Bu 87157

The Company of Shell Oil Gompany of Shell of Shell of Shell of Shell of Shell State H Lease, Well will for Shell Conservation of Shell C

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

Gentlemen:

Under provisions of Commission Order No. R-520, Rule 5 (b), delegating the Secretary-Director of the Commission authority to grant exception to the requirements of Rule 5 (a) without notice and hearing for a non-standard gas proration unit, Shell Oil Company hereby applies for an exception to the aforementioned Rule for the Shell State H lease and the well Shell State H No. 4, Eumont Gas Pool.

It is requested that the 320-acre Shell State H lease consisting of the E/2 of Section 13, T-21-S, R-35-E, Lea County, New Mexico, which at present is designated as two 160-acre gas proration units with the producing gas wells being Shell State H No. 2 and Shell State H No. 4, be designated as a single 320-acre non-standard gas proration unit with the well Shell State H No. 4 to be the producing well for this nonstandard proration unit.

In support of this application the following facts are submitted:

- 1. Shell State H No. 2 is located 1260 feet from the East line and 660 feet from the North line of Section 13, T-21-S, R-35-E and was originally completed as an oil well in April, 1937, flowing 350 BOPD from the open hole interval 3800-3925 feet.
- 2. An application to recomplete State H No. 2 as a gas-oil dual was approved by the Commission on December 4, 1952.
- 3. Subsequently the dual completion operation was completed on May 15, 1953, with the gross Eumont gas zone producing interval being 3265 to 3670 feet. On potential test the well flowed at the rate of 1400 MCFGPD and was assigned a 160-acre gas allowable.
- 4. Shell State H No. 4 is located 990 feet from the East line and 1980 feet from the South line of Section 13, T-21-S, R-35-E and was originally completed as an oil well in September, 1938, flowing 825 BOPD from the open hole interval 3767-3907 feet.
- 5. An application to recomplete State H No. 4 as a gas-oil dual was approved by the Commission on March 7, 1953. Subsequently the dual completion operation was completed on January 12, 1954, with the gross Eumont gas zone producing interval being 3320 to 3542 feet. On potential test the well flowed at the calculated rate of 5800 MCFGPD and was assigned a 160-acre allowable.
- 6. On January 1, 1957, Shell Oil Company completed State H No. 4-A as a replacement oil well for State H No. 4.

7. Subsequently a bridge plug was set in the 5½ inch casing at 3590 feet to plug off the oil zone in State H No. 4 and the gas zone was fracture treated with 30,000 gallons of gelled lease crude carrying 45,000 pounds of sand. On back pressure test taken May 6 to May 10, 1957, State H No. 4 produced as follows:

MC FCPD	Flowing Tubing Pressure-Psi
470	83.6
669	805
1013	782
11.83	761
2500 (estimated)	600

Galculated absolute open flow potential = 4900 MCFGPD

- 8. Shell Oil Company plans to workover the oil zone in State H No. 2 and to facilitate such work proposes to cement off the casing perforations opposite the gas zone and convert State H No. 2 to a single zone oil well. Therefore it is requested that the 160 acre gas proration unit consisting of the NE/4 of Section 13, T-21-S, R-35-E presently dedicated to State H No. 2 be combined with the 160 acre gas proration unit consisting of the SE/4 of Section 13 presently dedicated to State H No. 4 to form a 320 acre non-standard gas proration unit for State H No. 4 consisting of the E/2 of Section 13, T-21-S, R-37-E. A plat is attached hereto, showing the proposed unit, well location, off-set ownership and surrounding gas proration units. The above test data from State H No. 4 indicates this well will be able to satisfactorily produce a 320-acre allowable.
- 9. The proposed non-standard gas proration unit complies with the provisions of Rule No. 5 (b) of Order R-520 in that
 - (a) It is composed of contiguous quarter-quarter sections,
 - (b) It lies wholly within a single governmental section,
 - (c) It may reasonably be presumed to be productive of gas,
 - (d) Its length or width does not exceed 5280 feet,
- (e) And all operators owning interests within the same governmental section as the proposed unit which are not included in the unit and all operators coming interest within 1500 feet of the well to which this unit is proposed to be allocated have been notified of Shell's intent to form the unit by means of a copy of this application through certified mail. In addition, each of the said operators has been sent a request for a waiver of any objections to the formation of the said unit.
- 10. The approval of this application for a 320 acre non-standard gas proration unit will, in the opinion of the applicant, prevent waste, protect correlative rights and serve the best interest of conservation.

In view of the existence of the facts herein stated and compliance with the provisions of Rule 5 (b) of the Oil Conservation Commission Order No. R-520, Shell Oil Company requests that the Secretary of the Commission approve the above described nonstandard gas proration unit.

Respectfully submitted,

SHELL OIL COMPANY

W. L. Owen

Division Production Manager

Attachments

AFFIDAVIT

Before me, the undersigned authority, on this day personally appeared \underline{W}_{\circ} \underline{E}_{\circ} Owen, known to me to be the person whose name is subscribed to this instrument, who, after being by me duly sworn on oath, states that he is employed by or associated with Shell Oil Company in the capacity of Division Production Manager, and that the above statements are true and correct.

bactribed to before me on this the day of

Notary Public in and for Lea County, New Mexico

cc: New Mexico Oil Conservation Commission P. O. Box 2045
Hobbs, New Mexico

Certified Mail, Return Receipt Requested

cc: Amerada Petroleum Corporation P. O. Box 2040 Tulsa, Oklahoma

cc: Continental Oil Company
P. O. Box 427
Hobbs, New Mexico

cc: Sinclair Oil and Gas Company
P. O. Box 1470
Midland, Texas

cc: Drilling and Exploration Company 800 San Jacinto Building Houston 2, Texas

cc: Charm Oil Company Carper Building Artesia, New Mexico

cc: Gulf Oil Corporation Box 1290 Fort Worth, Texas