

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF THE STATE OF NEW  
MEXICO FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 1016  
Order No. R-799

THE APPLICATION OF SINCLAIR OIL  
AND GAS COMPANY FOR AN ORDER  
AUTHORIZING THE DUAL COMPLETION  
OF WELLS IN THE DEVONIAN COMMON  
SOURCE OF SUPPLY AND THE PENNSYLVANIAN  
COMMON SOURCE OF SUPPLY UNDERLYING  
THE E/2 NE/4 AND THE SE/4 OF SECTION  
34, ALL OF SECTIONS 26 AND 35, TOWN-  
SHIP 15 SOUTH, RANGE 36 EAST, AND  
LOTS 1 THROUGH 8 OF SECTION 5, AND  
LOTS 1, 2, 7 AND 8 OF SECTION 6,  
TOWNSHIP 16 SOUTH, RANGE 37 EAST,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on  
February 15, 1956, at Santa Fe, New Mexico, before the Oil Con-  
servations Commission of New Mexico, hereinafter referred to as  
the "Commission".

NOW, on this 27<sup>th</sup> day of April 1956, the Commission,  
a quorum being present, having considered the testimony and exhibits  
adduced 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 although the defined limits of the Dean-  
Devonian common source of supply are the same as outlined in  
applicant's application, the defined limits of the Dean-Pennsylvanian  
common source of supply, as set forth in Commission Order R-757,  
are somewhat different than the defined limits of the Dean-Pennsyl-  
vanian common source of supply as outlined in applicant's appli-  
cation and consist of the following described area:

TOWNSHIP 15 SOUTH, RANGE 36 EAST, NMPM  
SW/4 SW/4 Section 25  
All Section 26  
E/2 NE/4 and SE/4 Section 34  
All Section 35  
NW/4 Section 36

TOWNSHIP 16 SOUTH, RANGE 37 EAST, NMPM  
Lots 1, 2, 3, 4, 5, 6, 7 & 8 of Section 5  
Lot 1 of Section 6

(3) That the recoverable reserves in the above described Dean-Pennsylvanian Pool are such that a well drilled to the Pennsylvanian formation in this pool would probably not be a profitable venture.

(4) That although some wells have been drilled to and are producing from the Dean-Pennsylvanian Pool, unless means is provided to produce the known reserves in said pool by some method other than drilling separate wells into said Pennsylvanian formation, waste will occur in that all of the known recoverable reserves probably will not be produced.

(5) That the applicant, Sinclair Oil and Gas Company, has shown that to dually complete wells in the Dean-Devonian Pool and the Dean-Pennsylvanian Pool would probably be a profitable venture, by virtue of which most of the recoverable reserves in the Pennsylvanian formation could be produced and the waste thereby averted.

(6) That the applicant has shown that a dual completion installation utilizing parallel strings of tubing, one string of tubing to each common source of supply, and a retainer-type production packer will provide adequate separation of the fluids from the two reservoirs within the casing. Applicant has further shown that this type of installation may be readily adapted to the artificial lifting of the fluids from either or both of the two reservoirs if and when that should become necessary.

(7) That adequate separation of the reservoirs in the well bore outside the casing can be accomplished by setting the production casing string at the total depth of the well bore and by cementing it from total depth to a point at least 500 feet above the top of the Pennsylvanian formation.

(8) That although there is present in any dual completion the inherent danger of communication between the zones involved, and that such communication would result in waste, the evidence submitted in support of applicant's proposal for special pool rules permitting authority for dual completions in the Dean-Pennsylvanian and the Dean-Devonian Pools indicates that there is reasonable assurance that in this particular case, any such communication can be averted, and if it should occur, that it can be detected and corrected. Further, that waste will occur in this particular case if provision is not made for the dual completion of wells in the subject pools.

(9) That provision should be made for the Secretary-Director of the Commission to have the authority to grant administrative approval for the dual completion in the Pennsylvanian and Devonian formations only of any well located within the horizontal limits of both of the subject pools or located within the horizontal limits of one of the pools and within one-half mile of the horizontal limits of the other pool as they may now or as they may hereafter be defined.

(10) That special pool rules should be prescribed governing dual completions in the subject pools, also designating the mechanical manner of completion acceptable, type and manner of tests required, and such other rules as may be necessary to insure safe completion and operation of any well so dually completed.

IT IS THEREFORE ORDERED:

1. That the application of Sinclair Oil and Gas Company for an order promulgating special pool rules for the Dean-Devonian common source of supply and the Dean-Pennsylvanian common source of supply permitting the dual completion of a well within the horizontal and the vertical limits of the subject pools, after individual approval as hereinafter provided, be and the same is hereby approved.

2. (a) That the dual completion of any well within the horizontal and vertical limits of the subject pools may be permitted only by order of the Commission after due notice and hearing, except as noted by Paragraph 2 (c) of this order.

(b) The application for such hearing shall be submitted in triplicate and shall include an exhibit showing the location of all wells in the subject pools and a diagrammatic sketch of the proposed dual completion and shall set forth all material facts on the common sources of supply involved, and the manner and method of completion proposed.

(c) The Secretary of the Commission shall have authority to grant administratively an exception to the requirements of Paragraph (a) above without notice and hearing where application for administrative approval has been filed in due form and includes an exhibit showing the location of all wells in the subject pools and a diagrammatic sketch of the proposed dual completion, and has set forth all material facts on the common sources of supply involved, and the manner and method of dual completion proposed, and

(1) applicant proposes to dually complete a well in the Dean-Devonian common source of supply and the Dean-Pennsylvanian common source of supply and the well is located within the horizontal limits of both of the pools or is located within the horizontal limits of one of the pools and within one-half mile of the horizontal limits of the other pool, and

(2) applicant proposes to complete and equip the well in such a manner that the Dean-Devonian common source of supply and the Dean-Pennsylvanian common source of supply shall be completely segregated from each other by setting the production casing string at total depth and circulating cement from total depth to a point at least 500

feet above the top of the Pennsylvanian formation, and by utilizing parallel strings of tubing, one string to each of the common sources of supply, and a permanent retainer-type production packer.

Applicants shall also furnish all operators who own leases within the horizontal limits of either or both pools a copy of the application and a diagrammatic sketch of the proposed dual completion and a plat showing the location of all wells in the subject pools. Applicant shall include with his application to the Commission a written stipulation that all such operators have been properly notified. The Secretary of the Commission shall wait at least 20 days before approving any such dual completion, and shall approve such dual completion only in the absence of objection from any such operator owning acreage in either or both of the pools. In the event an operator objects to the dual completion, the Commission shall consider the matter only after proper notice and hearing.

The Commission may waive the 20-day waiting period requirements if the applicant furnishes the Commission with the written consent to the dual completion by all of the aforesaid operators involved.

PROVIDED HOWEVER, That any well so dually completed shall be completed and thereafter produced in such a manner that there will be no commingling within the well-bore, either within or outside the casing, of gas, oil and gas, or oil produced from either or both of the separate strata.

PROVIDED FURTHER, That upon the actual dual completion of any such well, the operator shall submit to the District Office of the Commission at Hobbs, New Mexico, copies of Oil Conservation Commission Form C-103, Form C-104, and Form C-110 outlining the information required on those forms by existing Rules and Regulations, packer setting affidavit form, and two copies of the electric log of the well. Operator shall also submit in duplicate evidence indicating that the cement behind the production casing string was circulated from total depth to a point at least 500 feet above the top of the Pennsylvanian formation.

PROVIDED FURTHER, That any well so dually completed shall be equipped in such a way that reservoir pressures may be determined separately for each of the two specified strata, and further, be equipped with all necessary connections required to permit recording meters to be installed and used, at any time, as may be required by the Commission or its representatives, in order that natural gas, oil, or oil and gas from each separate stratum may be accurately measured and the gas-oil ratio thereof determined.

PROVIDED FURTHER, That the operator shall be required to make any and all tests, including segregation tests, but not excluding other tests and/or determinations at any convenient time and in such manner as deemed necessary by the Commission; the original and all subsequent tests shall be witnessed by representatives of the Commission and by representatives of offset operators,

if any there be, at their election, and the results of each test properly attested to by the operator and all witnesses, and shall be filed with the Commission within ten days after completion of such test.

PROVIDED FURTHER, That upon the actual dual completion of any such well, operator shall submit to the Commission a diagrammatic sketch of the mechanical installation which was actually used to complete and produce the seal between the strata, and a special report of production, gas-oil ratio and reservoir pressure determination of each producing zone or stratum immediately following completion.

PROVIDED FURTHER, That upon actual dual completion of any well, operator shall within 10 days commence a segregation test, and shall conduct and report the results of said test in accordance with the instructions pertaining to and a part of the Commission's "Packer Leakage Test" form. Such segregation tests shall also be conducted at six months intervals from the date of initial dual completion and at such other times as may be deemed necessary by the Commission.

IT IS FURTHER ORDERED:

That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary or convenient for the prevention of waste and/or the protection of correlative rights; upon failure of any operator to comply with any requirement of this order, after proper notice and hearing the Commission may terminate the authority granted and require, in the interests of conservation, the operator or its successors and assigns to limit its activities to regular single-zone production insofar as the well wherein the failure to comply be concerned.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*John F. Simms*  
JOHN F. SIMMS, Chairman

*E. S. Walker*  
E. S. WALKER, Member

*A. L. Porter, Jr.*  
A. L. PORTER, Jr., Member and Secretary

