BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF SUNRAY MID-CONTINENT OIL COMPANY FOR AN ORDER AUTHORIZING A LIQUEFIED PETROLEUM GAS-GAS INJECTION PROJECT IN THE BISTI-LOWER GALLUP OIL POOL IN SAN JUAN COUNTY, NEW MEXICO, PURSUANT TO RULE 701 OF THE COMMISSION'S RULES AND REGULATIONS, AND FOR AN ORDER ESTABLISHING RULES AND REGULATIONS IN THE AREA OF SAID PROJECT.

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CASE NO.

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<u>A P P L I C A T I O N</u>

TO THE HONORABLE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO:

COMES NOW THE APPLICANT, SUNRAY MID-CONTINENT OIL COMPANY, AND RESPECTFULLY ALLEGES AND STATES AS FOLLOWS:

1. THAT IT IS THE OWNER AND OPERATOR OF LEASES AND WELLS WITHIN THE LIMITS OF THE BISTI-LOWER GALLUP OIL POOL, SAN JUAN COUNTY, NEW MEXICO.

2. That by New Mexico Oil Conservation Commission Order No. R-1315, Case No. 1559, dated December 31, 1958 Sunray Mid-Continent Oil Company was authorized to commence gas injection into the Bisti-Lower Gallup formation by the use of its Federal "C" Well No. 18, located in the SW/4 NE/4 Section 7, Township 25 North, Range 12 West NMPM, San Juan County, New Mexico, and by this same order rules and regulations governing the operation of the gas injection project were adopted for a portion of the Bisti-Lower Gallup Oil Pool; that the Commission by its Order No. R-1027, dated August 7, 1957, granted Sunray Mid-Continent Oil Company permission to inject liquefied petroleum gas followed by gas into the Bisti-Lower Gallup Oil Pool for the purpose of secondary recovery.

3. THAT IT IS DESIRED TO INJECT LIQUEFIED PETROLEUM GAS AND GAS PURSUANT TO RULE NO. 701 OF THE NEW MEXICO OIL CONSERVATION COMMISSION RULES AND REGULATIONS INTO THE BISTI-LOWER GALLUP FORMATION UNDERLYING THE FOLLOWING DESCRIBED ACREAGE:

TOWNSHIP 26 NORTH, RANGE 12 WEST, NMPM

	SECTION 31:	S/2 AND S/2 N/2 S/2 AND S/2 N/2
	SECTION 33:	s/2 sw/4
	TOWNSHIP 25 N	DRTH, RANGE 12 WEST, NMPM
	SECTION 3:	SW/4
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	SECTION 5:	ALL
	SECTION 6:	ALL
• •	SECTION 7:	ALL
	SECTION 8:	ALL
-	SECTION 9:	ALL
	SECTION 10:	NW/4
	SECTION 16:	ALL
	SECTION 17:	N/2 and $SE/4$ and $E/2$ $SW/4$ and $NW/4$ $SW/4$
	SECTION 18:	NE/4 and $N/2$ $NW/4$ and $N/2$ $SE/4$
•.	SECTION 20:	NE/4 AND NE/4 NW/4
	SECTION 21:	N/2 AND N/2 SE/4 AND NE/4 SW/4
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ALL IN SAN JUAN COUNTY, NEW MEXICO.

4. THAT THE WELLS IN THE BISTI-LOWER GALLUP OIL POOL ARE PRODUCED FROM THE LOWER-GALLUP OIL SAND WHICH IS FOUND AT THE APPROXIMATE DEPTH OF 4829 FEET IN SUNRAY MID-CONTINENT OIL COMPANY'S FEDERAL "C" WELL NO. 1 LOCATED IN THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER (NW/4 NW/4) OF SECTION 6, TOWNSHIP 25 NORTH, RANGE 12 WEST, NMPM. SAN JUAN COUNTY, NEW MEXICO.

5. That it is proposed to inject gas into the following wells in addition to Sunray Mid-Continent's Federal "C" Well No. 18, located in the SW/4 NE/4 Section 7, Township 25 North, Range 12 West, which was authorized as a gas injection well by New Mexico Oil Conservation Commission No. R-1315:

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SUNRAY MID-CONTINENT OIL COMPANY FEDERAL "C" WELL NO. 7 SW/4 SE/4 Section 31, Township 26 North, Range 12 West

EL PASO NATURAL GAS PRODUCTS COMPANY BENALLY WELL NO. 1 SW/4 NE/4 Section 5, Township 25 North, Range 12 West

Amerada Petroleum Corporation Salina White Well No. 1 SE/4 SW/4 Section 8, Township 25 North, Range 12 West

ALL IN SAN JUAN COUNTY, NEW MEXICO

6. THAT IT IS PROPOSED TO INJECT LIQUEFIED PETROLEUM GAS FOLLOWED BY GAS INTO THE FOLLOWING WELLS:

SUNRAY MID-CONTINENT OIL COMPANY FEDERAL "C" WELL NO. 4 SW/4 NE/4 Section 6, Township 25 North, Range 12 West

SUNRAY MID-CONTINENT OIL COMPANY FEDERAL "C" WELL No. 13 SW/4 NW/4, SECTION 5, TOWNSHIP 25 NORTH, RANGE 12 WEST

Amerada Petroleum Corporation Gle-Na-Nup-Pah Well No. 1 SW/4 SE/4 Section 5, Township 25 North, Range 12 West

PHILLIPS PETROLEUM COMPANY BENALLY WELL NO. 1 SW/4 SW/4 Section 5, Township 25 North, Range 12 West

SUNRAY MID-CONTINENT OIL COMPANY FEDERAL "C" WELL NO. 10 SW/4 SE/4 Section 6, Township 25 North, Range 12 West

SUNRAY MID-CONTINENT OIL COMPANY FEDERAL "C" WELL NO. 16 2 SW/4 NW/4 Section 8, Township 25 North, Range 12 West

SUNRAY MID-CONTINENT OIL COMPANY FEDERAL "C" WELL NO. 14 SW/4 NE/4 SECTION 8, TOWNSHIP 25 NORTH, Range 12 West

ALL IN SAN JUAN COUNTY, NEW MEXICO

7. THAT THE CASING PROGRAM IN SUNRAY MID-CONTINENT'S FEDERAL "C" WELL No. 18 is as follows and is typical of the casing program for the wells proposed to be converted into injection wells:

> 8-5/8" casing set at 352¹ with 225 sacks of cement. 5-1/2" casing set at 4989¹ with 200 sacks of cement.

THE CASING IN EACH INJECTION WELL WILL BE TESTED IN ACCORDANCE WITH SUCH RULES AND METHODS HERETOFORE APPROVED BY THE COMMISSION OR AS MAY BE PRESCRIBED BY IT PRIOR TO USE AS AN INJECTION WELL.

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8. THAT IT IS ESTIMATED THAT BETWEEN 3,000,000 AND 4,000,000 CUBIC FEET OF GAS PER DAY WILL BE INJECTED INTO THE INJECTION WELLS AND 6,000 TO 7,000 BARRELS OF LIQUEFIED PETROLEUM GAS PER DAY WILL BE INJECTED INTO THE INJECTION WELLS; AT A LATER DATE IT IS ESTIMATED THAT THE VOLUME OF GAS INJECTED MAY INCREASE, THAT THE GAS WILL CONSIST OF PRODUCED CASINGHEAD GAS FROM THE LOWER GALLUP OIL FORMATION WITH NEEDED MAKE-UP GAS TO BE PURCHASED FROM OUTSIDE SOURCES; THAT THE LIQUEFIED PETROLEUM GAS WILL BE PURCHASED FROM AVAILABLE PLANTS IN THE GENERAL VICINITY OF THE PROJECT.

9. THAT ATTACHED HERETO, MARKED EXHIBIT "A", AND MADE A PART HEREOF BY THIS REFERENCE, IS A PLAT SHOWING THE LOCATION OF THE PROPOSED INJECTION WELLS; THE LOCATION OF ALL OIL AND GAS WELLS, INCLUDING DRILLING WELLS AND DRY HOLES, AND THE NAMES OF LESSEES WITHIN ONE-HALF MILE OF THE PROPOSED INJECTION WELLS; AND THE NAME OF EACH OFFSET OPERATOR.

10. THAT THE OPERATOR OF THIS PROJECT IS SUNRAY MID-CONTINENT OIL COMPANY, P. O. BOX 2039, TULSA 2, OKLAHOMA.

11. THAT IN THE INTEREST OF CONSERVATION, THE PREVENTION OF WASTE AND TO MORE EFFECTIVELY AND EFFICIENTLY OPERATE THE LIQUEFIED PETROLEUM GAS-GAS INJECTION PROJECT IT IS RECOMMENDED TO THE COMMISSION THAT RULES AND REGULATIONS AS PROVIDED FOR BY NEW MEXICO OIL CONSERVATION COMMISSION ORDER NO. R-1315 BE AMENDED TO PRO-VIDE FOR LIQUEFIED PETROLEUM GAS-GAS INJECTION AS WELL AS GAS INJECTION AND APPLY TO THAT PORTION OF THE BISTI-LOWER GALLUP OIL POOL DESCRIBED ABOVE.

WHEREFORE APPLICANT PRAYS THAT THIS APPLICATION BE SET FOR HEARING, THAT NOTICE BE GIVEN AS REQUIRED BY LAW AND THAT UPON THE EVIDENCE ADDUCED AT SUCH HEARING, THE COMMISSION ISSUE AN ORDER GRANTING TO APPLICANT PERMISSION TO INJECT GAS AND LIQUEFIED PETROLEUM GAS INTO THE BISTI-LOWER GALLUP OIL POOL, AND ESTABLISHING RULES AND REGULATIONS IN THAT PORTION OF THE BISTI-LOWER GALLUP OIL POOL, SAN JUAN COUNTY, NEW MEXICO, DESCRIBED IN THIS APPLICATION, AS MORE FULLY SET FORTH IN THIS APPLICATION.

DATED THIS 17th DAY OF APRIL, 1959.

SUNRAY MID-CONTINENT OIL COMPANY

WILLIAM R. LOAR, ATTORNEY P. O. Box 2039 Tulsa 2, Oklahoma

L. C. WHITE, ATTORNEY P. O. Box 787 Santa Fe, New Mexico