

Case No.

98

Application, Transcript,
Small Exhibits, Etc.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 98

ORDER NO. 712

THE APPLICATION OF THE OIL CONSERVATION
COMMISSION UPON ITS OWN MOTION FOR AN
ORDER GOVERNING GAS OIL RATIOS FOR LEA,
EDDY AND CHAVES COUNTIES.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 10:00 A.M. on April 15, 1947 at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico hereinafter referred to as the "Commission".

NOW, on this 4 day of August 1947, the Commission having before it for consideration the testimony adduced at the hearing of said case and being fully advised in the premises;

FINDS:

1. That the Commission has jurisdiction in the matter.
2. That the order herein is reasonable and necessary in the material curtailment of avoidable underground and surface forms of waste affording the owner of each property in a pool in the respective counties, the opportunity to produce his just and equitable share of the oil and gas by using his just and equitable share of the reservoir energy of the pool within the meaning of the gas and oil conservation law in Chapter 72, Laws of New Mexico, 1935, taking into consideration all pertinent factors applicable to the various fields; such as age, state of depletion, character of producing formations, water and gas drive, application of gas to beneficial use, and the returning of gas to the formations for storage, repressuring and pressure maintenance projects.

IT IS THEREFORE ORDERED:

That the Order herein shall be applicable to the pools in Lea, Eddy and Chaves Counties, New Mexico and shall be known as the:

LEA-EDDY-CHAVES COUNTIES NEW MEXICO GAS-OIL RATIO ORDER

1. (a) The proration unit shall be the unit of proration as defined by the State-wide Proration Order (with deep-pool adaptation).
- (b) A marginal unit is; for pools having no special proration plan, a proration unit that will not produce the top unit allowable as in the State-wide Proration Order (with deep-pool adaptation); and for pools having such plans, a proration unit that will not produce the acreage factor allowable thereunder-both during the Gas-Oil Ratio Test.
- (c) A non-marginal unit is: for pools having no special proration plans, a proration unit that will produce the top unit allowable as in the State-wide Proration Order (with deep-pool adaptation); and for pools having such plans, a proration unit that will produce the acreage factor allowable - both during the Gas-Oil Ratio Test.
- (d) The top unit allowable shall be as in the State-wide proration Order (with deep pool adaptation).

(e) The gas-oil ratio of a proration unit shall be the total net formation gas produced with the oil from such unit divided by the total net barrels of oil so produced during the Gas-Oil Ratio Test.

(f) The limiting gas-oil ratios for the various pools shall be as in Section 2 hereinbelow.

(g) A high gas-oil ratio unit shall be a proration unit that exceeds the limiting gas-oil ratio prescribed for the pool in which such unit is located.

(h) A low gas-oil ratio unit shall be a proration unit that does not exceed the limiting gas-oil ratio prescribed for the pool in which it is located.

(i) The gas-oil ratio adjustment shall be as in Section 3 hereinbelow.

(j) The unadjusted allowable shall be the allowable a proration unit would receive before the gas-oil ratio adjustment is applied.

(k) The adjusted allowable shall be the allowable a proration unit receives after the gas-oil ratio adjustment is applied.

(l) The Official Gas-Oil Ratio Test applicable shall be such test designated by the Commission, made by such method and means, in such manner, and at such periods as the Commission in its discretion may prescribe from time to time. That a definite schedule be worked out by the Commission for conducting and submitting such tests of wells in each pool within the counties aforesaid and the making and the filing with the Commission the report of such official gas oil ratio tests shall be construed a part of such tests. The Commission will drop from the proration schedule any proration unit for failure to make such test as hereinabove described until such time as a satisfactory test has been made or full or proper explanation given.

2. (a) The limiting gas-oil ratios in cubic feet per barrel for the following pools shall be to wit:

<u>POOL</u>	<u>GAS OIL RATIO LIMIT</u>	<u>COUNTY</u>
Anderson	2000	Eddy
Arrowhead	3500	Lea
Artesia	2000	Eddy
Atoka	2000	Eddy
Barber	2000	Eddy
Benson	2000	Eddy
Blinebry	2000	Lea
Brunson	2000	Lea
Burton	2000	Eddy
Caprock	2000	Chaves & Lea
Cass	2000	Lea
Comanche	2000	Chaves
Corbin	2000	Lea
Culwin	2000	Eddy
Daugherty	2000	Eddy
Dayton	2000	Eddy
Dayton, East	2000	Eddy
Drinkard	2000	Lea
Dublin	2000	Lea
Eaves	2000	Lea
Eighty-four Draw	2000	Lea
Empire	2000	Eddy
Ennice-Monument:		
Ennice portion	6000	Lea
Monument portion	3000	
Ennice, West	2000	Lea
Penton	2000	Eddy
Forest	2000	Eddy
Free	2000	Eddy
Goffy	2000	Eddy
Grayburg-Jackson	4000	Eddy
Halfway	2000	Lea

<u>POOL</u>	<u>GAS OIL RATIO LIMIT</u>	<u>COUNTY</u>
Harrison	2000	Lea
Henshaw	2000	Eddy
High-Lonesome	2000	Eddy
High-Lonesome South	2000	Eddy
Hobbs	3500	Lea
Jones	2000	Lea
Lea	2000	Lea
Leo	2000	Eddy
Loco Hills	3000	Eddy
Lovington	2000	Lea
Lovington, West	2000	Lea
Lusk, East	2000	Lea
Lusk	2000	Eddy & Lea
Lusk, West	2000	Eddy
Lynch	2000	Lea
Lynch, North	2000	Lea
Maljamar	3000	Eddy & Lea
Maljamar, North	2000	Lea
Maljamar, South	2000	Lea
McMillan	2000	Eddy
Paddock	2000	Lea
PCA	2000	Eddy
Pearsall	2000	Lea
Premier	2000	Eddy
Red Lake	2000	Eddy
Roberts	2000	Lea
Roberts, West	2000	Lea
Robinson	2000	Eddy & Lea
Russell	2000	Eddy
Salt Lake	2000	Lea
San Simon	2000	Lea
Shugart	2000	Eddy
Shugart, North	2000	Eddy
Skaggs	2000	Lea
Square Lake	2000	Eddy
Tonto	2000	Lea
Turkey Track	2000	Eddy
Young	2000	Lea
Vacuum	2500	Lea
Watkins	2000	Lea
Weir	2000	
New & undesignated pools	2000	

(b) No limiting gas-oil-ratio shall be applied in Hardy, Penrose-Skelly, Langlie-Mattix, Rhodes Oil Pool, Cooper-Jal, and South Eunice pools in Lea County, (See order 633) and Scanlon in Eddy County, now primarily gas reservoirs. Provided that the oil produced with the gas shall not be in excess of the current top unit allowable; and provided further that the gas produced from said pools shall be put to beneficial use so as not to constitute waste, except as to proration units in said pools for which there are not facilities for the marketing or application to beneficial use of the gas produced therefrom. As to such proration units the limiting gas-oil ratio in effect immediately prior to the effective date of the order herein shall apply. As to said pools, gas-oil ratio tests shall be required only when the Commission within its discretion may from time to time indicate.

3. The system of gas-oil ratio control shall be that of volumetric control, whereby the current oil allowable for a proration unit, under the provisions of the State-wide Proration Order (with deep-pool adaptation), is adjusted by reason of exceeding the corresponding limiting ratio hereinabove described, in accordance with the following formula:

(a) Any proration unit which, on the basis on the latest official gas oil ratio test has a gas oil ratio in excess of the limiting gas oil ratio for the pool in which it is located shall be permitted to produce daily that number of barrels of oil which shall be determined by multiplying the current top unit allowable by a fraction, the numerator of which fraction shall be the limiting gas oil ratio for the pool and the denominator of which fraction shall be the gas oil ratio of said proration unit as determined by the latest official gas oil ratio test.

(b) A marginal unit shall be permitted to produce the same total volume of gas which it would be permitted to produce if it were a non-marginal unit.

(c) From the pool allocation shall be deducted the amount of oil allocated to marginal units and high gas-oil ratio units, then the remaining oil shall be distributed to the low gas-oil ratio units, within the same pool in accordance with the pool proration plan.

(d) All gas produced with the current oil allowable determined in accordance with this order shall be deemed to have been lawfully produced.

4. No proration units within a repressuring or pressure maintenance project area, where 65% available residue of the total gas withdrawal is returned to the formation shall be affected by the limiting ratios of this order. Such areas shall be those set out by the Commission by Order upon hearing as provided by law.

5. All proration units to which gas-oil ratio adjustments are applied shall be so indicated in the Proration Schedule with adjusted allowables stated.

6. The order herein supersedes Orders 237, 250, 545 and 650.
This order shall become effective on the first day of the proration month next succeeding the month in which said Order is adopted.

7. That jurisdiction of this case is hereby retained by the Commission to approve schedules of time and manner of taking and reporting gas oil ratios for wells in the separate pools of Lea, Eddy, and Chaves Counties and for other purposes connected therewith.

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

OIL CONSERVATION COMMISSION

Wm. J. Mabey
CHAIRMAN

John E. Miles
MEMBER

L. L. Spurrier
SECRETARY

LEA COUNTY OPERATORS COMMITTEE

DRAWER I

HOBBS, NEW MEXICO

May 23, 1947

file
Case 98

Mr. R. R. Spurrier
Oil Conservation Commission
Santa Fe, New Mexico

Dear Mr. Spurrier:

Attached you will find Proposed Gas-Oil Ratio Schedule,
as a part of the evidence submitted at the Hearing in
Santa Fe, April 15, 1947.

Yours truly,

Glenn Staley
Glenn Staley

GS:gi
Enc. 1

PROPOSED GAS-OIL RATIO SCHEDULE
4-29-47

FIELDS	GOR LIMIT	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
ARROWHEAD	3500	x	x										
BLINNEY	2000			*									
DOWERS	2000					x	x	x					
BRUNSON	2000								x	x	x		
CAPROCK	2000						x	x					
CASS	2000						x						
DRINKARD	2000				x	x	x						
EAVES	4000			x									
EUNICE	6000									x	x	x	
HOBBS	3500					x	x	x					
LOVINGTON	2000				x	x							
LYNCH	2000							x					
N. LYNCH	2000							x					
MONUMENT	4000							x	x	x			
PADDOCK	2000				x	x							
SKAGGS	5000						x						
S. EUNICE	6000										x	x	
W. EUNICE	2000					x	x						
W. LOVINGTON	2500				x	x							
W. ROBERTS	2000								x				
VACUUM	2500	x	x	x									
WEIR	2000								x				

LEA COUNTY OPERATORS COMMITTEE
MAY 13, 1947
HOBBS, NEW MEXICO

GAS AVAILABLE TO KUNICE PLANT IN THE KUNICE AND SOUTH KUNICE AREAS
During the Years 1943, 1944, 1945, 1946 and 1947

	<u>Oct, 43</u> <u>MCF</u>	<u>Sept, 44</u> <u>MCF</u>	<u>Sept, 45</u> <u>MCF</u>	<u>April, 46</u> <u>MCF</u>	<u>Feb, 47</u> <u>MCF</u>
Daily Metered Gas Volume to Plant	71,146	86,319	96,296	96,000	92,219
Gas Venting to Air on Connected Leases	<u>57,366</u>	<u>36,171</u>	<u>23,676</u>	<u>24,546</u>	<u>21,446</u>
Total Gas Available on Connected Leases	128,532	122,490	119,972	120,546	113,667
Gas Available on Unconnected Leases	<u>9,940</u>	<u>13,484</u>	<u>8,840</u>	<u>9,634</u>	<u>5,972</u>
Total Gas Available on Connected and Unconnected Leases	138,472	135,974	128,812	129,180	119,639
Gas Available in South Eunice Field on Unconnected Leases				4,029	15,772
Gas Metered from Trinity Wells to Carbon Black Plant				<u>4,500</u>	<u>4,012</u>
GRAND TOTAL				137,709	139,423

Odessa, Texas
March 18, 1947

Producing Gas-Oil
Ratios - Eunice Field

Lea County Operating Committee
Hobbs, New Mexico

Gentlemen:

As suggested by members of your Committee, we are attaching a table of producing gas-oil ratios recently determined in the Eunice Field. These results were obtained by spot measurements of the gas as compared with the current daily oil production in cases where the gas from a well or lease is not presently connected; and in cases where all of the gas is currently taken into a pipeline system, the actual monthly gas measurement and the reported oil runs were used.

At present, we are connected to leases producing 113,667 MCF per day, and we are able to take 92,219 MCF into the plant. We are now making plant enlargements and field line extensions to process all the gas available in the Eunice Field, plus 20 million from the South Eunice Field. There is 5,972 MCF per day available on unconnected leases in Eunice, making the present total gas in the field at 119,639 MCF. This total field gas volume as compared with the total monthly reported oil runs for the field gives an average producing ratio of 8,765 cubic feet per barrel.

When anticipated increased deliveries to El Paso commence this coming September or October, we expect to have a total demand from our Eunice Gasoline Plant of 123 million cubic feet of residue gas. If we are operating under a limited ratio of 6,000 as the field now has, we shall be unable to deliver the above volume of gas.

We are, therefore, asking your support in appearing before the Commission on April 15 and asking that the limiting 6,000 gas-oil ratio in Eunice be lifted insofar as is necessary to supply the gas markets; this to be effective when increased market is available. With oil producing schedules which will give us an even flow of gas to our gasoline plant, there should never be any gas vented at the Eunice Plant after the increased delivery to El Paso begins this fall. There is and will be approximately 200 MCF per day of gas on outlying leases which will not be connected.

- 2 -

The 20 million cubic feet which we expect to take from South Eunice is located in Sections 6 and 7, Township 22 South, Range 36 East. We expect to ask the Commission for gas-oil ratio exemption on this gas. We feel that these requests are in the direction of gas conservation and to the advantage of producers and shall appreciate your support at the April 15th hearing.

Yours very truly,



H. R. Markley
District Superintendent
Gasoline Department

Attachment

EUNICE FIELD

GAS-OIL RATIO BREAKDOWN OF ALL GAS AVAILABLE

<u>Ratio Bracket</u>	<u>13.45# P. B. Gas Volume MCF</u>	<u>Per Cent of Total</u>	<u>Oil Production BBLs.</u>	<u>Per Cent of Total</u>
0 - 1,000	348	.29	482	3.53
1 - 2,000	1,909	1.60	1,385	10.15
2 - 3,000	2,896	2.42	1,165	8.54
3 - 4,000	2,057	1.72	598	4.38
4 - 5,000	8,767	7.33	2,030	14.87
5 - 6,000	5,631	4.71	1,006	7.37
6 - 7,000	2,672	2.23	402	2.95
7 - 8,000	9,382	7.85	1,235	9.05
8 - 9,000	8,336	6.96	976	7.15
9 - 10,000	8,630	7.22	909	6.66
10 - 15,000	23,897	19.98	2,150	15.75
15 - 20,000	5,122	4.28	312	2.29
20 - 25,000	8,258	6.91	374	2.74
25 - 50,000	14,297	11.95	421	3.08
50 - 75,000	5,891	4.93	103	.75
75 - 100,000	2,977	2.48	33	.24
100 - 125,000	5,071	4.23	45	.33
125 - 150,000	579	.48	4	.03
150 - 175,000	<u>2,919</u>	<u>2.43</u>	<u>19</u>	<u>.14</u>
TOTAL	119,639	100.00	13,649	100.00

FIELD	WEIGHTED AVG.		VOL. & DISPOSITION		SOLUTION GOR & PRESSURE DATA					VOLUME & DISPOSITION OF RESIDUE GAS MCF			
	GOR		OF GAS NOT SOLD TO GASOLINE PLANT MCF		SAT.					PLANT			
	OBSERVED	PLANT	LEASE	VENTED	AVG. G.P.M.	SOL. GOR	PRESS.	AVG. B.P.P.	FUEL	LEASE	SOLD	VENTED	SHRINKAGE
ARROWHEAD	4582/1	4064/1	2352/M	33822/M	.677				322,447/M	Sold to Gasoline Plant	No Disposition		
BINEBRY	28724/1												
BOWERS	516/1												
BUNSON	1146/1		315/M	43079/M	.779			(I) 1917 PSI	11,236/M	Sold to Gasoline Plant	No Disposition		
CAPROCK													
CASS	166/1												
DRINKARD	1757/1		952/M	206,404/M	.736	196 Cu Ft/Bbl	437 PSI	(I) 3167 PSI	43,324/M	Sold to Gasoline Plant	No Disposition		
DRINKARD	1003/1			561/D				(I) 1300 PSI					
EIGHTY-FOUR DRAW													
EUNICE	4280/1	6013/1	3,314/M	126,017/M	.530	432 Cu Ft/Bbl	1372 PSI		2,126,370	Sold to Gasoline Plant	No Disposition		
MONUMENT													
EUNICE, WEST	306/1		100/M	Balance									
HALFWAY													
HARRISON													
HOBS	1103/1	1186/1	1024/D	521/D	1.10	456 Cu Ft/Bbl	1143 PSI	1143 PSI	56190	6936	356	232480	38094
LOVINGTON	2213/1				2.30	510 Cu Ft/Bbl	1796 PSI						
LOVINGTON, WEST													
LISK	*347/1		236/M										
LYNCH	Insufficient gas volume to measure												
LYNCH, NORTH	144/1		16/M	44/M									
MAJAWAR	*865/1		15,000/M	99,150/M	1.50	400 Cu Ft/Bbl		800 PSI	15,000/M	(66,000/M	15000/M		
MAJAWAR, NORTH	*452/1		231/M		.60								
MAJAWAR, SOUTH	350/1		142/M		1.00								
PEARSAULT	*674/1		1,200/M	3436/M	.60								
ROBERTS	1000/1			1074/M									
ROBERTS, WEST	846/1		98/M	5,440/M									
SALT LAKE	Insufficient gas volume to measure												
SAN SIMON	150/1												
SKAGGS	3485/1			120.9/D									
TONTON													
VACUUM	910/1	1021/1	1318/M	9194/M					879/M	343/M	263/M	9116/M	1522/M
WATKINS	*200/1												
WEIR	4397/1			284/D									
YOUNG	*380/1												

*Estimated

(I) 2580 PSI

(66,000/M

" Rtd to Rec")

CLASSIFICATION OF WELLS

[illegible]

WEIGHTED GAS OIL RATIO'S - FROM C - 116

ARROWHEAD	<u>1945</u> 119 Wells - 2885/1	<u>1946</u> 120 Wells - 3203/1
BRUNSON		13 Wells - 1174/1
CASS	2 Wells - 146/1	2 Wells - 166/1
DRINKARD	6 Wells - 1351/1	60 Wells - 2208/1
EAVES	14 Wells - 1328/1	14 Wells - 1361/1
EUNICE	464 Wells - 3620/1	463 Wells - 4280/1
S. EUNICE	81 Wells - 14,919/1	86 Wells - 17,855/1
W. EUNICE	14 Wells - 348/1	17 Wells - 366/1
HOBBS	254 Wells - 1039/1	249 Wells - 1097/1
LEA	1 Well - 360/1	
LOVINGTON	47 Wells - 1187/1	53 Wells - 1189/1
WEST LOVINGTON	34 Wells - 555/1	41 Wells - 574/1
LYNCH	2 Wells - 12/1	
NORTH LYNCH		1 Well - 144/1
MONUMENT	397 Wells - 2614/1	480 Wells 2429/1
PADDOCK	6 Wells - 662/1	49 Wells - 845/1
SALT LAKE		Insuf. Gas
SKAGGS	2 Wells - 3066/1	2 Wells - 3456/1
VACUUM	343 Wells - 1026/1	329 Wells - 1056/1

Glenn Staley

LEA COUNTY OPERATORS COMMITTEE
MARCH 25, 1947
HOBBS, NEW MEXICO

HUMBLE OIL & REFINING COMPANY

MIDLAND, TEXAS

J. W. HOUSE

March 18, 1947

File: 6-1 Proration and Conservation
Re: New Mexico

Mr. W. T. Jordan
Amerada Petroleum Company
P. O. Box 312
Midland, Texas

Mr. R. W. Ely
Cities Service Oil Company
Drawer G
Hobbs, New Mexico

Mr. Paul Evans
Gulf Oil Corporation
P. O. Box 1667
Hobbs, New Mexico

Mr. G. R. Zachry
Humble Oil & Refg Co
Hobbs, New Mexico

Mr. Harve H. Mayfield
Magnolia Petroleum Company
P. O. Box 727
Kermit, Texas

Mr. Ralph Gray
Stanolind Oil & Gas Co
Drawer F
Hobbs, New Mexico

Production Department
Mid-Continent Petroleum Corp
Midland, Texas

Mr. R. E. McMillen
Ohio Oil Company
P.O. Box 552
Midland, Texas

Mr. Charles P. Miller
Hobbs, New Mexico

Mr. G. H. Gray
Sinclair-Prairie Oil Co
Midland, Texas

Mr. W. R. Bollinger
Shell Oil Co
Hobbs, New Mexico

Mr. A. F. Holland
Shell Oil Company
Drawer "D"
Hobbs, New Mexico

Mr. Roy Durst
Rowan Drilling Co
Midland, Texas

Gentlemen;

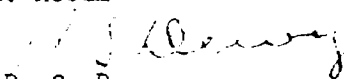
Attached hereto is a tabulation of the gas-oil ratio data on the Pad-dock field. This data has been compiled from information obtained by personal solicitation at your office or from letters addressed to us. In order to place the data on a comparable basis, the month of December 1946 was used. To convert the information supplied to us to apply to December 1946 required an interpretation of some of the material given to us, and an assumption that wells completed subsequent to that time would have had the reported allowable and gas-oil ratio.

#2.

Kindly check the data on the attached tabulation for your properties to determine any errors in computation, the assumptions made, and for additional information which you may care to supply. Any changes which you may care to suggest will be incorporated into a final tabulation for submittal to the Conservation Commission of New Mexico at the hearing April 15, 1946.

J. W. HOUSE

By:


R. S. Dewey

RSD:wrh

PADDOK FIELD

<u>Company</u>	<u>Lease Well</u>	<u>Pump or Flow</u>	<u>Date Tested</u>	<u>G.O.R.</u>	<u>Dec. Runs</u>	<u>Computed Gas M.C.F.</u>	<u>Dec. Allowable Barrels</u>	<u>Computed Gas M.C.F.</u>	<u>Avg G.O.R.</u>	<u>Remarks</u>
Amerada	Baker 2 Total 1 Well			3,360 3,360	1,697 1,697	5,702 5,702	1,674 1,674	5,625 5,625	3,360 3,360	100% vented
Cities Service	Brunson "C" 1 Owen 4 5 Total 4 Wells			522 748 728 445 611	1,674x 1,674x 1,674x 1,674x 6,696x	874 1,252 1,219 745 4,090	1,674 1,674 1,674 1,674 6,696	874 1,252 1,219 745 4,090	611	xDec allowable assumed 100% vented
Gulf	Eaves 3 Hugh 1 Paddock 1 2 4 Total 5 Wells		11-19-47 4-3-46 8-7-46 8-9-46 10-3-46	749 1,357 1,314 1,979 93 1,116	1,289 1,694 1,778 1,774 1,789 8,324	965 2,299 2,336 3,511 166 9,277	1,674 1,674 1,674 1,674 1,674 8,370	1,254 2,272 2,200 3,313 156 9,195	1,099	100% vented Avg. G.P.M. 1,055 in Jan. Skelly Gasoline Plant took 81% of gas volume computed from G.O.R. In Jan. Skelly Gasoline Plant took 4,251 MCF which includes 1,526 MCF used for gas lift giving net 2,725 MCF from formation. This is 42.5% of gas volume computed from G.O.R.
Humble	(Note Eaves 4, not reported) Whittaker & Perkins 1 N. Mex. State 3-1		10-22-46 10-24-46 10-25-46 3-5-46 10-26-46 5-21-46 10-27-46 7-22-46 8-20-46 9-12-46 10-4-46 10-27-46	820 817 891 950 810 770 779 698 558 788 818 1,142 822	1,687 1,366 1,366 1,355 1,366 1,355 1,367 1,373 1,354 1,373 1,374 1,443 16,779	1,383 1,116 1,217 1,287 1,106 1,043 1,065 958 756 1,082 1,124 1,648 13,785	1,674 1,674 1,674 1,674 1,674 1,674 1,674 1,674 1,674 1,674 1,674 1,674 20,088	1,373 1,368 1,492 1,590 1,356 1,289 1,304 1,168 934 1,319 1,369 1,912 16,474	820	5802 MCF to Skelly Gasoline Plant; balance vented.
Magnolia	S. E. Long 1 2 3 4 Total 3 wells		7-20-46 10-10-46 12-21-46 1-9-46	294 821 521 545	781 782 448 2,011	230 642 233 1,105	1,674 1,674 864 4,212	492 1,374 450 2,316	550	Water 31% Water 6.4% 89 MCF used on Lease; Balance vented.

Company	Lease Well	(Note Total Dec. Prod.)	Pump or Flow	Date Tested	G.O.R.	Dec. Runs	Computed Gas	Dec. Allowable	Computed Gas	AVE G.O.R.	Remarks
Mid-Continent	Xmas 1			6-6-46	358	3,503	1,255	1,674	835		
	Lynch 1			6-4-46	499	1,661	829	1,674	1,147		
	2			6-5-46	685	1,664	1,140	1,674	2,493		
	3			6-5-46	1,489	1,664	2,478	1,674	839		
	Total 4 Wells				501	1,664	834	1,674	839	794	100% to Skelly Gasoline Plant
					794	6,653	5,281	6,696	5,314		
Ohio	Lynch 1			5-27-46	996	1,683	1,676	1,674	1,667		
	2			5-22-46	930	1,683	1,565	1,674	1,557		
	3			5-30-46	433	1,684	729	1,674	725		
	Wortham 1			5-22-46	954	1,469	1,402	1,674	1,597		
	2			5-26-46	695	1,469	1,021	1,674	1,163		
	3			5-28-46	876	1,469	1,287	1,674	1,466		
	4			6-4-46	675	1,469	992	1,674	1,130		
	5			7-10-46	645	1,469	948	1,674	1,080		
	6			8-26-46	1,777	1,469	2,610	1,674	2,975		
	7			9-11-46	540	1,460	788	1,674	904		
	8			2-22-47	5,510	1,400	7,714	1,674	9,224		
	Total 11 Wells				1,239	16,724	20,732	16,414	23,488	1,276	Assumed 100% vented.
N. G. Penrose	Elliot B-12 1			8-16-46	730	1,682	1,228	1,674	1,222		
	2			8-14-46	791	1,728	1,359	1,674	1,324		
	Hinton 1-A			8-17-46	680	1,271	864	1,674	1,138		
	6			8-14-46	867	1,684	1,460	1,674	1,451		G.P.M. 1.16
	7			8-15-46	683	1,271	868	1,674	1,143		G.P.M. 1.16
	8			12-9-46	861	1,270	1,093	1,674	1,141		Xassigned allowable as well shut in while drilling
	Penrose 2			1-29-47	831	1,674x	1,391	1,674	1,391		offset
	Rogers 1			1-20-47	515	1,678	864	1,674	862		
	Total 8 Wells				745	12,248	9,127	13,392	9,672	722	Vented 100%
	(Hinton 2 & 3 not reported)										
Repollo	Rogers 1		F	9-16-46	931	1,398	1,302	1,674	1,558		
	2		P	9-18-46	718	2,005	1,440	1,674	1,202		Water 13.4%
	Total 2 wells				806	3,403	2,742	3,348	2,760	824	Sale to Skelly Gasoline Plant 567

Company	Lease Well	Pump or Flow	Date Tested	G.O.R.	Dec. Runs Barrels	Computed Gas M.C.F.	Dec. Allowable Barrels	Computed Gas M.C.F.	Avg G.O.R.	Remarks
Shell	Thomas Long 1			678	935	634	1,674	1,135		
	2			672	449	302	864	1,125		
	Total 2 Wells			676	1,384	936	2,538	2,260	890	100% vented
	Well being worked over to reduce gas-oil ratio									
Skelly	Baker "B" 4			1,680	1,684	2,839	1,674	2,812		
	5			705	1,674	1,180	1,674	1,180		
	Total 2 Wells			1,197	3,358	4,019	3,348	3,992	1,192	100% vented
Rowan Drile Co	Elliot B-2-15			Workover						
	B-2-9			Pump no GOR available						
	Walden 5		12--46	981	1,674x	1,642	1,674	1,642	981	xDue allowable assigned
	Total 1 Well									100% vented
Stanclind	Grizzell B-2			3,795	1,310	4,971	1,674	6,355	3,795	
	Grand Total 56 Wells			1,014	82,261	83,409	92,124	93,181	1,011	100% to Skelly Gasoline Plant BHP 1732

SUMMARY

Number of Wells	Range of G.O.R.	Average G.O.R.	Dec. Runs Barrels	Computed Gas M.C.F.	% Gas	Dec. Allowable Barrels	Computed Gas M.C.F.	% Gas
46	93 - 1000	71.3	66,348	47,301	56.8	75,384	54,002	56.0
7	1000 - 2000	1,540	11,506	17,721	21.2	15,718	17,977	19.3
0	2000 - 3000	--	--	--	--	--	--	--
2	3000 - 4000	3,549	3,007	10,673	12.8	5,348	11,978	12.8
0	4000 - 5000	--	--	--	--	--	--	--
1	5000 - 6000	5,510	1,400	7,714	9.2	1,674	9,224	9.9
Total 56		1,014	82,261	83,409	100.00	92,124	93,181	100.0

DISPOSITION OF GAS

	Runs Volume M.C.F.	Allowable Volume MCF	% on Allowable
Lease use MCF	89	89	0.1
Sold to Skelly Gasoline Plant	21,314	21,314	22.9
Vented	62,006	71,778	77.0
Total	83,409	93,181	100.0

HUMBLE OIL & REFINING COMPANY

MIDLAND, TEXAS

March 18, 1947

File: 6-1 Proration and Conservation
Re: New Mexico

Mr. G. R. Zachry
Humble Oil & Refg Co
Hobbs, New Mexico

Mr. Dean Murray
The Texas Company
Midland, Texas

Mr. H. Mayfield
Magnolia Petroleum Company
P. O. Box 727
Kermit, Texas

Mr. William N. Little
Tidewater Associated Oil Company
Midland, Texas

Mr. D. A. Miller
Phillips Petroleum Company
Midland, Texas

Mr. Fred Turner, Jr.
Midland, Texas

Mr. Ralph Gray
Stanolind Oil & Gas Company
Drawer F
Hobbs, New Mexico

Mr. L. H. Wentz
Ponca City, Oklahoma

Gentlemen:

Attached herewith is a tabulation of the gas-oil ratio data on the West Lovington Field. In order to place the data on a comparable basis, the month of December 1946 was used. To convert the information supplied to us to apply to December 1946 required an interpretation of the material given to us.

Kindly check the data on the attached tabulation for your properties to determine any errors in computation, the assumption made, and for additional information which you may care to supply. Any changes which you may care to suggest will be incorporated into a final tabulation for submission to the Conservation Commission of New Mexico at the hearing April 15, 1946.

J. W. HOUSE

By:

R. S. Dewey

RSD:wrh

WEST LOVINGTON FIELD

Company	Lease Well	Date Tested	G.O.R.	Dec. Runs		Computed Gas		Remarks
				Barrels		M.C.F.		
Humble	Federal Crosby 1	12-2-46	485	1,244		403		
	N. Mex. State P-1	12-3-46	522	1,263		659		
	2	12-4-46	432	1,240		536		
	3	12-5-46	461	1,240		572		
	N. Mex. State Q-1	12-10-46	307	1,240		381		
	2	12-11-46	402	1,252		503		
	3	12-12-46	385	1,240		477		
	Total 7 Wells		428	8,719		3,731		100% vented
Magnolia	N. Mex. State Q-3	5-21-46	--	--		--		Insufficient gas to measure
	R-5	5-21-46	605	1,246		754		
	6	5-29-46	1,232	908		1,119		
	7	5-21-46	680	1,246		847		Water 6%
	8	5-17-46	764	1,247		953		
	9	5-16-46	509	1,247		635		
	Total 5 Wells		731	5,894		4,308		100% vented
Phillips	Mexo 1	4-12-46	439	648		264		Insufficient gas to measure
	2	4-5-46	--	--		--		Assumed 100% vented
	Total 1 Well		439	648		264		
Stanolind	N. Mex State E Tr. 20	11	1,667	1,240		2,068		Echometer BHP 1188
	12		600	1,240		744		1106
	13		910	1,240		1,128		1285
	14		1,691	325		550		1465
	N. Mex. State R-1		655	1,249		818		1188
	Total 5 Wells		1,003	5,294		5,308		Assumed 100% vented
Texas	N. Mex. State "AH" 1	5-27-46	455	1,242		565		Water % 2.91
	2	5-28-46	333	1,242		414		1.48
	3	5-27-46	417	1,238		516		4.3
	4	5-28-46	751	1,232		925		1.58
	5	5-27-46	555	1,239		638		1.97
	6	5-29-46	349	1,233		430		9.1
	7	5-30-46	263	1,249		328		1.68

Company	Lease Well	Date Tested	G.O.R.	Dec. Runs Barrels	Computed Gas M.C.F.	Remarks
Texas	N. Mex State "AJ" 1	P 5-30-46	443	1,264	560	
	Total 8 Wells		445	9,939	4,426	Water % 1.47
			445	10,005	4,456	Dec. Battery Prod. & Ratio. Lease use 930 MCF/Month
						Balanced Vented
Tidewater	N. Mex State "O" 1	-- --	428	1,240	531	
	2		428	1,216	520	
	Total 2 Wells		428	2,456	1,051	Lease fuel 179 Mcf/month; Balance vented.
Fred Turner Jr.	N. Mex State B-1	P 9-11-46	412	1,240	511	
	2	" "	446	1,257	561	
	N. Mex State C-1	P "	256	1,240	317	
	2	" "	931	1,240	1,154	
	3	" "	202	1,240	250	
	4	" "	583	1,245	726	
	5	" "	525	1,244	653	
	N. Mex State D-4	P "	455	1,260	573	
	Total 8 Wells		475	9,966	4,745	100% vented.
L. H. Wentz	N. Mex State B-1	F 6-16-46	468	1,242	581	
	2	F 6-17-46	503	1,242	625	
	3	P 6-18-46	491	1,242	610	
	4	F 6-19-46	586	1,242	728	
	5	P 6-20-46	133	436	58	
	Total 5 Wells		481	5,404	2,602	Assumed 100% vented
	Total Field 41 wells		547	48,320	26,455	
	Number of Wells Range G.O.R.	Ave GOR Dec. Runs	Summary		%	
	38	133-1000	496	45,847	22,718	Gas
	3	1000-1691	1,511	2,473	3,737	85.9
	Total 41		547	48,320	26,455	14.1
						100%
			Disposition of Gas			
			% Volume MCF			
			Lease use MCF			
			Vented			
			100.0			

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO.

RECEIVED
JAN 27 1947

U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

Glenn Staley
Hobbs, New Mexico.

Dear Sir:

Enclosed you will find copy of "Sample Gas-Oil Ratio Order." This order has been written to be used as a basis for comment, discussion and criticism by all concerned in order that a suitable Gas-Oil Ratio Order may be promulgated, following open hearing as provided by law.

This copy is intended to provoke criticism either constructive or destructive.

Because of the present inadequate order, the pools indicated by asterisk do not have limiting ratios, or have 2000 by virtue of being new pools.

The plan is to study the order to be prepared for hearing April 15, 1947. Please furnish each operator copy of this proposed order.

Very truly yours

(Signed) R. R. Spurrier

SAMPLE GAS-OIL RATIO ORDER

The Order herein shall be applicable to the pools in Lea, Eddy, and Chaves Counties and shall be known as the:

LEA-EDDY-CHAVES COUNTIES GAS-OIL RATIO ORDER

1. (a) The proration unit shall be the unit of proration as defined by the State-wide Proration Order (with deep-pool adaptation).

(b) A marginal unit is; for pools having no special proration plan, a proration unit that will not produce the top unit allowable as in the State-wide Proration Order (with deep-pool adaptation); and for pools having such plans, a proration unit that will not produce the acreage factor allowable thereunder--both during the Gas-Oil Ratio Test.

(c) A non-marginal unit is: for pools having no special proration plans, a proration unit that will produce the top unit allowable as in the State-wide Proration Order (with deep-pool adaptation); and for pools having such plans, a proration unit that will produce the acreage factor allowable--both during the Gas-Oil Ratio Test.

(d) The top unit allowable shall be as in the State-wide Proration Order (with deep pool adaptation).

(e) The gas-oil ratio of a proration unit shall be the total net formation gas produced with the oil from such unit divided by the total ~~not~~ barrels of oil so produced during the Gas-Oil Ratio Test.

(f) The limiting gas-oil ratios for the various pools shall be as in Section 2 hereinbelow.

(g) A high gas-oil ratio unit shall be a proration unit that exceeds the limiting gas-oil ratio prescribed for the pool in which such unit is located.

(h) A low gas-oil ratio unit shall be a proration unit that does not exceed the limiting gas-oil ratio prescribed for the pool in which it is located.

(i) The gas-oil ratio adjustment shall be as in Section 3 hereinafter.


(j) The unadjusted allowable shall be the allowable a proration unit would receive before the gas-oil ratio adjustment is applied.

(k) The adjusted allowable shall be the allowable a proration unit received after the gas-oil ratio adjustment is applied.

(1) The Gas-Oil Ratio Test applicable shall be such Test designated by the Commission, made by such method and means, in such manner, and at such periods as the Commission in its discretion may prescribe from time to time. The making and the filing with the Commission the report of gas-oil ratio test shall be construed as a part of such test. The Commission will drop from the Proration Schedule any proration unit for failure to make such test as indicated, until a satisfactory test has been made, or explanation given.

2. (a) The limiting gas-oil ratios in cubic feet per barrel for the following pools shall be, to wit:

<u>POOL</u>	<u>GAS OIL RATIO LIMIT</u>	<u>COUNTY</u>
Anderson	2000	Eddy
Arrowhead	3500	Lea
Artesia	2000	Eddy
Atoka*	2000	Eddy
Barber	2000	Eddy
Benson*	2000	Eddy
Blinebry	2000	Lea
Brunson	2000	Lea
Burton*	2000	Eddy
Caprock*	2000	Chaves & Lea
Cass	2000	Lea
Comanche *	2000	Chaves
Corbin	2000	Lea
Culwin *	2000	Eddy

POOL	GAS-OIL RATIO LHM	COUNTY
Daugherty*	2000	Eddy
Dayton*	2000	Eddy
Dayton, East*	2000	Eddy
Drinkard	3000 ^{Gulf} 3500 ^{Conoco} 2000	Lea
Dublin	2000	Lea
Eaves	4000 ^{Conoco} 2000	Lea
Eighty-four Draw	2000	Lea
Empire*	2000	Eddy
Eunice-Monument		
24 mil/day flow → Eunice portion	6000	Lea
8 mil/day flow → Monument portion	4000 ^{Superior} (3500) - 3000	Lea
Eunice, West	2000	Lea
 Fenton*	2000	Eddy
Forest*	2000	Eddy
Fren	2000	Eddy
Getty	2000	Eddy
Grayburg-Jackson	4000	Eddy
Halfway	2000	Lea
Harrison	2000	Lea
Henshaw*	2000	Eddy
High-Lonesome	2000	Eddy
High-Lonesome South*	2000	Eddy
Hobbs	3500	Lea
Jones	2000	Lea
Justis	2000	Lea
Lea	2000	Lea
Leo*	2000	Eddy
Leeco Hills (Emergency Order)	3000	Eddy
Lovington	2000	Lea

<u>POOL</u>	<u>GAS OIL RATIO LEAD</u>	<u>POOL</u>
Lovington, West	2000	Lea
Lusk, East	2000	Lea
Lusk*	2000	Eddy* & Lea
Lusk, West*	2000	Eddy
Lynch	2000	Lea
Lynch, North	2000	Lea
Maljamar*	3000	Eddy* & Lea
Maljamar, North	2000	Lea
Maljamar, South	2000	Lea
McMillan	2000	Eddy
Paddock	2000	Lea
PCA*	2000	Eddy
Pearsall	2000	Lea
Premier	2000	Eddy
Red Lake	2000	Eddy
Roberts	2000	Lea
Roberts, West	2000	Lea
Robinson*	2000	Eddy & Lea
Russell*	2000	Eddy
Salt Lake	2000	Lea
San Simon	2000	Lea
Shugart	2000	Eddy
Shugart, North	2000	Eddy
Skaggs	5000	Lea
Square Lake*	2000	Eddy
Tonto	2000	Lea
Turkey Track *	2000	Eddy
Young	2000	Lea
Vacuum	2500	Lea
*No ratio (actually)		

POOL	GAS OIL RATIO LIMIT	COUNTY
Watkins	2000	Lea
Weir	2000	Lea
New and undesignated pools	2000	

(b) No limiting gas-oil- ratio shall be applied in Hardy, Penrose-Skelly, Langlie-Mattix, Rhodes Oil Pool, Cooper-Jal, and South Eunice pools in Lea County, (See order 633) and Scanlon in Eddy County, now primarily gas reservoirs; Provided that the oil produced with the gas shall not be in excess of the current top unit allowable; and provided further that the gas produced from said pools shall be put to beneficial use so as not to constitute waste, except as to proration units in said pools for which there are not facilities for the marketing or application to beneficial use of the gas produced therefrom. As to such proration units the limiting gas-oil ratio in effect immediately prior to the effective date of the order herein shall apply. As to said pools, gas-oil ratio tests shall be required only when the Commission within its discretion may from time to time indicate.

3. The system of gas-oil ratio control shall be that of volumetric control, whereby the current oil allowable for a proration unit, under the provisions of the State-wide Proration Order (with deep-pool adaptation), is adjusted by reason of exceeding the corresponding limiting ratio hereinabove described, in accordance with the following formula:

(a) Any proration unit with a gas-oil ratio in excess of the limiting ratio for the pool in which it is located shall be permitted to produce daily that total volume of oil, which when multiplied by the gas-oil ratio of that unit will result in a total gas volume that does not exceed the current top unit allowable times the limiting gas-oil ratio for such pool;

(b) A marginal unit shall be permitted to produce the same total volume of gas which it would be permitted to produce if it were a non-marginal unit.

(c) From the pool allocation shall be deducted the amount of oil allocated to marginal units and high gas-oil ratio units, then the remaining oil

shall be distributed to the low gas-oil ratio units, within the same pool in accordance with the pool proration plan.

4. No proration units within a repressuring or pressure maintenance project area, where 65% available residue of the total gas withdrawal is returned to the formation shall be affected by the limiting ratios of this order. Such areas shall be those set out by the Commission by Order upon hearing as provided by law.

5. All proration units to which gas-oil ratio adjustments are applied shall be so indicated in the Proration Schedule with adjusted allowables stated.

6. The order herein supersedes Orders 237, 250, 545 and 650.

This order shall become effective on the first day of the proration month next succeeding the month in which said Order is adopted.

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

DISTRIBUTED BY LEA COUNTY OPERATORS COMMITTEE
JANUARY 23, 1947
HOBBS, NEW MEXICO

(A) Test (cont.)

What is needed to record properly and accurately the production of crude oil from individual wells is separate tankage for each well. This may be considered uneconomic under existing conditions in the industry. The nearest approach to this ultimate of recording well productivity is a periodic test into a separate tank of each individual well normally connected to tankage common to two or more wells.

It is suggested that consideration be given by the Commission to the issuance of an order requiring a 24 hour test of each individual oil well in Lea, Eddy and Chave. counties, not less often than three months periods, to determine and record a daily capacity at least equal to the current top unit oil allowable and if the daily capacity is less than such top unit allowable, to determine and record the actual productivity of each oil well.

These data are essential for efficient operation of leases and for proper remedial work. Uniform application of the principle of individual well tests should result in increasing present oil "allowances" on the available schedule sufficient to increase the current top well allowables.
The benefit to the oil producer is obvious.

**GRAYBURG OIL COMPANY
OF NEW MEXICO**

ARTESIA, NEW MEXICO

April 12, 1947

New Mexico Oil Conservation Commission

Santa Fe, New Mexico

Gentlemen:

Reference is made to your "Sample Gas Oil Ratio Order" which, as you have stated, was circulated in order to invoke discussion and criticism.

In this "Sample Order" the Grayburg-Jackson Pool of Eddy County was set up tentatively with a limiting Gas-Oil Ratio of 2,000 cubic feet per barrel.

The undersigned company, operator of some 72 producing wells in the above mentioned pool, feels that a limiting Gas Oil Ratio of 2,000 cubic feet per barrel would be restrictive and not conducive to conservation of oil and/or gas.

The producing reservoir of the Grayburg-Jackson Pool is of a solution gas drive type and in common with other such reservoirs has a characteristically steady increase in gas oil ratio through the early life of production until a peak is reached. At this point, with the depletion of gas reserves, there is a correspondingly rapid decrease in gas oil ratio and it becomes necessary to resort to some method of artificial lift.

Attached hereto is a Composite Curve showing Bottom Hole Pressures and Gas Oil Ratios of wells at various phases in the producing history of the reservoir.

Although no data are available on the entire producing history of any one well, The Grayburg Oil Company considers the above curve as a true graphic representation of Typical Well Performance within this pool. Our records of Bottom Hole Pressure and Gas-Oil Ratio measurements are, of course, open to the inspection of the Commission or its agents at any time.

Page 2


Also attached is a recapitulation of latest Gas-Oil Ratios and Production of Oil and Gas during March, 1947, for our wells within the Grayburg Unit Area. You will note that while the average Gas-Oil Ratio for the Unit Area is 1,610 cubic feet per barrel many of our oldest wells are far in excess of the 2,000 cubic feet per barrel ratio.

The Grayburg Oil Company of New Mexico believes that a limiting Gas Oil Ratio of 5,000 cubic feet per barrel would not be excessive for the Grayburg-Jackson Pool and respectfully petitions the Commission to consider this figure before writing the Official Gas-Oil Ratio Order.

The undersigned company has in the past and will continue to pursue sound production policies which result in the conservation of oil and/or gas.


Respectfully yours,

Grayburg Unit Association
Operator
Grayburg Oil Company of New Mexico


R. J. Heard,
Vice President

RJH/nw

P. S. I hereby request that this letter and the inclosed figures, calculations, ~~graphs~~ and other material be considered a part of the record in Case No. 98 to be heard before the Oil Conservation Commission at Santa Fe at 10:00 A.M., April 15, 1947.


R. J. HEARD,
Vice President

GRAYBURG UNIT AREA
EDDY COUNTY, NEW MEXICO

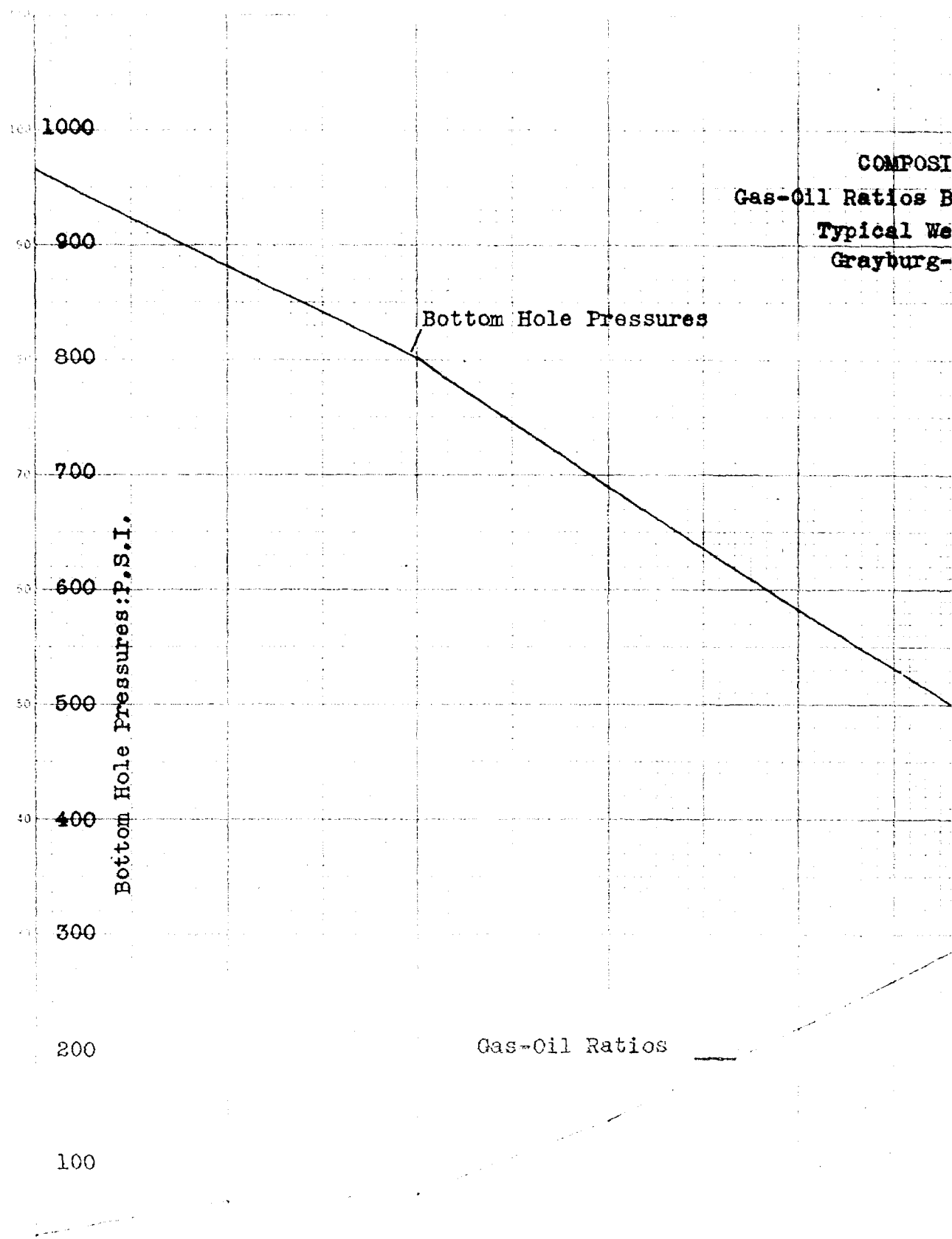
Page 1

Lease and Well No.	Date of Last GOR	GOR Cu. Ft. per Bbl.	March Oil Production Barrels	March Gas Production MCF
Burch A 2	12-30-46	4476	531	2377
3	8- 8-46	4026	403	1622
4	8-20-46	4728	1179	5574
5	8- 4-46	4905	1226	6014
6	4-20-46	1352	464	627
7	8-18-46	4556	551	2510
8 Input Well				
9	Estimated	3000	157	471
10	3-21-47	350	114	40
11	11- 9-46	2530	373	944
12	8- 5-46	7454	792	5904
13	11- 8-46	1697	1021	1733
14	11- 8-46	2332	463	1080
Burch A Total			7274	28896
Burch A Average GOR - 3973				
Burch B 1	11- 1-46	1056	96	101
2	3-30-47	1861	503	936
3	12-27-46	2052	352	722
4 Input Well				
5	12-27-46	2052	502	1030
6	10-18-46	1855	1141	2117
7	8-17-46	3036	537	1630
8	8-14-46	1770	537	950
9	10-13-46	954	1229	1172
10	10-15-46	639	949	606
11	9-29-46	624	1257	784
12	12-30-46	539	409	220
13	2-12-47	593	869	515
Burch B Total			8381	10783
Burch B Average GOR - 1287				
Dexter 1	11- 5-46	2311	553	1278

Lease and Well No.		Date of Last GOR	GOR Cu. Ft. per Bbl.	March Oil Production Barrels	March Gas Production MCF
Keely A	2	10-31-46	3813	300	1144
	3	10-31-46	3813	298	1136
	4	10-31-46	3813	299	1140
	5	Input Well			
	6	10-31-46	2195	841	1846
	7	1-24-47	3038	1244	3779
	8	11- 3-46	3529	1241	4379
	9	10-12-46	1960	875	1715
	11	3-29-47	4364	1201	5241
	Keely A Total			6299	20380
	Keely A Average GOR - 3236				
Keely B	1	10-10-46	1422	865	1230
	2	10-11-46	1018	1241	1263
	3	10-12-46	1940	449	871
	4	10- 3-46	1116	858	958
	5	11-20-46	1339	1428	1912
	6	11-12-46	1135	1428	1621
	7	11-11-46	1210	1397	1690
	8	9-29-46	753	1402	1056
	9	Input Well			
	10	9-19-46	709	1436	1018
	11	3-28-47	1182	1441	1703
	12	9-22-46	797	1442	1149
Keely B Total				13387	14471
Keely B Average GOR - 1081					
Burroh C	1	10-25-46	2257	231	521
	2	10-25-46	2257	233	526
	3	Input Well			
	4	12-29-46	2517	328	826
	5	10-21-46	577	561	324
	6	12-29-46	2517	638	1606
	7	12-29-46	2517	328	826
	8	12-29-46	2517	329	828
	9	2- 5-47	2274	264	600
Burroh C Total				2912	6057
Burroh C Average GOR - 2080					

Lease and Well No.	Date of Last GOR	GOR Cu. Ft. per Bbl.	March Oil	March Gas
			Production Barrels	Production MCF
Keely C 1	12-27-46	2239	531	1189
4	8-25-46	1378	1321	1820
5	8-21-46	1047	1328	1390
6	8-13-46	1517	1243	1886
7	10-16-46	1192	1308	1559
8	10-13-46	758	1307	991
9	12-31-46	590	711	419
10	9-13-46	766	1307	1001
11	8- 7-46	671	1307	877
12	Input Well			
13	11-23-46	1017	1303	1325
14	3-28-47	835	1340	1119
15	11-17-46	392	1340	525
16	11-10-46	664	1340	890
17	8- 8-46	400	1308	523
18	4-30-46	932	1312	1223
19	11-22-46	612	1308	800
21	8-15-46	519	1340	695
22	9-27-46	373	1342	501
23	10-25-46	728	1337	973
24	10-28-46	687	1314	903
Keely C Total			24947	20609
Keely C Average GOR - 834				
Unit Area Total			63753	102474
Unit Area Average GOR - 1610				

U.S. GEOLOGICAL SURVEY
WASHINGTON, D.C. 20508
NO. 154-2001
1967
U.S.G.A.

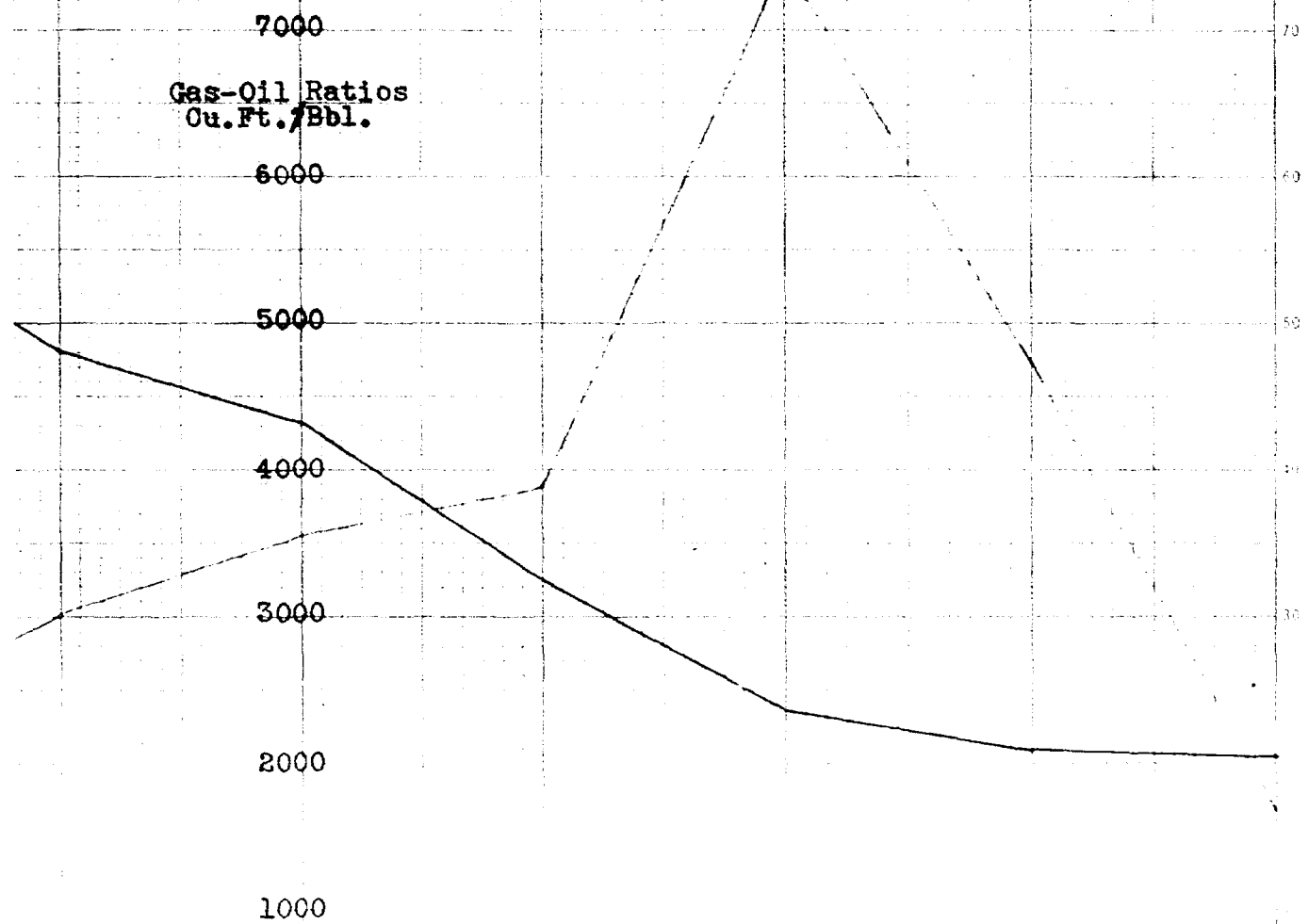


TE CURVE

Bottom Hole Pressures

Well Performance

Jackson Pool



Case # 98
Exhibit # 1

11 17

NEW MEXICO OIL CONSERVATION COMMISSION

GAS OIL RATIO ORDER

Addition for Rule 1 (1) providing for definite Schedule for conducting Official Gas Oil Ratio Tests.

With respect to Rule 1 (1) of the proposed Gas Oil Ratio Order of the Commission, pertaining to the time prescribed for conducting the Official Gas Oil Ratio Tests, it is recommended that a definite schedule be adopted for conducting and submitting such tests on wells in each pool. Since there is a tentative schedule now being followed, it is further recommended that Mr. Glenn Staley's office submit a definite schedule for review and adoption by the Commission.

98-20

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO ORDER

Substitution for Rule 3 (a) of Suggested Order:

Any proration unit which on the basis of the latest Official Gas-Oil Ratio Test has a gas-oil ratio in excess of the limiting gas-oil ratio for the pool in which it is located shall be permitted to produce daily that number of barrels of oil which shall be determined by multiplying the current top unit allowable by a fraction, the numerator of which fraction shall be the limiting gas-oil ratio for the pool and the denominator of which fraction shall be the gas-oil ratio of said proration unit as determined on the latest Official Gas-Oil Ratio Test.

Addition to Suggested Order - Rule 3 (d):

All gas produced with the current oil allowable determined in accordance with this order shall be deemed to be lawfully produced.

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO ORDER

Amendment for Rule 1 (1) of Suggested Order:

(1) The Official Gas-Oil Ratio Test applicable shall be such Test designated by the Commission, made by such method and means, in such manner, and at such periods as the Commission in its discretion may prescribe from time to time. The making and the filing with the Commission the report of gas-oil ratio test shall be construed as a part of such test. The Commission will drop from the Proration Schedule any proration unit for failure to make such test as indicated, until a satisfactory test has been made, or explanation given.

OFFICE OF INFORMATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

The Oil Conservation Commission, as provided by law, hereby gives notice of the following hearings to be held at Santa Fe, New Mexico, at 10:00 A.M. April 15, 1947:

Case 97

In the matter of the application of the Oil Conservation Commission upon its own motion for an order regarding tank batteries for separate pools and whether one tank battery shall serve one pool only or whether separate tank batteries shall be employed for separate pools.

Case 98

In the matter of the application of the Oil Conservation Commission for an order governing gas-oil ratios for Lea, Eddy, and Chavez counties, New Mexico.

Case 92

In the matter of the Application of Gulf Oil Corporation for issuance of a Special Order permitting the production of more than one horizon or pool through a single well bore in the Hobbs Pool, Lea County, New Mexico.

Case 93

In the matter of the Application of Gulf Oil Corporation for the issuance of a Special Order permitting the production of more than one horizon or pool through a single well bore in the Faddock, Drinkard, Brunson, Jones and Blinbry Pools, Lea County, New Mexico.

Case 94

In the matter of the Application of Gulf Oil Corporation for the promulgation of a General Order permitting and controlling production from more than one horizon or pool through a single well bore.

Note: Cases 92, 93 and 94 were in part heard January 10, 1947 and are continued to April 15th as indicated above.

Given under the seal of said Commission at Santa Fe, New Mexico on March 24, 1947.

OFFICE OF INFORMATION

By: /s/ W. C. Carroll, Secretary

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