Case No.

Application
Transcripts

Small Exhibits



#### BEFORE THE

#### OIL CONSERVATION DIVISION

#### NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS

IN THE MATTER OF THE APPLICATION OF GETTY OIL COMPANY FOR POOL CREATION AND SPECIAL POOL RULES LEA COUNTY, NEW MEXICO.

CASE NO. 6557

#### APPLICATION

Comes now, GETTY OIL COMPANY by their undersigned attorneys, and hereby makes application for an order creating a new pool and for promulgation of special pool rules including (1) 640-acre spacing or proration units on a permanent basis, and (2) special well location requirements, and in support of its application will show the Commission:

- (1) The Grama Ridge-Morrow Gas Pool, Lea County, New Mexico was created by the Oil Conservation Division by Order No. R-3006 on December 3, 1965, and made subject to the Special Pool Rules promulgated by said order which include a provision for 640acre spacing and proration units, with well locations prescribed as being no closer than 1,650 feet to the outer boundary of the unit and no closer than 330 feet to any quarter-quarter section line.
- (2) Said pool was extended from time to time by order of the Commission until said pool comprised all of the followingdescribed lands:

TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM

Section 33: A11

Section 34: A11

TCWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM

Section 2: A11

3: Section A11

Section 4: A11

Section 10: A11

- (3) Llano, Inc. is the operator of certain wells located within the Grama Ridge-Morrow Gas Pool.
- (4) Llano, Inc. filed an application with the Oil Conservation Division seeking recision of the Special Pool Rules for the Grama Ridge-Morrow Gas Pool (Oil Conservation Division Case No. 6496).
- (5) That on May 2, 1979, the Oil Conservation Division entered Order No. R-5995 which redefined the Grama Ridge-Morrow Gas Pool to include only the following described lands;

TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM Section 33: E/2 Section 34: W/2

TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM Section 3: W/2 Section 4: All Section 10: W/2

and recinded the Grama Ridge-Morrow Gas Pool Special Pool Rules.

(6) Order No. R-5995 further provided:

"That the Morrow formation underlying all of Section 26, the E/2 of Section 34, and all of Sections 35 and 36, Township 1 South, Range 34 East, NMPM, and all of Sections 1 and 2, the E/2 of Section 3, the E/2 of Section 10 and all of Sections 11 and 12, Township 22 South, Range 34 East, NMPM, are hereby placed on temporary 640-acre spacing, and no drilling permit shall be approved for any Morrow Gas Well proposed to be drilled on said lands unless such permit is for a well to which 640 acres (being a single governmental section) is dedicated, and which is located at least 1650 feet from the outer boundary of the unit and at least 330 feet from any quarter-quarter section line..."

(7) That said order further provided that the provisions set out in paragraph 6 hereinabove were to remain in force for a period of 30 days or for so long thereafter as a hearing, or order following a hearing on an application of Getty Oil Company for pool creation governing the above referenced acreage, is pending before the Oil Conservation Division.

- (8) The applicant, Getty Oil Company, is the operator of the Getty State Well 35 No. 1 located in Section 35, Township 21 South, Range 34 East, Lea County, New Mexico and operator of the Getty Two State Well No. 1 located in Section 2 of Township 22 South, Range 34 East, Lea County, New Mexico and said wells are producing from the Morrow Formation.
- (9) Applicant believes that the following described lands are reasonably productive of hydrocarbons in paying quantities from the Morrow Formation and should be included in the original definition of the new pool to be created because of the production capabilities of the wells on this acreage:

TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM Section 26: All Section 34: E/2 Section 35: All Section 36: All

# TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM Section 1: All Section 2: All Section 3: E/2 Section 10: E/2 Section 11: All Section 12: All

- (10) In order to prevent economic loss caused by the drilling of unnecessary wells, to avoid augmentation of risk arising from the drilling of an excessive number of wells and to otherwise prevent waste and protect correlative rights, Special Pool Rules and Regulations providing for 640-acre spacing units should be promulgated for the new pool.
- (11) Applicant respectfully requests that said Special Pool Rules provide that each well should be located on a standard unit containing 640 acres more or less.
- (12) Applicant further requests that said Special Pool Rules provide that each well shall be located no closer than 1650 feet to the outer boundary of the unit and no closer than 330 feet to any quarter-quarter section line.

WHEREFORE, Getty Oil Company requests that this Application be set for hearing before the Oil Conservation Commission at its hearing scheduled for May 29, 1979, that notice be given as required by law in the rules of the Division, and that the Application be approved.

Respectfully submitted,

CAMPBELL AND BLACK, P.A.

Post Office Box 2208

Santa Fe, New Mexico 87501 Attorneys for Getty Oil Company

## BRUCE KING LARRY KEHOE SECHLIARY

### STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

July 18, 1979

POST OFFICE BOX POSS STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 67501 (505) 827-2434

Re: Mr. William F. Carr Campbell & Black Attorneys at Law Post Office Box 2208 Santa Fe, New Mexico	CASE NO. 6557 ORDER NO. R-6050 Applicant:
	Getty Oil Company
Dear Sir:	
Enclosed herewith are two copies Commission order recently entered	
Yours very truly,  JOE D. RAMEY Director	
JDR/fd	
Copy of order also sent to:	
Hobbs OCC x Artesia OCC x Aztec OCC Other Thomas Kellahin	

#### STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

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

CASE NO. 6557 Order No. R-6050

APPLICATION OF GETTY OIL COMPANY FOR POOL CREATION AND SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 29, 1979, at Santa Fe, New Mexico, before the Cil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 17th day of July, 1979, 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 Division, by its Order No. R-5995 entered May 2, 1979, rescinded the Special Rules and Regulations for the Grama Ridge-Morrow Gas Pool, as promulgated by Division Order No. R-3006, and provided that said pool should henceforth be spaced, drilled, operated, and produced in accordance with Rule 104 of the Division Rules and Regulations and with such other Division rules and orders as may be applicable.
- (3) That said Order No. R-5995 redefined the horizontal limits of the Grama Ridge-Morrow Gas Pool to include only the E/2 of Section 33 and the W/2 of Section 34, Township 21 South, Range 34 East, NMPM, and the W/2 of Section 3, all of Section 4, and the W/2 of Section 10, Township 22 South, Range 34 East, NMPM.
- (4) That said Order No. R-5995 further defined a particular area, described as all of Section 26, the E/2 of Section 34, and all of Sections 35 and 36, Township 21 South,

-2-Case No. 6557 Order No. R-6050

Range 34 East, NMPM, and all of Sections 1 and 2, the E/2 of Section 3, the E/2 of Section 10, and all of Sections 11 and 12, Township 22 South, Range 34 East, NMPM, and prescribed that the Morrow formation underlying said area would be placed on temporary 640-acre well spacing and location requirements for a period of 30 days after the date of entry of said Order No. R-5995, or, provided that if Getty Oil Company had filed an application for creation of a new gas pool within the hereinabove-described lands and the promulgation of special rules for such new pool, including a provision for other than 320-acre spacing, then such temporary rules should remain in effect for so long thereafter as a hearing, or an order following a hearing, is pending.

- (5) That Getty Oil Company did file an application with the Division on May 3, 1979, requesting such pool creation and special rules, and said application was docketed for hearing as the instant case.
- (6) That as the applicant herein, Getty Oil Company seeks the creation of a new Morrow Gas Pool comprising all of Section 35, Township 21 South, Range 34 East, NMPM, and all of Section 2, Township 22 South, Range 34 East, NMPM, and the promulgation of special rules therefor, including a provision for 640-acre spacing and proration units, and well locations no closer than 1650 feet to the outer boundary of the unit and no closer than 330 feet to any quarter-quarter section line.
- (7) That the applicant is the operator of its Getty "35" State Well No. 1 located in Unit K of the aforesaid Section 35, and its Getty "2" State Well No. 1 located in Unit F of the aforesaid Section 2.
- (8) That said wells are located approximately 4290 feet apart, or less than one mile, but the main producing zone in each of the two wells does not appear to be of major significance in the other well.
- (9) That Getty presented evidence attempting to establish that the Morrow producing interval in both the Grama Ridge-Morrow Gas Pool and in the lands immediately East thereof, i.e., the lands under consideration in this case, is of deltaic marine nature, and therefore should extend laterally for considerable distance and exhibit good continuity of permeability throughout the reservoir, thus being conducive to 640-acre spacing; however, the preponderance of the evidence presented at the hearing establishes that said Morrow producing interval does not constitute a broad continuous producing body but instead is composed of numerous separate and isolated sand bodies.

-3-Case No. 6557 Order No. R-6050

- (10) That from the evidence submitted at the hearing, there is no reason to believe that the drainage characteristics in the Morrow formation in the area under consideration (Section 35, Township 21 South, Range 34 East, NMPM, and Section 2, Township 22 South, Range 34 East, NMPM) are any different than the drainage characteristics of the Morrow formation in the Grama Ridge-Morrow Gas Pool immediately to the West.
- (11) That the Division found, in Case No. 6496, from which Order No. R-5995 issued, that the drainage characteristics of the Morrow formation in the Grama Ridge-Morrow Gas Pool are not such as to support 640-acre spacing, and that 320-acre spacing was more appropriate for said pool.
- (12) That the applicant has failed to establish that one well will effectively and efficiently drain 640 acres in the Morrow formation underlying Section 35, Township 21 South, Range 34 East, NMPM, and Section 2, Township 22 South, Range 34 East, NMPM.
- (13) That after considering the evidence presented in this case and the economic loss caused by the drilling of unnecessary wells, the protection of correlative rights, including those of royalty owners, the prevention of waste, the avoidance of the augmentation of risks arising from the drilling of an excessive number of wells, and the prevention of reduced recovery which might result from the drilling of too few wells, the Commission can only conclude that the application for 640-acre spacing in the subject area should be denied, and that said lands should be developed on 320-acre spacing and proration units.
- (14), That a new pool should be created and defined for applicant's wells in the subject area, and that said pool should be designated the East Grama Ridge-Morrow Gas Pool with vertical limits comprising the Morrow formation and horizontal limits comprising the S/2 of Section 35, Township 21 South, Range 34 East, NMPM, and the N/2 of Section 2, Township 22 South, Range 34 East, NMPM, Lea County, New Mexico.
- (15) That said East Grama Ridge-Morrow Gas Pool should be spaced, drilled, operated and produced in accordance with Rule 104 of the Division Rules and Regulations and with such other Division rules and orders as may be applicable, including 320-acre spacing and proration units and well location requirements.
- (16) That the provisions of Order No. (3) on Pages 4 and 5 of Division Order No. R-5995 should be rescinded.

-4-Case No. 6557 Order No. R-6050

#### IT IS THEREFORE ORDERED:

(1) That the application of Getty Oil Company for the creation of a new gas pool in Lea County, New Mexico, for the production of gas from the Morrow formation is approved, and there is hereby created the East Grama Ridge-Morrow Gas Pool, with vertical limits comprising the Morrow formation and horizontal limits comprising the following described area:

TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM Section 35: S/2

## TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM Section 2: N/2

- (2) That said East Grama Ridge-Morrow Gas Pool shall be spaced, drilled, operated, and produced in accordance with Rule 104 of the Division Rules and Regulations and with such other Division rules and orders as may be applicable to 320-acre spacing and proration units and well location requirements.
- (3) That the application of Getty Oil Company for 640-acre spacing and well location requirements is hereby denied.
- (4) That the provisions of Order No. (3) on Pages 4 and 5 of Division Order No. R-5995 are hereby rescinded.

#### IT IS FURTHER ORDERED:

- (1) That the locations of all wells presently drilling to or completed in, or for which drilling permits have been approved for, the East Grama Ridge-Morrow Gas Pool or the Morrow formation within one mile thereof, are hereby approved.
- (2) That existing wells in the East Grama Ridge-Morrow Gas Pool shall have dedicated thereto 320 acres in accordance with the foregoing, and the operator thereof shall file Forms C-102 dedicating 320 acres to such wells within 60 days after entry of this order.

Failure to file new Forms C-102 with the Division dedicating 320 acres to a well within 60 days from the date of this order shall subject the well to cancellation of allowable.

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

-5-Case No. 6557 Order No. R-6050

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

ALEX J. ARMIJO, Member

EMERY C. ARNOLD, Member

JOE D. RAMEY, Member & Secretary

SEAL

## Original Gas In Place - MCF Drainage Area = $43,569 \text{ SQ.FI.} \times \text{Ø} \times (1.0\text{-SW}) \times \frac{\text{Rp}}{15.025} \times \frac{520 \times 1 \times \text{h} \times .001}{2}$

Well Data	Operator: Well Name: Well No.:	Llano GRMU No. 1	Llano GRMU No. 2	Llano GRMU No. 3	Llano GRMU No. 4	Llanu Gov't A No. 1	Geily 35 State No. 1	Average Well
Primary Gas Production - MCF Primary Oil Production - EQ. MC Remaining Primary Reserves - MC Ultimate Producible Reserves - Recovery Efficiency - % Original Gas In Place - MCF	F (2)	6,997,911 71,729 21,742 7,091,382 .80 8,864,228	5,897,450 £2,922 21,742 6,002,114 80 7,502,642	25,655 318,519 2,201,025 .80	2,641,051 65,748 -0- 2,706,799 .80 3,383,499	1,590,000 35,000 -0- 1,535,000 .80 1,918,750	70,000 -0-	3,982,210 58,509 60,334 4,101,053 .80 5,126,317
Thickness of Net Productive San	ds - h (ft.)	24	20	15	16	6	23	17.3
Thickness of Net Productive San Average Porosity - Ø (%)	ds - h (ft.)	24 10.0	20 8.8	15 10.5	16 7.1	6 7.0	23 10.3	17.3 9.3
Thickness of Net Productive San Average Porosity - ø (%) Average Formation Water Saturat		_						
Average Porosity - Ø (%)	ion - Sw (")	10.0	8.8	10.5	7.1	7.0	10.3	9.3
Average Porosity - Ø (%) Average Formation Water Saturat	ion - Sw (") (psia)	10.0 30	8.8 30	10.5 30	7.1 30	7.0 30	10.3 30	9.3 30
Average Porosity - Ø (%) Average Formation Water Saturat Initial Reservoir Pressure - Rp	ion - Sw (") (psia)	10.0 30 7614.2	8.8 30 7695.2	10.5 30 5230.2	7.1 30 7671.2	7.0 30 7017.2	10.3 30 7468.2	9.3 30 7116.0
Average Porosity - \$ (%) Average Formation Water Saturat Initial Reservoir Pressure - Rp Reservoir Temperature - Rt (OR)	ion - Sw (#) (psia)	10.0 30 7614.2 644	8.8 30 7695.2 637	10.5 30 5230.2 632	7.1 30 7671.2 638	7.0 30 7017.2 644	10.3 30 7468.2 636	9.3 30 7116.0 638

- (1) Condensate production has been converted to equivalent MCF at the rate of 3.5 MCF/STBO.
- (2) Remaining Primary Reserves agreed to by Llano and State of New Mexico prior to commencement of gas storage operations. The volumes were calculated from extrapolations of BHP/Z vs. Cumulative Production plots.

The foregoing table has been compiled solely for those Grama Ridge Morrow (Gas) Field wells which are or have been producing only from the Morrow Sand interval located below the Morrow Clastics Zone.

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Merico
Case No. 6557 Endish No. 12
Submitted by Getts
Hearing Data 5 ~ 29-25

LLANO, INC.
EXHIBIT FER

CALCULATED DRAINAGE AREA OF FIELD WELLS
GRAINA RIDGE MORRON (GAS) FIELD
LEA COUNTY, NEW MEXICO

DEFOLD RECORD TO THER

CIT. CO. 1. MARIC TON

DULLALITY TO

CASE NO. 6496

## CALCULATED DRAINAGE AREA OF FIELD WELLS GRAMA RIDGE MORROW (GAS) FIELD LEA COUNTY, NEW MEXICO (Revised for Gov't A #1)

	Operator:	Llano	Llano	Llano	Llano	Llano	
	Well Name:	GRMU	GRMU	GRMU	GRMU	Gov't A	Average
Well Data	Well No.:	No. 1	No. 2	No. 3	No. 4	No. 1	Well_
Primary Gas Production - MCF		6,997,911	5,897,450	1,856,851	2,641,051	2,148,588	3,908,370
Primary Oil Production - EQ. MC	r /1\	71,729	82,922	25,655	65,748	35,000	56,211
		21,742	21,742	318,519	-0-	601,412	192,683
Remaining Primary Reserves - MC Ultimate Producible Reserves - 1		7,091,382	6,002,114	2,201,025	2,706,799	2,785,000	4,157,264
Recovery Efficiency - %	MCF	.80	.80	.80	.80	.80	.80
		8,864,228	7,502,642	$\frac{.80}{2,751,281}$	3,383,499	3,481,250	5,196,580
Original Gas In Place - MCF		0,004,220	7,502,642	2,731,201	3,303,433	3,401,250	3,190,300
Thickness of Net Productive San	ds-h(ft.)(2)	24	20	15	16	6	16
Average Porosity - Ø (%)		10.0	8.8	10.5	7.1	7.0	9
Average Formation Water Saturat	ion - Sw (%)	30	30	30	30	30	30
Initial Reservoir Pressure - Rp	(psia)	7614.2	7695.2	5230.2	7671.2	7017.2	7046
Reservoir Temperature - Rt (OR)		644	637	632	638	644	639
Specific Gravity of Gas - G		.590	.596	.628	.595	.610	.604
Supercompressibility Factor - Z		1.210	1.217	1.238	1.215	1.160	1.208
Calculated Drainage Area - (acr	es)	358	407	249	285	836	) 427
-							1 ====
		*					/

<sup>(1)</sup> Condensate production has been converted to equivalent MCF at the rate of 3.5 MCF/STBO.

<sup>(2)</sup> Llano 1979 Net Pay Thickness.

		m a company and a		0-34-5		: 1"
		Robert	wipf	R-34-E		GETTY OIL COMPANY EXPL & PROD. DEPT
				Array Company		MAR 2 1979
						MIDLAND E&P DISTRICT
	. •					T
			<b></b>			2
						•
			e e e e e e e e e e e e e e e e e e e	E-7344	Continue 1	4 1
				المراقع المراقع	T. Co	
				7.331 /5.7#		Z X
		e e e e e e e e e e e e e e e e e e e		to viere girs be	J.4 (Saus)	
	·			Stone   Stone   Stone	\$2.00 Aura 207 4 8 42 12	
	•	• .		(3)(11) 030573	(Snet)	Na A
				Tes & 1000, 5	20.2-3	
	•			200 0591 CCO		
					12 1111	A
	•		St. Uran Pres Saurier Pres	3 post 2	\$40 0 \$ \$20 00 0 \$ \$40 00 0 \$ \$40 00 0 \$ \$40 00 0 \$ \$40 00 0 \$ \$40 00 0 \$ \$ \$10 0 0 \$ \$ \$10 0 0 \$ \$ \$ \$ \$	
	• • •		Step, WI Westation Line	7	6.6,.	
	·		B Steel Ca	9	107	ere
				SACTO	1	
		·	544	us	"Gois" US	
÷	•	•				
	• •					
·	•			ļi		
	•		3550			<b>L</b>
			C's COI	EXAMINER UT	, ,	
	•		Llano	SKICIT NO. 4	4	at the
	:		CASE NO.	4895-4	896	Getty #15.
*** **********************************			d boillmdu?	Llano		· · · ·
**			Hearing Dai			
<b>y</b> .				11	11 11	NO, INC.
	• .				<del></del>	
	•			GRAMA		AS STORAGE UNIT
			•			Y, NEW MEXICO ISOPACHOUS
						POROSITY
			·	T	Ċ.	
	•		;	1 1	SCA1	r III FEET

Į

#### CALCULATED DRAINAGE AREA OF FIELD WELLS GRAMA RIDGE MORROW (GAS) FIELD

LEA COUNTY, NEW MEXICO

(Revised for Gov't A #1 & previous Llano testimony - Case Nos. 4895 & 4896)

			Orig	inal Gas	in	Place	- N	CF			
Drainage Area	=	43,560 SQ.FT. x 9	ďχ	(1.0-Sw)		RP 15.025		520 Rt	$\frac{x}{2}$	хһх	.001
		AC.				13.023		ΝL	- 4		

Well Data	Operator: Well Name: Well No.:	Llano GRMU No. 1	Llano GRMU No. 2	Llano GRMU No. 3	Llano GRMU No. 4	Llano Gov't A No. 1	Average Well
Primary Gas Production - MCF		6,997,911	5,897,450	1,856,851	2,641,051	2,148,588	3,908,370
Primary Oil Production - EQ. M	CF (1)	71,729	82,922	25,655	65,748	35,000	56,211
Remaining Primary Reserves - M	CF (2)	21,742	21,742	318,519	0-	601,412	192,683
Ultimate Producible Reserves -	MCF	7,091,382	6,002,114	2,201,025	2,706,799	2,785,000	4,157,264
Recovery Efficiency - %		.80	.80	.80	.80	.80	.80
Original Gas In Place - MCF		8,864,228	7,502,642	2,751,281	3,383,499	3,481,250	5,196,580
Thickness of Net Productive Sa	ands - h (ft.)	20.2	15.4	5 <b>.7</b>	8.3	6.6	11.2
Average Porosity - ∅ (%)		10.0	8.8	10.5	7.1	7.0	8.9
Average Formation Water Satura	tion - Sw (%)	30	30	30	30	30	30
Initial Reservoir Pressure - R	tp (psia)	7614.2	7695.2	5230.2	7671.2	7017.2	7046
Reservoir Temperature - Rt (OR	t)	644	637	632	638	644	639
Specific Gravity of Gas - G		.590	.596	.628	.595	.610	.604
Supercompressibility Factor -	Z	1.210	1.217	1.238	1.215	1.160	1.208
Calculated Drainage Area - (ac	eres)	425	529	<u>653</u>	549	760	<u>583</u>
Calculated Drainage Radius - (	(ft)	2,428	2,708	3,009	2,759	3,246	2,843

(1) Condensate production has been converted to equivalent MCF at the rate of 3.5 MCF/STBO.

(2) Llano 1972 Net Pay Thickness.

BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico

Case No. 6557 Exhibit No. 16 Submitted by Ge

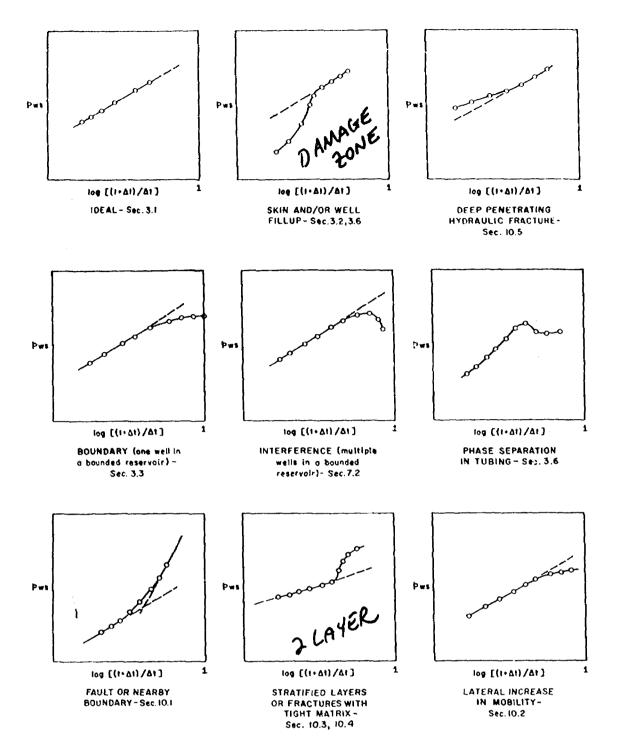


Fig. 11.6 Example buildup curves.

sure from Bottom Hole Pressure Build-up Characteristics", Trans., AIME (1950) 189, 91-104.

- 5. Russell, D. G. and Truitt, N. E.: "Transient Pressure Behavior in Vertically Fractured Reservoirs", J. Pet. Tech. (Oct., 1964) 1159-1170.
- Odeh, A. S. and Nabor, G. W.: "The Effect of Production History on Determination of Formation Characteristics From Flow Tests", J. Pet. Tech. (Oct., 1966) 1343-1350.
- 7. Nisle, R. G.: "The Effect of a Short Term Shut-In on a
- Subsequent Pressure Build-up Test on an Oil Well", Trans.. AIME (1956) 207, 320-321.
- 8. Lozano, G. and Harthorn, W. A.: "Field Test Confirms Accuracy of New Bottom-Hole Pressure Gauge", J. Pet. Tech. (Feb., 1959) 26-29.
- 9. Jones, L. G.: "Reservoir Reserve Tests", J. Pet. Tech. (March, 1963) 333-337.
- van Poollen, H. K.: "Radius of Drainage and Stabilization Time Equations", Oil and Gas J. (Sept. 14, 1964) 133.



NATURAL RESOURCES GROUP Exploration and Production

May 23, 1979

Case No. 6557--Commission Hearing, May 29, 1979

ECEIVED

OIL CONSERVATION DIVISION

SANTA FE

State of New Mexico Energy and Minerals Department Oil Conservation Divison P. O. Box 2088 Santa Fe, New Mexico 87501

Attention: Mr. Joe Ramey,

Director

Gentlemen:

Phillips Petroleum Company supports the application of Getty Oil Company seeking to create a new Morrow gas pool under subject case assignment. New Pool designation is to apply to the Getty State 35 Well No. 1 located in Unit K, Section 35, Township 21-S, Range 34-E, and the Getty Two State Well No. 1 located in Unit F, Section 2, Township 22-S, Range 34-E, Lea County. Said application requests promulgation of special pool rules including 640-acre gas well spacing with the provision that no orthodox location be nearer than 1,650 feet from any outer unit boundary.

Phillips' interest herein is as a 25 percent working interest owner in the Getty-operated State "36" COM No. 1, which is currently being drilled in Unit F, Section 36, Township 21-S, Range 34-E, Lea County.

Very truly yours,

PHILLIPS PETROLEUM COMPANY

J. W. Maharg

Engineering Director

Odessa Area

THM:kb

cc: Getty Oil Company P. O. Box 1231 Midland, Texas 79702 I-0123945145 05/25/79
TWX EXXONUSA HOU B
040 HOUSTON TX 5/25/79
PMS NEW MEXICO O'LL CONSERVATION DIVISION
DEPARTMENT OF ENERGY AND MINERALS
P 0 BOX 2088
SANTA FE NEW MEXICO 87501
REFERENCE: LEA COUNTY

IPMFEKA SANA

LEA COUNTY
POOL CREATION AND SPECIAL POOL RULES (CASE 6557)
MAY 29, 1979 COMMISSION HEARING

EXXON IS LEASEHOLD OWNER OF THE SW/4 SECTION 11, TOWNSHIP 22-S, RANGE 34-3, WHICH IS WITHIN THE AREA FOR WHICH GETTY OIL COMPANY IS REQUESTING 640 ACRE GAS WELL SPACING. EXXON SUPPORTS GETTY OIL COMPANY'S REQUEST FOR 640 ACRE WELL SPACING IN THE REFERENCED AREA.

J M SHEPHERD
JOINT INTEREST MANAGER
EXXON COMPANY, U S A.
MIDLAND, TEXAS

1438 EST

IPMFEKA SANA

ram

NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT Llano State #344 Com. Minerals, Inc. 10.1 21 South 34 mon of Well: Acts if Fig. 118 Co 1650 Productny Pormation Dedicated A vieties Ground Lyvel Flev Grama Ridge Morrow Morrow 3651.3 1 Outline the acreage dedicated to the aubject well by colored pencil or hachure marks on the plat below, 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to-working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? If answer is "yes," type of consolidation'\_ If answer is "no," list the owners and tract descriptions which have actually been consolidated. (I'se reverse side of this form if necessary.). No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commis-CERTIFICATION K-3592 I hereby certify that the information con-W.I. = Minerals, et al (Same as Lease E-9659) tained herein is true and complete to the best of my knowledge and belief. R.I. = State of N. M. Position President Minerals, Inc. E-9659 W.I. = Minerals, et al (Same as Lease K-3592) R.I. = State of N. M.February 16, 1979 Registeres Professional Engineer

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Case No. 6557Exhibit No. 9
Submitted by Plano
Hearing Date 5/29

LLANO, INC.
EXHIBIT "A"
WELL LOCATION & ACREAGE DEDICATION PLAT
STATE "34" COM. NO. I
GRAMA RIDGE MORROW (GAS) FIELD
LEA COUNTY, NEW MEXICO

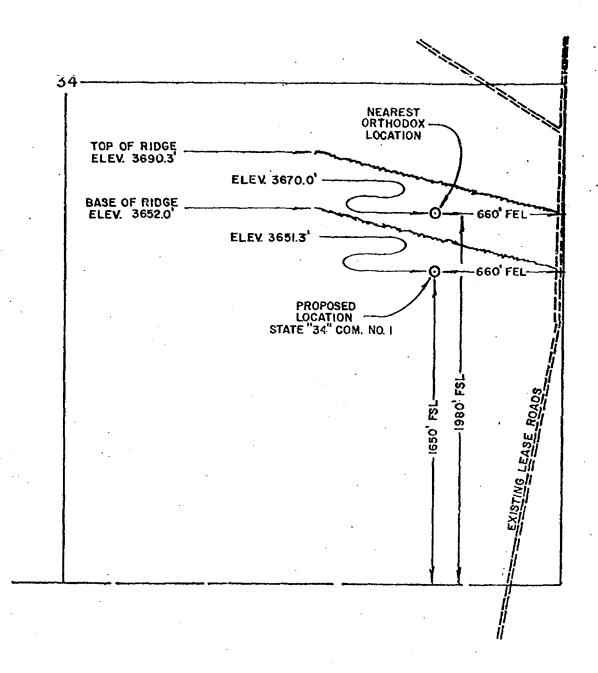
**R34E** POGO TEXAS O & G TEXACO 27 28 26 STATE LLANO, INC. STATE LLANO, INC. STATE GETTY T 21 S **≱**i 35 33 共<sup>2</sup> GRM UNIT STATE LLANO, INC. STATE STATE LLANO, INC. GETTY T 22 S 3 STATE STATE

#### LEGEND

- PROPOSED LOCATION STATE "34" COM.
- NEAREST ORTHODOX LOCATION
- ACREAGE TO BE DEDICATED TO PROPOSED WELL.
- ※ MORROW GAS WELL

	THE RESIDENCE OF STREET AND ADDRESS OF THE PARTY AND ADDRESS OF THE PAR
BEFC	RE THE _
OIL CONSERV.	ATION COMMISSION
Santa Fa	e, New Mexico
Case No. 655;	7 Exhibit No. 10
Submitted by	Lano
Hearing Date	5/29
The construction of the contract of the contra	and was the first management and an analysis of the contract o

SCALE 1000 0 1000 2000 3000 FEET LLANO, INC.
EXHIBIT "B"
AREA PLAT
STATE "34" COM. NO.I
GRAMA RIDGE MORROW (GAS) FIELD
LEA COUNTY, NEW MEXICO



ರ್ವಾಕ್ ಕರ್ನಾಟ್ ಕ್ರಮ್ ಕ್ರಮ್ ನೀರ್ಪ್ ನೀರ್ಪ್ ನೀರ್ ಕರ್ನಿ ಕರ್ನಾಟ್ ಬ್ಯಾಗ್ ಕರ್ನಾಟ್ ನಿಲ್ಲಾಗು ಕಟ್ಟಿಯಾಗಿ ಬಹುದು ಕೊಟ್ಟು ಮುಖಯ
DEFORE THE
OIL CONSERVATION COMMISSION
Sasta Fel, New Mexico
Care No. 6557 mulbit No. 11
Submitted by fland
Freeding Date 5/29
, , , , , , , , , , , , , , , , , , , ,

SCALE

50 25 0 50

FEET

LLANO, INC.
EXHIBIT "C"
LOCATION PLAT
STATE "34" COM. NO. I
GRAMA RIDGE MORROW (GAS) FIELD
LEA COUNTY, NEW MEXICO



## RUCTION

HORRS, NEW MEXICO 88240 . PHONE 503 393-3525 P. O. BOX 1847

February 27, 1979

Llano, Inc. P. O. Box 1320 Hobbs, NM 88240

Attention: Mr. Jack Moody

Reference: State Com 34 #1

Gentlemen:

We wish to submit our price to perform the proposed work on the above captioned location. The following bids are based on on-site inspection.

#1 1650' FSL, 660' FEL, S34-T21-R34, Lea County, NM

Furnish labor, equipment and materials to cut subgrade, level location, build approximately 600' of 12' wide, 6" compacted caliche road and a 6"compacted caliche drilling pad containing 58,200 sq. ft. Build reserve 120'x165'.

Our price, subject to applicable sales tax - - \$16,490.00

#2 1980' FSL, 660' FEL, S34-T21-R34, Lea County, NM

Furnish labor, equipment and materials to cut subgrade, shoot and level location, build approximately 600' of 12' wide 6" compacted caliche road, and a 6" compacted caliche drilling pad containing 58,200 sq. ft. Build reserve 120'x165'.

Our price, subject to applicable sales tax - - \$31,345.00

The above prices include grid roller.

We appreciate the opportunity of presenting this information and hope to have the pleasure of serving you.

Very truly yours,

Jack E. Turner General Manager

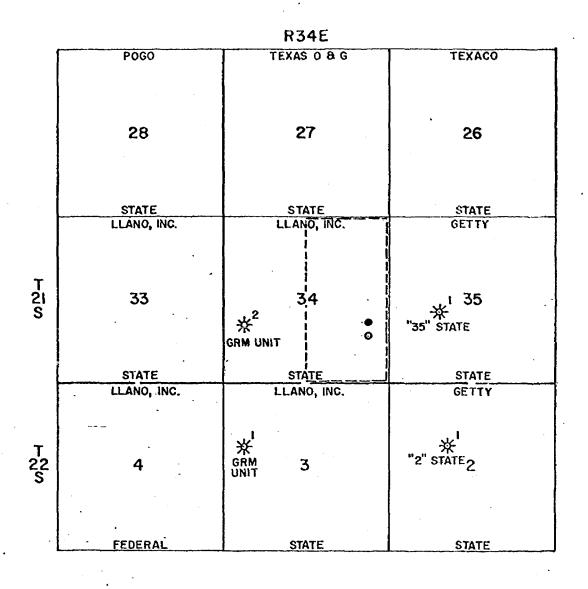
DEFORE THE OIL CONSETVATION COMMISSION Stable Pr., Blow Maxico Coro No. 6557 Exhibit No. 12

Horaing Date

LLANO, INC. EXHIBIT "D" CONTRACTOR'S BID ON LOCATION STATE "34" COM. NO. I GRAMA RIDGE MORROW (GAS) FIELD LEA COUNTY, NEW MEXICO

Llano State "34" Com Minerals, Inc 21 South 34 East or mon of Wels: 1650 trom the Ground Lavel Flex. Preducing Paradian Grama Ridge Morrow Morrow 3651.3 1 Outline the acreage dedicated to the aubject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the awareship thereof (both as to working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? No If answer is "yes," type of consolidation If answer is "no," list the owners and tract descriptions which have actually been consolidated. (I'se reverse side of this form if necessary.) -No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commis-CERTIFICATION K-3592 W.I. = Minerals, et al (Same as Lease E-9659) of my knowledge and belief. R.I. = State of N. M. Position President Minerals, Inc. E-9659 W.I. = Minerals, et al (Same as Lease K-3592) R.I. = State of N. M.Date Surveyes February 16, 1979 Registered Professional Engineer BEFORE THE OIL CONSERVATION COMMISSION Santa Fo, Now Monico o No. 6557 Expost No. 9 LLANO, INC. EXHIBIT "A" milled by Lland WELL LOCATION & ACREAGE DEDICATION PLAT isaring Date

STATE "34" COM. NO.1 GRAMA RIDGE MORROW (GAS) FIELD LEA COUNTY, NEW MEXICO



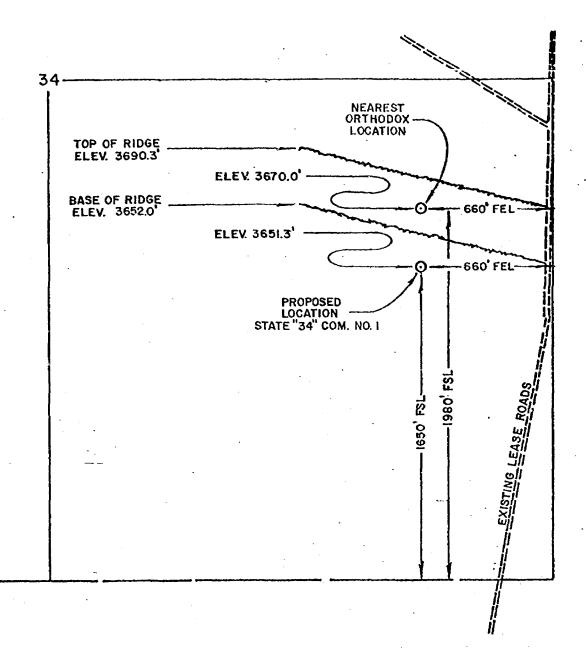
#### LEGEND

- PROPOSED LOCATION STATE "34" COM.
- NEAREST ORTHODOX LOCATION
- ACREAGE TO BE DEDICATED TO PROPOSED WELL.
- ※ MORROW GAS WELL

A CONTRACTOR OF THE PROPERTY O
BEFORE THE
CIL CONSERVATION COMMISSION
Santa Fo, New Mexico
ase No. 6557 Exhibit No. 10
Submitted by Rlamo
Hearing Date 5/29

SCALE
1000 0 1000 2000 3000
FEET

LLANO, INC.
EXHIBIT "B"
AREA PLAT
STATE "34" COM. NO.I
GRAMA RIDGE MORROW (GAS) FIELD
LEA COUNTY, NEW MEXICO



And the state of t
ORE THE OIL COMMISSION La Fe, New Mexico
Caro i 6557 Exhibit No. //
Suin by flano
Hose y Date 5/29
The second secon

SCALE
50 25 0 50
FEET

LLANO, INC.
EXHIBIT "C"
LOCATION PLAT
STATE "34" COM. NO. I
GRAMA RIDGE MORROW (GAS) FIELD
LEA COUNTY, NEW MEXICO



## CONSTRUCTION CO., INC.

P. O. BOX 1847 • HOBBS, NEW MEXICO 88240 • PHONE 505 393-3525

February 27, 1979

Llano, Inc. P. O. Box 1320 Hobbs, NM 88240

Attention: Mr. Jack Moody

Reference: State Com 34 #1

Gentlemen:

We wish to submit our price to perform the proposed work on the above captioned location. The following bids are based on on-site inspection.

#1 1650' FSL, 660' FEL, S34-T21-R34, Lea County, NM

Furnish labor, equipment and materials to cut subgrade, level location, build approximately 600' of 12' wide, 6" compacted caliche road and a 6"compacted caliche drilling pad containing 58,200 sq. ft. Build reserve 120'x165'.

Our price, subject to applicable sales tax - - \$16,490.00

#2 1980' FSL, 660' FEL, S34-T21-R34, Lea County, NM

Furnish labor, equipment and materials to cut subgrade, shoot and level location, build approximately 600' of 12' wide 6" compacted caliche road, and a 6" compacted caliche drilling pad containing 58,200 sq. ft. Build reserve 120'x165'.

Our price, subject to applicable sales tax = - \$31,345.00

The above prices include grid roller.

We appreciate the opportunity of presenting this information and hope to have the pleasure of serving you.

Very truly yours,

Jack E. Turner General Manager

BULL DOZERS

AIR COMPRESSOR

MOTOR GRADERS

ROLLER

WATER TRUCKS

BEFORE THE
... CONSERVATION COMMISSION
Santa Fa, Maw Mexico

Jase No. 6557 Emblish No. 12

Submitted by\_

Healing Units

5/29

EXHIBIT "D"

CONTRACTOR'S BID ON LOCATION

STATE "34" COM. NO. I

GRAMA RIDGE MORROW (GAS) FIELD

LEA COUNTY, NEW MEXICO



#### SABINE PRODUCTION COMPANY

901 Wall Towers East 201 Wall Street Midland, Texas 79701 (915) 683-5607

C. H. Madsen District Geologist

May 24, 1979

New Mexico Oil Conservation Commission State Land Office Building Santa Fe, New Mexico 87501

Attention: Mr. Joe Ramey

OIL CONSERVATION DIVISION SANTA FE

Re: Cases 6557, 6497 and 6558 Dated May 29, 1979

#### Gentlemen:

Sabine Production Company, as a 25% Working Interest Participant in Getty "36" State Com. #1 Well and owner of other leases in the Gramma Ridge Area, expresses the following feelings in the subject cases:

- Case 6557 Concur with 640 acre spacing and 1650' measurement from outer lease lines.
- 2. Case 6497 Object to the application of Llano to drill an unorthodox gas well with respect to location and recommend that a well be penalized for any variance from field rules.
- Case 6558 Object to the application of Llano for a non-standard spaced unit and recommend that a well be penalized for any variance from field rules.

Very truly yours,

SABINE PRODUCTION COMPANY

C. N. Gradu

C. H. Madsen

District Geologist

/wb

A Subsidiary of SABINE Corporation

Dockets Nos. 23-79 and 24-79 are tentatively set for hearing on June 13 and 27, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

#### DOCKET: EXAMINER HEARING - NEDNESDAY - MAY 23, 1979

9 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

- CASE 6545: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Corinne Grace, Travelers Indemnity Company, and all other interested parties to appear and show cause why the Kuklah Baby Well No. 1 located in Unit G of Section 24, Township 22 South, Range 26 East, Eddy County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.
- CASE 6422: (Continued from February 28, 1979, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Helton Engineering & Geological Services, Inc., Travelers Indemnity Company, and all other interested parties to appear and show cause why the Brent Well No. 1 located in Unit M of Section 29 and the Brent Well No. 3 located in Unit G of Section 19, both in Township 13 North, Range 6 East, Sandoval County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.

- CASE 6546: Application of Black River Corporation for compulsory pooling and non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Jalmat Gas Pool underlying the SW/4 of Section 32, Township 23 South, Range 37 East, to form a 160-acre non-standard gas proration unit to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6536: (Continued from May 9, 1979, Examiner Hearing)

Application of Black River Corporation for two non-standard gas proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for two 80-acre non-standard gas proration units in the Jalmat Gas Pool as follows: the N/2 SE/4 of Section 22, Township 23 South, Range 36 East, to be dedicated to applicant's well to be drilled in Unit J of said Section 22; and the S/2 SE/4 of said Section 22 to be dedicated to El Paso Natural Gas Company's Shell State Well No. 3 located in Unit P.

CASE 6535: (Continued from May 9, 1979, Examiner Hearing)

Application of Torreon Oil Company for a waterflood project, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the San Luis-Mesaverde Pool by the injection of water into the Menefee formation through two wells located in Section 21, Township 18 North, Range 3 West, Sandoval County, New Mexico.

- CASE 6547: Application of American Petrofina Company of Texas for the creation of a waterflood buffer zone, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a waterflood buffer zone comprising the NE/4 SE/4 of Section 26, Township 17 South, Range 32 East, Maljamar Grayburg-San Andres Pool, to enable applicant to produce its Johns B Well No. 4 located thereon at an unrestricted rate.
- Application of John F. Staver for salt water disposal, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Dakota formation through the open hole interval from 1408 feet to 1412 feet in his Table Mesa Well No. 22 located in Unit N and from 1394 feet to 1400 feet in his Table Mesa Well No. 23 located in Unit O, both in Section 34, Township 28 North, Range 17 West, Table Mesa-Dakota Oil Pool.
- Application of Gulf Oil Corporation for pool creation, discovery allowable, and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order creating a new Bone Springs oil pool for its Lea "YH" State Well No. 1 located in Unit O of Section 25, Township 18 South, Range 34 East. Applicant also seeks a discovery allowable and promulgation of special pool rules, including a provision for 80-acre spacing.

- CASE 6550: Application of Yates Petroleum Corporation for an unorthodox gas well location and compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled tause, seeks an order pooling all mineral interests in the Wolfcamp through Mississippian formations underlying the S/2 of Section 12, Township 19 South, Range 24 Fast, to be dedicated to its Allison Federal "CQ" Well No. 2 to be drilled at an unorthodox location 1980 feet from the South line and 660 feet from the West line of said Section 12. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6492: (Continued from May 9, 1979, Examiner Hearing)

Application of Yates Petroleum Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the San Andres formation underlying the NE/4 RM/4 of Section 13, Township 17 South, Range 25 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

- CASE 6551: Application of Bass Enterprises Production Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox Lower Morrow gas well location 1980 feet from the North line and 660 feet from the East line of Section 1, Township 19 South, Range 28 East, the N/2 of said Section 1 to be dedicated to the well.
- CASE 6528: (Continued from April 25, 1979, Examiner Hearing)

Application of Bass Enterprises Production Co. for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox Morrow test well location to be drilled 660 feet from the North and West lines of Section 10, Township 21 South, Range 32 East, Lea County, New Mexico, the W/2 of said Section 10 to be dedicated to the well.

- CASE 6552: Application of Maddox Energy Corporation for compulsory pooling, Eddy County, New Mexico.

  Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the E/2 of Section 3, Township 24 South, Range 28 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6553: Application of The Atlantic Richfield Company for approval of infill drilling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a finding that the Division waived existing well-spacing requirements and found that the drilling of additional wells was necessary to effectively and efficiently drain those portions of the proration units in the Empire Abo Unit located in Townships 17 and 18 South, Ranges 27, 28 and 29 East, which could not be so drained by the existing wells.
- Application of The Atlantic Richfield Company for compulsory pooling, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks an order pooling all royalty interests in the Devonian, McKee, and Ellenburger formations underlying the E/2 of Section 20, Township 22 South, Range 36

  East, Langlie Field, to be dedicated to a well to be drilled at a standard location thereon.
- CASE 6555: Application of Jake L. Hamon for an unorthodox gas well location, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for an unorthodox location 660 feet from the North line and 560 feet from the East line of Section 30, Township 20 South, Range 36 East, North Osudo-Morrow Gas Pool, all of said Section 30 to be dedicated to the well.
- CASE 6556: Application of Curtis Little for the amendment of Order No. R-5962, San Juan County, New Mexico.

  Applicant, in the above-styled cause, seeks the amendment of Order No. R-5952 to provide for the unorthodom location of a well to be drilled 1000 feet from the South line and 50 feet from the East line of Section 11, Township 28 North, Range 12 West, Basin-Dakota Pool, and for the extension of the date to commence drilling.
- CASE 6435: (Continued from February 28, 1979, Examiner Hearing)

Application of Amerada Hess Corporation for approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a finding that the drilling of its W. A. Weir "B" Well No. 3 located in Unit B of Section 26, Township 19 South, Range 36 East, Eumont Cas Pool, Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well, and further seeks approval of a waiver of existing well-spacing requirements.

- CASE 6559: Application of Roy L. McKay for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for his Morton Solid State Unit Area, comprising 1,480 acres, more or less, of State lands in Township 15 South, Range 34 East.
- CASE 6487: (Continued from February 28, 1979, Examiner Hearing)

Application of El Paso Natural Gas Company for approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Shell E State Com Well No. 2 located in Unit N of Section 6, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6471: (Continued from February 28, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Freeman Well No. 1-A to be located in Unit C of Section 11, Township 31 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing vell.

CASE 6472: (Continued from February 28, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Jenny Well No. 1-A to be located in Unit P of Section 13, Township 26 North, Range 4 West, Basin-Dakota Pool, Rio Arriba County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6473: (Continued from February 28, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks a vaiver of existing well-spacing requirements and a finding that the drilling of its McIntyre Well No. 1-A to be located in Unit K of Section 11, Township 26 North, Range 4 West, Basin-Dakota Pool, Rio Arriba County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6474: (Continued from February 28, 1979, Examiner Hearing)

ij,

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, San Juan County, New Nexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Williams Well No. 1-A to be located in Unit C of Section 24, Township 31 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the provation unit which cannot be so drained by the existing well.

CASE 6475: (Continued from February 28, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Montoya Well No. 1-A to be located in Unit I of Section 35, Township 32 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

#### DOCKET: COMMISSION HEARING - TUESDAY - MAY 29, 1979

OIL CONSERVATION COMMISSION - 9 A.M. - ROOM 205 STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

CASE 6557: Application of Getty Oil Company for pool creation and special pool rules, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks an order creating a new Morrow gas pool for its State

35 Well No. 1 located in Unit K of Section 35, Township 21 South, Range 34 East, and its Getty Two

State Well No. 1 located in Unit F of Section 2, Township 22 South, Range 34 East, and for promulga-

tion of special pool rules, including provision for 640-acre gas well spacing.

CASE 6497: (DE NOVO)

Application of Llano, Inc. for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be located 1650 feet from the South line and 660 feet from the East line of Section 34, Township 21 South, Range 34 East, Grama Ridge-Morrow Gas Pool, the E/2 of said Section 34 to be dedicated to the well.

Upon application of Getty Oil Company this case will be heard De Novo pursuant to the provisions of Rule 1220.

CASE 6558: Application of Llano, Inc. for a non-standard gas proration unit, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks approval for a 320-acre non-standard gas proration unit comprising the E/2 of Section 34, Township 21 South, Range 34 East, to be dedicated to its Llano 34 State Com Well No. 1 located in Unit I of said Section 34.



3

#### BEFORE THE

#### OIL CONSERVATION DIVISION

NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS

IN THE MATTER OF THE APPLICATION OF GETTY OIL COMPANY FOR POOL CREATION AND SPECIAL POOL RULES LEA COUNTY, NEW MEXICO.

CASE NO. 6557

#### APPLICATION

Comes now, GETTY OIL COMPANY by their undersigned attorneys, and hereby makes application for an order creating a new pool and for promulgation of special pool rules including (1) 640-acre spacing or proration units on a permanent basis, and (2) special well location requirements, and in support of its application will show the Commission:

- (1) The Grama Ridge-Morrow Gas Pool, Lea County, New Mexico was created by the Oil Conservation Division by Order No. R-3006 on December 3, 1965, and made subject to the Special Pool Rules promulgated by said order which include a provision for 640-acre spacing and proration units, with well locations prescribed as being no closer than 1,650 feet to the outer boundary of the unit and no closer than 330 feet to any quarter-quarter section line.
- (2) Said pool was extended from time to time by order of the Commission until said pool comprised all of the following-described lands:

TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM Section 33: All

Section 34: All

TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM

Section 2: All Section 3: All Section 4: All

Section 10: All

- (3) Llano, Inc. is the operator of certain wells located within the Grama Ridge-Morrow Gas Pool.
- (4) Llano, Inc. filed an application with the Oil Conservation Division seeking recision of the Special Pool Rules for the Grama Ridge-Morrow Gas Pool (Oil Conservation Division Case No. 6496).
- (5) That on May 2, 1979, the Oil Conservation Division entered Order No. R-5995 which redefined the Grama Ridge-Mcrrow Gas Pool to include only the following described lands;

TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM Section 33: E/2 Section 34: W/2

TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM Section 3: W/2 Section 4: All Section 10: W/2

and recinded the Grama Ridge-Morrow Gas Pool Special Pool Rules.

(6) Order No. R-5995 further provided:

"That the Morrow formation underlying all of Section 26, the E/2 of Section 34, and all of Sections 35 and 36, Township 21 South, Range 34 East, NMPM, and all of Sections 1 and 2, the E/2 of Section 3, the E/2 of Section 10 and all of Sections 11 and 12, Township 22 South, Range 34 East, NMPM, are hereby placed on temporary 640-acre spacing, and no drilling permit shall be approved for any Morrow Gas Well proposed to be drilled on said lands unless such permit is for a well to which 640 acres (being a single governmental section) is dedicated, and which is located at least 1650 feet from the outer boundary of the unit and at least 330 feet from any quarter-quarter section line....".

(7) That said order further provided that the provisions set out in paragraph 6 hereinabove were to remain in force for a period of 30 days or for so long thereafter as a hearing, or order following a hearing on an application of Getty Oil Company for pool creation governing the above referenced acreage, is pending before the Oil Conservation Division.

- (8) The applicant, Getty Oil Company, is the operator of the Getty State Well 35 No. 1 located in Section 35, Township 21 South, Range 34 East, Lea County, New Mexico and operator of the Getty Two State Well No. 1 located in Section 2 of Township 22 South, Range 34 East, Lea County, New Mexico and said wells are producing from the Morrow Formation.
- (9) Applicant believes that the following described lands are reasonably productive of hydrocarbons in paying quantities from the Morrow Formation and should be included in the original definition of the new pool to be created because of the production capabilities of the wells on this acreage:

TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM Section 26: All Section 34: E/2 Section 35: All Section 36: All

# TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM Section 1: All Section 2: All Section 3: E/2 Section 10: E/2 Section 11: All

A11

Section 12:

- (10) In order to prevent economic loss caused by the drilling of unnecessary wells, to avoid augmentation of risk arising from the drilling of an excessive number of wells and to otherwise prevent waste and protect correlative rights, Special Pool Rules and Regulations providing for 640-acre spacing units should be promulgated for the new pool.
- (11) Applicant respectfully requests that said Special Pool Rules provide that each well should be located on a standard unit containing 640 acres more or less.
- (12) Applicant further requests that said Special Pool Rules provide that each well shall be located no closer than 1650 feet to the outer boundary of the unit and no closer than 330 feet to any quarter-quarter section line.

WHEREFORE, Getty Oil Company requests that this Application be set for hearing before the Oil Conservation Commission at its hearing scheduled for May 29, 1979, that notice be given as required by law in the rules of the Division, and that the Application be approved.

Respectfully submitted,

CAMPBELL AND BLACK, P.A.

William F. Carr
Post Office Box 2208
Santa Fe, New Mexico 87501
Attorneys for Getty Oil Company



#### BEFORE THE

#### OIL CONSERVATION DIVISION

#### NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS

IN THE MATTER OF THE APPLICATION OF GETTY OIL COMPANY FOR POOL CREATION AND SPECIAL POOL RULES LEA COUNTY, NEW MEXICO.

CASE NO. 6557

#### APPLICATION

Comes now, GETTY OIL COMPANY by their undersigned attorneys, and hereby makes application for an order creating a new pool and for promulgation of special pool rules including (1) 640-acre spacing or proration units on a permanent basis, and (2) special well location requirements, and in support of its application will show the Commission:

- (1) The Grama Ridge-Morrow Gas Pool, Lea County, New Mexico was created by the Oil Conservation Division by Order No. R-3006 on December 3, 1965, and made subject to the Special Pool Rules promulgated by said order which include a provision for 640-acre spacing and proration units, with well locations prescribed as being no closer than 1,650 feet to the outer boundary of the unit and no closer than 330 feet to any quarter-quarter section line.
- (2) Said pool was extended from time to time by order of the Commission until said pool comprised all of the following-described lands:

TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM Section 33: All

Section 33: All Section 34: All

TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM

Section 2: All Section 3: All Section 4: All Section 10: All

- (3) Llano, Inc. is the operator of certain wells located within the Grama Ridge-Morrow Gas Pool.
- (4) Llano, Inc. filed an application with the Oil Conservation Division seeking recision of the Special Pool Rules for the Grama Ridge-Morrow Gas Pool (Oil Conservation Division Case No. 6496).
- (5) That on May 2, 1979, the Oil Conservation Division entered Order No. R-5995 which redefined the Grama Ridge-Morrow Gas Pool to include only the following described lands;

TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM Section 33: E/2 Section 34: W/2

TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM Section 3: W/2 Section 4: All Section 10: W/2

and recinded the Grama Ridge-Morrow Gas Pool Special Pool Rules.

(6) Order No. R-5995 further provided:

"That the Morrow formation underlying all of Section 26, the E/2 of Section 34, and all of Sections 35 and 36, Township 21 South, Range 34 East, NMPM, and all of Sections 1 and 2, the E/2 of Section 3, the E/2 of Section 10 and all of Sections 11 and 12, Township 22 South, Range 34 East, NMPM, are hereby placed on temporary 640-acre spacing, and no drilling permit shall be approved for any Morrow Gas Well proposed to be drilled on said lands unless such permit is for a well to which 640 acres (being a single governmental section) is dedicated, and which is located at least 1650 feet from the outer boundary of the unit and at least 330 feet from any quarter-quarter section line...".

(7) That said order further provided that the provisions set out in paragraph 6 hereinabove were to remain in force for a period of 30 days or for so long thereafter as a hearing, or order following a hearing on an application of Getty Oil Company for pool creation governing the above referenced acreage, is pending before the Oil Conservation Division.

- (8) The applicant, Getty Oil Company, is the operator of the Getty State Well 35 No. 1 located in Section 35, Township 21 South, Range 34 East, Lea County, New Mexico and operator of the Getty Two State Well No. 1 located in Section 2 of Township 22 South, Range 34 East, Lea County, New Mexico and said wells are producing from the Morrow Formation.
- (9) Applicant believes that the following described lands are reasonably productive of hydrocarbons in paying quantities from the Morrow Formation and should be included in the original definition of the new pool to be created because of the production capabilities of the wells on this acreage:

TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM
Section 26: All
Section 34: E/2
Section 35: All
Section 36: All

## TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM Section 1: All Section 2: All

Section 3: E/2 Section 10: E/2 Section 11: All Section 12: All

13

- (10) In order to prevent economic loss caused by the drilling of unnecessary wells, to avoid augmentation of risk arising from the drilling of an excessive number of wells and to otherwise prevent waste and protect correlative rights, Special Pool Rules and Regulations providing for 640-acre spacing units should be promulgated for the new pool.
- (11) Applicant respectfully requests that said Special Pool Rules provide that each well should be located on a standard unit containing 640 acres more or less.
- (12) Applicant further requests that said Special Pool Rules provide that each well shall be located no closer than 1650 feet to the outer boundary of the unit and no closer than 330 feet to any quarter-quarter section line.

WHEREFORE, Getty Oil Company requests that this Application be set for hearing before the Oil Conservation Commission at its hearing scheduled for May 29, 1979, that notice be given as required by law in the rules of the Division, and that the Application be approved.

Respectfully submitted,

CAMPBELL AND BLACK, P.A.

William F. Carr
Post Office Box 2208
Santa Fe, New Mexico 87501
Attorneys For Getty Oil Company

dr/

#### STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION COMMISSION

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

JOR

- CASE NO. 6557

Order No. <u>R-6050</u>

APPLICATION OF GETTY OIL COMPANY FOR POOL CREATION AND SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at Santa-Fe7-New-Mexico

on \_\_May 29 \_\_\_\_\_\_, 19\_79\_\_, at Santa Fe, New Mexico,

before the Oil Conservation Commission of New Mexico, hereinafter

referred to as the "Commission."

NOW, on this \_\_\_\_\_\_ day of \_July \_\_\_\_\_, 19\_79\_\_, the

NOW, on this \_\_\_\_\_day of \_\_\_\_\_, 19\_\_/9 , 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 Division, by its Order No. R-5995 entered May 2, 1979, rescinded the Special Rules and Regulations for the Grama Ridge-Morrow Gas Pool, as promulgated by Division Order No. R-3006, and provided that said pool should henceforth be spaced, drilled, operated, and produced in accordance with Rule 104 of the Division Rules and Regulations and with such other Division rules and orders as may be applicable.
- (3) That said Order No. R-5995 redefined the horizontal limits of the Grama Ridge-Morrow Gas Pool to include only the E/2 of Section 33 and the W/2 of Section 34, Township 21 South, Range 34 East, NMPM, and the W/2 of Section 3, all of Section 4, and the W/2 of Section 10, Township 22 South, Range 34 East, NMPM.
- particular area, described as all of Section 26, the E/2 of Section 34, and all of Sections 35 and 36, Township 21 South, Range 34 East, NMPM, and all of Sections 1 and 2, the E/2 of Section 3, the E/2 of Section 10, and all of Sections 11 and 12, 25 and 18 and 2 for a prescribed that the Morrow formation underlying said area would be placed on temporary 640-acre well spacing and location requirements for a period of 30 days after the date of entry of said Order No. R-5995, or, provided that if Getty Oil Company had filed an application for creation of a new gas pool within the hereinabove-described lands and the promulgation of special rules for such new pool, including a provision for other than 320-acre spacing, then such temporary rules should remain in effect for so long thereafter as a hearing, or an order following a hearing, is pending.

Vous 2

Case No. 6557 Order No. R-

- (5) That Getty Oil Company did file an application with the Division on May 3, 1979, requesting such pool creation and special rules, and said application was docketed for hearing as the instant case.
- (6) That as the applicant herein, Getty Oil Company, seeks the creation of a new Morrow Gas Pool comprising all of Section 35, Township 21 South, Range 34 East, NMPM, and all of Section 2, Township 22 South, Range 34 East, NMPM, and the promulgation of special rules therefor, including a provision for 640-acre spacing and proration units, and well locations no closer than 1650 feet to the outer boundary of the unit and no closer than 330 feet to any quarter-quarter section line.
- (7) That the applicant is the operator of its Getty "35" State Well No. 1 located in Unit K of the aforesaid Section 35, and its Getty "2" State Well No. 1 located in Unit F of the aforesaid Section 2.
- (8) That said wells are located approximately 4290 feet apart, or less than one mile, but the main producing zone in each of the two wells does not appear to be of major significance in & presented evidence often sting the other well.
- That although a trompted to establish that the Morrow producing interval, in the subject area. Is of deltaic marine nature, and therefore should extend laterally for considerable distrance and exhibit good continuity of permeability throughout the reservoir, thus being conducive to 640-acre spacing; however, the preponderance of the evidence establishes that the Morrow producing interval in the Grama Ridge-Morrow Gas Pool and in the lands immediately East thereof, i.e., the lands under consideration in this case, does not constitute a broad continuous producing body but instead is composed of numerous separate and isolated sand bodies.

- there is no reason to believe that the drainage characteristics in the Morrow formation in the area under consideration (Section 35, Township 21 South, Range 34 East, NMPM, and Section 2, Township 22 South, Range 34 East, NMPM) are any different than the drainage characteristics of the Morrow formation in the Grama Ridge-Morrow Gas immediately to the West.
- (11) That the Division found, in Case No. 6496, from which Order No. R-5995 issued, that the drainage characteristics of the Morrow formation in the Grama Ridge-Morrow Gas Pool are not such as to support 640-acre spacing, and that 320-acre spacing was more appropriate for said pool.
- (12) That the applicant has failed to establish that one well will effectively and efficiently drain 640 acres in the Morrow formation underlying Section 35, Township 21 South, Range 34 East, NMPM, and Section 2, Township 22 South, Range 34 East, NMPM.
- this case and the economic loss caused by the drilling of unnecessary wells, the protection of correlative rights, including those of royalty owners, the prevention of waste, the avoidance of the augmentation of risks arising from the drilling of an excessive number of wells, and the prevention of reduced recovery which might result from the drilling of too few wells, the Commission can only conclude that the application for 640-acre spacing in the subject area should be denied, and that said lands should be developed on 320-acre spacing and proration units.

- (14) That a new pool should be created and defined for applicant's wells in the subject area, that pool should be designated the East Grama Ridge-Morrow Gas Pool with vertical limits comprising the Morrow formation and horizontal limits comprising the S/2 of Section 35, Township 21 South, Range 34 East, NMPM, and the N/2 of Section 2, Township 22 South, Range 34 East, NMPM, Lea County, New Mexico.
- (15) That said East Grama Ridge-Morrow Gas Pool should be spaced, drilled, operated and produced in accordance with Rule 104 of the Division Rules and Regulations and with such other Division rules and orders as may be applicable, including 320-acre spacing and proration units and well location requirements.
- (16) That the provisions of Order No. (3) on Pages 4 and 5 of Division Order No. R-5995 should be rescinded.

#### IT IS THEREFORE ORDERED:

(1) That the application of Getty Oil Company for the creation of manual a new gas pool in Lea County, New Mexico, for the manual production of gas from the Morrow formation is approved, and there is hereby created the East Grama Ridge-Morrow Gas Pool, with vertical limits comprising the Morrow formation and horizontal limits comprising the following described area:

TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPH Section 35: S/2

TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM Section 2: N/2

(2) That said East Grama Ridge-Morrow Gas Pool shall be spaced, drilled, operated, and produced in accordance with Rule 104 of the Division Rules and Regulations and with such other Division rules and orders as may be applicable to 320-acre spacing and proration units and well location requirements.

-6-Case No. 6557 Order No. R-

- (3) That the application of Getty Oil Company for 640-acre spacing and well location requirements is hereby denied.
- (4) That the provisions of Order No. (3) on Pages 4 and 5 of Division Order No. R-5995 are hereby rescinded.
- That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

ALEX J. ARMIJO, Member

EMERY C. ARNOLD, Member

Corretary & Member

IT IS FURTHER ORDERED

Campleted in, or for which drelling paramets have to Eu approved for, the East Grama Ridge-marrow gas Pool are the Marrow formation within one mile thereof, are hereby approved.

East Grama Ridge Morrow gas

MMSA 1953. existing wells in the South Peter son Pennsylvation.

Pool shall have dedicated thereto 80 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said or proration units established by the Division and dedicated thereto.

And the operator theres shall sha

thereto.

And the operator thereof shall all met Forms C-102

Failure to file new Forms C-102 with the Division dedicating order.

320 80 acres to a well or to obtain a non-standard unit approved by subject the well to cancellation of allowable.

2)

## BRUCE KING GOLESTOR LABRY KEHOE STORETARY

#### STATE OF NEW MEXICO

## ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

July 18, 1979

POST OFFICE ROX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 67501 15051 827-2434

Mr. Thomas Kellahin Kellahin & Kellahin Attorneys at Law Post Office Box 1769 Santa Fe, New Mexico	Re: CASE NO. 6558 ORDER NO.R-6051 Applicant:
	Llano, Inc.
Dear Sir:	
	copies of the above-referenced entered in the subject case.
JOE D. RAMEY Director	
JDR/fd	
Copy of order also sent to	:
Hobbs OCC X Artesia OCC X Aztec OCC	
Other William F. Carr	