

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 9208  
ORDER NO. R-8843

APPLICATION OF HIXON DEVELOPMENT  
COMPANY FOR A GAS STORAGE WELL,  
SAN JUAN COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on October 7, 1987, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 17th day of January, 1989, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) Division Order No. R-2065, dated September 19, 1961, authorized Shell Oil Company to institute a pressure maintenance project in the Bisti-Lower Gallup Oil Pool by the injection of water into said zone in their Carson Unit Area underlying all or portions of Sections 10 through 15, and 22 through 25, Township 25 North, Range 12 West, NMPM, and all or portions of Sections 7, 17 through 20, and 30, Township 25 North, Range 11 West, NMPM, San Juan County, New Mexico. Order No. R-2065 also designated this project the "Carson Bisti-Lower Gallup Pressure Maintenance Project"; and promulgated special operating procedures therein.
- (3) The applicant in this case, Hixon Development Company, became the operator of the Carson Unit and the subject pressure maintenance project area on July 27, 1982.
- (4) At this time the applicant seeks authority to re-inject Bisti-Lower Gallup Oil Pool casinghead gas production from the Carson Unit for storage purposes back into the Bisti-Lower Gallup Oil Pool in its Carson Unit "18" Well No. 34 located 660 feet from the South line and 1976 feet from the East line (Unit O) of Section 18, Township 25 North, Range 11 West, NMPM, San Juan County, New Mexico, which has been a temporarily abandoned producing well since 1965.

(5) The subject casinghead gas is presently being flared.

(6) Essentially all of the casinghead gas injected for storage purposes will be recovered from the storage zone and will be put to beneficial use.

(7) Injection of gas is proposed to be accomplished through 2 3/8-inch tubing installed in a packer to be set within 100 feet above the uppermost perforation (the packer setting depth is a variation of the applicant's request made at the hearing), with injection into the perforated interval from approximately 4869 feet to 4978 feet; the casing-tubing annulus should be filled with an inert fluid; and a pressure gauge or approved leak-detection device should be attached to the annulus in order to determine leakage in the casing, tubing or packer.

(8) Prior to commencing injection operations, the casing in the subject well should be pressure-tested throughout the interval from the surface down to the proposed packer-setting depth, to assure the integrity of such casing.

(9) The injection well or system should be equipped with a pressure-limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 974 psi.

(10) Approval to increase the injection pressure for said well should be granted only after notice and hearing.

(11) The operator should notify the supervisor of the Aztec district office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure test in order that the same may be witnessed.

(12) The applicant should file the appropriate injection/withdrawal reports monthly with the Division.

(13) The proposed method of injection for storage purposes is mechanically feasible and is in the interest of conservation as it should result in a greater ultimate recovery of oil and beneficial use of gas from the subject pool and Unit Area, thereby preventing waste, and will not violate correlative rights.

(14) The subject application should be approved.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Hixon Development Company, is hereby authorized to inject casinghead gas produced from its Carson Bisti-Lower Gallup Pressure Maintenance Project for storage purposes, and to subsequently withdraw such gas, in the perforated interval from approximately 4869 feet to 4978 feet (which is within the vertical limits of the Bisti-Lower Gallup Oil Pool) in its Carson Unit "18" Well No. 34 located 660 feet from the South line and 1980 feet from the East line (Unit O) of Section 18, Township 25 North, Range 11 West, NMPM, San Juan County, New Mexico.

(2) Re-injection of the gas into said well shall be accomplished through 2 3/8-inch tubing installed in a packer to be set within 100 feet above the uppermost perforated interval.

PROVIDED HOWEVER THAT, the casing-tubing annulus shall be filled with an inert fluid; and a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak-detection device in order to determine leakage in the casing, tubing or packer.

PROVIDED FURTHER THAT, prior to commencing injection operations, the casing in the subject well shall be pressure-tested to assure the integrity of such casing in a manner that is satisfactory to the supervisor of the Division's district office at Aztec.

(3) The injection well or system shall be equipped with a pressure limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 974 psi.

(4) Authorization for an increase in the injection pressure shall be granted only after notice and hearing.

(5) The operator shall notify the supervisor of the Aztec district office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure test in order that the same may be witnessed.

(6) The applicant shall file monthly Division Form C-131, Monthly Gas Storage Report, covering operations of the subject gas storage project.

(7) The operator shall immediately notify the supervisor of the Aztec district office of the failure of the tubing, casing or packer in said well or the leakage of gas from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(8) The applicant shall conduct said injection operations and submit monthly reports in accordance with Rules 701, 702, 703, 704, 705, 706, 708 and 1131 of the Division Rules and Regulations.

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(9) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

*Victor L. Lyon*  
for WILLIAM J. LEMAY  
Director

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