of March, 1960?

A The total allowable for the month of March for the Jalmat Pool was 8,600,945 MCF's. Jal Oil Company allowable was 131,666 MCF's. Percentagewise, 1.531 percent to total.

Q And the Exhibit shows that while the Jal Oil Company has 2.584 percent of the wells in the Jalmat Pool, it only is allowed to produce 1.531 percent of the gas?

A That's correct.

Q Now, in connection with the preparation of this application, Mr. Hardwick, did you make the same study in regard to the allowable assigned to the Jalmat Pool for the month of April,1960?

A That's correct.

(Whereupon, Applicant's Exhibit No. 4 was marked for identification.)

Q I hand you here what has been marked, identified as Applicant's Exhibit No. 4, and ask you to state what that Exhibit shows?

A This Exhibit shows that for the month of April there were a total of 385 Jalmat Wells, Jal Oil Company having 10, for a percentage to total of 2.597 percent. The total allowable for the Jalmat Pool for the month of April was 6,541,921 MCF's; the allowable attributed to Jal Oil Company's wells, 100,240 MCF's; Jal Oil Company's allowable to total is 1.532 percent.

Q All right, sir. Mr. Hardwick, were you connected with the Jal Oil Company in October of 1959?

A That's true.

Q In the same capacity that you presently are representing the Company?

A I was.

Q You are familiar with the hearing in regard to Case 1778 and 1779, which were consolidated by the Commission?

A I am.

Q In that case, were the subject wells, the Eva Owen No. 1, the Dyer No. 3 and the Watkins No. 2 before the Commission for consideration?

A They were.

MR. GIRAND: At this time, if the Commission please, we would like to offer and adopt the record in the consolidated cases, No. 1778 and No. 1779, heard by the Examiner in Santa Fe on October the 7th, 1959, as a part of the record in this case.

MR. PORTER: Does anyone have any objections as to the admission of the records in the two previous cases? Any objection

to those records being made a part of this case? They will be considered part of the case.

(Whereupon, Applicant's Exhibit No. 5 was marked for identification.)

Q (By Mr. Girand) Mr. Hardwick, I hand you here a letter dated June 8, 1959 on stationery of El Paso Natural Gas Company, addressed to Jal Oil Company, over the signature of D. B. Gillit, Dispatching Department. I will ask you whether or not you have ever seen that letter before?

A I have.

Q Was that letter written at the time shown and received by you according to the stamp thereon.--

A Yes.

Q --as far as you know?

A Yes.

Q Does that letter deal with any of the wells in question at this hearing?

A Yes, it does.

Q For the record, would you read into the record the pertinent parts of the letter dealing with the subject wells?

A The second paragraph of the letter states: "The New Mexico Oil Conservation Commission has reclassified four (4) of your wells connected to our gathering system from marginal to non-marginal status. The wells are the Dyer #3, Legal #2, Jenkins #1 and Repollo #1 in the Jalmat Gas Pool. The allowables were made retro-

active to July, 1958, and all of the wells are now overproduced due to being produced at all times as marginal wells."

Q Now, that letter is dated 1959?

A That's dated June 8, 1959.

Q And prior to the receipt of that letter, your wells have been classified as marginal wells without restriction as to the amount of production?

A I believe that's correct.

Q Now, generally speaking, these wells-- I will ask you whether or not these wells produce any fluid in conjunction with the gas?

A Yes.

Q I will ask you whether or not the wells are artificially or mechanically produced?

A All except one is mechanically produced.

Q Which well is not mechanically produced?

A I am sorry. All are mechanically produced.

Q All right. Now, up until June of 1959 the wells have been classified as marginal wells under the Rules of the Commission?

A That's correct.

Q Then, in June of 1959 the Commission assigned or designated the wells as non-marginal wells?

A That's correct.

Q And charged against the wells all production up to June of 1958; is that correct?

A July of '58.

Q July of '58?

A According to this.

Q In other words, the production from the wells for the months of July, 1958 up until June of 1959 were legally produced by the Company?

A That's correct.

Q And without any knowledge that they would be charged against any allowable later set by the Commission?

A I believe that's correct.

Q Now, do you know of your own knowledge whether or not the wells would be overproduced at this time had the Commission not gone back for a period of one year and charged it against the wells, the gas produced by the wells?

A I can't answer for certain, but I don't believe they would.

(Whereupon, Applicant's Exhibit No. 6 was marked for identification.)

Q Mr. Hardwick, I hand you here an instrument containing two pages, marked Applicant's Exhibit No. 6, appearing to be a letter from El Paso Natural Gas Company to Girand and Stout, Lawyers, Hobbs, New Mexico. Attention: W. D. Girand, over the signature of J. W. Baulch, Jr. I will ask you whether or not you have seen that letter or a copy thereof?

A Yes, I have.

Q Does the Exhibit on its face show a copy directed to your

office at Midland, Texas?

A It does.

Q What does Exhibit 6 deal with, Mr. Hardwick?

A It's dealing with the Watkins No. 2 Well located in the SE/4 of the SE/4 of Section 35, Township 24 South, Range 36 East, Lea County, New Mexico.

Q Mr. Hardwick, who is J. C. Chewning?

A She is Secretary for Jal Oil Company, Inc.

Q And where does she reside?

A Midland, Texas.

Q Are you familiar with her signature?

A Yes, I am.

(Whereupon, Applicant's Exhibit No. 7 was marked for identification.)

Q I hand you here what has been marked Applicant's Exhibit 7, and ask you whether or not that is a photo copy of her signature?

A That's correct.

Q Now, Exhibit No. 6 appears to oe in affidavit form. Will you state what the Exhibit purports to show?

A The Exhibit purports to show the original reserves less production through 1959, showing an unrecovered reserve January 1st, 1960--

Q Now --

A --for Watkins No. 2.

MR. GIRAND: I would like to have the record corrected to show that is Exhibit 7.

Q (By Mr. Girand) From what source were the original reserve figures obtained?

A From the Ira Brinkerhoff report.

Q The Exhibit has previously been introduced here?

A That's correct.

Q All right. From what source were the production, through December 1959, figures obtained?

A They were obtained through to October, '59 from the Brinkerhoff report, and from the Accounting records through December, '59.

Q And, of course, the unrecovered reserves are just a subtraction of the production from the original reserves?

A That's correct.

Q Now, after the hearing before the Examiner in October of 1959, did the Jal Oil Company watch the subject wells closely as to their production mannerisms and abilities?

A They did.

Q In connection with this hearing, did you prepare a memorandum of the producing history of the Watkins No. 2 from October '59 through February of 1960?

A I did.

(Whereupon, Applicant's Exhibit No. 8 was marked for identification.)

Q I hand you here what has been marked as Applicant's Exhibit No. 8, and ask you whether or not that is a reproduced or photo copy of that memorandum?

A That's correct.

Q For the record, will you read into the record your report, skipping the summary well activity and what not?

A This is a summary gathered from the gas production charts and also our field superintendent information. It's brief, but it explains how the well reacted under certain circumstances. From October the 1st to the 8th, it states this was a flowing well and no gas was produced during this period. The well was shut in. Well pressure, casing pressure I should say, 900 pounds. From October the 8th to the 16th, there was no gas produced. The well was shut in. October the 16th to the 23rd, no gas produced. The well was shut in. From October the 23rd to the 31st, well produced 308 MCF. Water produced 250 barrels per day when well was producing. October the 31st to November 8th, well produced 2,120 MCF's. Chart shows when line pressure goes up, production drops due to water condition and line pressure. Water 250 barrels per day. On November 8th to the 16th, well produced 141 MCF's. Well blown in almost every day to keep water off. Had to swab well in on November the 11th as water was too great for well to blow around.

Q Just a minute, Mr. Hardwick. When you say well had to be blown in nearly every day, does that require extra supervision?

A Yes, it does.

Q All right. Go ahead.

A On November 16th to the 22nd, well produced 1,440 MCF's. Water is blown off when well is not on line. Had to swab well on 11/17 due to same condition as above, same being water condition.

Q Now, just for the purpose of the record, Mr. Hardwick, what do you mean, you had to swab the well?

A The well wouldn't unload the water, so you bring a swab unit out, a pulling unit.

Q All right. Proceed, sir.

A On November 22nd to the 30th, well produced 987 MCF's. Changed orifice from three-quarter inch to one-quarter inch to see if well would produce less gas and not logg off.

MR. PORTER: Mr. Girand, at this time the hearing will recess until one-thirty.

(Recess)

MR. PORTER: The hearing will come to order, please. Mr. Girand, will you proceed with the questions?

Q (By Mr. Girand) Mr. Hardwick, I believe your last statement was in regard to the production record of the Watkins No. 2, for the period of November 22nd through November 30th, that appearing on Exhibit 8. Do you have Exhibit 8 in front of you, sir?

A Yes, I do.

Q All right. Will you proceed, starting with November 23rd--November 22nd-November 30th period and continue with your statement?

A From Nomvember the 22nd to the 30th, the well produced

987 MCF's. The orifice was changed from a three-quarter inch to a one-quarter inch to see if the well would produce less gas and not logg off. December 1st to the 8th, well produced 221 MCF's. Well died on one-quarter inch orifice and wouldn't blow around. Used a swab unit December 4th to get water off the formation and back to producing. December 8th to the 16th, the well died again on a quarter inch orifice and wouldn't produce. Orifice changed December 9th from one-quarter inch to one-half inch, and well swabbed in. The well produced approximately 350 MCF's and died. Well swabbed in December 10th produced 25 MCF's and died. Well swabbed in December 11th produced approximately 40 MCF and died. Orifice changed from one-half inch to one inch, and well was blown in. Well was able to produce with one inch orifice but casing pressure has dropped from 900 pounds to 600 pounds in approximately two months.

Q Just a minute. You mean that the pressure on the well, casing pressure, dropped three hundred pounds in the two months, being the months of--the last half of October through the first half of December?

A That's correct.

Q All right. Proceed, sir.

A December 16th to the 23rd, well produced 2,335 MCF's. Choke was pinched to reduce flow of gas. Well started logging off. This flow procedure was tested with El Paso Natural Gas Company as per their letter of March 7, 1960.

Q That letter of March 7th, 1960 is a letter previously

introduced in evidence here and identified by you; is that correct?

A Yes.

Q All right. Go ahead.

A December 23rd to the 31st, well produced 2,642 MCF. Chart shows well heading due to enormous amount of water, same being approximately 250 barrels per day. January 1st to the 8th, well produced 2,164 MCF. Chart shows well pinched down to determine low rate of flow and well died. Well later blown in when line pressure dropped allowing same to unload water. January the 8th to the 16th, well produced 2,696 MCF. Chart shows production at a specified rate; when choke is pinched well begins to logg off. Then choke is opened up and well unloads the water. January 16th to the 23rd, well produced 2,075 MCF's. Well producing at as low rate as can be produced without logging off. Water still approximately 250 barrels per day. January 23rd to the 31st, well produced 2,707 MCF's. Well started out low and appeared to be logging off, so choke was opened to allow well to unload water. February 1st to the 8th, well produced 2,517 MCF's. Producing at as low a rate as possible without logging off. February 8th to the 16th, well produced 1,706 MCF. Chart shows erratic production due to logging off condition. Well logged off on the 14th due to high line pressure and cold weather. February 16th to the 21st, well produced 1,246 MCF. Chart shows about the same as appeared February 8th to the 16th. February 21st to the 29th, well produced 1,084 MCF's. Well logged off several times due to cold weather. Was able to blow well in when line pressure and

weather permitted. Water production still approximately 250 barrels per day, and casing pressure dropping gradually due to water encroachment. Casing pressure on March 31st, 1960 was 360 pounds.

Q At the commencement of this period, under this Exhibit 8, your casing pressure was approximately 900 pounds?

A When we started, yes, sir.

Q And due to the manner in which the well has had to be produced, the casing pressure has dropped to 360 pounds as of March 31st of this year?

A That's correct.

Q If you know, is that encroachment of water in the zone from which you are producing?

A I can't say.

Q All right. Now, did you, in connection with this application, supervise the making of similar Exhibits covering the well known as the Eva Owen No. 1?

A That's correct.

(Whereupon, Applicant's Exhibit No. 9 was marked for identification.)

Q Mr. Hardwick, I hand you here what has been identified as Applicant's Exhibit No. 9, and ask you to please state what that Exhibit represents?

A Exhibit No. 9 represents the original reserves for the Eva Owen No. 1, and the production through 1959, and the unrecovered reserves, January 1st, 1960.

Q From what source were those figures obtained?

A The original reserves were obtained from the Ira Brinkerhoff report; the production through October was also obtained from the report, and we added to that October, November and December.

Q Then, the unrecovered reserves was just a subtraction of the amount?

A That's correct.

Q Does the Eva Owen Well make water?

A Yes, sir.

Q Was the Eva Owen Well one of the wells that was subject to hearing in Cases 1778 and 1779?

A That's correct.

Q In October, when we had the hearing before the Examiner in an attempt to obtain some relief of these wells, due to the overproduction resulting from the fact that the wells were required to be produced in the manner they are presently being produced, it was the fact that the wells were reclassified, and the allowable or the gas they had produced prior to July of 1959 had been charged against the well. From that time on, did you make a close study of the operations of the Eva Owen Well?

A Yes.

Q From what source did you obtain your information as to the producing habits and characteristics of this well?

A This information was prepared from El Paso Natural Gas Company charts and with our field superintendent information.

(Whereupon, Applicant's Exhibit No. 10 was marked for identification.)

Q Now, I hand you here an instrument containing two pages, identified as Exhibit No. 10, and ask you if that is the photo copy of the memorandum you prepared in regard to the Eva Owen No. 1 Well?

A Yes, it is.

Q Will you read it into the record, the information contained therein?

A From October the 1st to October the 9th, this information is compiled and the well does have a free piston installation, and was shut in approximately one year. Well is dead due to water condition after long shut in period and unable to blow well in.

Q Do you know why the well was shut in in the original instance?

A Yes, the well was overproduced.

Q Was that due to reclassification of the well?

A I believe that's correct.

Q All right. Proceed, sir.

A From October the 9th to the 17th, we have the same situation. We are unable to blow the well in. From October the 17th to the 24th, same as above. From October 24th to the 31st, most of this period is the same as above. Had pulling unit swab well in on the 31st, and same produced 43 MCF's and a considerable amount of water before well died. November 1st to the 9th, well was swabbed in November 3rd, and produced very little before dying. Swabbed

in again November 4th, and produced a total for this period of 90 MCF's and a considerable amount of water. November 9th to the 17th, well produced 59 MCF's for this period. Well was blown in several times and would not take line. This procedure performed each day to get fluid off of well. Produced approximately 40 barrels of water per day. November the 17th to the 23rd, the well produced 175 MCF's under the same conditions as I just described. November 23rd to December 1st, well produced 438 MCF's, under the same conditions. December 1st to the 9th, well produced 442 MCF's under the same conditions. December 9th to the 17th, well produced 297 MCF's. Same conditions. December 17th-December 24th, well produced 121 MCF's. Changed orifice December 18th from a half inch to one inch to get piston to run. Produced 814 MCF's after change, and approximately 40 barrels of water per day. December 24th-January 1st, well produced 1,664 MCF's. Well, according to the charts, having a hard time keeping fluid off the formation. January 1st to the 9th, produced 731 MCF's. Well logged off five times in this period, but was able to blow same in. Water production still about the same. January 9th to the 17th, well produced 175 MCF's. Well was blown each day, but well only took line two times and logged off each time due to water on formation. January 17th to the 24th, well produced 121 MCF's. Unable to get well to take the line. Tried blowing in once or twice each day. January 24th to February the 1st, well produced 7 MCF's. Same conditionsas above. February 1st to the 9th, well produced 451 MCF's. Line pressure down. Well blew in,

but unable to produce normally. February 9th to the 17th, well produced 579 MCF's. Same conditions as above. February 17th-22nd, well produced 161 MCF's. Well logged off after two days low production due to the same conditions as above. February 22nd to March 1st, well produced 348 MCF's. Produced low for one-half the time and was logged off approximately one-half the time. Each time well logged off, the well was worked with to get water off formation and get same back to producing. When producing it unloads approximately 40 barrels of water per day. On March 31st, 1960, the casing pressure was 400 pounds, and the tubing pressure 200 pounds.

Q Now, Mr. Hardwick, in connection with this hearing, did you make a comparison in regard to the Repollo Well No. 1, which was one of the subject wells of the hearing of October, 1959?

A I didn't make a comparison as to the production. I did make a summary of the reserves.

(Whereupon, Applicant's Exhibit No. 11 was marked for identification.)

Q All right. I hand you here what has been identified as Exhibit No. 11, and ask you if that Exhibit was prepared under your supervision?

A That is correct.

Q Now, what is the present status of the Repollo No. 1?

A It's dead.

Q And how long has it been dead?

A Approximately six months.

Q Was the Repollo No. 1 shut in because of overproduction?

A I don't believe it was shut in for that reason.

Q Do you know what reason it was shut in?

A It was shut in a time or two for some specific tests, and we were never able to get it back on.

Q At the time it was shut in, do you know whether or not it was able to meet its allowable?

A I would say yes.

Q Since the tests that were made on the Repollo Well were completed, how long did the Company attempt to bring the Repollo No. 1 back into--

A We worked with it approximately three months.

Q And by working with it, what did you do?

A There was a pumping unit installation at this well, and we continually pumped it, trying to unload the water so that the gas might come back in.

Q Now, your statement, as shown by Exhibit No. 11, deals with the original reserves as determined by the engineering report; is that correct?

A That's correct.

Q And, then, from that you have taken the amount of gas it would produce from the well?

A That's correct. Let me restate that. On this summary which we have presented here, the Repollo is not listed thereon.

Q It is not listed on--

A On the Brinkerhoff report I have here. These came from a prior Brinkerhoff report.

Q I see. You checked the figures against that report?

A Yes, I have.

Q You are satisfied that the figures appearing on Exhibit 11 are correct according to your records?

A That's correct.

Q That report showed a figure of 6,363,446 MCF as the reserves under that well?

A That's correct.

Q And showed the production through December of '59 of 2,184,353--

A That's correct.

Q --MCF. So, according to the report, the unrecovered reserves from that well, due to the fact that it was shut in, amount to 4,179,093 MCF; is that correct?

A That's correct.

Q And as far as your efforts have been since the well was shut in, you have been unable to bring the well back to produce any of that gas?

A That's correct.

Q So, as far as the Company is concerned, that gas is forever lost?

A Yes, sir.

Q Now, in connection with this application, did you make

similar studies in regard to the Dyer No. 3?

A Yes, sir.

(Whereupon, Applicant's Exhibit No. 12 was marked for identification.)

Q I hand you what may be identified as Applicant's Exhibit No. 12, and ask you to state what that Exhibit represents?

A This Exhibit represents the original reserves less production, and the unrecovered reserves as of January 1st, 1960 in the Dyer No. 3. Information is acquired from the Brinkerhoff report.

Q Will you read those figures into the record, please, sir?

A The original reserves, 3,436,278 MCF. Production through December, 1959, 793,606 MCF's. Unrecovered reserves, 2,642,672 MCF.

Q At the hearing in October, did you also make a memorandum as to the producing habits of the Dyer No. 3 Well?

A I did.

(Whereupon, Applicant's Exhibit No. 13 was marked for identification.)

Q I hand you what has been identified as Applicant's Exhibit No. 13, and ask you, is that your memorandum?

A This is.

Q And from what sources did you obtain the information?

A From El Paso Natural Gas Company charts, and our field superintendent information.

Q All right. Will you read the summary into the record, please?

A This well has a piston operation installed therein, and the piston is set from, October period, October 1st to the 9th, the piston is set one and one-half hours on, and one-half hour off.

Q Will you explain that a little bit by just an operation?

A Well, I will explain briefly, but you may want to talk with someone about the full details.

Q Insofar as you know.

A The piston, so far as I know, is a free piston floating up and down in the tubing. And it falls to the bottom and gathers up water, and at a certain time it comes to the top and is held there for a certain length of time, and allows the well to unload water coming thereafter. And this well is producing gas, and, then, the period it's off, it falls to the bottom and starts the same procedure again.

Q All right, sir. Go ahead.

A Each gas production kick on the chart is strong. Then, well production drops considerably due to the water volume. When line pressure is up to approximately a hundred and eighty pounds, production drops sharply. Production for this period is 2,282 MCF. Water, approximately 25 barrels per day. October 9th to the 17th, piston setting is the same. Line pressure was up October 12th, well died. Was able to blow same in on October 14th. Line pressure still high. Well died again. Same thing happened on October 15th

and 16th. Production for this period, 1,419 MCF's. Water about the same. October the 17th to the 24th, piston setting the same. Well blown in on the 17th and well died. Well blown in on October the 19th and died. Same thing happened on October 22nd and 23rd. Production, 405 MCF's for this period. Water increasing. October the 24th-November the 1st. Piston setting the same. Well was blown in four times in this period and logged off each time. Unable to keep same producing due to water. Production, 569 MCF's. Water approximately 30 barrels per day. November the 1st to the 9th. Piston setting the same. Well blown in two times in this period and died each time. Unable to keep producing due to water encroachment. Production, 296 MCF's. Water approximately the same. November the 9th to the 17th. Same piston setting. Unable to blow well in. Had swab unit swab well in well on November 13th, but was unable to keep well producing. Well died about four hours later. Production, 71 MCF's. Water approximately the same. November the 17th to the 23rd. Unable to blow the well in. No gas. November 23rd to December the 1st. Unable to blow well in. No gas. December 1st to the 9th. Piston setting was the same. Swabbed well in December 2nd and same died shortly thereafter. Production, 151 MCF's. Water approximately 30 barrels per day. December 9th to the 17th. Unable to get well to produce. No gas. December 17th to the 24th. Unable to get well to produce. No gas. December 24th-January 1st. Unable to get well to produce. No gas. January 1st to the 9th. Unable to get the well to produce. No gas.

January 9th to the 17th. Unable to get well to produce. No gas. January 17th to the 24th. Unable to produce well, so installed pump jack January the 21st to lift water off the formation. Production, 307 MCF's. Water, 30 to 35 barrels per day. January the 24th to February the 1st. Line pressure high; approximately 225 pounds. Pump running to keep water off the formation. Production is low due to line pressure. Production, 1,091 MCF's. Water production approximately the same. February 1st to the 9th. Changed orifice from one and a quarter to three-quarters. Pump was running. Production, 1,262 MCF's. Water the same. February 9th to the 17th. Pump running to keep formation clean. When line pressure is high, production is down. Production, 880 MCF's. Water the same. February 17th-22nd. Had trouble with pump jack engine and cold weather. Well produced very little gas. Production, 418 MCF's. Water approximately 35 barrels per day when well is producing. February 22nd to March 1st. Well produced in accordance with line pressure. Pump running to keep formation clear of water. Production, 1192 MCF's. Water about the same. This well on March 31st, 1960 had casing pressure of 250 pounds, tubing on the pump.

Q Now, Mr. Hardwick, just what is the Company's aim,insofar as you know, in the filing of this application? What is the Company seeking to obtain from the Commission?

A Well, the Company is certainly not trying to do away with proration. We feel that proration is necessary, but wells such as these, that produce a considerable amount of water, need some type

of a consideration or some form that they can be produced at a rate that it would recover the unrecoverable reserves. All of these wells have a tremendous amount of water for a gas well, and if they can't be produced economically, then, they certainly would be prematurely abandoned. And if abandoned, it's not only loss of reserves to the Company, but it's loss of reserves to the royalty owners and the State, purchaser and just everybody is affected by it.

Q Well, is the Company's opinion that if this gas is allowed to be lost due to the encroachment of water, that it will forever be lost to the public?

A That's true.

Q I will ask you whether or not the wells in question are connected to what is called a low pressure line of one hundred pounds operating pressure; is that correct?

A I believe that's correct.

Q And that is the lowest pressure line that is in existence in the area, that you know of?

A I believe you probably should ask the engineer on that. I am not too familiar--

Q Do you feel that, also, unless you are allowed to produce these wells, the Company, that is, in the manner that you have produced them in the past, that the wells will have to be prematurely abandoned?

A That is true.

Q It would be uneconomical to produce?

A Yes.

MR. GIRAND: I believe that's all I have of this witness.

MR. PORTER: Anyone have any questions of Mr. Hardwick?

CROSS-EXAMINATION

BY MR. PAYNE:

Q Mr. Hardwick, would you refer to your Exhibits 3 and 4 and tell me what relevancy they have, if any?

MR. GIRAND: If the Commission please, I don't think Mr. Hardwick is qualified to pass on the relevancy of the evidence. That is a matter for this Commission.

MR. PAYNE: Mr. Girand, he showed on Exhibits 3 and 4 the total wells in the Jalmat Pool owned by the Jal Oil Company. Then he showed the percentage of the total allowable that the Jal Oil Company gets. Now, he testified as to these matters, and I want to know what he hopes to establish by that.

MR. GIRAND: I think the Exhibit speaks for itself.

Q (By Mr. Payne) In other words, each hole in the ground should get the same amount of gas?

A I didn't say that. I believe that when this was exhibited, Mr. Girand said he requested this information.

Q Yes. Now, and I am trying to determine what it has to do with your proposal here, your requested relief. Do you feel that a well with one acre dedicated to it should have as much allowable as one with one hundred forty?

A I don't.

Q Now, what is the acreage dedicated to each of the wells in question?

A I believe they range from hundred sixty down to approximately forty.

Q And the deliverability always varies, I presume?

A Yes, sir. I think there is probably some question; maybe the engineer will establish on the deliverability. I am not qualified on that.

Q Now, since you have calculated the percentage of the total allowable that you get from-- Have you calculated the percentage that you have with the water in the pool?

A I have not calculated that.

Q Now, Mr. Hardwick, I believe you testified that due to the fact that these wells were reclassified, they generally were overproduced, and that had they been allowed to continue to be marginal wells, they wouldn't have been overproduced; is that right?

A I believe that's correct.

Q Now, Mr. Hardwick, why do you feel that a well which has demonstrated its abilit to produce in excess of a non-marginal allowable should be c'assified marginal?

A Because of the inability, when the well was shut in, to come back and produce gas, which it has reserves there.

Q Well, Mr. Hardwick, the well was capable, and, in fact, did produce more than non-marginal allowed, did it not?

A I believe that's correct. I don't have those figures before me.

Q Therefore, it would seem rather anomalous, wouldn't it, to allow it to remain classified as marginal?

A I believe our situation at this time is greater than it was at the time that they were reclassified.

Q Now, Mr. Hardwick, you testified that you have watched these wells closely since the hearing in October at which time the Commission granted relief on these wells. If that is the case, why did the Commission find it necessary to advise Jal Oil Company that they were producing these wells or one of these wells in excess of the amount allowed by the Order entered in that case?

MR. GIRAND: If the Commission please, why the Commission did anything, we are not accountable for it.

MR. PAYNE: The witness testified--

MR. GIRAND: Just a minute. You asked him why the Commission did something. I don't know. Read the question.

(Question read by Reporter.)

Q (By Mr. Payne) You testified that you had watched these wells closely since the last hearing.

A I believe that's true.

Q Is it not a fact that you did produce one of them in excess of the allowable granted in the Order?

A That is correct. We were attempting to try to find what a minimum rate of flow was, and at that time it was overproducing.

We had not established that. Although we had cut it back some, we still hadn't established that a minimum rate of flow that we would flow the well without the logging off. And so we continued to produce it some to see if we couldn't establish that.

Q Now, Mr. Hardwick, I believe you testified that both the Owen and the Dyer, I believe it is, produce water when you made these summarizations?

A Yes.

Q And that includes January and February, does it not, of this year?

A Yes, sir.

Q In view of that, Mr. Hardwick, why did Jal Oil Company report to the Commission on Form C-115, for both January and February that these wells had no water production?

A I assume that would be an oversight on the person filling these out.

Q Now, you did show it for the one well, for the Watkins Well, but for the other four of these wells they show no water production?

A They leave it blank.

Q Yes, sir. Now, Mr. Hardwick, these wells are all perforated in the 80's, are they?

A I am not familiar with that.

Q Do you know if they were open hole in the Queen?

A Again, I am not familiare with that.

Q Do you know where your water is coming from?

A No, I don't.

Q The engineer will testify to that?

A I feel he probably will.

Q Now, Mr. Hardwick, I believe you testified that your application, if not granted here, there is a good probability that gas will be left in the ground which would never be recovered. Is it your opinion that some other well would not produce this gas?

A I am speaking just frankly of my opinion. I don't believe they would. I am not qualified on that.

Q I see. Now, you installed a pump jack recently, I believe you testified, in your Dyer Well?

A That's correct.

Q Is that a permanent pump jack or--

A It's permanent equipment.

Q Now, in your Eva Owen Well, you are still producing that by means of the free piston?

A That's correct, when we can get it on.

Q Which is dependent upon gas production-- Well, let me put it this way. You must have gas production in order to lift that piston and unload the water?

A That's correct.

Q Now, that is not the case in the pump jack, is it?

A No.

Q It's a separate water pump?

A I am not qualified to answer this, but to a certain extent, I believe that the gas is dependent upon the water also, even thought the pump jack is lifting the water from the formation.

Q Now, Mr. Hardwick, the pump jack is the ultimate, supposedly, weapon against large amounts of water, isn't it?

A That's correct.

Q And you generally proceed from a free piston stage to the pump jack stage?

A That's correct.

Q Now, in view of the fact, Mr. Hardwick, that-- Do you feel that you are asking the Commission here to take the ultimate step as to these wells? In other words, terminate prorationing to them? That is what it is, in effect, is it not?

A Something to that--

Q And that is the furthest, of course, that the Commission could ever go. Now, in view of that, do you feel that the Commission should take that step unless you have taken the ultimate step? In other words, until such time as you have used the pump jack in the Eva Owen Well?

A Well, of course, we feel that we should try to get all the reserves we can under each step down the line. But we feel that the pump jack, the time is almost set after that period comes. And we would like to try to recover a portion of it before that time, as the expense of the pump jack is very high.

Q Now, Mr. Hardwick, in view of your very large reserves

under each one of these tracts, I presume it would be very economically feasible to rework any of these wells,provided it's safe. Have you considered attempting to squeeze off to eliminate your water problem?

A This has been discussed some. I believe probably the engineer will probably answer more of these questions than I am qualified to answer.

MR. PAYNE: Thank you. That's all.

MR. PORTER: Mr. Nutter.

QUESTIONS BY MR. NUTTER:

Q What were Mr. Brinkerhoff's reserve figures based on, do you know?

A I don't know. He is an independent consultant.

Q Is he here today?

A No, he isn't.

Q You don't know what he considered, then, in arriving at these reserves for each one of these tracts?

A I don't.

Q Do you know if he knew whether large quantities of water were being produced, or the wells were capable of producing large quantities of water when he made his evaluation of the tract?

A I believe at the time that this report was made, I don't believe the water condition was as bad as it is right now. It has become worse since the time of this report. He was aware of some of it, I'm sure.

Q Are his reserves purported to be recoverable reserves or total reserves underlying the tract?

A Recoverable reserves.

Q And these estimates were made at the time when there wasn't as much water production as there is now?

A I believe that's correct. I would assume that. I don't know exactly what he based it on.

MR. NUTTER: Thank you.

QUESTIONS BY MR. UTZ:

Q Mr. Hardwick, I believe that you stated in your testimony that you felt that the amount of production subsequent to July 1st, 1958 was legal production, and your wells were produced legally?

A I was under that impression.

Q Are you familiar with Rule 8 of Order R-967?

A I don't have it before me. I would have to take a look to see.

Q Would you recognize the Rule if I read it to you?

A I would see.

Q I quote from Rule 8, last paragraph of Rule 8, of Order R-967. It has to do with classification of wells. "At the end of a proration period, if a marginal well is producing more than the total allowed for the period assigned as allowable, the marginal well shall be classified as a non-marginal well." What does that mean?

A Well, that means--I assume it says that--that if a

well is overproduced more than normal allowable for non-marginal wells, then it should be reclassified.

Q And do you feel that the Commission was acting in accordance with the Rules when we reclassified the well as a non-marginal well retroactive to the time it started overproducing as non-marginal?

A On some of the wells which we had at that time, they were producing considerabl amount of water. The Repollo was one of them. And under the study which we are to put forth on this, we felt the reclassification to ultimately get the reserves probably was against the well ever producing its reserve.

Q Mr. Hardwick, do you believe that by virtue of the fact that a well is classified marginal, that it shouldbe allowed at any time to produce more than a non-marginal allowable well of like size?

A I think there are certain circumstances that surround individual wells that might call for that.

Q That is what you are asking for now, is relief from proration, under the Rules?

A We are asking for some relief, yes.

Q Are you familiar with the proration formula of Jalmat Gas Pool?

A Not too familiar with it, no. I understand it's on deliverability and acre specter.

Q Do you feel that the allowable assigned to your wells is

in proportion to the allowable assigned to the Empire Pool in accordance with the formula?

A I would say this: This is my opinion. Wells that produce a lot of water under the deliverability test, I believe that it doesn't do the wells justice.

Q As far as the formula is concerned, you feel that you are receiving your fair share of your--

A I feel sure, yes.

Q Because of your water problem, you want to be relieved to produce more than your fair share of the allowable?

A I believe, if the water wasn't present, that our share of the allowable would be more.

Q You mean to say, then, that you think that if you didn't have the water, your reserves would be more?

A I am not saying the reserves would be more, but I believe we are getting on something that probably the engineer could answer better than I can. But I do believe this: That if the water wasn't present, you would have a better deliverability test, which would give you a better allowable.

MR. UTZ: I see. Thank you.

MR. PORTER: Anyone else have a question?

QUESTIONS BY MR. PAYNE:

Q Mr. Hardwick, are you familiar with the completion methods of the Jal Oil Company wells in the Jalmat Pool?

A No, I am not.

MR. PAYNE: All right, sir.

MR. PORTER: Any further questions? The witness may be excused.

(Witness excused)

MR. GIRAND: At this time we offer Exhibits 1 through 13, inclusive.

MR. PORTER: Who prepared the Exhibits?

MR. GIRAND: They have been testified to. The witness testified to, prepared each one of them.

MR. PORTER: I see. Without objection, the Exhibits will be admitted to the record.

MR. GIRAND: That is, with the exception of Exhibit 1. That's your own schedule.

MR. PORTER: You don't want to take that. The witness may be excused.

(Witness excused)

MR. GIRAND: Call Mr. Watson, please.

DEWEY WATSON,

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

DIRECT EXAMINATION

BY MR. GIRAND:

Q Will you state your name, please?

A Dewey Watson.

Q Where do you live, Mr. Watson?

A Jal, New Mexico.

Q By whom are you employed?

A Olson Oil, Incorporated.

Q Have you testified before the Commission in the capacity of a petroleum engineer before?

A Yes, sir, I have.

MR. GIRAND: Is the Commission satisfied with Mr. Watson's qualifications?

MR. PORTER: Yes, sir.

Q (By Mr. Girand) Mr. Watson, did Olson Oil previously own the wells presently known as Jal Oil Company's Dyer No. 3, Eva Owen No. 1, and Watkins No. 2?

A Would you restate that question again?

Q I said: Did the Olson Oil Company previously own those wells?

A No, sir.

Q Have you previously had any connection with the wells known as the Jal Oil Company's Dyer No. 3, the Watkins No. 2 and Eva Owen No. 1?

A The only one I didn't have anything to do with completion on was the Dyer No. 3. The Watkins 2 and Eva Owen No. 1, I was there on the completion on those.

Q Were you at that time employed by Jal Oil Company?

A On the Watkins 2, yes. The Eva Owen was Olson Oil Company.

Q Now, as a matter of fact, Mr. Watson, you are familiar with the hearing held in Santa Fe before the Examiner in October of 1959, wherein the subject wells were a matter of controversy at that time?

A Yes, sir.

Q You appeared at that time to testify in regard to those wells?

A That's correct.

Q Now, are you familiar with the application that has been filed with the Jal Oil Company in connection with the Dyer No. 3, Watkins No. 2, and Eva Owen No. 1?

A Yes, sir, I am.

Q In connection with that application, have you been requested by me and by the Jal Oil Company to make any study of the condition of the three subject wells?

A Yes, sir, I have been.

Q And in connection with that, did you make any further study as to the wells known as the Repollo No. 1 and Legal No. 2, and Jenkins No. 1 wells?

A Yes, sir, I did.

MR. GIRAND: If the Commission please, at this time, in regard to Exhibits Nos. 14 and 15, being the letter from Mr. J. W. Baulch, Jr., addressed to Girand and Stout, dated April 11th, 1960; and the accompanying map, which is Exhibit No. 15, I would like to make this statement to the Commission, that El Paso requested that

none of their men be used as witnesses in this matter. The map was presented to the writer as a map fully demonstrating the low pressure line system of the El Paso Natural Gas Company, located in Jalmat Pool. And the Exhibits are offered primarily to enlighten the Commission as to the wells that are located on this low pressure line of a hundred pound operating pressure, and their relation to the subject wells. The prorated force of them, Mr. Payne, is just to kind of orient things that we are talking about. And with that understanding, I would like to offer Exhibits 14 and 15.

MR. PORTER: The Exhibits will be admitted to the record for the purpose of--stated.

MR. GIRAND: All right.

(Whereupon, Applicant's Exhibits Nos. 14 and 15 were marked for identification.)

Q (By Mr. Girand) Mr. Watson, directing your attention to the map which has been identified as Exhibit 15, will you briefly state what the map purports to show?

A Well, this is a portion of the over-all map by El Paso Natural Gas Company showing the one hundred pound line pressure in the Jal area. And there are three compressor stations as indicated on the map where the field compressors are set to enable the line pressure to be brought down from around two hundred pounds down to a hundred at the wellhead. And those were primarily installed due to the weakened condition of the well, the low shut in pressures of all the wells in that area. The wells are tied in here so as

to be able to produce into the two hundred fifty pound line. In order to comply with their contract, the line pressure was lowered.

Q Now, the compressor stations operating off those lines are shown on the map, are they not?

A Yes, sir, they are.

Q And how are the wells identified as being connected to the line?

A By the red line.

Q Now, the area shown there is all located within the Jalmat Gas Pool, is it not?

A Yes, sir, it is. All except one well, which is in Section 2, 25, 37. It's a Justis Glorietta Gas Well. And that's the only exception that I have noted.

Q Mr. Watson (Whereupon, Applicant's Exhibit No. 16 was marked for identification.)

Q Mr. Watson, I hand you here what has been identified as Exhibit No. 16, and ask you if you can state for the record what that Exhibit represents?

A This is a list of the wells that are tied into the hundred pound system of El Paso Natural Gas, and furnished by Mr. Baulch.

Q Now, on Page 1 of the Exhibit there, under the wells identified as Continental Oil Company's State A-2-1, located in Section 2, Township 25 South, Range 37 East, is the well you referred to as not being in the Jalmat Pool--

A Yes, sir, it is. That is the Justis.

Q It is, however, connected to the low pressure line?

A Yes, sir.

Q All right. Now, what is the usual operating pressure of that line?

A Well, normally, it will be approximately a hundred pounds, plus or minus a few pounds either way.

Q Now, in connection with this hearing, did you have occasion to check on the Watkins No. 2 Well, belonging to the Jal Oil Company?

A Yes, sir, I did.

Q And what did you find in connection with that well, as to its operating condition?

A Well, at the time I checked it, which was 4/9/60, the well was logged off due to high line pressure, and it was left down 4/10/60, and it was swabbed for eight hours 4/11/60. And yesterday evening the well was flowing in the atmosphere, drinking very little gas on a full two-inch stream of water, and was unable to go into the El Paso line.

Q Now,does the Watkins No. 2 make a sufficient amount of water?

A Yes, it does; considerable amount of water.

Q Did you make any other observations in regard to that well?

A I think the testimony already presented limited the lowest

rate of flow that could be obtained and keep the well on the line was approximately three hundred twenty-five MCF per day.

Q Now, how did you arrive at that figure that it would require an allowable of that amount in order to keep the well on the line in its present condition?

A Well, that was actually taken by El Paso personnel and read off of their meters and charts.

Q Now, in order for that well to produce that amount, would that exceed the allowable assigned to that well?

A Under normal conditions, the way the allowable has been, yes.

Q Now, are you familiar with the manner of arriving at the allowable assignable to wells in the Jalmat Gas Pool?

A Yes, sir.

Q Briefly, what factors are used in order to determine the--

A Well, the acreage factor and deliverability factor.

Q Do you know how much of the allowable was assigned to the acreage factor under the Rules?

A Seventy-five and twe.. v-five. It slips my mind which it is. I need some help there.

MR. GIRAND: I think the Commission will take notice of that fact.

Q (By Mr. Girand) Do you know how much acreage is assigned to the Watkins No. 2?

A Forty acres.

(Whereupon, Applicant's Exhibit No. 17 was marked for identification.)

Q Now, Mr. Watson, I hand you here what has been identified as Applicant's Exhibit No. 17, and ask you if you can state what that instrument represents?

A This is an El Paso Natural Gas Company form which carries the same information as the official State form on the "One-point Back Pressure Test for Gas Wells for the Deliverability Test." This first test was taken on 4/1-8/60, and there was no deliverability calculated due to the fact that on here there is a note on it saying "Operator did not want well shut in." And I think the reason is obvious, due to the fact that if it is shut in, it would have to be swabbed off.

Q All right. Now, what did that show the rate of flow?

A The rate of flow was 292.3 MCF, and the line pressure was a hundred nine pounds.

Q All right. Now, directing your attention to the second page of the Exhibit, of the regular flow as shown by that Exhibit, I will ask you to state what that Exhibit is?

A Well, this is the same El Paso form, "Deliverability Test."

Q For what time? Taken when?

A For 2/20 through 27, 1959. And the rate of flow was 747.8 MCF, at a static pressure of 305.2 pounds. And there was a deliverability calculated for this, which was 650.8 MCF per day.

Q Now, directing your attention to the first page of the

Exhibit, that Exhibit fails to show any deliverability factor, does it not?

A Yes, sir.

Q Is there a notation on Page 2 of the Exhibit of any significance?

A Yes, sir, there is. The tubing pressure on this well did not have any pressure on seventy-two hour shut in, which means that it's logged off with water.

Q Now in taking deliverability tests, Mr. Watson, have you ever participated in taking those tests?

A No, sir, I haven't directly.

Q Well, did you know the procedure that is followed in taking one to the extent -- from the time the well is shut in and then the testing period thereafter to determine the deliverability?

A Yes, sir.

Q All right. State for the record what that is.

A Well, there is a free flow period consisting of twenty-four hours. And then it is shut in pressure of seventy-two hours, when the shut in pressure is recorded on a tubing indicator, and the flow data is used to determine the rate of flow of the operating pressure.

Q All right. Then, when is the test taken after the shut in period to determine the--one of the factors used in the deliverability?

A Would you state that again?

Q Well, after the shut in period, seventy-two hours, is there any further testing in order to arrive at any factor used in arriving at the deliverability of a well?

A Well, the tubing and casing pressure is recorded for twenty-four hours. I mean--

Q Is that immediately after the shut in period of seventy-two hours?

A The twenty-four hours following the shut in pressure, yes.

Q Now, where you have a well making water, such as the Watkins No. 2, and the other wells near it, in this application, will you state how long it would take you to bring a well back that is making water such as these wells are making in order for them to flow any gas in a twenty-four hour period after being shut in?

A Well, in the case of the Repollo--I mean the Watkins here, the most recently-- The well died on the 9th, and it was swabbed for eight hours, and it was dead through the 10th, and swabbed for eight hours on the 11th. And at six o'clock yesterday evening it was still producing nothing but water, and how much longer it will take, I don't know. So, it would be a matter of hours or a matter of days.

Q Well, in the case of the Watkins well being shut in for one day, after swabbing for two or three days, you haven't been able to get it back on the line; is that correct?

A Well, it was swabbed for one day and unloaded by itself. And, as I say, I don't have the information that was available this

morning.

Q But, assuming that it had been subjected to a test such as set forth by the Commission of testing the deliverability within a twenty-four hour period immediately following the shut in, what would have been its deliverability factor?

A Well, there would have been no deliverability.

Q In other words, it would be deprived of that factor, which makes up seventy-five percent of this allowable?

A Yes.

Q All right. Directing your attention to the Eva Owen Well No. 1, are you familiar with that particular well?

A Yes, sir.

Q In connection with that well, did you testify before the Commission in the November hearing?

A Yes, sir.

Q I mean October hearing.

A Yes, sir, I did.

Q How long had the Eva Owen Well been shut in?

A The Eva Owen was shut in on July 15th, 1958, and an under-age was made up 7/20/59. That would be one year and five days.

Q All right. Now, after overage had been made up, were you able to get the Eva Owen back on the line?

A No, sir. It hasn't been producing at the normal since the shut in period.

Q Did you make a study of what its production has been

s

since it has been back on production in relation to the allowable granted it?

A Yes, sir. It had been back on production for a period of nine months, and these figures only take eight months. And it has produced a total of 6,806 cubic feet.

Q All right. And how much was the allowable assigned to that well during that period?

A Well, the allowable assigned to it was 29,000,181 cubic feet.

Q And how much is it unproduced at the present time?

A Well, there was a new proration period took into effect the last of December, which cancelled out the approximate 16,000,000 that the well was under at that time. And it is now just a little over 13,000,000 behind.

Q Yet, that was the well that was shut in at one time for being overproduced?

A Yes, sir, for one year. And it looks to us like this is a prime example of what is going to happen to the rest of them in the very near future if they were shut in.

Q All right. Now, have you calculated the cost of putting on a pump unit on that particular well?

A Not on that particular well. On the Dyer No. 3 it was calculated, and it's estimated at eighty-five hundred dollars.

Q Have you made any calculation in regard to the Owen or the Watkins Well, either one, as to the cost of installing a pump?

A Well, the pump jack would be very similar to the one installed on the Dyer 3. I mean, the figures would be used to one and the same.

Q All right. Have you made any study as to the cost for producing gas through methods of operating a pump jack?

A Well, on the Dyer 3, estimated pay-out on the March, 1960 production, it will take sixteen and a half months to pay for the installation of the pump jack.

Q Would that also include the operating cost of the pump?

A No, sir.

Q About what are the Company figures, if you know, of the operating cost that is more or less a fixed charge to each well operated in that manner?

A It is one hundred and fifty dollars per month.

Q Did you calculate about how long it would take, considering the hundred fifty a month flat charge, plus the cost of putting in the pump and unit?

A No, sir, I did not.

Q But just on the basis of the cost of putting in the pump, it would take some sixteen and a half months to pay for the well at the present allowable--

A Yes, sir.

Q --in order to pay for the cost of the pump?

A Yes.

Q Would that be true on all the wells, such as the Watkins

2 and the--

A Well, it would take longer in the Eva Owen and Watkins 2 due to the low acreage. That would be just in proportion to the acreage factor, or almost proportional to it.

(Whereupon, Applicant's Exhibit No. 18 was marked for identification.)

Q Mr. Watson, I hand you what may be identified as Applicant's Exhibit No. 18, and ask you to explain what that instrument represents?

A This is also an El Paso chart, El Paso form, which we used. One-point Back Pressure Test and Deliverability. And it is on the Eva Owen No. 1.

Q And what period does it cover?

A It covers 3/6 through 13 of '59.

Q Now, what does the second page of the Exhibit cover?

A It is the same deliverability form, and it covers from 5--the day of the test is 5/16/58.

Q Now, does the Exhibit bear any notation in regard to the particular well as to the condition found by the tester?

A Yes, sir, it does. Under the remarks at the bottom of the page it says: "The shut-in used to calculate this test was taken from the nearest offset well (Sun-Lanehart #1," as requested by the New Mexico Oil and Gas Commission.

Q And it actually wasn't a deliverability test of the Eva Owen No. 1 as set forth in the Rules?

A Yes, sir, it was.

Q You say it was a deliverability test as set forth in the Rule?

A Well, it was in the effect that at the time, according to this note, the shut-in used to calculate this test was taken from the nearest offset well which was provided for in the New Mexico Oil Conservation Commission Rules, that an offset well could be used if it was unable to be shut-in.

Q All right. Now, are there any notations on the first page of Exhibit No. 18? Any of any importance to this--

A The same notation that was on the Watkins No. 2, "the tubing did not have any pressure on the shut-in," which indicates that the water in the tubing is balancing out with the gauge pressure, as logged off.

Q Now, what differences can you determine between the two pages, that is, the page covering the test for 1958 as compared to the test in 1959, to show that this well is either losing pressure or capability to produce, if any appears?

A Well, although the deliverability is lower on the 1959 test, the rate of flow is less, and it's producing at a lesser tubing pressure and line pressure. And there was no casing pressure taken on the '58 test, so you can't compare that. So, even though the deliverability is lower, the well is actually--the pressures are all lower, tubing and casing both.

Q Do you have any opinion as to what is causing the pressure

to be reduced?

A Well, the whole area in the Jal area is--the pressure is dropping in the whole area due to the lower line pressure. And also, the increase in water, as the wells produce more gas.

(Whereupon, Applicant's Exhibit No. 19 was marked for identification.)

Q Now, Mr. Watson, I hand you here an instrument identified as Applicant's Exhibit No. 19, which contains five pages. Can you identify that instrument, please?

A Well, the first and second pages are El Paso Natural forms of the deliverability calculations. The fourth and fifth forms are "Multi-point Back Pressure Test for Gas Wells; El Paso Natural Gas form. Also containing the same information that is filed on the official New Mexico form.

Q All right. Now, directing your attention to the Exhibit and on page three thereof, being the test for April, 1958, what is the deliverability factor shown there?

A Two hundred forty-eight MCF.

Q All right. Now, for the testing period of March 13th, 1959, what is the factor shown there?

A Two hundred eighteen point eight MCF.

Q Is there a notation on that second page in regard to the 1959 test?

A Yes, sir.

Q Read that into the record, please.

A The note here, "The pressure was taken from R. Olsen Winningham No. 3-- or "P sub c was taken from R. Olsen Winningham No. 3 well and could not be shut-in due to water logging off well bore."

Q All right. Now, on the first page of the Exhibit, being the report for April, 1960, what is the deliverability factor used there?

A It is calculated at 158.4 MCF.

Q In other words, nearly 200.differential between April of 1958 to April, 1960?

A Nearly 100.

Q One hundred. That's right. I stand corrected. Now, in connection with the Dyer No. 3, did you make any further study in regard to the production habits of that well?

A I checked the charts after the well was put on the pump jack, and those production charts show a very unstable producing condition even with the pump jack moving the water.

Q Is it your testimony that the installation of the pump jack in itself was not an answer at all to the wells producing, such as these wells are being produced?

A What was that question?

Q That installation of a pump jack is not an answer at all to the producing of wells being produced where they have water in the production formation?

A Well, it's the best we can do right at the present time,

I mean.

Q Does the installation of the pump itself answer all the questions?

A No, sir. From the indication on the chart, it looks like it's going to log off even with the pump jack on.

Q Based on your observation of the Dyer No. 3, did you feel that that was the well that would be regulated just because it did have a pump jack on and protect your reservoir?

A I don't think it can be regulated close enough to entirely eliminate the problem we have here of overproduction, no.

Q In connection with your study of this application and the wells involved in this application, Mr. Watson, did you arrive at any conclusion that the rate of flow that these wells could maintain and still be produced without loss to the reservoir, or loss of their reserves?

A Well, about the only way they can be produced and prevent either abandonment or loss of reserves, or both, is the way they have been produced.

Q Well, now, what would be the rate of flow that would have to be allowed these wells at this time in order to maintain them?

A Well, it's going to be somewhere in the neighborhood of three to four hundred thousand a day.

Q All right. And what would be true in the Eva Owen?

A Well, if there is a pump jack installed, it's going to change the conditions there to where-- I mean, I think each well

will pretty well have to stand on its own. But under the present conditions, it won't even produce, so I have no way of-- It's going to have to go to a different medium of producing before we can come to any conclusion how much it will produce.

Q You were familiar with the Eva Owen No. 1 Well prior to the time it was shut-in, were you not?

A Yes, sir.

Q At the time that it was shut-in, do you know why it was shut-in?

A It was overproduced.

Q At the time it was shut-in, was it capable of producing more than the daily allowable that was assigned to it?

A Yes, sir, but I don't recall how much the daily allowable was.

Q Do you know whether or not it's comparable to the daily allowable assigned to the well at the present time?

A Yes, sir, it would be.

Q Was it more or less than the presently assigned allowable?

A Well, at that time I think the allowable was a little higher than it is at the present time.

Q At that time, or at the time it was shut-in, it was capable of making that allowable, was it not?

A Yes, sir.

Q And at the present time it's incapable of making that allowable that has been assigned?

A That's correct.

Q What do you attribute that loss of productivity to, if anything?

A Well, about the only thing it can be attributed to is by the shut-in period; allowing the water to move on in around the bore hole, and enough so that it won't go ahead and flow down.

Q As an engineer, Mr. Watson, what is your opinion as to the solution of allowing operators having wells, such as the wells in question here, to continue to produce their wells in an economical manner, and yet at the same time not turning them entirely loose, but prorate them in such a manner as to afford equal protection to all operators who have wells operating in the same manner these wells are?

A Well, it has occurred to me that the whole south end of that field down there, the pressure is dropping and the water is increasing, and not only in our wells but everybody's wells in the area. And it looks to me like it's right around the corner where all of these well will have to be either disseminated in a different pool, and, say, South Jalmat Pool, and taken out of the deliverability and the shut-in period of the proration. I mean that might not be the solution that we want, but it is a possibility.

Q Well, in parlance of the oil industry, are they considered wells such as stripper wells or wells on their last leg?

A They are definitely on their last leg.

Q And if they are not produced properly, the reservoirs

attributable to the acreage would be lost, would they not?

A Yes, I believe they would.

MR. PORTER: We will have a ten-minute recess.

(Short recess)

Q (By Mr. Girand) Mr. Watson, you have previously testified that you appeared on behalf of the Jal Oil Company in connection with the hearing this October, 1959, wherein the Repollo No. 1 Well was one of the wells, subject matter, of that hearing; is that correct?

A Yes, sir, it is.

Q In connection with the Repollo No. 1 Well, and using it as an example of what may or what we anticipate will happen on subject wells, will you state to the Commission just what you observed in regard to the performance of the Repollo No. 1? That is, in regard to the reserves attributable to it, its production habits and manners, and what happened after the well was shut-in?

A Well, from the completion date in 1950, July, the well produced one year and ten months into the El Paso six hundred pound system. And in March 1953, the pump jack was installed, and the well was still going into the two hundred fifty pound system at that time. Now, it produced a total of five years and eight months into the two hundred fifty pound system, and at that time the water volume became so great that it wouldn't make any gas, and the line pressure was dropped in the area to one hundred pounds, and we continued to make gas for two years and nine months more. Now, that's

a total of one hundred eleven months production history on the well. During that period we produced 2,184,353 MCF, which the reserves were given some 6,000-- I don't have that total reserve figure, but the unrecovered reserves were 4,100--or 4,179,093, which leaves us recovering approximately one-third of the reserves attributed to the lease. And the total months that the well produced and the total gas volume that was made, it figures out that the average production per month was about 9,679 MCF per month for that period of nine years and three months. Now, this well was allowed, through the sanction of the Commission and the El Paso Natural Gas, to produce unrestricted for that period of time until it was shut-in sometime in, I believe, July of 1959 for some test. And since that time the well has gone to nothing, and as far as we are concerned, it's gone forever.

Q But it was producing gas up to the time it was shut-in for the test?

A Yes, sir, it was.

Q All right. Now, basing your answer on your knowledge of the area in the Jalmat Pool, and particularly this area in the south part there where the wells have made water, is it your opinion that the same result will be realized on the subject wells here, such as the Dyer No. 3, the Eva Owen, and the Watkins No. 2, if they are required to attempt to produce under the allowable?

A I think it's reasonable to compare the production from those wells with the Repollo production, and I think the results

that have shown up in the Eva Owen very distinctly bear that out due to the one year shut-in period, and then we are unable to get the well back on production at the present time. And there is another thing here on that. The total reserves are much more than what has actually been recovered. I think the unrecovered reserves were 1,893,532 MCF.

Q Well, is it your-- Pardon me, go ahead.

A The allowable for the last nine months from July '59 through March of '60, the allowable attributed to that well was 3,677,000 cubic feet per month. And at that rate, the unrecoverable reserves-- I mean, if it flowed that rate every month, the unrecovered reserves would take five hundred fifteen months to actually recover, which is a little bit out of line. We know it won't produce that long.

Q Basing your answer on your knowledge of the area, and particularly of the wells, do you believe that it is practical from an economical standpoint to require these wells to be shut-in at any time?

A From our experience that we have had, no.

Q Do you feel that any requirement to have them shut-in at any time would result in a loss of and waste of gas in place?

A Yes, sir, I do.

Q All right. Do you believe that these wells should be exempt from such test as the deliverability test as called for by the Orders 967 and 1092-A?

A Yes, sir, I do.

Q In that connection, though, can these wells be maintained at the existing allowable assigned to them under the producing methods that are required in order to obtain gas from well bores?

A Would you repeat that, please?

Q Well, by the same token, based on the allowable that is assigned to these wells at the present time, can they be operated without being shut-in for overproduction?

A Well, the Dyer and Watkins can not. The Eva Owen can't make its present allowable under the present conditions.

Q At the time the Eva Owen was shut-in, though, it was making more than the allowable because that was the reason it was shut-in?

A Yes.

MR. GIRAND: I believe that's all.

MR. PORTER: Mr. Payne.

CROSS-EXAMINATION

BY MR. PAYNE:

Q Mr. Watson, would you give me the acreage that is dedicated to each of these wells in amount; not by quarter-sections?

A The Dyer No. 3 has 160 acres.

Q Yes, sir.

A The Eva Owen has 80 acres. And the Watkins No. 2 has 40 acres.

Q Now, Mr. Watson, are you familiar with the assignment No.

9 in Order R-520, dealing with the Jalmat Pool?

A I don't recall what it is, no, sir.

Q Well, reading No. 9, Mr. Watson, it states "one gas well on the Jalmat Pool can sufficiently drain 640 acres." Now, do you believe that?

A Given enough time, I assume it can.

Q Well, sir, you have testified now that if the gas doesn't come out of these wells, it's going to be lost. Now, why isn't it going to be produced from another well on the section?

A Well, at the rate that water is encroaching,it will--I think the gas is bound to be by-passed and left in place. And I don't see any other way it can happen.

Q So, some might be produced and some might be lost?

A Yes, sir.

Q Now, Mr. Watson, do you know where the water can come from that is being produced through these three wells?

A No, sir. I only know the Watkins-- We know it's coming out of that twelve foot--

Q Have you had any analysis made to show whether it's salt water or fresh water?

A Well, it's a brackish salt water. It's neither salt nor fresh water.

Q Now, has Jal Oil Company investigated to determine whether thereis a casing leak or whether the water from the Santa Rosa might be coming down the side of the pipe due to deterioration in

your cement job?

A Not to my knowledge, no.

Q Don't you think it would be of value to Jal Oil Company to know where this water is coming from?

A Yes, sir.

Q Now, Mr. Watson, was there a correlation between the water production and the depth of the perforations, or the depth to which the well was drilled and not plugged back?

A You mean it did as far as sub-soil or compared to other wells?

Q No. What I am getting at is, is there any correlation between the water production that you see out of these wells and the depth of the perforations? What I am still trying to get is, where is the water actually coming from?

A Well, it's normally assumed that the water would be coming out of the lowest zone in the well bore, but I don't think that is the case in your Yates Section. And then I think it's been found even in some wells further north of us there, that each sand lens or sand productive zone carries some fluid with it. It isn't confined to just one zone. Our problem would be simple if it were.

Q You feel, then, I take it, that water is coming from the Yates--

A Yes, sir.

Q --formation. Now, is it possible that since you completed your Watkins No. 1 with approximately six hundred feet of open hole

in the gas section, that this water can be coming from the Queen formation due to your completion job on the Watkins No. 1, and that is where the water is coming from that you are getting in the other three wells?

A No, I hardly believe so, because the history on that water introduction there is more or less an overnight proposition, and we test that Queen Section well enough to know that there isn't that much oil in it.

Q That much water?

A That wasn't there, that much water in it. There was a considerable amount of water, but the oil was very light, and it has been plugged back. I don't recall the depth of that. It's been too far back. But it was plugged back into the Yates Section. I don't know whether the records show it or not, but it was actually cemented back to the bottom of the Yates, or near the bottom, if not in the Yates.

Q What about the possibility of remedial work to shut off that water?

A Well, which well are you talking about?

Q On all three.

A On all three. Well, in the Watkins 2, I don't think there is any question about it. If you shut off the water, you would shut off the gas too.

Q You believe in that well, at least, the water is coming in through all the perforations?

A It's just a necessary evil. If you are going to produce the gas, you are going to have to take the water with it. And I have never been successful in plugging off water in the Yates yet. Now, it might be possible to do, I don't know; but I have never successfully accomplished it myself.

Q Well, now, is that what you are going to attempt to do with the two wells that you depleted from your application? I believe there was some testimony that there was going to be some kind of work done on them.

A I think that will be in the neighborhood of a crack job.

Q Now, your Legal Well was shut-in in March, wasn't it? Your Legal No. 2?

A I don't know.

Q The end of March?

A It was shut-in-- Let's see. This is the 12th. I think maybe it was shut in the last two or three days of March, and then opened back up and then shut back in now.

Q Well, now, when you started producing it in again in April, did you find that it was logged off?

A Yes, sir, it was.

Q You had swabbed it in?

A I don't know whether it was swabbed in or not. That could probably be better answered by one of the Company personnel, because I didn't start checking it until a few days before the hearing. I am not familiar with whether they did or didn't swab it off, although

I do know that it had to be either blown in or swabbed off. I don't think they swabbed it off.

Q Now, as I understand your free piston method of production, in order to lift the water you have to produce gas?

A Yes, sir.

Q Now, how does the pump jack method work?

A Well, there hasn't been very many pump jacks used in that manner. As far as I know, the Repollo was probably the first one in New Mexico. You can produce it in that manner; you can produce gas out the casing and water out your tubing. And there is enough water. The low pressures that we have down there, if you get the tubing loaded with water out of your bore hole, there is no chance of it blowing around to the tubing. I mean, all your gas has to come out of your gas casing, because there is not enough casing pressure left in it to push that water, a full load of water, out the tubing. So the way it's produced, it is pumped out the tubing and the gas flows out the casing.

Q And the pump is above ground, your water pump?

A No, sir,the water--it's a subsurface pump. It's just a regular oil pump. No difference.

Q Now, what you are interested in is keeping your water unloaded, I take it?

A Yes, sir.

Q Conservation rather than getting more gas than your neighbor?

A I think the Company would be entirely willing, if it were possible, to cut it back as much as the Commission desired. I mean--

Q Well, now, the thing that bothers me, Mr. Watson, why can't you shut in your casing, which your gas is produced through, and pump your water out, and not have gas production along with it?

A Well, you would get a small amount of gas, and it may be possible to do that.

Q Well, now, couldn't you then shut in the casing, take the water out of the tubing and such gas as comes out with it, have a separator and then run that to your gas sales; and wouldn't that figure be less than the allowable presently assigned to the wells?

A If at such time as the well doesn't produce enough water to be flowing water and gas out of the casing, as was the case of the Repollo. Now, I mean, on the Dyer 3, I meant I don't know enough about the well. It's just recently been put on the pump jack, and it hasn't been thoroughly established as far as the possibilities are concerned, but in the case of the Repollo, it was flowing water and gas out of the casing and all, more water than we could blow out of it. So, it did flow out the casing a long time. So, eventually the water will go clear over. And when you shut the casing in, and after your water volume becomes so great, you can't produce anything but water out of your tubing, and your casing will still be loaded up.

Q Well, it will still be loaded up, but you will be pro-

ducing the water as it comes in, won't you?

A A certain portion of it, yes.

Q And, now, what is the bottom hole pressure on each of these three wells? Do you have that?

A No, sir, I don't have the bottom hole pressure.

Q Well, what is the approximate depth of the oil?

A About twenty-nine hundred.

Q Now, if you keep the tubing full of water by this pump jack method and keep pumping the water out, isn't the hydrostatic head going to be sufficient to keep the gas from being produced out of that tubing?

A Yes, sir, it can be.

Q So, then, it looks like you could unload your water without producing gas?

A It's possible to unload some of it. Now, whether you are going to unload enough of it to keep it from logging off, that's kind of a trial and error method, after you get your operation going.

Q I see. Mr. Watson, has the Jal Oil Company considered the possibility of reinjecting the gas, either into the well which produced it, or into an adjacent well?

A I can't speak for the Company on that.

Q Well, these wells are fairly adjacent to each other, aren't they? They are close to each other?

A Well, there is four of them pretty close together, and

then the other one is about seven, eight miles off.

Q Well, now, couldn't you install a central compressor, reinject this gas back into the reservoir, and thereby unloading your water and still keeping your producing rate within the allowable?

A Well, a small amount of gas involved in this whole situation wouldn't warrant setting a twelve, fifteen thousand compressor, I don't believe.

Q Well, let's talk about that a minute. I believe you testified that these were on their last legs, or Mr. Girand there. And on the other hand, your reserves show, oh, approximately two hundred thousand dollars worth of recoverable gas for each of these wells.

A Well, let me ask you this: Do you think just subjecting our gas in that two or four wells that would be involved would be enough to keep that water from just flooding the whole situation now?

Q Well, I am not the one testifying.

A It was your suggestion.

Q That's what I am trying to find out from you. Now, you've got two hundred thousand dollars of recoverable reserves in each one of these wells, approximately. Surely you wouldn't mind spending twenty-five thousand dollars to get it. By the way, how are these reserves computed? Was that a pressure production decline method ~~for your~~ or pore volume analysis?

A I don't know how the man computed it.

Q And Jal Oil Company, as such, hasn't actually made a study of the reserves, other than hiring--

A An outsider.

Q And the line pressure which was checked out was approximately a hundred pounds?

A Yes, sir. I mean it will vary from sometimes ninety-six up to maybe a hundred fifteen or eighteen pounds.

Q Just depending on--

A Just depending on how well El Paso's compressors are running.

MR. PAYNE: Thank you.

MR. PORTER: Mr. Nutter.

QUESTIONS BY MR. NUTTER:

Q Mr. Watson, just exactly what do you expect to accomplish in the manner of operation that you are seeking in, an opportunity to try out here? In other words, if the Commission should grant you the relief that you have requested on the Watkins No. 2 Well, for instance, how much gas do you think you would be able to produce?

A You mean out from the recovery?

Q Per month.

A Well, I think the testimony established that it would flow at the rate of about three hundred twenty-five MCF per day, which, I am sure they would be willing to keep it-- I mean, just as long as it's flowing and keeping the water off the formation,

that's all we are asking.

Q Well, now, haven't there been times when in that well's life, as shown on the chronology of the activities here, when the well was producing something like less than that amount of gas and didn't seem to be logging on?

A Well, it's possible that it might have.

Q I notice here on November 26th to November 30th the well produced nine hundred eighty-seven MCF. This is the Watkins No. 2 Well; it produced nine hundred eighty-seven MCF. And it doesn't appear that there was any trouble until you changed the orifice from three-quarters to one-quarter to see if you could produce less gas and not log off.

A Well, that's correct. I mean they were attempting to establish a lesser amount of gas, a lesser rate of flow, the least amount of gas that could be supplied per day and keep it on the line.

Q But this is considerably less than the amount of gas just mentioned that the well would produce and not log off?

A Well, now, maybe I misunderstood you.

Q You said something about three hundred twenty-five MCF per day.

A Yes, sir. Just a second; let me check. What date were you referring to?

Q This was November 20th to the 30th, which would be nine days. It was averaging just a little over a hundred per day,

wasn't it?

A Well, it doesn't say what date the orifice was changed, does it?

Q I assume that the orifice was changed at the end of the nine-day period. Was that--

A Well, in case it did, it was only making a little over a hundred MCF per day,--

Q Now,--

A -- But then you go on from December 1st to the 8th, the well produced two hundred twenty-one MCF and died and would not blow around.

Q This was with the quarter inch orifice?

A Yes.

Q So, it would appear that a quarter inch orifice would cause it to load up?

A Yes, sir.

Q Now, what system of production does this Watkins No. 2 use? Was this a floating piston well?

A No, sir. There was no mechanical device on it.

Q This is just making as best as it can--

A Yes.

Q --pumping the water as it comes out of the formation?

A Right.

Q Now, on your Dyer No. 3, that is the well that has the pumping jack on it now?

wasn't it?

A Well, it doesn't say what date the orifice was changed, does it?

Q I assume that the orifice was changed at the end of the nine-day period. Was that--

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A No, sir. There was no mechanical device on it.

Q This is just making as best as it can--

A Yes.

Q --pumping the water as it comes out of the formation?

A Right.

Q Now, on your Dyer No. 3, that is the well that has the pumping jack on it now?

A Yes, sir, it is.

Q How much do you think you will be able to produce if the Commission grants you the relief you requested, using the pumping jack?

A Well, the deliverability is only one hundred fifty-eight MCF.

Q Now, is that deliverability test taken with a pumping jack in operation?

A Yes. And if I may check back and see what the-- The rate of flow at that deliverability was two hundred fourteen MCF. So, I don't think it would be over that. I think it could be kept to that.

Q What was your average in the period of February 22nd to March 1st? Your pump was running to keep the formation clear of water and produced eleven hundred ninety-two MCF of gas during that period. How much would that be?

A That's still on the Dyer; right?

Q Yes, sir, this is the Dyer.

A Give me those dates again, please.

Q Was February 22nd and March 1.

A That would be eight days. An average of that would be a hundred forty-nine MCF per day, would it not?

Q I believe that's somewhere in the neighborhood of the figures. Now, referring to the Eva Owen No. 1 Well, what is the method of production on this well?

A Well, up until this last go-around, after it was shut-in, it was producing on a piston at the time it was shut-in, and it has been attempted to produce it on the piston since then, and unsuccessfully.

Q From the chronology of activities here on Exhibit No. 10, it doesn't appear to presently be producing any rate of production that has been particularly successful on this well, has it?

A That's correct. I mean, as far as the piston or even able to flow into the line at any rate, I think it's passed.

Q Is it your intention to place a pump jack on this well?

A I can't say. I haven't talked to the Company people to see, but I assume--

Q Can a pump jack be placed--

A --if there is any more gas to be produced, it's necessary, yes, sir. However, the pay-out on that particular project will be in accordance with the acreage factor. And I think I stated, as on the Dyer 3, it would be about sixteen and a half months pay-out, and it will be approximately double on this, or thirty-two to thirty-six months on the Eva Owen.

Q You are assuming there, for the purpose of making a calculation, that you wouldn't get any relief, and that you would have to operate under the Commission's allowable for the well; is that correct?

A That's correct.

Q Now, if you would get this relief, and you were able to

produce the well with a pump jack, how much gas would you make?

A We don't know. We may not be able to even make what it made before. That is something that nobody can answer, I don't think.

Q Mr. Watson, has any attempt ever been made on any of these wells to install a smaller diameter tubing to see if that would increase the flow?

A I believe not.

Q In some instances, isn't it true that installing a smaller tubing will improve flow efficiency?

A Well, now, I haven't had any experience along that line, so I can't say. But it stands to reason, I mean, from an engineering and lifting standpoint that it would possibly help it.

Q I noticed on one of these Exhibits one of the wells had two inch tubing and one had two and a half inch tubing. What did the third well have, do you know?

A No, I can't say what--

Q I believe the Exhibit reflects that you had two wells with two inch tubing and one with two and a half inch tubing. I stand corrected. Two of the wells have two and a half inch --

A Two have two and a half.

Q --and one has two inch.

A Well, it's possible that it would have had a longer flowing life with two inch. I'm sure it could have been somewhat longer. I mean, it's a little bit--

Q I suspect they have had a longer life by having tubing in them than they would have had if you hadn't had the tubing on them?

A Yes. There is no question in my mind about it.

MR. NUTTER: I believe that's all.

QUESTIONS BY MR. UTZ:

Q Mr. Watson, do you have completion data available there to answer some questions in regard to the total depth?

A I believe we do. Just a second. Which one would you prefer first?

Q I would like to know what the total depth is on the Watkins No. 2.

A Casing was set through on that well.

Q Casing was set where?

A The casing was set through the pay, and the plugback depth is 2968. Just a second here, I will get the TD, where it was drilled to. I think it was drilled to a total depth of 2987, and 2973 feet of five and a half casing was run and cemented.

Q Casing was set at 2973?

A Well, there was 2973 feet of casing run, and it was set at 2983. Direct floor measurements.

Q So, you have about three or four feet of open hole below the casing; is that correct?

A Yes, sir. It's approximately three feet, because this is 2983.7.

Q Was your tubing set at 2869?

A I will have to check because I am not sure. Yes, sir, 2869.

Q Well, that would leave about eighteen feet of hole below the bottom of the tubing; is that correct?

A Eighteen foot below the bottom of the tubing? If you said it was set at 2869, there would be approximately a hundred feet.

Q That's right Hundred nineteen feet. Do you think it's possible the water could be coming from that hundred eighteen feet over--

A Well, we are still talking about the Watkins 2?

Q That's right. You have some open hole below the base of the shoe, five and a half casing shoe.

A Well, that's only three feet.

Q Well, yes, that's true.

A Your perforation is there to 2942 to 54. And it's--

Q Do you think there is any water in that open three feet of hole?

A Well, I can't say whether there is or isn't, but according to the core, it sure didn't look like there would be. It was hard dolomite.

Q There would not be?

A Yes, there wouldn't be.

Q You really don't know where the water is coming from in

this well?

A Except it's coming through those perforations. As far as the exact place where it's coming from, no.

Q Do you know whether the cement job is open?

A As far as I know, it hasn't been tested.

Q Is this well producing through the tubing?

A Yes, sir.

Q Now, on your Owen No. 1, do you have the total depth for that well?

A Total depth is 2776.

Q The tubing was set at 2772.

A Well, that tubing has been changed two or three different times. It shows to be two and a half tubing at 2772.

Q Then, do you have approximately four feet of open hole below the tubing?

A Yes, sir.

Q Do you know whether any water is coming from that zone or not?

A Not for sure, no, sir.

Q You haven't tested the well to find out?

A As far as I know, no, it hasn't been.

Q Is that well producing through the tubing?

A Yes, sir. Well, it was. It's dead now.

Q Pardon?

A I say it was producing through the tubing before it died.

Q It's not producing at all,now?

A No, sir.

Q On the Dyer No. 3, what is the total depth of that well?

A Total depth is 2977.

Q And the two and a half inch tubing was set at 2960?

A Well, I suspect that that tubing was changed in this recent installation of the pump jack. . I don't know.

Q This well does have a pump jack on it?

A Yes, sir. Well, now, it's flowing gas through the casing and water--pumping the water through the tubing.

Q Actually, it would have seventeen feet of open hole below the tubing from which the water is being pumped?

A Yes, sir.

Q Do you know whether or not the water is coming from this zone?

A No, I don't know.

Q You haven't tested the well to find out?

A No, sir. It hasn't been.

MR. UTZ: That's all I have.

MR. PORTER: Any furthur questions?

MR. UTZ: One further question.

QUESTIONS BY MR. UTZ:

Q Do you have any idea where the gas and water contact is in this area?

A No, sir. As I stated before, it has been found that the

water, each individual sand, will usually carry some fluid, whether it's high or low. And as you go north of Jal, your casing will carry a little oil in the top section and produce dry gas out of it.

Q Do you think you have a partial water-dry in this area?

A Evidently, it has to be, because I don't know of any other area where there is water in the Yates like there is in this area we are talking about right here. Now, how it got there, I don't know, but I would assume it is a week or semi-weak, but actually, it's getting stronger water drive.

Q (By Mr. Payne) This hasn't always been present in this interval?

A Yes, sir. On the Dyer 3, and the Legal 2, and the Jenkins are all right in one year, and they all make a small amount of water on completion.

QUESTIONS BY MR. UTZ:

Q But there has been an encroachment of water?

A There has been an encroachment as time has gone on.

MR. UTZ: That's all I have.

REDIRECT EXAMINATION

BY MR. GIRAND:

Q Mr. Watson, I believe they have suggested certain things such as pumping the water and compressor stations, changing the tubing, things of that nature. Do you feel that the wells in their present condition would warrant the expense of such operation with-

out knowing what the results would be?

A Well, it's just a gamble whether you would ever see the money again, I mean, as far as anything you do. The installation of a pump jack seems to be the safest way out over an extended period of time. But if the wells are shut-in even with the pump jack on them I am not sure what the results are going to be.

MR. GIRAND: I believe that's all.

MR. PORTER: Any further questions of the witness?

MR. GIRAND: I want to reoffer all Exhibits, 1 through 18.

MR. PORTER: Without objection--

MR. GIRAND: Well, Exhibits 1 through 19.

MR. PORTER: Without objection, the Exhibits will be admitted.

(Thereupon, Applicant's Exhibits 1 through 19 were received in evidence.)

MR. PORTER: The witness may be excused.

MR. GIRAND: That's all we have to offer at this time.

MR. PORTER: Does anyone else have any testimony to offer in this case, 1941? Anyone have a statement to make? Mr. Kastler.

MR. KASTLER: Bill Kastler from Roswell, New Mexico, representing Gulf Oil Corporation. Gulf is an independent offset operator interested in the outcome of this case; our offset lease covers Section 32. We feel that no legal or equitable reasons for extending this exception has been shown in this case, which now

exists under the present Jalmat Field Rules. And, therefore, we enter our opposition.

MR.PORTER: Mr. Bratton.

MR. BRATTON: Howard Bratton, Roswell, New Mexico, appearing on behalf of Humble Oil & Refining Company. Humble objects to the exception of Jal Oil Company Owen Well No. 1, Dyer No, 3, and Watkins Well No. 2 from prorationing of--according to the Jalmat Rules and Regulations for the reason that we are also operators in the Jalmat Gas Pool of properties in close proximity to two of the subject wells, and feel that exemption of these wells would rule in violation of our correlative rights. The exemption of one operator in a pool from prorationing would be a violation of the correlative rights of the other operators who must remain subject to the Pool prorationing Rules.

MR. PORTER: Anyone else have any statement to make? Mr. Hughston.

MR. HIGHSTON: R. L. Hughston, Shell Oil Company. Shell Oil Company is an operator in the Jalmat Gas Pool, and is opposed to the granting of the Jal Oil Company's requested exceptions. We, in general, feel that the removal of prorationing in a selected area of a competitive reservoir is a bad thing; that the prorationing formula of the Rules, whether they are popular or unpopular, should be applied uniformly and equitably to all operators in the Field; that the correlative rights of the operators will be affected to the injury of some, and to the advantage of others. Here, if an

exception is allowed, the effect on the correlative rights of other operators might be small, but a bad precedent would be set. We think that Jal should be limited to the method of others in Jalmat Field who are faced with the water problem, which method is through the use of remedial measures.

MR. PORTER: Anyone else have a statement to make? The Commission will take the case under advisement.

* * *

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, THOMAS T. TOMKO, Court Reporter, in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in machine shorthand and reduced to typewritten transcript by me, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this, the 15th day of April, A.D. 1960, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Thomas T. Tomko
Notary Public

My Commission expires:

January 7, 1964

DRAFT
OEP:esr
April 21

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. 1941

Order No. R-1655

APPLICATION OF JAL OIL COMPANY FOR EXCEPTIONS TO VARIOUS PROVISIONS OF ORDERS R-520, R-967, and R-1092-A FOR 3 WELLS IN THE JALMAT GAS POOL, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 13, 1960, at Hobbs, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this _____ day of April, 1960, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, 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 is the owner and operator of the following-described wells in the Jalmat Gas Pool, Lea County, New Mexico:

Dyer Well No. 3, SE/4 NE/4 of Section 31, Township 25 South, Range 37 East

Owens Well No. 1, SW/4 SW/4 of Section 21, Township 25 South, Range 37 East

Watkins Well No. 2, SE/4 NE/4 of Section 35, Township 24 South, Range 36 East.

(3) That according to the testimony presented, each of the above-described wells makes a considerable amount of water, the Dyer Well No. 3 approximately 35 barrels per day, the Owens Well No. 1 approximately 40 barrels per day, and the Watkins Well No. 2 approximately 250 barrels per day.

(4) That all of the above-described ~~subject~~ wells were the subject of an Examiner Hearing in Case No. 1779, heard October 7, 1959, after which hearing the said Dyer Well No. 3, which was subject to complete shut-in for being more than six times over-produced, was exempt from complete shut-in and the operator was permitted to make up this well's over-production by producing it at a monthly rate not to exceed 75% of the well's current allowable or at a rate not to exceed 75% of the well's average monthly allowable for the preceeding six-month proration period, whichever was greater.

(5) That at the time of the said Examiner Hearing the said Owens Well No. 1 and the said Watkins Well No. 2 were substantially in balance. Since these two wells were not subject to shut-in for over-production, it was ~~in~~ the opinion of the Commission that no relief was necessary.

(6) That the latest gas production figures show that the Owens Well No. 1 is under-produced rather than over-produced and thus it apparently needs no relief.

(7) That the said Watkins Well No. 2 is approximately twelve times over-produced and, under the provision of Order R-520 and

Order R-967, is subject to complete shut-in until such time as ~~its, substantial portion of the; over-production is made up.~~ it becomes less than 25% of the allowable produced.

(8) That due to liquid problems, the applicant should be permitted to produce the said Watkins Well No. 2 at monthly rate not to exceed 75% of the well's current allowable, or at a monthly rate not to exceed 75% of the well's average monthly allowable for the preceeding six-month proration period, whichever is greater.

(9) That due to liquid problems, the applicant seeks an order cancelling the over-production incurred by each of the subject wells and exempting these wells from the requirements of an Annual Deliverability Test. In addition, the applicant requests that these wells be exempt from prorationing as it is now practiced under the Jalmat Gas Pool rules.

(10) That the said Watkins Well No. 2, which makes a substantial amount of water, is being produced without a free-piston or pump-jack installation, even though applicant's experience with other wells in the same general area has been that such mechanical devices are useful in keeping water unloaded from well bores.

(11) That the water produced from the said Owens Well No. 1 is being lifted by means of a free-piston installation. Such an installation requires that the water be lifted by gas production, and if the gas allowable assigned to this well is insufficient to keep the water unloaded from the well, the operator could install a pump-jack to accomplish this purpose.

(12) That a pump-jack has recently been installed in the said Dyer Well No. 3 and the evidence does not establish that this installation is inadequate to keep the water unloaded from this well.

(13) That a pump-jack installation operates independently of gas production and, from an engineering standpoint, there appears to be no reason why such an installation, if properly

sized, cannot keep the formation clear of water, while keeping the gas production at a level within the gas allowable assigned to the well.

(14) That the applicant has apparently made no study or investigation to determine where the water produced by the subject wells is coming from. Further, the applicant has apparently made no study to determine whether remedial work should be conducted on the wells in order to shut off the water production.

(15) That the applicant has not made a study to determine whether or not it would be feasible to produce the wells in such a manner as to keep the formation clear of water and then re-inject the amount of produced gas which is in excess of the allowable assigned to well.

(16) That according to the applicant's testimony as to the recoverable reserves underlying the tracts dedicated to each of the subject wells, the applicant should be willing to perform the remedial work necessary to alleviate these water problems, or to install such mechancial installations as are necessary to keep the formation clear of water, since such work would apparently be economically feasible.

(17) That 160 acres is dedicated to the said Dyer Well No. 3, 80 acres is dedicated to the said Owens Well No. 1, and 40 acres is dedicated to the said Watkins Well No. 2, so that even in the event that the production from one or more of these wells is lost due to water encroachment, which event should not occur if the operator makes every effort to prevent it, there should be no ultimate loss of gas from the Jalmat Gas Pool, inasmuch as one well in this Pool will efficiently and economically drain 640 acres, and the gas underlying the tracts dedicated to each of the subject wells presumably would be produced from offset wells.

(18) That in regard to certain of the applicant's wells, a re-dedication of acreage would be feasible and could result in

an increase of the per well allowable.

(19) That to cancel the over-production which the subject wells have thus far incurred would impair the correlative rights of other operators in the Jalmat Gas Pool, and to permit any well to consitently produce more gas than is assigned as an allowable to such well in accordance with the proration formula for the pool would impair the correlative rights of other operators in the pool.

(20) That since the allowable assigned to ~~each~~ wells in the Jalmat Gas Pool is dependent in part upon a well's calculated deliverability as determined by an Annual Deliverability Test, the subject wells should not be exempt from such test. Presumably the reason for the applicant's request that the subject wells be exempt from Deliverability Test is so that they will not have to be shut-in prior to the pre-flow period. This shut-in period can and should be dispensed with by allowing the applicant to use the highest of the shut-in pressures of the four nearest wells in the Jalmat Gas Pool in taking the Deliverability Test on each of the subject wells.

(21) That the applicant has failed to establish any compelling reason why the Commission should exempt the subject wells from gas prorationing, an action which would be a radical departure from present Commission policy and which would have far-reaching effects.

IT IS THEREFORE ORDERED:

(1) That the application of Jal Oil Company for an order exempting the following-described wells in the Jalmat Gas Pool from gas prorationing, and for an order cancelling the overproduction incurred by each of said wells and exempting them from deliverability tests be and the same is hereby denied:

Myers Well No. 3, SE/4 NE/4 of Section 31,
Township 25 South, Range 37 East

Owens Well No. 1, SW/4 SW/4 of Section 21,
Township 25 South, Range 37 East

Watkins Well No. 2, SE/4 NE/4 of Section 35,
Township 24 South, Range 36 East

all in Lea County, New Mexico.

(2) That the operator be and the same is hereby authorized to compensate for the overproduction incurred by the said Watkins Well No. 2 by producing it at a monthly rate not to exceed 75% of the well's current allowable or at a monthly rate not to exceed 75% of the well's average monthly allowable for the preceding six-month proration period, whichever is greater.

(3) That in taking the Annual Deliverability Test on each of the above-described wells, the operator be and the same is hereby authorized to use the highest of the shut-in pressures of the four nearest wells in the Jalmat Gas Pool.