Additional Information

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Mesquite SWD Inc.'s Salado Draw SWD 13

Montoya Formation Depth Issue

The Salado Draw 13 well was originally drilled by Chevron and later acquired and side tracked by Mesquite SWD, Inc. Concerns have recently been raised by NMOCD regarding the total depth of the sidetracked wellbore and potential penetration of not only the Montoya Formation, but the underlying Simpson Group. Here we briefly review the original completion records from Chevron, detail revisions to those reported formation tops from the original lithology logs, review TD of the nearby Maelstrom well and use cross-section and isopach data to determine that the deepening of the Salado Draw 13 well did not penetrate more than a few feet into the uppermost Montoya Formation.

Background

Chevron initially drilled the Salado Draw 13 well to a TD of 18,675' and their completion records (dated Sept. 2, 2015) include the formation tops shown in the table below. Mesquite SWD later acquired the Salado Draw 13 well and sidetracked it to a TD of 19,465'. These reported formation tops for the original drilling of the Salado Draw 13, as well as tops for the nearby Maelstrom well, have been used by Chevron to suggest that the Salado Draw 13 well was deepened through the Montoya Formation and into the underlying Simpson Group.

Formation	Completion Record Top (Chevron)
Mississippian	15,839'
Woodford Shale	17,404'
"Top Silurian"	17,729'

Salado Draw 13 Formation Tops Revised

Below are revised formation tops picked from the lithology logs posted for the original Salado Draw 13 drilling effort by Chevron:

Formation	Top From Lithology Log
Mississippian	17,425'
Woodford Shale	17,710'
"Devonian" (Wristen)	17,876'
Fusselman	18,300'
TD	18,675'

Picks of formation tops from the lithology logs suggest the following discrepancies between the formations as reported via the completion report by Chevron and well log data:

- The Mississippian Formation thickness is approximately five times the thickness observed in nearby wells (~1550' in the completion report versus ~ 300' thick in surrounding wells).
- The base of the Mississippian may have been inaccurately recorded as the top of Woodford Shale in the completion record.
- The top of the Woodford Shale may have been inaccurately recorded as the "Top Silurian".
- There is no top listed for the Fusselman in the completion records and the reported TD is approximately 800' below their Silurian base, suggesting their completion was in the lower Fusselman. Chevron reports a 918' plug-back (TVD 18,675', plug-back TVD: 17,757').

Maelstrom SWD TD Concern

In addition to the discrepancies observed between the reported formation tops for the original Salado Draw 13 drilling effort by Chevron and the formation tops observed in the wireline data, the Maelstrom well (TRS) formation top data were also used by Chevron to indicate that the deepening of the Salado Draw 13 may have resulted in penetration of the Simpson Group. The formation tops for the Maelstrom well match well with the repicked formation tops for the Salado Draw. Neither well shows the appearance of shale nor siliciclastics at TD, which would be a strong indicator of Simpson Group strata. The Salado Draw redrilling effort stopped once chert was encountered at 19,445', a common marker used by drillers as the top of the Montoya Formation. In their completion report for the Maelstrom well, Chevron records a TD of 18,931', but a Montoya Formation top pick of 18,944', *13 feet below their TD.*

Unless the Maelstrom well was drilled through those 13 additional feet and plugged back, it is difficult to ascertain how they are certain of the top of the Montoya Formation.

Isopachs and Cross Section

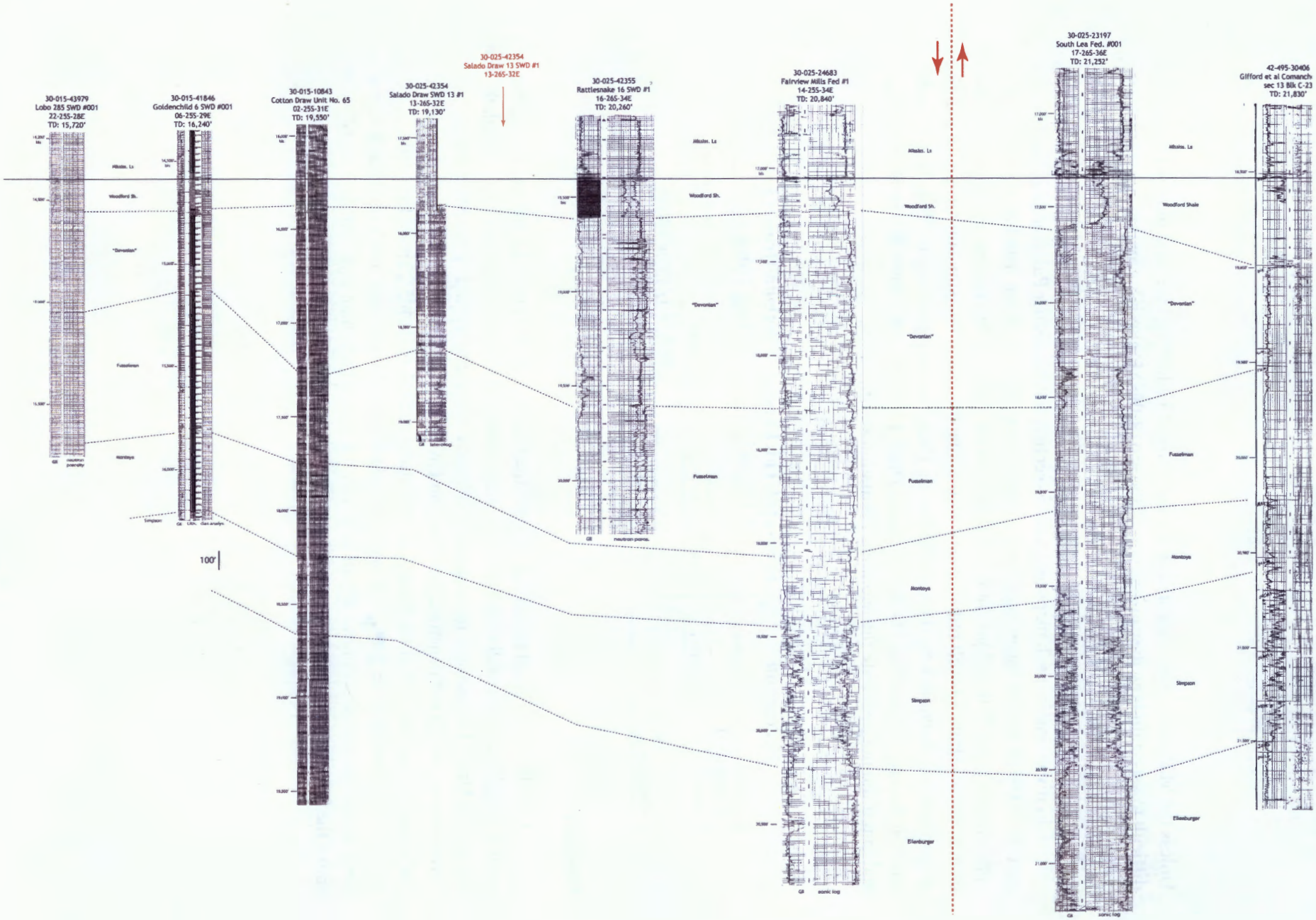
In reviewing isopach maps and a cross-section for the deeper Palezoic units in this portion of the Delaware Basin, anticipated thicknesses of the units are listed below (also see appended figures). If the Montoya Formation is on the order of 350 to 400 feet thick, then the TD for the Salado Draw 13 well redrill is still well above the top of the Simpson Group. In addition, projections of formation tops through the Salado Draw 13 location using the few deeper basin wells in the area suggest the TD of the Salado Draw 13 well is not within the Simpson Group and that it did not penetrate the Montoya Formation significantly.

Formation	Estimated Thickness by Isopach	Salado Draw 13 Log Thickness
Woodford	180'	190'
Wristen + Fusselman	1500'	1600'
Montoya	350'	Not fully penetrated
Simpson	850'	Not penetrated

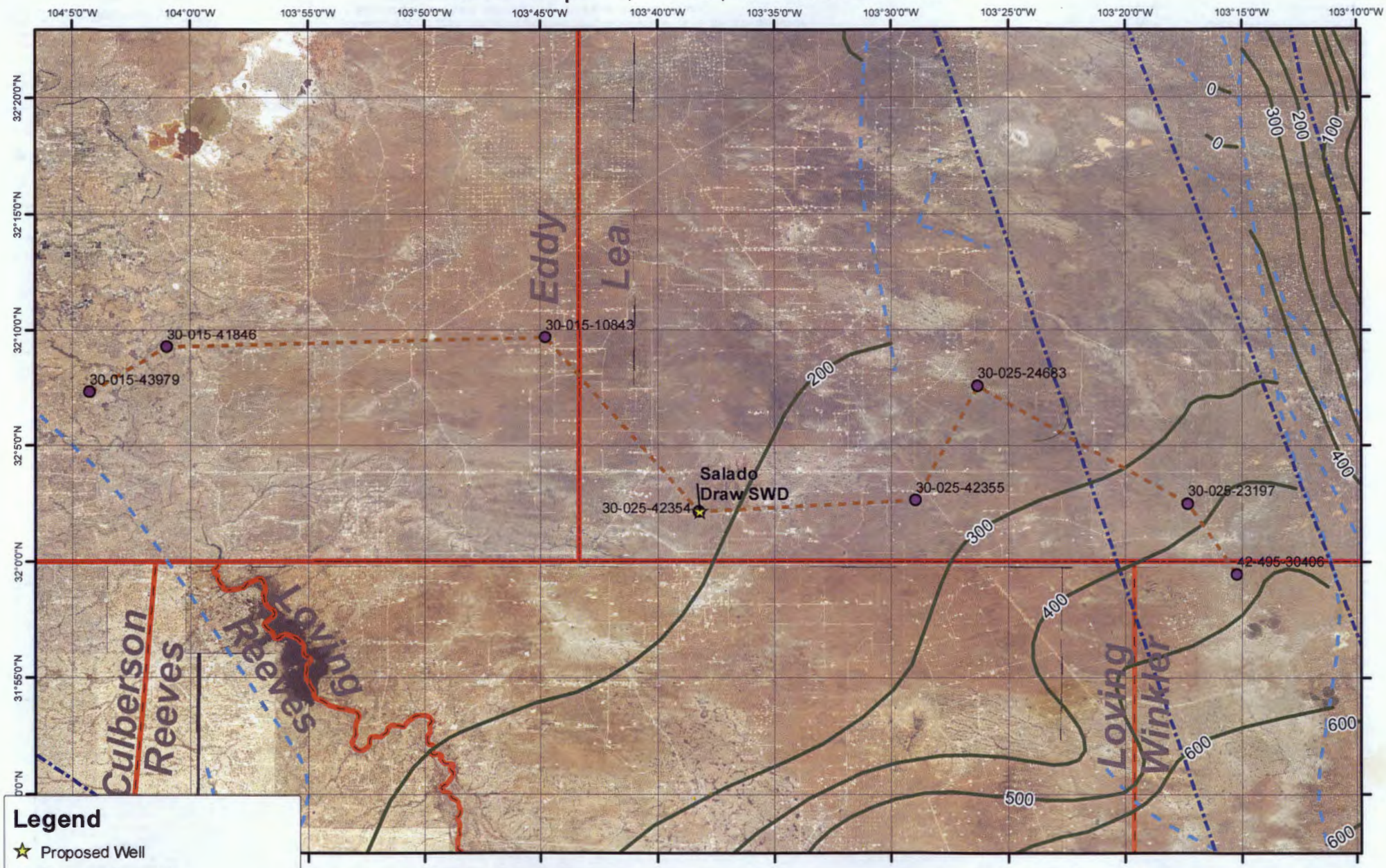
Summary

In light of corrected formation tops for the original Salado Draw 13 drilling effort, the neighboring Maelstrom well data and the isopach maps for this area, it seems highly unlikely that the Salado Draw 13 sidetrack penetrated more than 20 feet into the top of the Montoya Formation and it did not penetrate the Simpson Group at all. The revised formation tops listed above, along with the top of the Montoya Formation picked at 19,445', are in line with projections from other deep wells as well as isopach maps for the area. We would suggest that there is no reason to discontinue use of this well for Siluro-Devonian injection as it is still well above the lower permeability barriers of both the Montoya Formation and Simpson Group.

Northwest


30-015-43979
Lobo 285 SWD #001
22-25S-28E
TD: 15,720'
30-015-41846
Goldenchild 6 SWD #001
06-25S-29E
TD: 16,240'
30-015-10843
Cotton Draw Unit No. 65
02-25S-31E
TD: 19,550'
30-025-42354
Salado Draw SWD 13 #1
13-26S-32E
TD: 19,130'
30-025-42354
Salado Draw 13 SWD #1
13-26S-32E
30-025-42355
Rattlesnake 16 SWD #1
16-26S-34E
TD: 20,260'
30-025-24683
Fairview Mills Fed #1
14-25S-34E
TD: 20,840'
30-025-23197
South Lea Fed. #001
17-26S-36E
TD: 21,252'
42-495-30406
Gifford et al Comanch
sec 13 Blk C-23
TD: 21,830'
Mississ. Ls
Woodford Sh.
"Devonian"
Fusselman
Montoya
Simpson
Ellenburger
100'

Woodford Isopach, Faults, and Well Location



Legend

- Proposed Well
- Cross-section wells
- Cross-section Line
- Late Devonian (Woodford) Isopach
- Precambrian Faults
- Basement Faults
- County Boundaries, NM
- County Boundaries, TX

5 2.5 0 5 10 15 20 Miles

N

Coordinate System: GCS North American 1983
Datum: North American 1983
Units: Degree
Basement faults (if shown) were digitized from Tectonic Map of Texas (Ewing, 1990)
Precambrian faults were digitized from Frenzel et al (1998) Figure 6.

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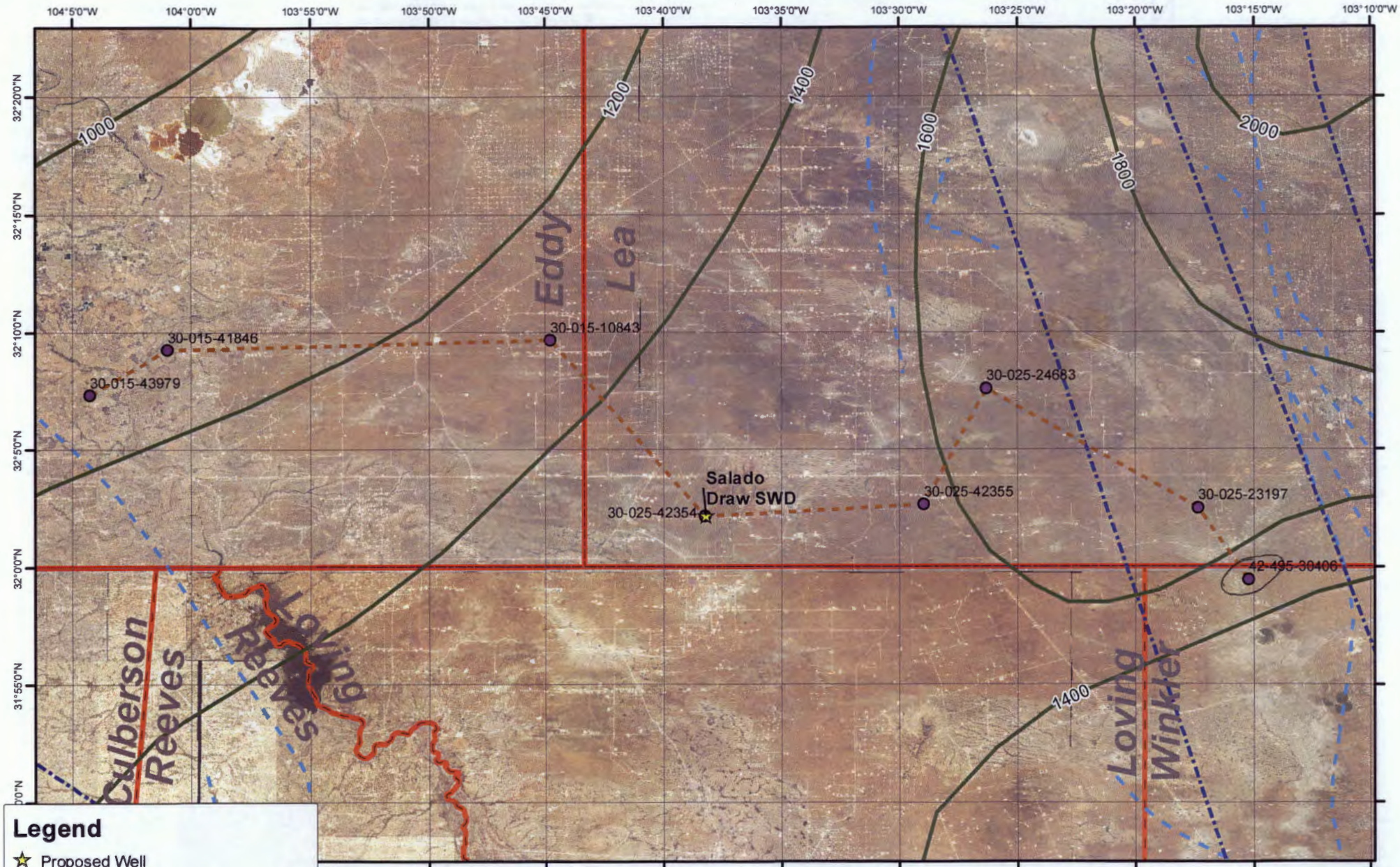
Wristen/Fusselman Isopach, Faults, and Well Location



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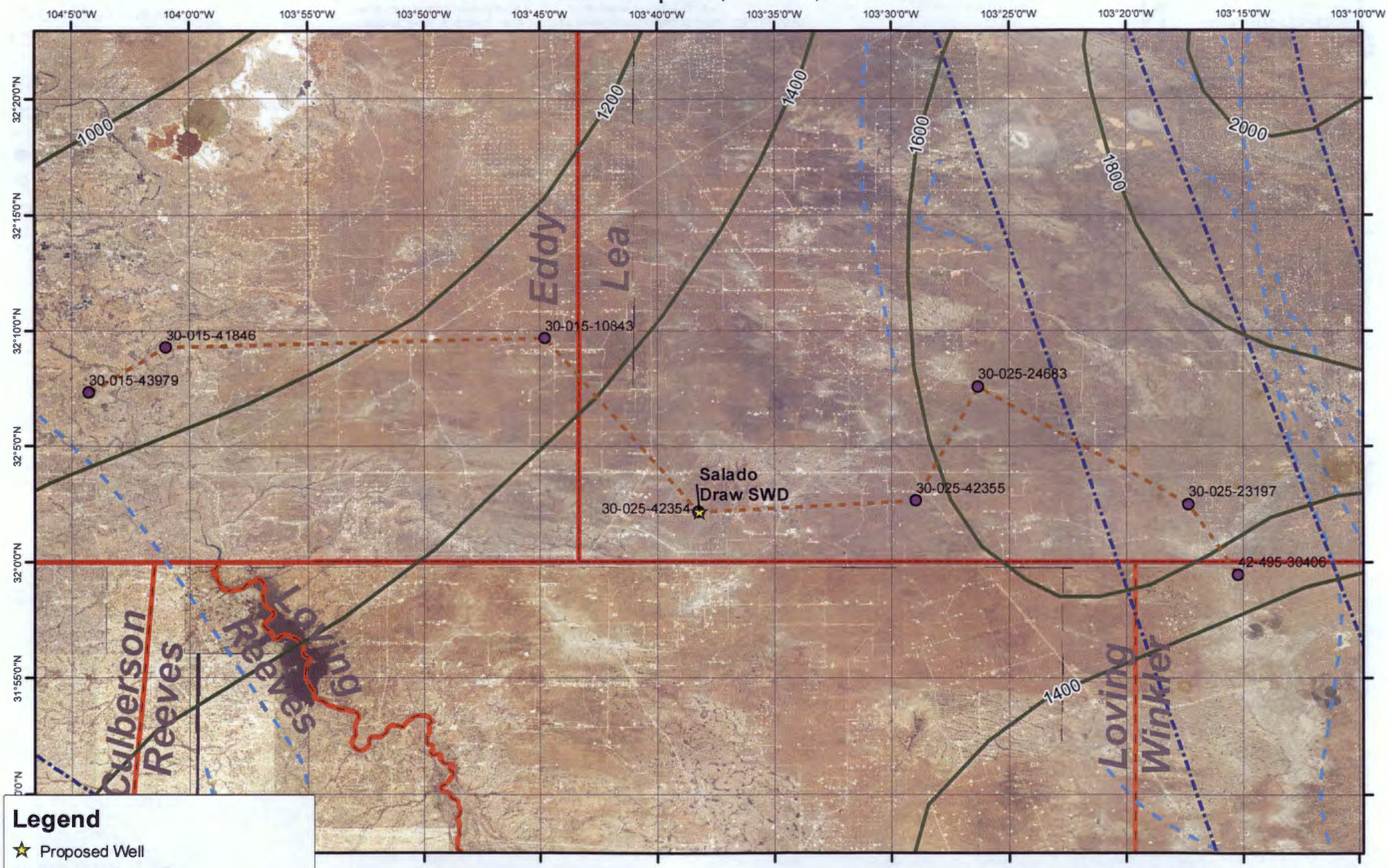

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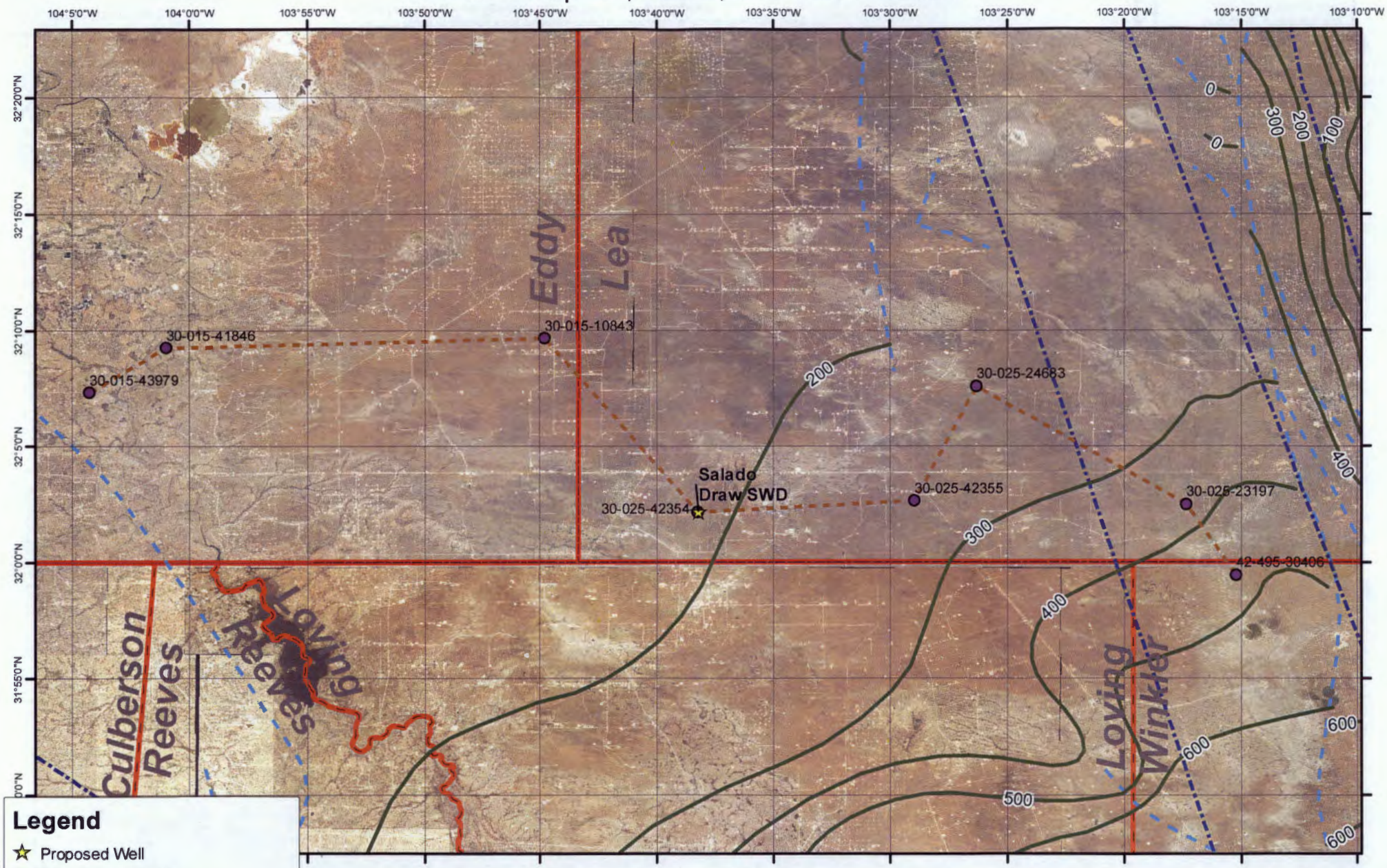
Woodford Isopach, Faults, and Well Location



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