



Nugget  
Current injectors → Wagers "A" #3  
Wagers "C" #1  
others approved but never converted

BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

IN THE MATTER OF THE PROMULGATION AND  
ESTABLISHMENT OF FIELD RULES TO GOVERN  
OPERATIONS IN THE "D" SAND OF THE NUGGET  
FIELD, WASHINGTON COUNTY, COLORADO

CAUSE NO. 134

ORDER NO. 134-3

REPORT OF THE COMMISSION

This cause came on for hearing before the Commission on January 10, 1961, at 10:00 a.m., in Room 720, State Services Building, Denver, Colorado, after publication of Notice of Hearing as required by law, on the application of the Monsanto Chemical Company for an order approving a certain Unit Agreement covering the Nugget Unit Area described on exhibits attached to said Unit Agreement, and a water injection program for said Nugget Unit Area; and also approving certain changes in the field rules set forth in Order No. 134-1, issued by the Commission on September 3, 1959.

FINDINGS

The Commission finds as follows:

1. That due notice of the time, place and purpose of the hearing has been given in all respects as required by law.
2. That the Commission has jurisdiction over the subject matter embraced in said Notice, and of the parties interested therein, and jurisdiction to promulgate the hereinafter prescribed order.
3. That the Nugget Unit Agreement presented by the Monsanto Chemical Company is necessary to increase the ultimate recovery of oil and gas from the Nugget Unit Area, and should therefore be approved as being in the public interest for conservation.
4. That the "D" sand formation underlying the Nugget Unit Area, as set forth in said Unit Agreement, constitutes a common source of supply of oil and gas, and is composed of the following lands in Washington County, Colorado, to-wit:

Township 1 South, Range 56 West, 6th P.M.

Section 19:  $SE\frac{1}{4}$   
Section 20:  $S\frac{1}{2}$ ,  $S\frac{1}{2}NE\frac{1}{4}$   
Section 29:  $NW\frac{1}{4}$ ,  $N\frac{1}{2}NE\frac{1}{4}$ ,  $SW\frac{1}{4}NE\frac{1}{4}$   
Section 30:  $NE\frac{1}{4}$

5. That the water injection program for the "D" sand formation underlying said Nugget Unit Area, as presented by Applicant, will increase the ultimate recovery of oil and gas from said Unit Area, and should therefore be approved as being in the public interest for conservation.
6. That avoidable waste of oil and gas will be prevented by the operations proposed by Applicant, and the correlative rights of all interested parties will not

adversely affected and will be reasonably protected under such plan of operation; and that in the interest of securing the greatest ultimate recovery of oil and gas from said pool, the prevention of waste and protection of correlative rights, this application should be granted.

7. That because of the water injection program and unitized operations planned for said Nugget Unit, Rules 2, 3, 4 and 5 of this Commission's Order No. 134-1, issued September 3, 1959, should be rescinded.

8. That a diligent testing and reporting program approved by the Director should be adhered to, in order to ascertain that complete separation of the "D" and "J" sands underlying the Nugget Field is maintained.

### ORDER

NOW, THEREFORE, IT IS ORDERED that the following rules and regulations shall apply hereafter to the lands set forth in this order, in addition to other applicable rules and regulations and orders of the Commission, if any, heretofore adopted and not in conflict herewith:

Rule 1. The Nugget Unit Agreement presented by the Monsanto Chemical Company, covering the Nugget Unit Area herein defined, and providing for Unit operations of the "D" sand underlying said Nugget Unit Area, is hereby approved.

Rule 2. Said Nugget Unit Area shall be composed of the following described lands in Washington County, Colorado, to-wit:

Township 1 South, Range 56 West, 6th P.M.

Section 19: SE $\frac{1}{4}$

Section 20: S $\frac{1}{2}$ , S $\frac{1}{2}$ NE $\frac{1}{4}$

Section 29: NW $\frac{1}{4}$ , N $\frac{1}{2}$ NE $\frac{1}{4}$ , SW $\frac{1}{4}$ NE $\frac{1}{4}$

Section 30: NE $\frac{1}{4}$

Rule 3. The program presented by Applicant for the injection of water into the "D" sand of the Nugget Unit Area is hereby approved, and the Monsanto Chemical Company is authorized to inject water into said formation through the proposed input wells in such quantities as shall be reasonably determined by Applicant to best achieve the maximum recovery of oil without waste.

Rule 4. Rules 2, 3, 4 and 5 of this Commission's Order No. 134-1 are hereby rescinded.

Rule 5. A diligent testing and reporting program approved by the Director shall be adhered to, in order to ascertain that complete separation of the "D" and "J" sands underlying the Nugget Field is maintained.

IT IS FURTHER ORDERED, that the Commission expressly reserves its right, after notice and hearing, to alter, amend or repeal any and/or all of the above orders, rules and regulations.

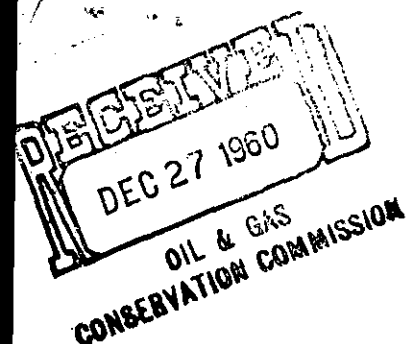
ORDERED this 24th day of January 1961.

THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

By



D. V. Rogers, Secretary



BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

Cause No. 134

IN THE MATTER OF THE APPLICATION  
OF MONSANTO CHEMICAL COMPANY, FOR  
AN ORDER CONCERNING THE NUGGET  
FIELD, WASHINGTON COUNTY, COLORADO,  
APPROVING BOTH A UNIT AGREEMENT AND  
A WATER FLOOD PROJECT IN SAID FIELD,  
AND CHANGING CERTAIN FIELD RULES.

Monsanto Chemical Company, herein called Applicant, states and  
alleges:

1. Applicant is a Delaware corporation authorized to do business  
in the State of Colorado.
2. This application concerns the common source of supply of oil  
and gas in the D Sand formation underlying the Nugget Field in Washington  
County, Colorado.
3. Applicant is an interested party in that it owns and holds  
oil and gas leasehold interests which cover, include and affect the D Sand  
formation in the Nugget Field.
4. Applicant and other operators and royalty owners have entered  
into an agreement entitled:

UNIT AGREEMENT  
NUGGET UNIT  
WASHINGTON COUNTY, COLORADO

Said agreement, herein called the Nugget Unit Agreement, was entered into  
as of the 2nd day of December, 1960. The Unit area covered by said agreement  
is entirely included within the limits of the Nugget Field established by  
this Commission by Order No. 134-1 in this cause. The Unit area is also  
described on exhibits attached to the Nugget Unit Agreement. On or before  
the date of filing this application, all of the working interest owners as  
defined in the Nugget Unit Agreement have executed said agreement. Applicant  
is informed and believes, and upon such information and belief states that  
prior to the date of the hearing on this application a sufficient number of  
royalty owners as defined in said agreement owning a sufficient portion of  
the royalty in said unit area to cause said agreement to be effective will  
have executed said agreement.

5. Applicant alleges that the conduct of operations in the Nugget Field under and pursuant to the terms and provisions of the Nugget Unit Agreement will promote conservation of oil and gas in this common source of supply and will prevent waste therein. Applicant wishes this Commission to approve said unit agreement in accordance with and for the purposes set forth in 1953 C.R.S., Secs. 100-6-16.

6. Applicant is the unit operator designated in said Nugget Unit Agreement, and makes this application on behalf of itself individually and in its capacity as unit operator on behalf of all parties to the Nugget Unit Agreement. Applicant as unit operator proposes to institute a water injection program in the development and operation of the Nugget Field. In this proceeding the Applicant also seeks approval by this Commission, pursuant to 1953 C.R.S., Sections 100-6-16, of its proposed water injection plans and operations.

7. Attached to this application and incorporated herein by this reference are the following exhibits showing the following items:

Exhibit A:

Consisting of twenty-one pages, including a plat and schedule showing the area involved, together with the well or wells, including drilling wells, dry and abandoned wells located thereon, all properly designated, and the names and addresses of owners of record within one mile of all proposed input wells.

Exhibit B:

A full description of the water injection plan for which approval is sought.

Exhibit C:

A copy of said Nugget Unit Agreement with its attached exhibits showing, among other things, the Unit area described therein.

8. The D Sand formation is the formation from which the wells in the Nugget Field are producing or have produced and is found between the approximate depths of 5,261 feet and 5,319 feet subsurface in Monsanto Chemical Company's No. 2 Barnes well, located in the SE $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 20, Township 1 South, Range 56 West, Washington County, Colorado, and also between the approxi-

mate depths of 5,264 feet and 5,320 feet subsurface in Monsanto Chemical Company's No. 12 Flessner well, located in the SE $\frac{1}{4}$  NE $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 30, Township 1 South Range 56 West, Washington County, Colorado. Said D Sand formation is the only formation which will be affected by the proposed water injection plan. Attached hereto and marked Exhibits D-1 through D-8 are the logs or applicable portions thereof of the proposed input wells. Attached hereto and marked Exhibit E is a description of the casing of the input wells. Purchased water as shown on Exhibit B is to be used for injection. The name and address of the operator of the project is that of the Applicant, Monsanto Chemical Company, 1310 Denver Club Building, Denver 2, Colorado.

9. Attached hereto and incorporated herein by this reference and marked Exhibit F is an affidavit signed by J. Murphy, Jr., on behalf of the Applicant, showing that the additional notice required in Section 403 of the rules and regulations of this Commission has been given in compliance with said Section 403.

10. By Rule 2 of Order No. 134-2, that bench of the D Sand formation known as the D-3 Sand was removed from the provisions of Order No. 134-1 insofar as said order pertained to the SE $\frac{1}{4}$  of Section 20 and the NE $\frac{1}{4}$  of Section 29, T. 1 S., R. 56 W., 6th P. M., Washington County, Colorado. Applicant states that said D-3 Sand underlying said land is not included in or affected by the Nugget Unit Agreement, nor is it affected in any way by this application.

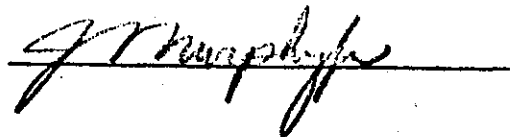
11. Order No. 134-1 of this Commission dated September 3, 1959, contains certain field rules which in the opinion of Applicant are not appropriate to unitized operations, although they may be appropriate to competitive operations in the Nugget Field. These field rules are embodied in Rules 2, 3, 4 and 5 of said Order No. 134-1. Rule No. 2 provides for production limitations by well, with certain provisions for transfer of the allowable among wells on any one lease. Rule No. 3 provides for monthly gas-oil ratio tests on each well. Rule No. 4 provides for semi-annual bottom hole pressure surveys. Rule No. 5 provides for monthly production reports by well.

12. Applicant alleges that although the foregoing field rules may be appropriate and in the interest of conservation where competitive operations exist, they are not appropriate and in the interest of conservation once the field is unitized and unit operations have been put into effect. Applicant therefore states that upon approval of the Nugget Unit Agreement and water injection program described in this application, this Commission should also by its order eliminate the aforesaid Rules Nos. 2, 3, 4 and 5 of Order No. 134-1 in order to permit efficient unit operations in the Nugget Field, which in Applicant's judgment will promote conservation of oil and gas in this common source of supply and prevent waste therein, and will aid in achieving the greatest ultimate recovery therefrom.

WHEREFORE, Applicant respectfully prays that this Commission pursuant to the applicable provisions of the Oil and Gas Conservation Act of Colorado approve the aforesaid Nugget Unit Agreement and water injection program described in this application, and upon such approval eliminate Rules 2, 3, 4 and 5 of Order No. 134-1.

MONSANTO CHEMICAL COMPANY

By

A handwritten signature in dark ink, appearing to read "J. T. Murphy", is written over a horizontal line.