Of Astronomy Coo

DC-226 Grandethus 8/18/55

August 29, 1955

APPLICATION FOR DUAL GAS COMPLETION OF PACIFIC MORTHWEST'S INDIAN "H", WELL NO. 1, LOCATED IN SECTION 15, T2GH-R3W, RIO ARRIBA COUNTY, NEW NEXTCO

Margar Lada Ma Lada Lada Mar

Oil and Gas Conservation Commission State of New Mexico P. O. Box 871 Santa Fe. New Mexico

Attention: Mr. W. B. Macey

Gentlemen:

In accordance with your request of August 8, 1955, that we furnish you a resume of all work done on Pacific Northwest's Indian "H", Well No. 1, prior to your issuing a formal order approving the dual completion, the following information is submitted:

Dual completion operations on the well between the Pictured Cliffs and Mesaverde formations were conducted in the following order:

- (1) The open hole Point Lookout section of the Mesaverde was fractured.
- (2) A bridge plug was set at 5970 and the Menefee section of the Mesaverde was perforated from 5812 to 5824 feet and from 5914 to 5968 feet and fractured.
- (3) A bridge plug was set at 5750 feet and the well was perforated from 3934 to 3935 feet and squeezed.
- (4) The well was then perforated at 3790 and cemented, with the top of the cement outside the 52 inch casing indicated by a temperature survey at 3410 feet.
- (6) The well was cleaned out to total depth of 5069 feet and a Baker Model "B" production packer was set at 5780 feet with the tubing side-door choke at 3944 feet.

AFFLICATION FOR DUAL GAS COMPLETION OF PACIFIC NORTHWEST'S INDIAN "H", WELL NG. 1, LOCATED IN SECTION 15, T28N-R3W, RIO ARRIBA COUNTY, NEW MEXICO

The street was seen

Oil and Oms Conservation Commission State of New Mexico P. O. Box 671 Santa Fe, New Mexico

Attention: Mr. W. B. Macey

Centlemen:

In secondance with your request of August 3, 1955, that we firmish you a resume of all work done on Pacific Morthwest's Indian "H", Well No. 1, prior to your issuing a formal order approving the dual completion, the following information is submitted:

Dual completion operations on the well between the Pictured Cliffs and Mesaverde formations were conducted in the following order:

- (1) The open hole Point Lookout section of the Messaverde was fractured.
- (2) A bridge plug was set at 5970 and the Mensfee section of the Measwerds was perforated from 5612 to 5624 feet and from 5914 to 5908 feet and fractured.
- (3) A bridge plug was set at 5750 feet and the well was perforated from 3934 to 3935 feet and squeezed.
- (4) The well was then perforated at 3790 and cemented, with the top of the cement outside the 5g inch casing indifference by a temperature survey at 3410 feet.
- (5) The Pictured Cliffs section was perforated from 3810 tolk as 3920 feet and sand-oil fractured.
- (6) The well was cleaned out to total depth of 6069 feet and a Baker Model 1D production packer was set at 5780 feet with the tubing side-door choic at 3944 feet.

The three hour open flow potential for the well on the Meseverde tubing completion was 2042 MCF per day taken August 26, 1955, and on the Pictured Cliffs annulus completion was 415 MCF per day taken August 26, 1955. Attached for your information is a diagramatic sketch of the dual with pertinent data as completed. Verbal approval to proceed with dual completion operations on this well was received from Mr. McGrath of the U. S. Geological Survey on August 10, 1955.

If any additional information is needed on this well before a formal order approving the dual completion can be issued, please notify us.

Yours very truly,

W. B. JOHNSTON

W. R. Johnston, Manager Production Operations

LOT; bh Attachment

cc: U. S. Geological Survey Farmington, New Mexico

> Oil Conservation Commission Aztec, New Mexico



The three hour open flow potential for the well on the Messverde tabling completion was 2042 MCF per day taken August 25, 1955, and on the Pictured Cliffs annulus completion was 415 MCF per day taken August 25, 1955. Attached for your information is a diagramatic sketch of the dual with pertinent data as completed. Verbal approval to proceed with dual completion operations on this well was received from Mr. McGrath of the U. S. Geological Survey on August 15, 255.

If any additional information is needed on this well before a fermal order approving the dual completion can be issued, please netify us.

Yours very truly.

DESCRIPTIONS SERVED BY

W. K. Johnston, Manager Production Operations

Mar. bh

ec: U. S. Geological Burvey Farmington, New Mexico

011 Conservation Commission Astes, New Mexico



WELL DEPTH OF 3000 FEET

7 5/8 INCH CASING SET AT 3634 FEET

TUBING SIDE - DOOR CHOKE - SET AT 3944 FEET PICTURED CLIFFS DATA:

TOP OF PICTURED CLIFFS 3622 FEET

BOTTOM OF PICTURED CLIFFS 3936 FEET

PERFORATIONS 3810-3920

MESAVERDE DATA:

TOP OF MESAVERDE

5700 FEET

MESAVERDE TO TOTAL DEPTH OF 6069 FEET

PERFORATIONS

5812 - 5824

5914-5968



PRODUCTION PACKER SET AT 5780 FEET

5 1/2 INCH CASING SET AT 5986 FEET

4 3/4 INCH OPEN HOLE TO 6069 FEET

DIAGRAMATIC SKETCH OF

DUAL GAS COMPLETION FOR

INDIAN H WELL # 1

PACIFIC NORTHWEST PIPELINE CORPORATION ALBUQUERQUE, NEW MEXICO

APPLICATION FOR DUAL GAS COMPLETION

OF INDIAN H WELL # I IN PICTURED CLIFFS

AND MESAVERDE FORMATIONS

RIO ARRIBA COUNTY NEW MEXICO

TRIBAL ## 60

Drawn: W. McGAHEY

Vertical Scale I" = 400'

Appr. L. TRUBY

Date 8-20-55

PACIFIC NORTHWEST PIPELINE CORPORATION

HOUSTON 2, TEXAS

GPV TROUGHT

AUG 5 MS

. Durte mot multich ster e Pettik Tiriera ko koliterak 195 seletika kompanie e 195 seletika ki esteri. I

走,1000mg1

Comment of the second of the comment of the comment

ಆಕಾರವೂಕ ನಡೆಕೆ ಕಡೆಕೆ ಎಂದು ಮಾರುತ್ತು

11 50 513 (1)

Pallerin igraest and Consider a process librations of the consider and consider and consider and considerations of the considerations of the consideration and considerations of the consideration and considerations of the consideration of the considerations of the consideration of t

ាននៅ បាន LL នាស់សារ បាស់សារ សំនៅនៃ សំនៅនៃ ប្រទាំង នៅការ ប៉ុន្តែ បាន នៅ ប្រទាំង នៅ ស្ថិត្តិបាន ប្រចាំ។ ប្រទាំង ប្រធាន និង សំនៅនៃ ស្រុង ប្រធាន និង សំនៅនេះ ប្រចាំ ប្រចាំ ប្រចាំ ប្រចាំ ប្រធាន និង សំនៅនេះ ប្រចាំ ប្ចាំ ប្រចាំ ប្ចាំ ប្រចាំ ប្រចាំ

The control of the tile and the control of the cont

plug would be drilled out and a production packer set at approximately 5750 feet with the intention of producing the Mesaverde formation through the tubing and the Pictured Cliffs formation through the casing-tubing annulus. (5) A side door choke will be placed in the tubing at approximately 3930 feet for the purpose of either producing, at a later date, the Pictured Cliffs through the tubing with a blank choke below the Pictured Cliffs in the tubing or for the purpose of running small tubing and producing the Mesaverde through the small tubing and the Pictured Cliffs, packed off below the choke, through the tubing-tubing annulus.

The above described arrangement will allow Pacific Northwest to test for reserves in two formations in this one well and will allow us, at a later date, the potentiality of producing both formations from the one well. This would, of course, decrease our drilling costs in the area. We are of the opinion that a production packer can be set between somes and shut off communication between formations in this well with this type of completion. As no offset acreage other than Pacific's is involved in the completion of this well, no ether operators have been notified of the proposed dual.

We would appreciate your early consideration of this request as there is currently a rig on this location.

Yours very truly,

ORIGINAL SIGNED BY W. R. JOHNSTON

W. R. Johnston, Manager PRODUCTION OPERATIONS



plus voold he erelies out and a stocketion catter of approximate.

7.64 for the rest the intention of processing the Moranae constituent of the contract of the testing and the first of a sign of the stocket of the contract of the contract

one playe described arrangement wil silon Besiks dotthurst of a see for reserved is the fils are mell and will eller as the state are seller and continued as the state are mell and will eller as the state at a later continued of setting a second and antiples of the continued and are of the opinion there a production peaker out to set button and and and of committee and second and and colf committee and served and and and colf committee and served first and second and the second and the completion. In the set of the opinion of the second and are compressed and of the opinion of the opinion of the base have been accepted as a constant of the opinion of the compression.

es would appreciate your rank, continue of this requered a character of the requered of the decreasity a rig on this location.

. Paris (III) Bridge

BRIGINAL SIGNED BY W. R. LONNOTOR

7. k. somerod, kasasat Polite**ct na** opiš trons



WELL DEPTH OF 3000 FEET

7 5/8 INCH CASING SET AT 3634 FEET

TUBING SIDE - DOOR CHOKE

PROPOSED AT APPROXIMATELY

3930 FEET

PICTURED CLIFFS DATA:

TOP OF PICTURED CLIFFS 3625 FEET

BOTTOM OF PICTURED CLIFFS 3936 FEET

PROPOSED PERFORATIONS

3640-3660

3694-3722

3810 - 3920

MESAVERDE DATA:

TOP OF MESAVERDE

5700 FEET

MESAVERDE TO TOTAL DEPTH OF 6069 FEET

PROPOSED PERFORATIONS

5812 - 5824



PRODUCTION PACKER PROPOSED AT

APPROXIMATELY 5780 FEET

5 1/2 INCH CASING SET AT 5986 FEET

4 3/4 INCH OPEN HOLE TO 6069 FEET

DIAGRAMATIC SKETCH OF PROPOSED DUAL GAS COMPLETION FOR INDIAN H WELL # 1

PACIFIC NORTHWEST PIPELINE CORPORATION ALBUQUERQUE, NEW MEXICO

APPLICATION FOR DUAL GAS COMPLETION OF INDIAN H WELL # I IN PICTURED CLIFFS AND MESAVERDE FORMATIONS

RIO ARRIBA COUNTY NEW MEXICO

TRIBAL ## 60

Drawn: W. McGAHEY

Vertical Scale I" = 400' Date 8-4-55

Appr. L. TRUBY