

GENERAL OFFICES - FORT WORTH, TEXAS

BOPCO, L.P.

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September 10, 2014

Mr. Phillip Goetz
Oil Conservation Division
Engineering and Geological Service Bureau
1220 S. St Francis Dr.
Santa Fe NM 87505

Re: James Ranch Unit 21 SWD #1
SWD; Devonian
30-015-41074

Mr. Goetz:

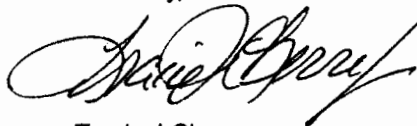
Per your request, BOPCO, LP is submitting the following information on the referenced well:

- Memo outlining how completion depth chosen
- Log strip with disposal interval and formations marked

The application for disposal requested the interval 15291'-16801' in the Devonian formation. Since the application was submitted prior to the well being drilled, the top of the Devonian formation was estimated based on offset well information. The actual completed disposal depth lies outside the permitted interval but is still within the formation included in the permit. The attached memo from Mr. Brian Pregger, geologist for BOPCO, explains how the actual completion depth was selected at the time the well was drilled and completed and that it is, in fact, within the permitted formations.

If you have any questions or need additional information, please do not hesitate to call me at 432/683-2277.

Sincerely,



Tracie J Cherry
Sr. Regulatory Analyst

Enclosures

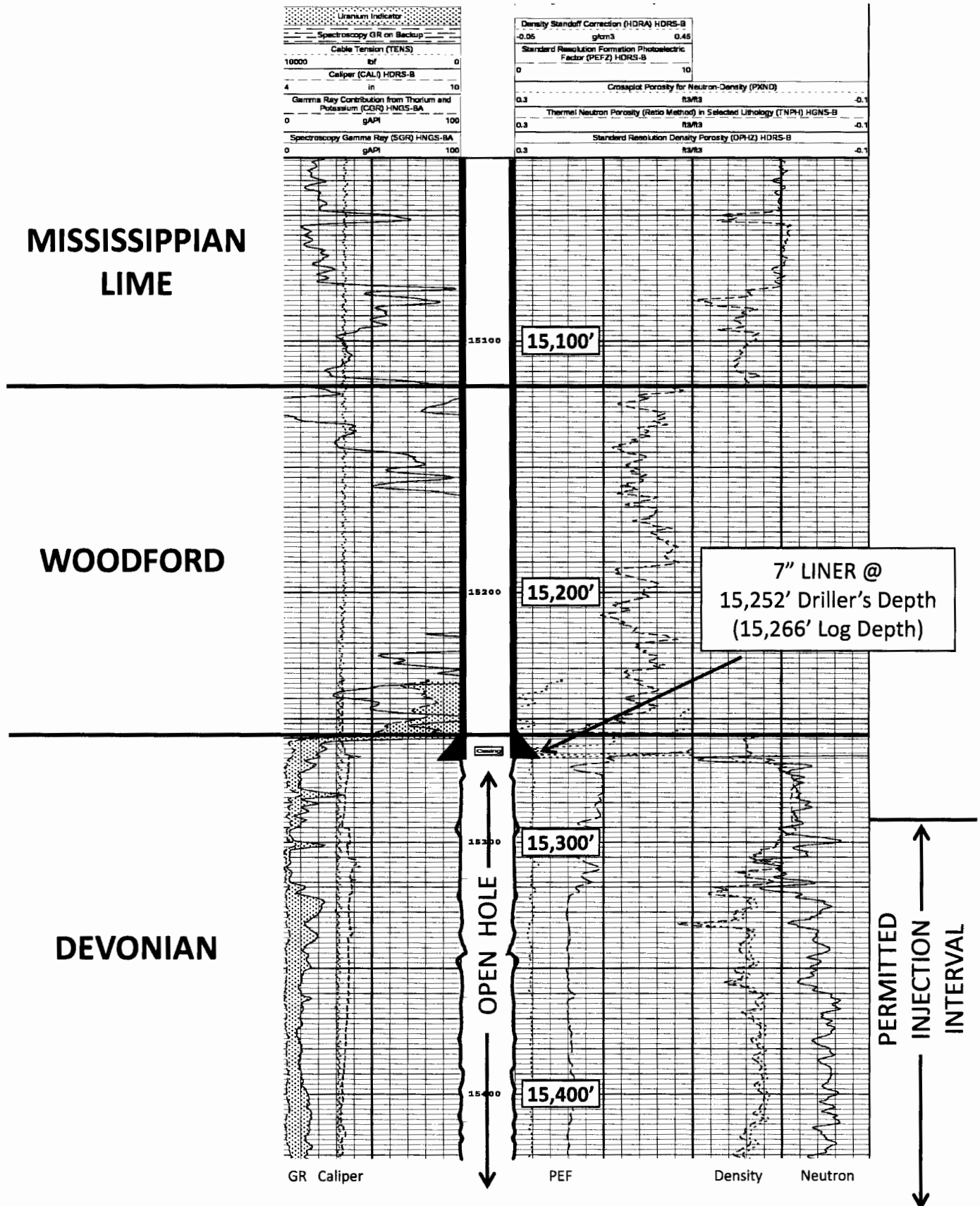
Memorandum

To: Tracie Cherry
From : Brian Pregar
Date: September 9, 2014
Re: James Ranch Unit 21 Federal SWD No. 1 Injection Interval

The James Ranch Unit 21 Federal SWD No. 1 well was permitted by the New Mexico Oil Conservation Division for injection "into the Devonian, Silurian, and Ordovician through an open hole interval from approximately 15,291 feet to 16,801 feet". This interval was based on the expected depths of the relevant formations prior to drilling; the top of the Devonian formation (top of the injection interval) was estimated to be at a depth of 15,290'. When drilled, the top of the Devonian was encountered shallow to prognosis, at a driller's depth of 15,242' (15,256' log depth). Ten feet of Devonian was drilled, and 7" casing was set at a driller's depth of 15,252' (15,266' log depth). The well was subsequently drilled to a total driller's depth of 16,525' in the top of the Ordovician Montoya formation, 276' above the base of the permitted injection interval. Water injection is in the open hole below the 7" liner, consisting of the interval from ten feet below the top of the Devonian at a driller's depth of 15,252' to the TD of the well in the top of the Montoya formation at a driller's depth of 16,525'.

Attached is an annotated section of the Neutron-Density log run prior to completion illustrating the top of the injection interval. The formations shown are the uppermost Devonian, the overlying Woodford shale, and the basal portion of the Mississippian lime. The 7" casing is set ten feet below the top of the Devonian, as per the well plan. Water is being injected only into that portion of the stratigraphic interval that was specified in the administrative order (Devonian, Silurian, and Ordovician). The discrepancy between the depth of the top of the injection interval as completed and the depth on the permit is the result of the difference between the depth of the Devonian top as drilled and the depth as estimated.

BOPCO
James Ranch Unit 21 Federal SWD No. 1
Woodford – Devonian Log Section



Memorandum

To: Tracie Cherry
From : Brian Pregger
Date: September 15, 2014
Re: James Ranch Unit 21 Federal SWD No. 1 Deep Section

Attached is an annotated Neutron-Density log of the BOPCO JRU 21 Federal SWD No. 1 well illustrating the section penetrated from the top of the Devonian to TD. A total of 1,278' of Devonian, Silurian, and Ordovician carbonates was drilled. The well encountered two porous dolomite intervals, one in the Devonian from 15,320' to 15,490', and a second one in the Silurian Fusselman formation from 15,846' to 16,368'. These are separated by a tight limestone section that is interpreted as being Upper Silurian. The well was drilled 170' below the top of the Ordovician Montoya formation, a limestone underlying the dolomite of the Fusselman formation. The two porous dolomite intervals (Devonian, Fusselman) were the anticipated targets for water injection in this well.

BOPCO
James Ranch Unit 21 Federal SWD No. 1
Devonian - Ordovician Log Section

