

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

Ken McQueen
Cabinet Secretary

Matthias Sayer
Deputy Cabinet Secretary

Heather Riley, Division Director
Oil Conservation Division



June 18, 2018

Ms. Deanna Poindexter, Operations Engineer
Cross Timbers Energy, LLC
400 West Seventh Street
Fort Worth, TX 76102

RE: Packer Setting Depth Exception

North Vacuum Abo Unit Well No. 175 (API 30-025-24325)
Unit H, Sec 14, T17S, R34E, NMPM, Lea County, New Mexico
Injection Authority: Administrative Order PMX-50 (dated September 13, 1973) under the terms of Commission Order No. R-4430 (as amended)
Permitted Interval: Abo formation
Pool: Vacuum;Abo, North (Pool code: 61760)

Ms. Poindexter:

Reference is made to your request on behalf of Cross Timbers Energy, LLC (OGRID 298299; "Cross Timbers") received by the Division on June 11, 2018, for the above named well. Cross Timbers applied for exception for setting the packer within 100 feet of the top perforation in the injection interval.

It is our understanding that Cross Timbers has requested a packer setting depth of 8355 feet below surface or approximately 129 feet above the top perforation of the injection well located at 8484 feet below surface. A permanent packer is currently set at 8437 feet and will not hold pressure with a seal assembly. As a result, Cross Timbers is requesting to install a new retrievable packer at a depth of 8355 feet.

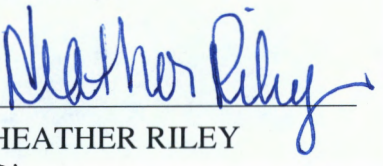
Cross Timbers has provided a log section identifying the top of the approved interval of the pressure maintenance project, the Abo formation, at a depth of approximately 8060 feet below surface. The proposed setting depth for the new packer at 8355 feet would be approximately 295 feet below the upper contact of the Abo formation and within the approved interval.

For the reasons stated in the application and because it appears that correlative rights are protected, waste will not occur and this modification will not endanger any fresh water aquifer or the

environment, the exception is granted. The packer location within this well shall not be set higher than 129 feet above the current depth of the top perforation unless the operator receives written approval from the Division Director.

The Division Director may rescind this exception if it becomes apparent that the injected fluid is not being confined to the permitted interval or is endangering any fresh water aquifer.

Sincerely,

A handwritten signature in blue ink, reading "Heather Riley", is written over a light green rectangular background.

HEATHER RILEY
Director

HR/prg

cc: Oil Conservation Division – Hobbs District Office
Well File - 30-025-24325

CROSS TIMBERS ENERGY, LLC

TO: Heather Riley, NMOCD Division Director

FROM: Deanna M. Poindexter, Operations Engineer

DATE: June 11, 2018

Re: Packer Setting Depth Exception Request

Well Name: North Vacuum Abo Unit 175
Location: Section 14-17S-34E, Lea County, NM
API: 30-025-24325

Cross Timbers Energy, LLC, operates the North Vacuum Abo Unit #175 in Lea County, NM. This is an injection well into the Abo formation of the North Vacuum Abo Unit Waterflood. The subject well is currently shut-in pending work. Cross Timbers Energy respectfully requests an exception to the packer setting depth to 129' above the top perforation.

Per the attached wellbore schematic, there is currently a permanent packer located at 8,437' that will not hold pressure with a seal assembly. This necessitates the installation of a new retrievable injection packer above 8,437'. A prior attempt at setting a packer in the two joints of casing above the permanent packer was not successful. A revised setting depth of 8,355' would put the new injection packer into the next joint uphole where a good seal with the packing elements could be obtained.

Attached to this request is a log section identifying the perforations and the top of the Abo. At 8,355', the new packer will be 295' below the top of the Abo.

Please feel free to contact me with any questions regarding this request. Your time and consideration in this matter are appreciated.

Deanna M. Poindexter
Operations Engineer
Email: dpoinindexter@mspartners.com
Office: 817.334.8301



Well Name:

North Vacuum Abo Unit #175

Location:

1980' FNL & 485' FEL

Sec: 14

Township:

17S

Range:

34E

County:

Lea

State: NM

API:

30-025-24325

CURRENT

Surface Csg

Size: 12-3/4"
 Wt & Thrd: 34#
 Grade: J-55, 8RD, STC
 Set @: 265'
 Sx Cmt: 400 sx
 Circ: Yes
 TOC: Sfc

KB: 4,032'
 GL: 4,017'
 Spud Date: 12/22/1972

Intermediate Csg

Size: 8-5/8"
 Wt & Thrd: 28#
 Grade: J-55, 8RD STC
 Set @: 3,060'
 Sx Cmt: 1400 sx
 Circ: Yes
 TOC: Sfc

Production Casing

Size: 5-1/2"
 Wt & Thrd: 17#
 Grade: J-55, 8RD, LTC
 Set @: 8,750'
 Sx Cmt: 2300 sx
 Circ: Yes
 TOC: Sfc

**Baker Model NB Packer with Baker
 Model D Seal Assembly @ 8,437'**
 F Nipple (1.81" ID) @ 8,453'
 2-3/8" OE tbg @ 8,460'

Abo Perfs (58 holes):

8,484' - 8,490'
 8,494' - 8,500'
 8,514' - 8,517'
 8,520'
 8,524' - 8,526'
 8,529' - 8,535'

TD: 8,750'

Well Name: North Vacuum Abo Unit #175
 Location: 1980' FNL & 485' FEL Sec: 14 Township: 17S Range: 34E
 County: Lea State: NM API: 30-025-24325

PROPOSED

Surface Csg

Size: 12-3/4"
 Wt & Thrd: 34#
 Grade: J-55, 8RD, STC
 Set @: 265'
 Sx Cmt: 400 sx
 Circ: Yes
 TOC: Sfc

KB: 4,032'
 GL: 4,017'
 Spud Date: 12/22/1972

Intermediate Csg

Size: 8-5/8"
 Wt & Thrd: 28#
 Grade: J-55, 8RD STC
 Set @: 3,060'
 Sx Cmt: 1400 sx
 Circ: Yes
 TOC: Sfc

2-3/8" x 5-1/2", Arrowset Injection Packer
 @ 8,355' on 2-3/8", 4.7#, J-55 tubing

Baker Model NB Packer with Baker
 Model D Seal Assembly @ 8,437'
 F Nipple (1.81" ID) @ 8,453'
 2-3/8" OE tbg @ 8,460'

Production Casing

Size: 5-1/2"
 Wt & Thrd: 17#
 Grade: J-55, 8RD, LTC
 Set @: 8,750'
 Sx Cmt: 2300 sx
 Circ: Yes
 TOC: Sfc

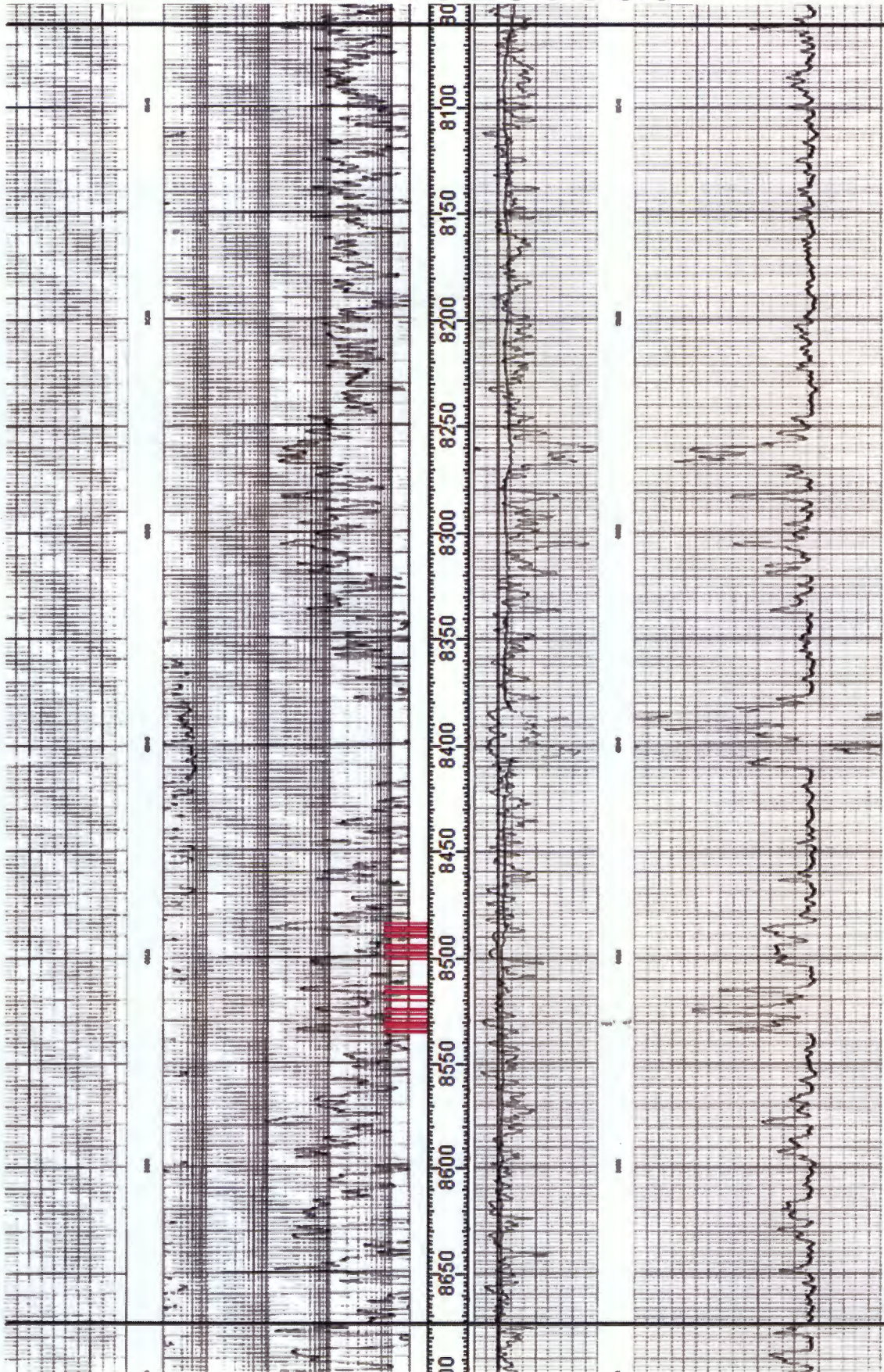
Abo Perfs (58 holes):

8,484' - 8,490'
 8,494' - 8,500'
 8,514' - 8,517'
 8,520'
 8,524' - 8,526'
 8,529' - 8,535'

TD: 8,750'

NVAU 175WI

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ABO

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