CASE 6090: OCC TO CONSIDER THE AMERIMENT OF RULE 107 OF THE COMMISSION RULES

Lase Number 6090

Application Transcripts.

Small Exhibits



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FE 87501

LAND COMMISSIONER PHIL R. LUCERO February 2, 1978



STATE GEOLOGIST **EMERY C. ARNOLD**

DIRECTOR JOE D. RAMEY

	_
Re:	CASE NO. 6090
Mr. Kenneth Bateman White, Koch, Kelly & McCarthy	ORDER NO. R-3637
Attorneys at Law	
Post Office Box 787 Santa Fe, New Mexico	Applicant:
Daniel Fe, New Mexico	
	Oil Conservation Commission
Dear Sir:	•
Commission order recently en	pies of the above-referenced tered in the subject case.
Yours very truly,	
JOE D. RAMEY Director	
JDR/fd	
Copy of order also sent to:	
Hobbs OCC x	
Artesia OCC X	
Aztec OCCx	

Vic Lyon, Rick Tully

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

CASE NO. 6090 Order No. R-5637

IN THE MATTER OF THE HEARING CALLED BY
THE OIL CONSERVATION COMMISSION ON ITS
OWN MOTION TO CONSIDER THE AMENDMENT OF
RULE 107 OF THE COMMISSION RULES TO PROVIDE
A REQUIREMENT FOR THE DETERMINATION OF CEMENT
TOPS OUTSIDE ALL CASING STRINGS BY MEANS OF
TEMPERATURE OR MECHANICAL SURVEYS.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 30, 1977, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this <u>31st</u> day of January, 1978, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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 this case was called by the Commission as a companion case to Case No. 6089, which was to consider the amendment of Rules 701, 702, 703, 704, and 705 of the Commission Rules and Regulations.
- (3) That the proposed amendments of Rules 701 and 702 in Case No. 6089 were dismissed without prejudice by the Commission by Order No. R-5636, dated January 31, 1978, and will be reconsidered by the Commission at a later date.
- (4) That the proposed amendment of Rule 107, the subject of the instant case, should also be dismissed without prejudice, and should be reconsidered at a later date.

IT IS THEREFORE ORDERED:

- (1) That Case No. 6090 be dismissed without prejudice.
- (2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

-2-Case No. 6090 Order No. R-5637

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

PHIL R. LUCERO, Chairman

EMER: C. ARNOLD, Member

JOE D. RAMEY, Member & Secretary

SEAL



dugan production corp.

November 29, 1977

New Mexico Oil Conservation Commission Box 2088 Santa Fe, NM 87501

ATTENTION DANIEL S. NUTTER, EXAMINER

Re: Adoption of Proposed Rule C 107 (a) Case No. 6090

Dear Mr. Nutter:

In Case No. 6090 called for hearing before the New Mexico Oil Conservation Commission on November 30, 1977 we wish to state our objection to the adoption of the proposed Rule C 107 (a).

The proposed Rule C 107 (a) provides that the cement top outside all strings of casing will be determined by means of a temperature or other wireline survey whenever cement is not circulated to the surface. We feel the adoption of this blanket rule for all operators is not justified because the possible benefits it might yield will not offset the additional time and money that it will cost.

The running of these surveys will be time-consuming because more rig time will be needed to complete a well, and the operator and its personnel will need to spend additional time on location to supervise the work. Needless to say, there will be additional costs and expenses associated with the extra rig time and supervisory personnel as well as the extra expense for the additional wireline services.

There are of course situations where the locating of the cement tops is necessary, but we do not feel the adoption of this blanket rule is the answer. Rather we are of the opinion that if the cement tops need to be located, then the operator acting under a reasonable and prudent standard can make the decision to acquire the extra wireline services. This method will not estop the New Mexico Oil Conservation Commission and its representatives from requesting the operator to run the surveys if the NMOCC felt the surveys are needed in these limited situations.

For the foregoing reasons we would hope the New Mexico Oil Conservation Commission will not adopt this unnecessary and needlessly expensive blanket rule.

Respectfully submitted,

Thomas A. Dugan

President

vs

Dockets Nos. 39-77 and 1-78 are tentatively set for hearing on December 14, 1977 and January 4, 1978. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - NOVEMBER 30, 1977

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

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

CASE 6089: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the amendment of Rules 701, 702, 703, 704, and 705 of the Commission Rules governing applications for approval of injection wells and projects, well construction and operations standards, reports and records requirements, and automatic termination of authorization for abandoned wells or projects.

Please see proposed rules enclosed.

CASE 6090: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the amendment of Rule 107 of the Commission Rules to provide a requirement for the determination of cement tops outside all casing strings by means of temperature or mechanical

Please see proposed rule enclosed.

<u>CASE 6091</u>: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the amendment of Rule 405 of the Commission Rules, the adoption of a new Rule 1131, and a new Form C-131, all for the purpose of reporting gas injections and withdrawals in underground natural gas storage projects.

Please see proposed rule and amended form enclosed,

In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the reclassification of the following pressure maintenance projects as secondary recovery projects: The Amoco Baskett and Wasley Projects, and the Union Texas Baskett Project, all in Cato-San Andres Pool, Chaves County, New Mexico, The Amoco Horton Project, Milnesand-San Andres Pool, Roosevelt County, New Mexico. The Midwest Project, Nonombre-Pennsylvanian Pool, the Coastal States Flying "M" Project, Flying M-San Andres Pool, and the Mobil Vacuum Middle Penn Project, Vacuum-Middle Pennsylvanian Pool, all in Lea County, New Mexico, Also to be considered will be the amendment of the orders authorizing said projects to reflect the aforesaid reclassification,

CASE 6093: In the matter of the hearing called by the Oil Conservation Commission on its own motion to on the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the reclassification of the following pressure maintenance projects as secondary recovery projects: The Atlantic Richfield Horseshoe Gallup Unit Project, the Energy Reserves Group Horseshoe Gallup Project No. 3 and Northeast Hogback Unit Project, and the Engineering and Production Services Horseshoe Gallup Project No. 2, all in Horseshoe Gallup Oil Pool, the Engineering and Production Services Many Rocks Gallup Project No. 1, Getty Many Rocks Gallup Project No. 3, and the J. P. Woosley Many Rocks Gallup Project No. 4, all in the Many Rocks-Gallup Oil Pool; the Dugan Central Cha Cha Project and the Suburban Propane Northwest Cha Cha Unit Project, both in Cha Cha-Gallup Oil Pool; and the Shell Carson Unit Project, Bisti-Gallup Oil Pool, all in San Juan County, New Mexico. The Tenneco Lower Hospah Project, Couth Hospah-Lower Sand Oil Pool; South Upper Hospah Project, South Hospah-Upper Sand Oil Pool; and Lone Pine Dakota D Unit Project, Lone Pine Dakota D Oil Pool, all in McKinley County, New Mexico. Also to be considered will be the amendment of the orders authorizing said projects to reflect the aforesaid reclassification.

CASE 6094:

In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the repeal of Commission Order No. 67 and the amendment of Rule 406 of the Commission Rules, both of which relate to carbon dioxide gas. The repeal of said Order 67 and the amendment of Rule 406 would be for the purpose of abolishing the existing special rules for carbon dioxide exploration, development, and processing, and placing such activities under the general rules of the Commission.

RULE 107. CASING AND TUBING REQUIREMENTS

(The following paragraph will be proposed to be added to Rule 107 (a).)

The cement top outside all strings of casing shall be determined by means of a temperature survey or other wireline survey whenever cement is not circulated to the surface.

RULE 405. STORAGE GAS

With the exception of the requirement to meter and report monthly the amount of gas injected and the amount of gas withdrawn from storage in the absence of waste these rules and regulations shall not apply to gas being injected into or removed from storage. (See Rule 1131.)

I- SECONDARY RECOVERY, PRESSURE MAINTENANCE, SALT WATER DISPOSAL, AND HYDROCARBON STORAGE

RULE 701. INJECTION OF FLUIDS INTO RESERVOIRS

A. Permit for Injection Required

The injection of gas, liquefied petroleum gas, air, water, or any other medium into any reservoir for the purpose of hydrocarbon storage, maintaining leservoir pressure, secondary recovery, or the injection of water into any formation for the purpose of water disposal shall be permitted only by order of the Commission after notice and hearing, unless otherwise provided herein.

B. Method of Making Application

Application for original authority for the injection of gas, liquefied petroleum gas, air, water, or any other medium into any formation for any reason, including salt water disposal, or for the expansion of any such injection project by the completion or conversion of additional well(s) shall include the following:

- A plat showing the location of the proposed injection well(s) and the location of all other wells within a radius of two miles from said proposed injection well(s) and the formation from which said wells are producing or have produced. The plat shall also indicate the lessees, if any there be, within said two-mile radius.
- 2. A tabular summary of all wells located within one-half mile of the injection well(s) which wells penetrate the injection zone showing all casing strings, setting depths, sacks of cement used, cement tops, total depth, producing interval, well identification, and location. Applications for expansion of projects need not include the tabulation if the same is on file and no additional wells are included.
- The log of the proposed injection well(s) if same is available.
- 4. A diagrammatic sketch of the proposed injection well(s) showing all casing strings, including diameters and setting depths, quantities used and tops of cement, perforated or open hole intervals, tubing strings, including diameters and setting depths, and the type and location of packers, if any.

- 5. A diagrammatic sketch of all plugged and abandoned wells within the one-half mile radius and which have penetrated the injection zone showing all information required under (2) above plus the size and location of all plugs and the date of abandonment. Applications for expansion of projects need not include the schematics if the same are on file and no additional wells are included.
- 6. Other pertinent information including the name and depth of the zone or formation into which the injection will be made, the kind of fluid to be injected, an analysis of the formation water and water to be injected if any, any calculations of the formation fracture gradient made including data upon which such calculations were based, anticipated injection pressure and volume, and the source of the injection fluid.
- 7. The depth of any source of potable water and any water having a total dissolved solids concentration of 10,000 mg/l or lcss above the injection zone within the area set out in 2 above.

C. Salt Water Disposal Wells

The Secretary-Director of the Oil Conservation Commission shall have authority to grant an exception to the requirements of Rule 701-A for water disposal wells only, without notice and hearing, when the waters to be disposed of are mineralized to such a degree as to be unfit for domestic, stock, irrigation, or other general use, and when said waters are to be disposed of into a formation older than Triassic (Lea County only) which is non-productive of oil or gas within a radius of two miles from the proposed injection well, providing that any water occurring naturally within said disposal formation has a total dissolved solids concentration in excess of 10,000 mg/l or has a total dissolved solids concentration in excess of the fluid to be injected and that such injection will not render unfit for such use underground waters which are sources or potential sources for domestic, stock, irrigation, and/or other general use.

To obtain such administrative approval, operator shall submit in TRIPLICATE Commission Form C-108, Application to Dispose of Salt Water by Injection Into a Porous Formation, said application to be filed in accordance with Rule 701-B above. Copies of the application shall also be sent to all offset operators and to the surface owner of the land upon which the well is located.

If no objection is received within 15 days from the date of receipt of the application, and the Secretary-Director is satisfied that all of the above requirements have been complied with, and that the well is to be cased and cemented in such a manner that there will be no danger to oil, gas, or usable water reservoirs, an administrative order approving the disposal may be issued. In the event that the application is not granted administratively, it shall be set for public hearing, if the operator so requests.

The Commission may dispense with the 15-day waiting period if waivers of objection are received from all offset operators and the surface owner.

INJUCTION REST. CONSTRUCTION AND OPERATION STANDARDS RULE 702.

A. Casing and Cementing Requirements

Wells used for injection of gas, air, water, or other fluids shall be cased with safe and adequate casing or tubing so as to prevent leakage and such casing or tubing shall be so set and comented that damage will not be caused to oil, gas, or fresh water resources.

B. Tubing and Packer Requirements

Wells used for injection of gas, air, water or other fluids shall be equipped with a string of tubing set in a packer set within 100 feet of the uppermost perforations, or in the case of open-hole completions within 100 feet of the casing shoe. If the gas or fluid to be injected is corrosive, the tubing shall be protected by a non-reactive internal coating, addition of corrosion control chemicals to the injected stream, or both.

The annular space between the tubing and casing shall be equipped in such a manner as to permit the detection of the failure of the tubing or packer.

C. Injection Pressure Requirements

Wells used for injection of gas, air, water, or other fluids shall be equipped in such a manner as to limit the injection pressure. The pressure limitation shall be such as to prevent the fracturing of the strata confining the injected fluid.

D. Reporting of Leaks or Mechanical Failures

The operator of any injection project, storage project, salt water disposal well or special purpose injection well shall report the failure of the casing, tubing, or packer in any injection well, or the leakage of air, gas, water, liquid hydrocarbons or any other fluid from or around any injection well or any producing or plugged well offsetting such injection well or within such project. Such notice shall be given in accordance with the provisions of Rule 116. Such notice RULE 703. COMMENCEMENT, DISCONTINUANCE, AND ABANDONMENT OF INJECTION **OPERATIONS**

The following provisions shall apply to all injection projects, storage projects, salt water disposal wells and special purpose injection wells:

A. Notice of Commencement and Discontinuance

- Immediately upon the commencement of injection operations in any well, the operator shall notify the Commission of the injection date.
- Within 30 days after the discontinuance of injection operations in any well the operator shall notify the Commission of the date of such discontinuance and the reasons therefor.
- (3) Before any intake well shall be plugged, notice shall be served on the Commission by the owner of said well, and the same procedure shall be followed in the plugging of such well as provided for the plugging of oil and gas wells.

 Abandonment of Injection Operations

- Whenever there shall be a continuous 6 months period of non injection into any injection project, storage project, salt water disposal well, or special purpose injection well such project or well shall be considered abandoned and approval for injection shall
- (2) The Secretary-Director, may for good cause shown, administratively grant an extension or extensions of injection authority as an exception to Paragraph (1)

RULE 704. RECORDS AND REPORTS

The operator of an injection well or project for secondary recovery or pressure maintenance, gas or petroleum storage, salt water disposal, or injection of any other fluids shall keep accurate records and shall report monthly to the Compission gas or fluid volumes injected, stored,

and/or produced as required on the appropriate form listed below:

- (1) Secondary Recovery on Form C-115:
- Pressure Maintenance on a form approved by the Commission:
- (3) Salt Water Disposal on Form C-120-A;
- Gas or Liquefied Petroleum Gas Storage on Form C-131: and
- Injection of other fluids on a form approved by the Commission.

RULE 705. STORAGE WELLS

The Secretary-Director of the Oil Conservation Commission shall have authority to grant an exception to the requirements of Rule for the underground storage of liquefied petroleum gas or liquid hydrocarbons in secure caverns within massive salt beds.

Applicants shall furnish all operators within a half-mile radius of the proposed well with a copy of the application to the Commission, and applicant shall include with his application a written stipulation that all operators within a half-mile radius of the proposed well have been properly notified. The Secretary-Director of the Commission shall wait at least ten days before approving any such application, and shall approve any such application only in the absence of objection from any notified operator. In the event that an operator objects to the application the Commission shall consider the matter only after proper notice and hearing. proper notice and hearing.

In addition to the filing requirements of Rule 701 B, the applicant for approval of a storage well under this rule shall file the following:

- A. With the Secretary-Director:
 - a plugging bond in accordance with the provisions of Rule 101;
- With the appropriate district office of the Commission in
 - Form C-101, Application for Permit to Drill, Deepen, or Plug Back;
 - Form C-102, Well Location and Acreage Dedication Plat; and,
 - (3) Form C-105, Well Completion or Recompletion Report and Log.

RULE 1131.

Each operator of an underground gas storage project, including projects for the storage of liquefied natural gas or liquefied petroleum gas, shall report such operations on Form C-131. Form C-131 shall be filed in DUPLICATE (one copy with the Santa Fe office and one copy with the appropriate district office) and shall be postmarked not later than the 15th day of the first succeeding month.

Application of OCC on its own motion for the amendment of Rule 107 of the Commission Rules and Regulations. To be considered will be a requirement for the determine tion of comment tops outside casing by means of temperature or mechanical survey.

Appl of OCC

of Rule 701, 702, 703, and 705, and 1120;

To be considered will be the amendment of

Commission rules governing the application

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BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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CASE NO. 6090

Order No. R- 4637

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION ON ITS ONL MOTION TO CONSIDER THE AMENDMENT OF RULE 107 OF THE COMMISSION RULES TO PROVIDE A REQUIREMENT FOR THE DETERMINATION OF CEMBAT TOPS OUTSIDE ALL CASING STRINGS BY MEANS OF TEMPERATURE OR MECHANICAL SURVEYS.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 30, 1978 at Santa Fe, New Mexico, before Examiner Daniel 5. Nutter

NOW, on this day of , 19 , the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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.

12) That this case was called by the Commission os a componion case to Case No. 6089, which was to consider the proposed amendment of Rules 701, 702, 703, 704, and 705 of the Commission Rules and Regulations.

(3) That the proposed amendments of Rules 70: and 702 in Case No. 6089 were dismissed without prejudice by the Commission by Order No. R-5636, dated January 31, 1978, and will be reconsidered by the Commission at a leter date

(4) That the proposed amendment of Rule 107, the subject of the instant case, should also be dismissed without prejudice, and should be reconsidered at a later date!

17 15 THEREFORE ORDERED: (1) That Case No. 6090 be dismissed without prejudice.

2) Junislichin Dowe af