

State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
Governor

Sarah Cottrell Propst
Cabinet Secretary Designate

Gabriel Wade, Acting Director
Oil Conservation Division



January 22, 2019

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. 145 (API 30-025-23568)
Unit P, Sec 27, T17S, R34E, NMPM, Lea County, New Mexico
Injection Authority: 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 December 19, 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 8442 feet below surface or approximately 133 feet above the top perforation of the injection well located at 8575 feet below surface. A packer is permanently set at 8540 feet but could not be retrieved and was abandoned in place. The tubing set to this packer had to be cut producing a tubing stub with a top at 8529 feet. As a result, Cross Timbers is requesting to install a new retrievable packer at a depth of 8442 feet.

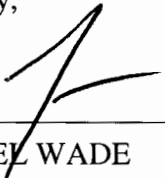
Cross Timbers has provided a log section identifying the top of the approved interval of the pressure maintenance project, the Abo formation, at a depth of approximately 8342 feet below surface. The proposed setting depth for the new packer at 8442 feet would be approximately 100 feet below the upper 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 133 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,



GABRIEL WADE
Acting Director

GW/prg

cc: Oil Conservation Division – Hobbs District Office
Well File - 30-025-23568

CROSS TIMBERS ENERGY, LLC

TO: Heather Riley, NMOCD Division Director

FROM: Deanna M. Poindexter, Operations Engineer

DATE: December 17, 2018

Re: Packer Setting Depth Exception Request

Well Name: North Vacuum Abo Unit 145
Location: Section 27-17S-34E, Lea County, NM
API: 30-025-23568

Cross Timbers Energy, LLC, operates the North Vacuum Abo Unit #145 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 133' above the top perforation.

Per the attached wellbore schematic, there is currently a permanent packer located at 8,540' with a stuck seal assembly and an 8' section of tubing with a top at 8,529'. This necessitates the installation of a new retrievable injection packer above 8,529'. Prior attempts at setting a packer in the 45' of casing above the permanent packer/tubing stub were not successful. A revised setting depth of 8,442' 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 8,442', the new packer will be 100' below the top of the Abo.

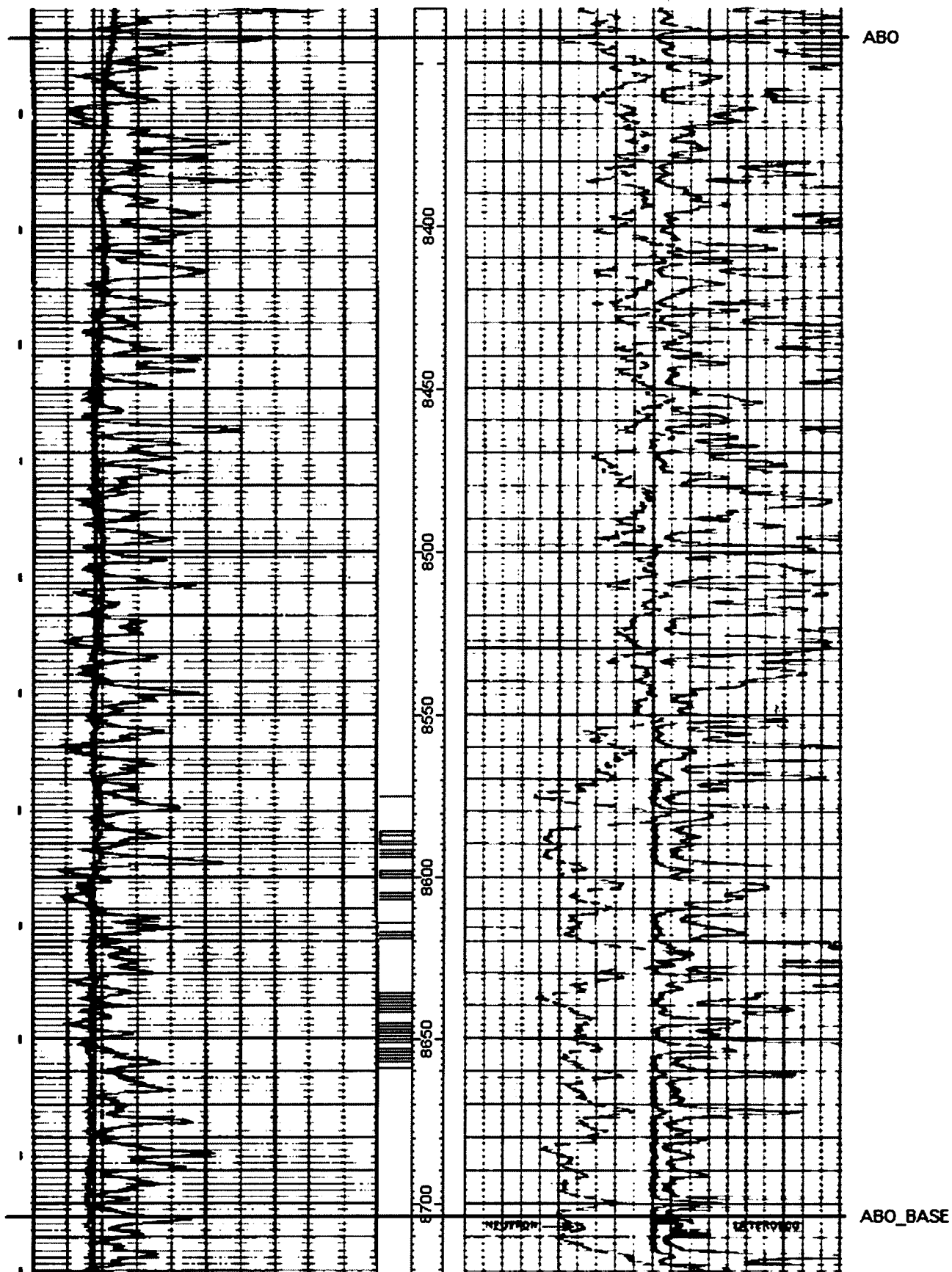
Please feel free to contact me with any questions regarding this request. Your time and consideration in this matter are appreciated.

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

Authority:



NVAU 145WI
30025235680000



Well Name: North Vacuum Abo Unit #145
 Location: 660' FSL & 860' FEL Sec: 27
 County: Lea State: NM

Operator: Cross Timbers Energy, LLC
 Township: 17S Range: 34E
 API: 30-025-23568

Updated: 12/17/2018

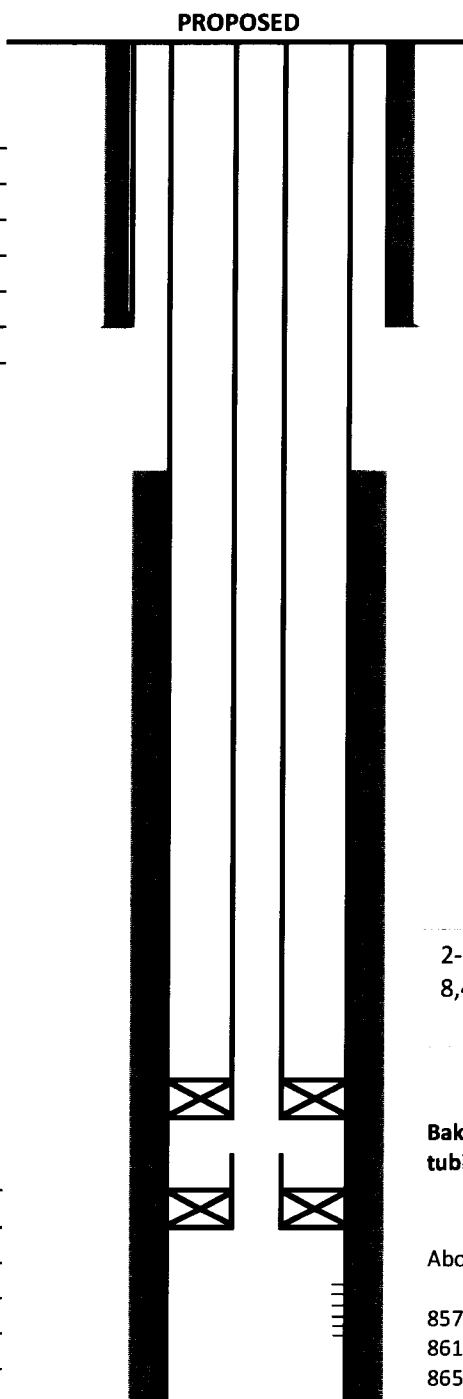
KB: 4,049'

GL: 4,035'

Spud Date: 9/22/1970

Surface Csg

Size: 8-5/8"
 Wt & Thrd: 23#
 Grade: J-55
 Set @: 1,620'
 Sx Cmt: 800
 Circ: Yes
 TOC: sfc



2-3/8" x 5-1/2", Arrowset Injection Packer @
 8,442' on 2-3/8", 4.7#, J-55 tubing

Baker Model N Packer w/ stuck Seal Assembly and Cut
 tubing. Packer @ 8,540'. Top of tubing stub @ 8,529'

Abo Perfs: (1 JSPF)

8575', 8586'-90', 8592' - 94', 8598'-8600', 8605'-07',
 8614', 8617'-19', 8636' - 42', 8645' - 51', 8653' - 57',
 8659'

Production Casing

Size: 5-1/2"
 Wt & Thrd: 17# & 15.5#
 Grade: N-80 & J-55, STC & LTC
 Set @: 8,750'
 Sx Cmt: 3,100
 Circ: no
 TOC: 2560'

2,009' of 17# casing on bottom of
 string

PBTD: 8,720'
 TD: 8,750'

Well Name: North Vacuum Abo Unit #145
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 County: Lea State: NM

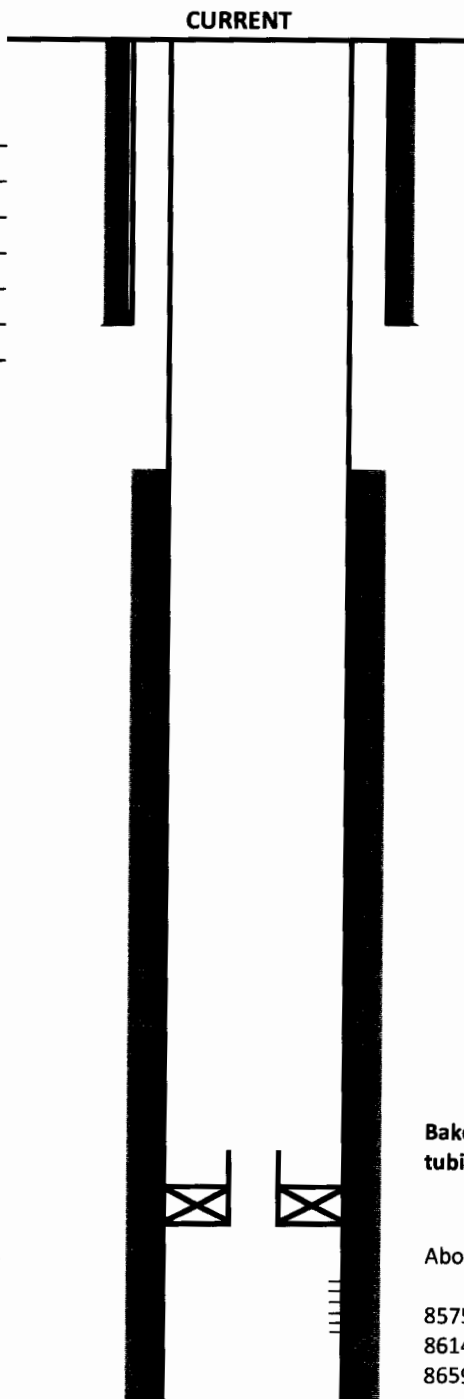
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