GAS BUAL COMPLETION of

Casa Mo.

2055

Application, Transcript,
5 mall Exhibits, Etc.

DEFORE THE OIL COMMERVACION COMMISSION OF THE STATE OF MEN MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL COMMERVATION CHEMISSION OF MIN MIKIGO FOR THE PURPOSE OF COMMISSIONING:

> CASE No. 2058 Order No. 2-1777

APPLICATION OF ASSET OIL & GAS COMPANY FOR A SAC-OAS HEAL COMPANY ON A SEC-OAS HEAL PROTURN CLIFFS POOL AND IN THE MARIES PROGUCING INCOMPAL, SAN JUAN COUNTY, MAN MERICO.

CAMER OF THE CONSTREE OF

IT THE CONCLOSION:

This grown down on for bearing at 9 o'clott a.m. on september 21, 1989, at South 76, Nov Marine, before tentel 5. Notice, Mandace daily appointed by the Cil Consideration discussion, sion of Nov Marine, bereinafter referred to as the "Consideration," in accordance with hale 1214 of the Counterion hales and hestilation.

NOW, on this 3rd day of October, 1940, the Countering, a queen heing present, having considered the application, the evidence address, and the recommendations of the hundred. Damiel S. Matter, and being fully advised in the president,

ZEEPS:

- (1) That due public notice having been given as poquired by law, the Countesion has jurisdiction of this cause and the subject natter thereof.
- (2) That the applicant, Amber Oil & Gas Company, is the court and operator of the Hanks Well No. 12-D, located in Bait N. Sertion 7, Township 27 North, Range 9 West, MISH, San Juan County, New Mexico.
- (3) That the applicant proposes to dually complete the said Hanks Well No. 12-D in such a manner as to permit the production of gas from the Pulcher Kutz-Pictured Cliffs Pool through a string of 2 7/8-inch casing and the production of gas from the Debota Producing Interval through 2 3/8-inch tubing installed within a parallel string of 4 1/2-inch easing, comented in a common well bore.
- (4) That sufficient cement should be used to provide a 950-foot fill-up from total depth, and that sufficient cement should be used to provide a fill-up from a cement basket set below the

-2-CASE No. 2055 Order No. R-1777

base of the Pictured Cliffs formation to a point 350 feet above the shee of the 2 7/8-inch easing.

- (5) That the mechanics of the proposed dual completion are feasible and in accord with sound conservation practices, provided adequate controlising or turbolising equipment is used.
- (6) That approved of the subject application will neither cause wate nor impair correlative rights.

IT IS THEREFORE CERTED:

That the applicant, heles Oil a des Company, he and the same is hereby exhacted to deally complete its Pape Pail De. 13-0. Leanted in Unit E. Sentian T. Tompiets II Death, Reads I Vest. Death, see June County, Der Decise, is with a same of to possible the production of one from the Painter Date-Planament Cliffe Position upon the retring of 3 7/6-inch cooling will the production of one from the Debuth Producing Education of 4 1/2-inch cooling, possible installed within a parallel string of 4 1/2-inch cooling, possible in a county well bore.

PROTECT NOMETER, That control our traboliums shall be installed at 30-20ct intervals throughout the producing fountiens and to a point 100 feet above such formations.

provide a 950-foot fill-up from total depth, and that sufficient comment shall be used to provide a fill-up from a comment health seat below the base of the Pietured Cliffo foundtion to a point 350 feet above the shee of the 2 7/0-insh coming.

PROVICED FURTHER. That the applicant shall complete, epocate and produce said well in accordance with the provisions of Section V. Raio 112-A.

PROVIDED PURPLES. That the applicant shall take communication tests upon completion and annually thereafter during the Deliverability Test Period for the Saketa Sone, or as prescribed by the Secretary-Director of 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 the applicant to comply with any requirement of this order, the Commission may terminate the

M. Pertu, h.

OCE/

GOVERNOR JOHN BURROUGHS CHAIRMAN

State of New Mexico Oil Conservation Commission

LAND COMMISSIONER MURRAY E. MORGAN MEMBER



STATE GEOLOGIST

A. L. PORTER, JR.

2 .

P. O. BOX 871 SANTA PE

Mr. Jacon Kellahin Bellahin & New Box 1713 Santa Pe. New Mexico

Order No. <u>2006</u>

Applicant:

Atten Otl & One Commen

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. PORTER, Jr., Secretary-Director

Carbon copy of order also sent to:

Hobbs OCC X
Artesia OCC
Aztec OCC X
Other

COSL 2055 MPANY DG.

AZTEC OIL & GAS COMPANY

920 MERCANTILE SECURITIES BLDG.
DALLAS 1, TEXAS

LAND DEPARTMENT
H. L. SNIDER, .*R., MANAGER
KENNETH A. SWANSON, ATTORNEY

July 19, 1960 1880 C.L. 87 N. 1 35

REGISTERED MAIL

Mr. A. L. Porter, Secretary-Director New Mexico Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico

> Re: Application of Aztec Oil & Gas Company for Multiple Completion Hearing Relating to Hanks #12-D Well, San Juan County, New Mexico

Dear Sir:

Enclosed, in triplicate, is aziec Oil & Cas Company's Application for Dual Completion, as required by Rule 112-A IV, for the purpose of approval of completion of the captioned well in the Pictured Cliffs and Dakota formations. It is expected that both formations will be productive of gas. The completion technique for which approval is sought will employ the setting of $\frac{1}{42}$ casing in the Dakota formation and 2-3/8 tubing inside such casing for the production of Dakota gas. The Pictured Cliffs gas will be produced from a parallel string of 2-7/8 casing set, cemented and perforated in the Pictured Cliffs formation, having been run in the well bore outside such $\frac{1}{42}$ casing.

It is respectfully requested that this application be set for hearing at an early date.

Yours very truly,

Vermeth a. Swamon

KAS/et Enclosures

DOCKET: EXAMINER HEARING, WEDNESDAY, SEPTEMBER 21, 1960

The following cases will be heard before Daniel S. Nutter, Examiner, or Oliver E. Payne, Attorney, as Alternate Examiner:

* Case Nos. 2083 through 2089 will not be heard before 1 p.m.

CASE 2055: (Continued)

Application of Aztec Oil & Gas Company for a gas-gas dual completion utilizing two strings of casing. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Hanks Well No. 12-D, located in Unit H, Section 7, Township 27 North, Range 9 West, San Juan County, New Mexico, in such a manner as to permit the production of gas from the Fulcher Kutz-Pictured Cliffs Pool and the production of gas from the Dakota Producing Interval through parallel strings of 2 7/8-inch and 4½-inch casing cemented in a common well bore. Applicant proposes to install 2 3/6-inch tubing to produce the Dakota gas.

NEW CASES

CASE 2073:

Application of Aztec Oil & Gas Company for a gas-gas dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Hanks Well No. 18-D, located in Unit B, Section 5, Township 27 North, Range 9 West, San Juan County, New Mexico, in such a manner as to permit the production of gas from the Fulcher Kutz-Pictured Cliffs Pool and the production of gas from the Dakota Producing Interval through parallel strings of 2 7/8-inch and 4½-inch casing cemented in a common well bore. Applicant also proposes to install 2 3/8-inch tubing to produce the Dakota gas.

CASE 2074:

Application of Aztec Oil & Gas Company for a gas-gas dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Hanks Well No. 16-D, located in Unit K, Section 6, Township 27 North, Range 9 West, San Juan County, New Mexico, in such a manner as to permit the production of gas from the Fulcher Kutz-Pictured Cliffs Pool and the production of gas from the Dakota Producing Interval through parallel strings of 2 7/8-inch and 4½-inch casing cemented in a common well bore. Applicant also proposes to install 2 3/8-inch tubing to produce the Dakota gas.

Docket No. 27-60

CASE 2075;

Application of Aztec Oil & Gas Company for a gas-gas dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Hanks Well No. 15-D, located in Unit B, Section 6, Township 27 North, Range 9 West. San Juan County, New Mexico, in such a manner as to permit the production of gas from the Fulcher Kutz-Pictured Cliffs Pool and the production of gas from the Dakota Producing Interval through parallel strings of 2 7/8-inch and 4½-inch casing cemented in a common well bore. Applicant also proposes to install 2 3/8-inch tubing to produce the Dakota gas.

CASE 2076:

Application of Aztec Oil & Gas Company for a gas-gas dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Hare Well No. 15-D located in Unit D, Section 10, Township 29 North, Range 10 West, San Juan County, New Mexico, in such a manner as to permit the production of gas from the Aztec-Pictured Cliffs Pool and the production of gas from the Dakota Producing Interval through parallel strings of 2 7/8-inch and 4½-inch cemented in a common well bore. Applicant also proposes to install 2 3/8-inch tubing to produce the Dakota gas.

CASE 2077:

Application of El Paso Natural Gas Company and Sinclair Oil & Gas Company for two non-standard gas proration units. Applicants, in the above-styled cause, seek an order establishing two 191-acre non-standard gas proration units in the South Blanco-Pictured Cliffs Gas Pool, Rio Ariiba County, New Mexico, one comprising the NE/4 and lots 1 and 2 of Section 18, the other comprising the SE/4 and lots 3 and 4 of said Section 18, both in Township 24 North, Range 3 West. Said units are to be dedicated respectively to the Tonkin Federal Well No. 3, located 1470 feet from the North line and 1750 feet from the East line of said Section 18 and to the Tonkin Federal Well No. 4, located 1500 feet from the South line and 990 feet from the East line of said Section 18.

CASE 2078:

Application of Chambers & Kennedy for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Monterey State Well No.2, Unit D, Section 32, Township 18 South, Range 31 East, Eddy County, New Mexico, in such a manner as to permit the production of oil from an undesignated Yates oil pool and the production of oil from the North Shugard Queen-Grayburg Pool through parallel strings of 1½-inch and 2 3/8-inch tubing respectively.

CASE 2079:

Application of Socony Mobil Oil Company for a "slim-hole" oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its E.O. Carson Well No. 23, located 760 feet from the South line and

Docket No. 27-60

860 feet from the West line of Section 28, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Paddock Pool and the production of oil from the Wantz-Abo Pool using parallel stings of 2/7/8-inch tubing cemented in a common well bore.

CASE 2080:

Application of W. H. Swearingen for an amendment of Order No. R-1748. Applicant, in the above-styled cause, seeks an amendment of Order No. R-1748 to include the SE/4 NW/4 of Section 21 with the remainder of the N/2 of said Section 21, both in Township 18 South, Range 26 East, Eddy County, New Mexico, to form a standard 320-acre gas unit in the Atoka-Pennsylvanian Gas Pool Applicant further seeks a determination of the well costs which are to be paid by the parties.

CASE 2081:

Application of Phillips Petroleum Company and Phillips Chemical Company for permission to commingle the production from three separate leases. Applicant, in the above-styled cause, seeks permission to commingle the production from the Vacuum Pool from all wells on the following-described portions of three State leases:

State Lease No. B-2073, SE/4 NE/4 of Section 19

State Lease No. B-2388, NW/4 SE/4 of Section 20

State Lease No. B-1501, NE/4 NW/4 of Section 29

all in Township 17 South, Range 35 East, Lea County, New Mexico.

CASE 2082:

Application of Pan American Petroleum Corporation for offlease storage of oil. Applicant, in the above-styled cause, seeks an order authorizing it to store the Empire-Abo Pool production from its Malco "N" Lease (NW/4 and N/2 SW/4 of Section 15) in a separate tank battery to be located on its State "BR" Lease (NE/4 NE/4 of Section 16), both in Township 18 South, Range 27 East, Eddy County, New Mexico.

The following cases will not be heard before 1 p.m. on September 21, 1960.

CASE 2083:

Application of Gulf Oil Corporation for a 160-acre non-standard gas provation unit and for an order force-pooling the mineral interests therein. Applicant, in the above-styled cause, seeks an order force-pooling all mineral interests within the vertical limits of the Tubb Gas Pool in a 160-acre Docket No. 27-60

non-standard gas proration unit consisting of the W/2 E/2 of Section 14, Township 21 South, Range 37 East, Lea County, New Mexico, including the following non-consenting interest owners. J. M. Newton, Ronald J. Byers, Robert E. Byers, and Constance E. Byers. Said unit is to be dedicated to the Naomi Keenum Well No. 2, located 660 feet from the South line and 1980 feet from the East line of said Section 14.

CASE 2084:

Application of Gulf Oil Corporation for permission to commingle the production from several separate pools and for permission to install two automatic custody transfer systems. Applicant, in the above-styled cause, seeks permission to commingle the production from the Brunson-Ellenburger Pool with production from the Hare Pool, and to commingle the production from the Terry-Blinebry Pool with the production from the North Paddock Pool, on its Harry Leonard "F" Lease, consisting of the E/2 of Section 2, Township 21 South, Range 37 East, Lea County, New Mexico. Applicant further seeks permission to install two automatic custody transfer systems to handle the aforesaid commingled production.

CASE 2085:

Application of Gulf Oil Corporation for permission to commingle the production from several separate pools and for permission to install two automatic custody transfer systems. Applicant, in the above-styled cause, seeks permission to commingle the production from the Brunson-Ellenburger Pool with production from the Hare Pool, and to commingle the production from the Wantz-Abo Pool, Paddock Pool, Penrose-Skelly Pool and Drinkard Pool with the gas condensate production from the Tubb Gas Pool and the Blinebry Gas Pool, from all wells on its Eunice King Lease consisting of the N/2 of Section 28, Township 21 South, Range 37 East, Lea County, New Mexico. Applicant further seeks permission to install two automatic custody transfer systems to handle the aforesaid commingled production.

CASE 2086:

Application of Gulf Oil Corporation for an automatic custody transfer system. Applicant, in the above-styled cause, seeks an order authorizing the installation of an automatic custody transfer system to handle the Gladiola (Devonian) Pool production from all wells presently completed or hereafter drilled on the M. M. Harris Lease comprising the NW/4 of Section 8, Township 12 South, Range 38 East, Lea County, New Mexico.

CASE 2087:

Application of Gulf Oil Corporation for an automatic custody transfer system. Applicant, in the above-styled cause seeks an order authorizing the installation of an automatic custody transfer system to handle the Gladiola (Devonian) Pool production from all wells presently completed or hereafter drilled

Docket No. 27-60 -5-

on the Lea-State "AV" Lease comprising the NW/4 of Section 19, Township 12 South, Range 38 East, Lea County, New Mexico.

CASE 2088:

Application of Tennessee Gas Transmission Company for an amendment of Order No. R-1755. Applicant, in the above-styled cause, seeks an order amending Order No. R-1755 to expressly designate the applicant as operator of the unit pooled in said order with all powers incidental to the proper operation of the unit including the power and authority to market the production from the unit well.

CASE 2089:

Application of Val R. Reese & Associates, Inc. for the promulgation of special rules and regulations governing the Escrito-Gallup Oil Pool. Applicant, in the above-styled cause, seeks an order promulgating special rules and regulations governing the drilling, spacing and production of oil and gas wells in the Escrito-Gallup Oil Pool, Rio Arriba Count, New Mexico and further, to extend said pool to include all of Section 25, Township 25 North, Range 7 West.

Cont to 9/21

AZTEC OIL SECURITIES BLDG.

1960 AUG PALLAS HTEXAS 14

LAND DEPARTMENT H. L. SNIDER, JR., MANAGER KENNETH A. SWANSON, ATTORNEY August 19, 1960

Mr. A. L. Porter, Secretary-Director New Mexico Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico

> Re: Case No. 2055, Application for Dual Completion, Aztec-Hanks #12-D Well

Dear Mr. Porter:

The captioned Case has been set for hearing before an examiner on August 24. We anticipate filing with your office several more applications of a similar nature early next week.

If possible, we would prefer having all applications considered the same day and, therefore, request that Case No. 2055, Application for Dua: Completion Approval, Aztec-Hanks #12-D, be postponed and reset for hearing along with the applications to be filed next week.

Should you know the date of the next Examiner Hearing following that of August 24, I would appreciate having such information.

Thank you for your consideration of this request.

Yours very truly,

Hermell a Swamm

KAS/et

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DOCKET: EXAMINER HEARING AUGUST 24. 1960

Oil Conservation Commission - 9 a.m., Mabry Hall, State Capitol, Santa Fe

The following cases will be heard before Daniel S. Nutter, Examiner, or Oliver E. Payne, Attorney, as alternate Examiner:

CASE 2053:

Application of Continental Oil Company for a triple completion utilizing three strings of casing. Applicant, in the above-styled cause, seeks an order authorizing it to triple complete its Jicarilla 22-22 Well No. 1, located in the NW/4 SE/4 of Section 22, Township 25 North, Range 4 West, Rio Arriba County, New Mexico, in such a manner as to permit the production of oil from the Gallup formation, the production of oil from the Greenhorn formation and the production of oil from the Dakota formation through parallel strings of 4½-inch, 2 7/8-inch, and 4½-inch casing respectively, cemented in a common well bore. Applicant proposes to install tubing to the Gallup and Dakota formations.

CASE 2054:

Application of Continental Oil Company for a triple completion utilizing three strings of casing. Applicant, in the above-styled cause, seeks an order authorizing it to triple complete its Jicarilla 28-27 Well No. 3, located in the NW/4 SE/4 of Section 27, Township 25 North, Range 4 West, Rio Arriba County, New Mexico, in such a manner as to permit the production of oil from the Gallup formation, the production of oil from the Greenhorn formation and the production of oil from the Dakota formation through parallel strings of 4½-inch, 2 7/8-inch, and 4½-inch casing respectively, cemented in a common well bore. Applicant proposes to install tubing to the Gallup and Dakota formations.

-2--Docket No. 24-60

CASE 2056:

Application of Gulf Oil Corporation for permission to commingle the production from all wells on several leases in Townships 21 and 22 South, Range 36 East, Lea County, New Mexico, and for approval of two automatic custody transfer facilities to handle said commingled production from the Arrowhead Pool, Eumont Pool, Eunice-Monument Pool, South Eunice Pool and Jalmat Pool, all in Lea County, New Mexico.

CASE 2057:

Application of Kay Kimbell for an order force-pooling all interests in a 320-acre standard gas unit in the Dakota Producing Interval. Applicant, in the above-styled cause, seeks an order force-pooling all mineral interests in the Dakota Producing Interval in a 320-acre standard gas unit consisting of the W/2 of Section 22, Township 29 North, Range 11 West, San Juan County, New Mexico.

CASE 2058:

Application of Anderson-Prichard Oil Corporation for a triple completion and for a 181-acre non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order authorizing the triple completion of its Western-Federal Well No. 1, located 330 feet from the North and West lines of Section 5, Township 23 South, Range 38 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Blinebry Pool, the production of gas from the Tubb Gas Pool and the production of oil from the Drinkard Pool through parallel strings of 2 3/8-inch tubing, 2 1/16-inch tubing, and 2 3/8-inch tubing respectively. Applicant, further seeks the establishment of a 181-acre non-standard gas proration unit in the Tubb Gas Pool consisting of Lots 1, 2, 3, and 4 of said Section 5, to be dedicated to the said Western-Federal Well No. 1.

-3-Docket No. 24-60

CASE 2060:

Application of Drilling and Exploration Company, Inc., for approval of a unit agreement. Applicant, in the above-styled cause seeks approval of its Mescalero Unit Agreement, which unit is to emprace approximately 4829 acres of Federal and State land in Townships 18 and 19 South, Ranges 33 and 34 East, Lea County, New Mexico.

CASE 2061:

Application of Ralph Lowe for approval of a unit agreement. Applicant, in the above-styled cause, seeks approval of its Northeast Maljamar Unit Agreement, which unit is to embrace approximately 800 acres in Townships 16 and 17 South, Range 33 East, Lea County, New Mexico.

CASE 2040:

(Continued)

Application of Neville G. Penrose, Inc., for an order authorizing the dual completion of its Grizzel Well No. 1, located in Unit G, Section 5, Township 22 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of gas from the Tubb Gas Pool and the production of oil from the Drinkard Pool through the casing-tubing annulus and 2 3/8-inch tubing respectively.

SANTA FE, NEW MEXICO

	Undesignated I	Dakota County	San Juan	Date July 8, 1960	
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Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest not request for hearing is received by the Santa Fe office, the application will then be processed.

producing zones, then separate application for approval of the same should be filed simultaneously with this application.

AZTEC CEL AND GAS COMPARY Heaks well # 12-D Application for dual completion

EXHIBIT "A"

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Exhibit "B"

BEFORE THE OIL CONSERVATION COMMISSION MABRY HALL Santa Fe, New Mexico August 24, 1960

IN THE MATTER OF:

Application of Aztec Oil & Gas Company for a gasgas dual completion utilizing two strings of casing. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Hanks Well No. 12-D, located in Unit H, Section 7, Township 27 North, Range 9 West, San Juan County, New Mexico, in such a manner as to permit the production of gas from the Fulcher Kutz-Rictured Cliffs Pool and the production of gas from the Dakota Producing Interval through parallel strings of 2 7/8 inch) and 4½ inch casing cemented in a common well bore. Applicant proposes to install 2 3/8 inch tubing to produce the Dakota gas.

Case 2055

BEFORE:

Daniel Nutter

TRANSCRIPT OF HEARING

MR. NUTTER: We will go back now and call Case 2055.

MR. PAYNE: The applicant has asked that this case be continued to the second examiner hearing in September which will be September 21st.

MR. NUTTER: Case No. 2055 will be continued to September the 21st before the same examiner.



ALBUQUERQUE, NEW MEXICO

STATE OF NEW MEXICO COUNTY OF BERNALILLO)

I, LEWELLYN NELSON, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing was reported by me in Stenotype, and that the same was reduced to typewritten transcript under my personal supervision and contains a true and correct record of said proceedings, to the best of my knowledge, skill and ability.

DATED this 4th day of September, 1960, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Searly 2 Relene NOTARY PUBLIC

My Commission Expires:

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case to 26 heard by me on 19. Examines New Mexico Oil Conservation Commission



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NEW MEXICO OIL CONSERVATION COMMISSION

Examiner Hearing - Daniel S. Nutter

Santa Fe , NEW MEXICO

REGISTER

September 21, 1960 T	ME: 9 a.m.
REPRESENTING:	LOCATION:
EPN6	Cl Paso
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NEW	MEXICO	OIL	CONSERVATION	COMMISSION

Examiner Hearing - Daniel S. Mutter

Santa Re , NEW MEXICO

REGISTER

HEARING DATE September 21. 1960

NAME:

REPRESENTING:

LOCATION:

C. C. Loveless, Vr. Set

Joan Kildin Kildin 1700

Rosell

Hobbert

Jonie C. Smith

S. L. Flors hing Dorfman Ord. Co. Dellas, Dec.

BEFORE THE OIL CONSERVATION COMMISSION September 21, 1960

Examiner Hearing

IN THE MATTER OF:

Application of Astec Oil & Gas Company for a gas-gas dual completion utilizing two strings of easing. Applicant, in the above-styled cause, seeks an order authorising the dual completion of its Hanks Well No. 12-D, located in Unit H, Section 7, Township 27 North, Range 9 West, San Juan County, New Mexico. In such a) manner as to permit the production of gas from the Fulcher Kuts-Pictured Cliffs Poel and the production of gas from the Dakota Producing Interval through parallel strings of 2 7/8inch and 12-inch casing cemented in a common well bore. Applicant proposes to install 2 3/8-inch tubing to produce the Dakota gas.

CASE NO. 2055

IN THE MATTER OF:

Application of Astec Oil & Gas Company for a gas-gas dual completion. Applicant, in the hool above-styled cause, seeks an order authorising the dual completion of its Hanks Well No. 18-D, located in Unit B, Section 5, Township 27 North, Range 9 West, San Juan County, New Mexico, in such a manner as to permit the production of gas from the Fulcher Kuts-Pictured Cliffs Pool and the production of gas from the Dakota Producing Interval through parallel strings of 2 7/8-inch and 43-inch casing cemented in a common well bore. Applicant also proposes to install 2 3/8-inch tubing to produce the Dakota gas.

CASE NO. 2073

IN THE MATTER OF:

Application of Aztec Oil & Gas Company for a gas-gas dual completion. Applicant, in the above-styled cause, seeks an order authorizing



the dual completion of its Hanks Well No. 16-D. located in Unit K, Section 6, Township 27 North, Range 9 West, San Juan County, New Mexico, in such a manner as to permit the production of gas from the Fulcher Kuts-Pictured Cliffs Pool and the production of gas from the Daketa Producing Interval through parallel strings of gas from the Dakota Producing Interval through parallel strings of 2 7/8-inch and /2-inch casing cemented in a common well bore. Applicant also proposes to install 2 3/8-inch tubing to produce the Daketa gas.

CASE NO. 2074

IN THE MATTER OF:

Application of Astec Oil & Gas Company for a gasgas dual completion. Applicant, in the abovestyled cause, seeks an order authorising the dual completion of its Hanks Well No. 15-D, located in Unit B, Section 6, Township 27 North, Range 9 West,) San Juan County, New Mexico, in such a manner as to) permit the production of gas from the Fulcher Kuts-) Pictured Cliffs Pool through parallel strings of 2 7/8-inch and 12-inch casing cemented in a common well bore. Applicant also proposes to install a 2 3/8-inch tubing to produce the Dakota gas.

CASE NO. 2075

IN THE MATTER OF:

Application of Astec Oil & Gas Company for a gasgas dual completion. Applicant, in the abovestyled cause, seeks an order authorising the dual completion of its Hare Well No. 15-D located in Unit D, Section 10, Township 29 North, Range 10 West, San Juan County, New Mexico, in such a manner) as to permit the production of gas from the Aztec-) Pictured Cliffs Pool and the production of gas from) the Dakota Producing Interval through parallel strings of 2 7/8-inch and 12-inch casing cemented in a common well bore. Applicant also proposes to install 2 3/8-inch tubing to produce the Dakota

2076

BEFORE:

Daniel S. Nutter, Examiner Oliver E. Payne



TRANSCRIPT OF PROCEEDINGS

MR. NUTTER: The hearing will come to order.

MR. PAYNE: Case 2055. Application of Astec Oil & Gas Company for a gas-gas dual completion utilizing two strings of casing.

MR. WHITE: Charles White of Gilbert, White and Gilbert, appearing as local counsel for the Astec Oil & Gas Company. We have with us Mr. Kenneth Swanson, the attorney out of Dallas, who will present the testimony. And if the Examiner please, may the record show the same appearance in Cases 2073 through 2076.

MR. NUTTER: Do you anticipate consolidating for the purpose of the hearing?

MR. WHITE: We will also call cases 2073 and 2074.

MR. NUTTER: All these cases are for dual completion, and the appearances are the same as in the first.

MR. SWANSON: We have one witness to permit testimony for Aztec is all these cases, he is Mr. Elliot Stevens.

(Witness sworn.)

ELLIOT STEVENS

called as a witness, having been previously duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. SWANSON:

Mr. Stevens, will you state by whom you are employed and your position with the company?



- District Engineer with the Aztec Oil & Gas Company.
- Have you previously testified before this Commission?
- Yes, I have.
- Do you wish to have the witness further qualified? MR. NUTTER: No. How is your name spelled?
- S-t-e-v-e-n-s. MR. NUTTER: Your initials, please?
- L. M.
- (By Mr. Swanson) These five cases are involved with applications for approval of dual completions for the Fulcher Lutz-Pictured Cliffs and for the Fulcher Kutz-Pictured Cliffs, Aztec or South Blanco Pools. The completion procedures requirements for all cases are similar, we believe they are feasible, they will effect considerable savings.

Mr. Stevens, if you will please outline in general the practice that we plan to follow in completing these wells?

We propose to set about 300 feet of 13 3/8-inch service casing and drill out from under that with 12 1/h-inch hole, continue with that size hole to about 100 feet below the base of the Pictured Cliffs with holes reduced to 7 7/8-inch hole and drilled through the Dakota formation. 4 1/2-inch casing will be run through the Dakota formation with a DV end 4 1/2 space about 50 feet below the Pictured Cliffs then this casing is mounted on the mandrel, then 2 7/8-inch is run along side the 4 1/2-inch and run through the Pictured Cliffs down to around 2500 feet. We then



cement the 4 1/2-inch with about 200 sacks of cement and 100 sacks of neat cement which gives us fill of about 950 feet. After waiting twelve hours on the first state of the cement job we then cement the 2 7/8-inch casing and the job is timed so that the first cement that leaves the bottom of the 2 7/8 and could insure the arrival at the shoe of the level of cement which is being displaced off the DT Tool in the 1/2. We displace 100 sacks through the DV Tool and 100 sacks through the 2 7/8 which gives us 200 sacks of neat cement and gives us about 350 feet. We then wait fortyeight hours on the cement and then perforate the 2 7/8-inch casing with a oriented gun with four jets per foot. After perforating we pressure up on the 4 1/2 to be sure there are no leaks and then if everything is in order we perforate the Dakota formation with four jets per foot. The Dakota is fracked with 2,000 gallons of water, 80,000 pounds of sand, tubing is run and swabbed in. We then frack the Picture with 1400 gallons of water and 60,000 pounds of sand.

The result of this type of completion procedure would be that you have the casing landing below the proceeding interval in each case and have cement fill up raising from 900 feet approximately to 300 feet above the top of the formation?

That is correct.

Q In your opinion you effect complete separation of the formation?

Yes, sir.



Is it anticipated that a savings in cost will be obtained from this proceeding?

It is more economical, we would save about \$7500.00 over single completions and about v3500.00 over a dual completion in the regular manner.

This will conclude our testimony in the cases. MR. NUTTER: Any questions of Mr. Stevens?

BY MR. MUTTER:

- Mr. Stevens, you stated that you would have a 950 feet fill up on the cement job in the 4 1/2?
 - Yes, sir.
- Where will all this cement be in relation to the bottom of the Dakota?
- That brings it up to well into the lower bank of this perforation shale, the lamus, lower mancos shale.
- Taking one well as typical, the Hanks 18-D, you expect your perforations would be 7500 to 7625, total depth would be. New is the 4 1/2 set at total depth?
 - Yes, sir.
- So your total depth would be approximately 7730, you would have 950 fill up?
 - Yes, sir.
- Which would be approximately 6780 feet, be the top of the cement, assuming the Dakota perforation would be 7500 feet, how many feet would be of the uppermost perforation?



About 700 feet.

- Now, where will the bettom of the cement be that is Q displaced through the DV Tool?
- They will go to the shoe of the h 1/2, right to the bottom. We run an automatic fill up collar and a guide shoe usually.
- And you will have a continuous cement sheath then from below the DV Tool to a point --
 - You are speaking of the DV Tool?
 - Yes, sir.
- The cement will go approximately one joint below the DV Tool, we set a cement basket one joint.
 - One joint below?
 - Yes, sir.
- You will have a continuous cement sheath from that backet to approximately 350 feet above the shoe of the 2 7/8?
 - Yes, sir.
 - Is there any Mesa Verde production is this area?
 - No, sir, none at all.
 - What about centralizers, Mr. Stevens?
 - We run usually three centralizers through the Dakota section and one centralizer below the DV Tool on the 4 1/2. We can't run any below, it interferes of the running of 2 7/8 inch.
 - No centralizer on the 2 7/8?
 - None run on it.

You are not using centralisers on turbolisers then in the upper section of the pay?

No. sir.

MR. SWANSON: Does the Commission feel that is advisable in dual cases?

MR. NUTTER: Yes, sir. In many instances prior to this application the Commission has required centralizers or turbolisers throughout the pay, usually one centralizer or turbolizer on each joint of pipe throughout the pay and three joints above the pay.

MR. SWANSON: I am sure we will be glad to comply with any such instructions from the Commission.

- (By Mr. Nutter) What type of oriented gun does Astec propose to use?
 - Lane wells or Schlumberter.
- Radio-activity that determines the orientation. And all of these dual completions are for the Pictured Cliffs and the Dakota formation, is that correct?
 - That is correct.
- What average pressure do you expect in the Pictured formation?
 - Bottom hole will be around five or six hundred pounds.
 - How about the Dakota? Q
 - The Dakota will average about 2300 pounds bottom hole

pressure

What is the possibility of having oil in the Dakota in Q that area?

There will be oil, I am sure, in the Dakota. All the rest of our Dakota wells do have oil in them. It is a gas distillan rather than crude.

If this develops in the oil area, would it be possible to efficiently lift the oil from the Dakota with this type of installation, if that would become necessary?

Yes, it would.

MR. NUTTER: Any further questions of Mr. Stevens? Mr. Payne.

BY MR. PAYNE:

Do you anticipate any corrosion problems in either one of these?

No, sir, we anticipate none.

MR. NUTTER: Any further questions of Mr. Stevens? You may be excused.

(Witness excused.)

MR. NUTTER: Do you have any further testimony?

MR. SWANSON: No, sir.

MR. NUTTER: Does anyone have anything in Cases Numbers 2055, 2073, 2074, 2075 or 2076? If not, we will take these cases under advisement and call Case 2077.



STATE OF NEW MEXICO COUNTY OF BERNALILLO

of my knowledge, skill and ability.

88

I, LEW NELSON, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached transcript of proceedings before the Oil Conservation Commission was reported by me in stanctype and reduce to typewritten transcript by me and/or under my personal super-

vision and that the same is a true and correct record to the best

Witness my hand and seal this the 28 day of September, 1960, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

My Commission Expires: June 14, 1964

> I do hereby certify that the foregoing in a complete record of the proceedings in the Examiner hearing of Case No. 2055 2073 heard by ma on 250. 2016

Merico Oil Conservation Commission



INDEX

ELLIOT STEVENS

By Mr. Swanson

By Mr. Hutter

DEARNLEY-MEIER REPORTING SERVICE, Inc.

ALBUQUERQUE, NEW MEXICO