

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**APPLICATION OF COLGATE OPERATING, LLC
FOR COMPULSORY POOLING, AND NON-
STANDARD SPACING AND PRORATION UNIT IN
EDDY COUNTY, NEW MEXICO**

CASE NO. 21226

**APPLICATION OF COLGATE OPERATING, LLC
FOR COMPULSORY POOLING, AND NON-
STANDARD SPACING AND PRORATION UNIT IN
EDDY COUNTY, NEW MEXICO**

CASE NO. 21227

AFFIDAVIT

**STATE OF TEXAS)
) ss.
COUNTY OF MIDLAND)**

SERGIO OJEDA, being duly sworn, deposes and states:

1. I am over the age of 18, I am a Geologist for Colgate Operating, LLC and have personal knowledge of the matters stated herein. I have been qualified by the Oil Conservation Division ("Division") as an expert petroleum geologist.

2. Exhibit 1 is a geology study I prepared for the Dawson Fed State Com Wells Nos. 123H, 133H, 124 H, and 134H to test the 2nd and 3rd Bone Spring Sand underlying the S/2 of Sections 33 and 34, Township 19 South, Range 28 East, NMPM, Eddy County, New Mexico. The study includes:

SBSG-TBSG Gun Barrel Development map;

Regional Locator Map;

Cross-Section Locator Map;



SBSG Structure Map;

SBSG Isopach Map;

TBSG Structure Map;

TBSG Isopach Map;

Cross-Section A-A';

Cross-Section A-A' (SBSG);

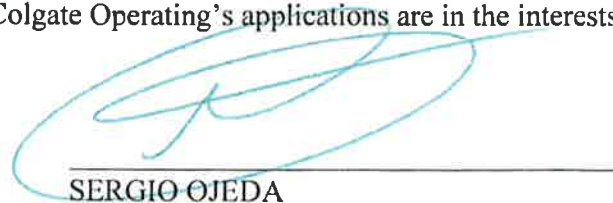
Cross-Section A-A' (TBSG).

3. **Exhibit 2** is a geology study I prepared for the Shamrock Fed State Com Wells Nos. 121H, 131H, 122 H, and 132H to test the 2nd and 3rd Bone Spring Sand underlying the N/2 of Sections 33 and 34, Township 19 South, Range 28 East, NMPM, Eddy County, New Mexico. The study includes the same information as provided for the Dawson wells.

4. I conclude from the maps for the Dawson and Shamrock wells that:

- a. The horizontal spacing units are justified from a geologic standpoint.
- b. There are no structural impediments or faulting that will interfere with horizontal development.
- c. Each quarter section encountered by each of the wells in the proposed unit will contribute more or less equally to production,

8. In my opinion, the granting of Colgate Operating's applications are in the interests of conservation and the prevention of waste.



SERGIO OJEDA

SUBSCRIBED AND SWORN to before me this 26th day of May, 2020 by Sergio Ojeda on behalf of Colgate Operating, LLC.

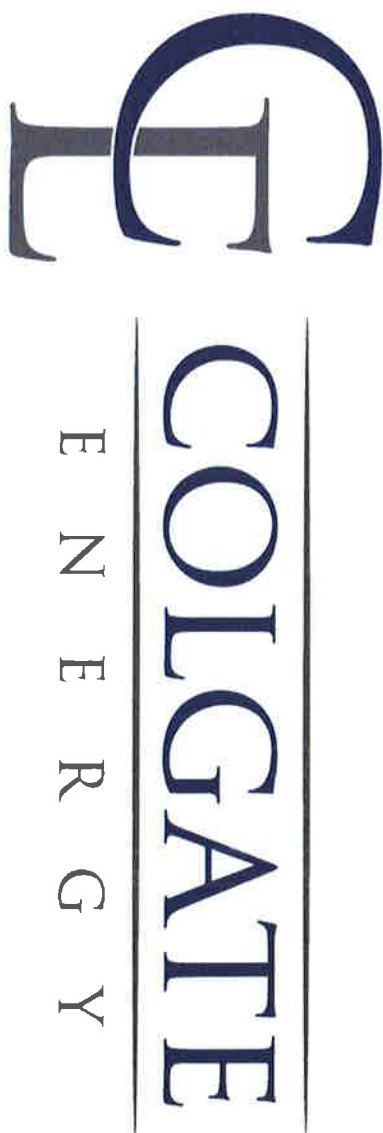
Kathryn Hanson

Notary Public

My Commission Expires:

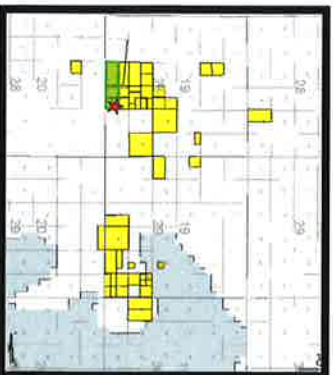
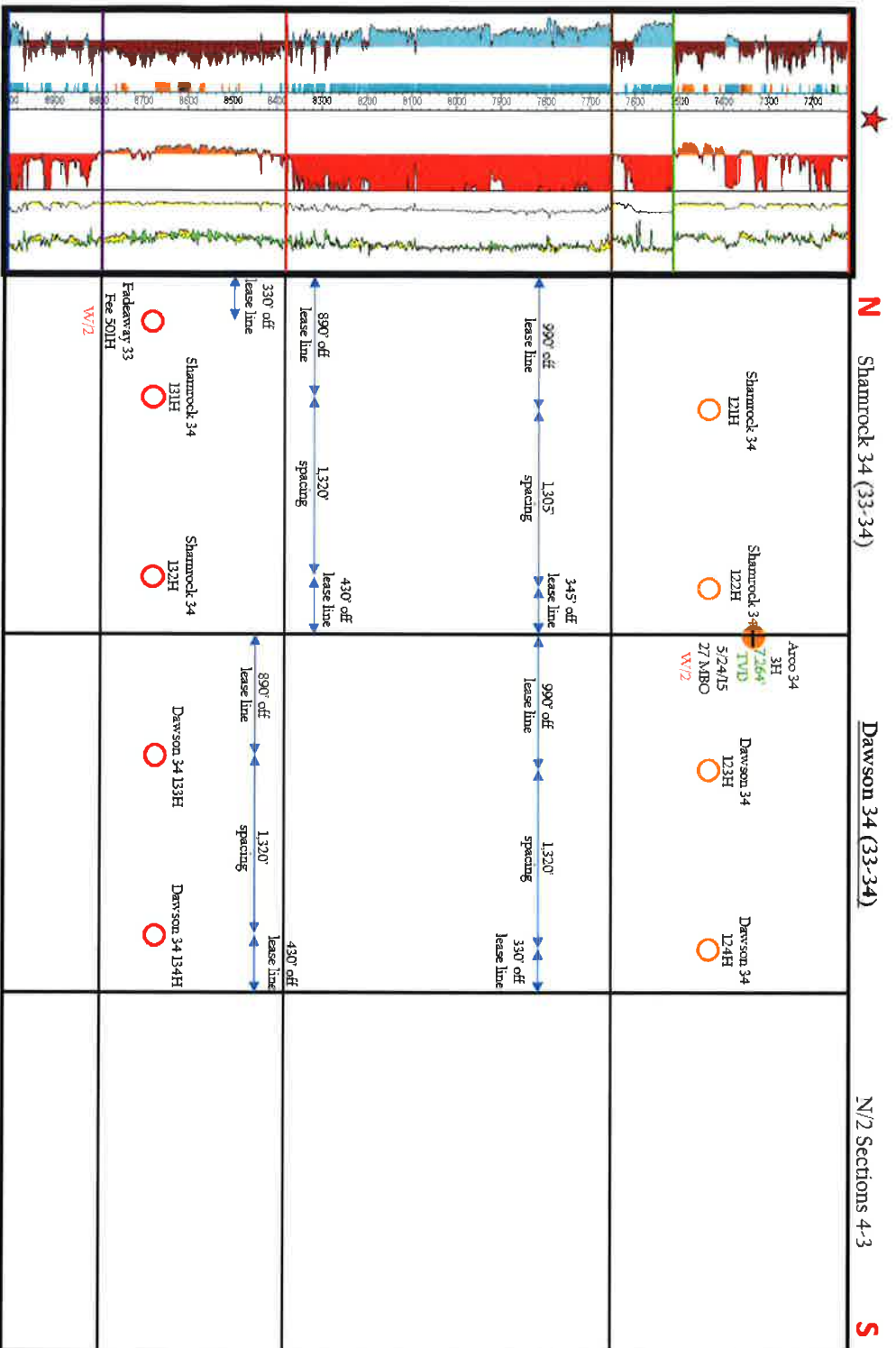
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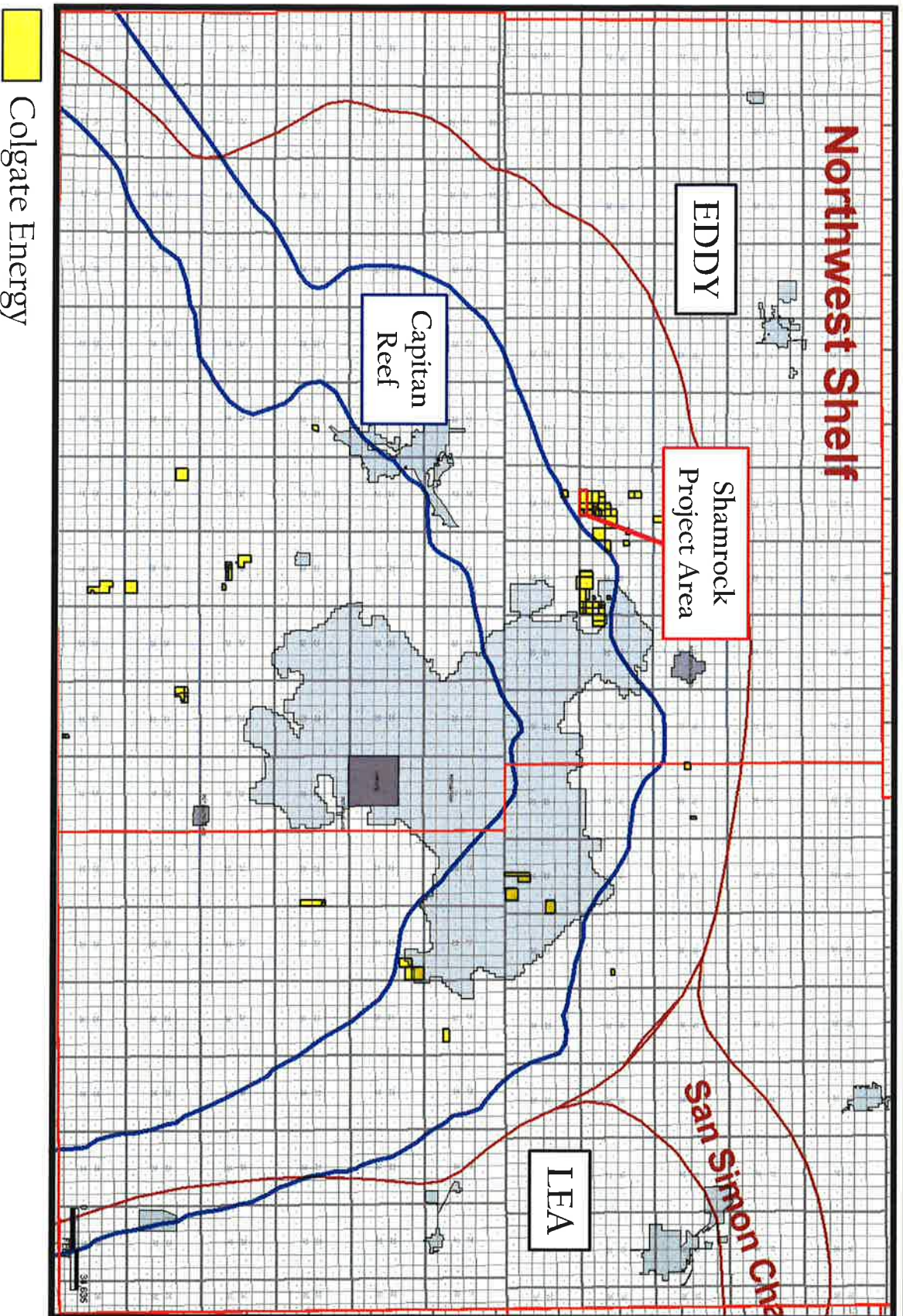
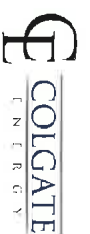


PDU: Dawson 34 Fed Pooling
5/26/2020

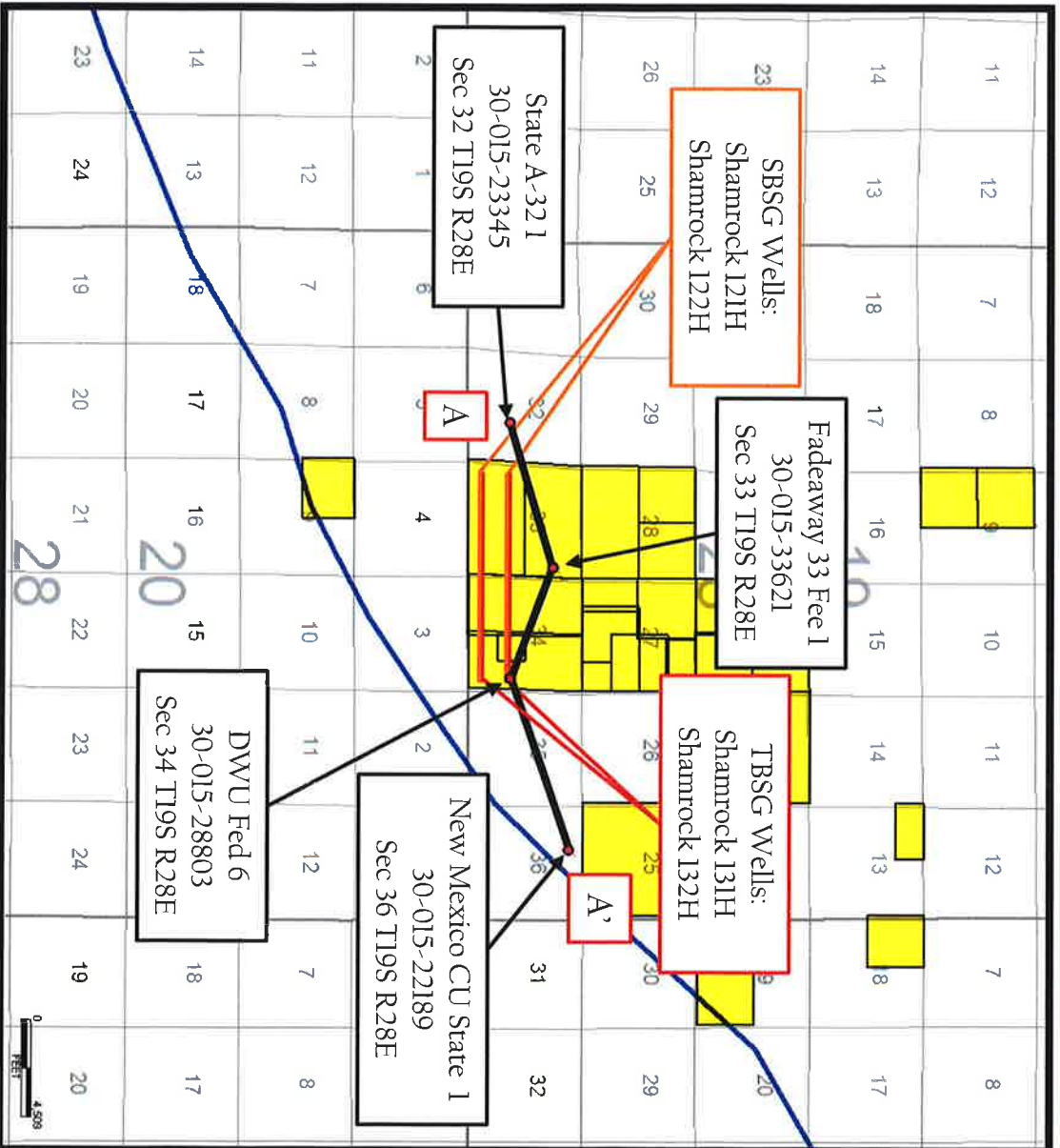
Dawson 34 Fed: SBSG-TBSG Gun Barrel Development



Dawson 34 Fed: Regional Locator Map

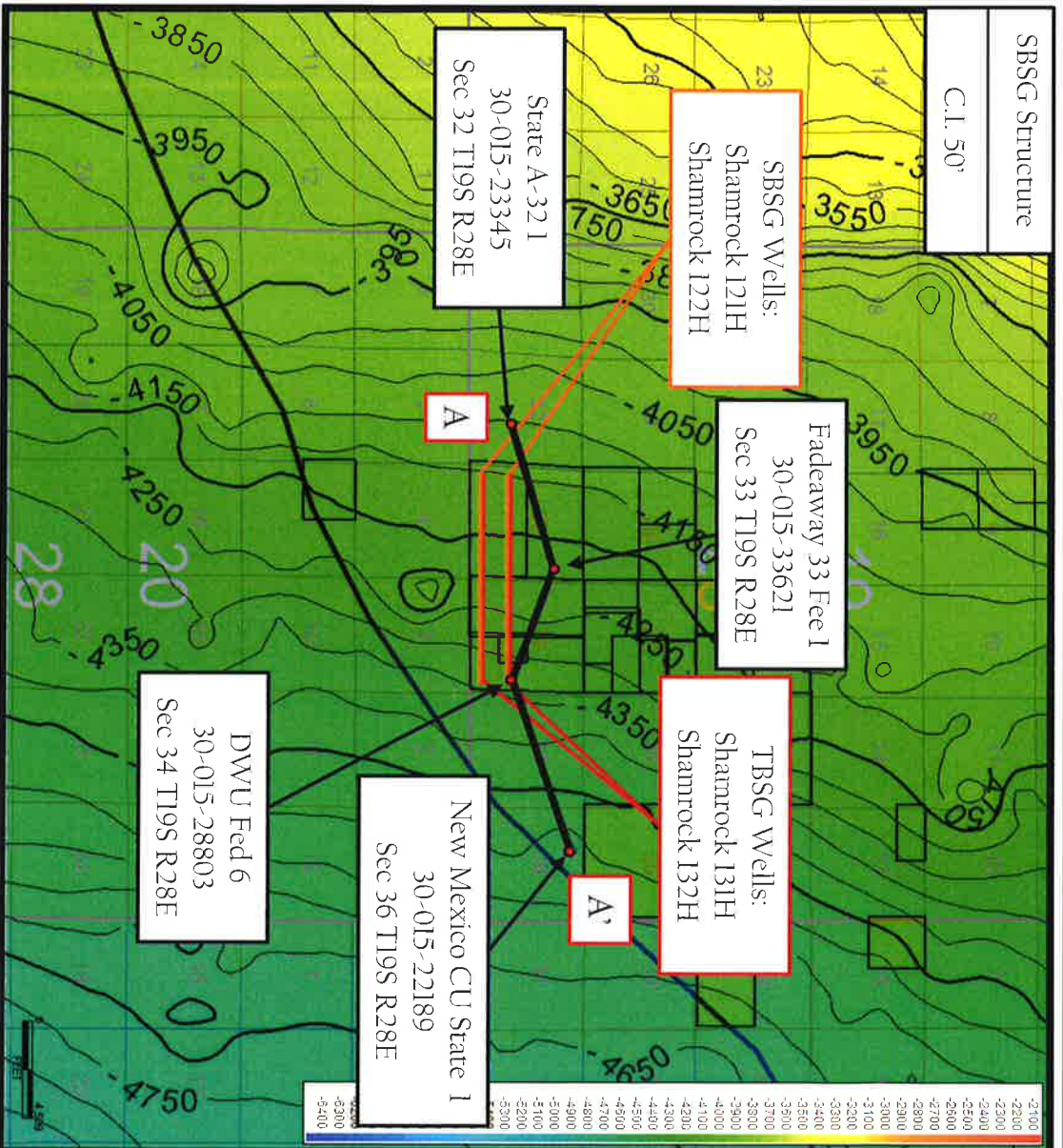


Dawson 34 Fed: Cross-Section Locator Map



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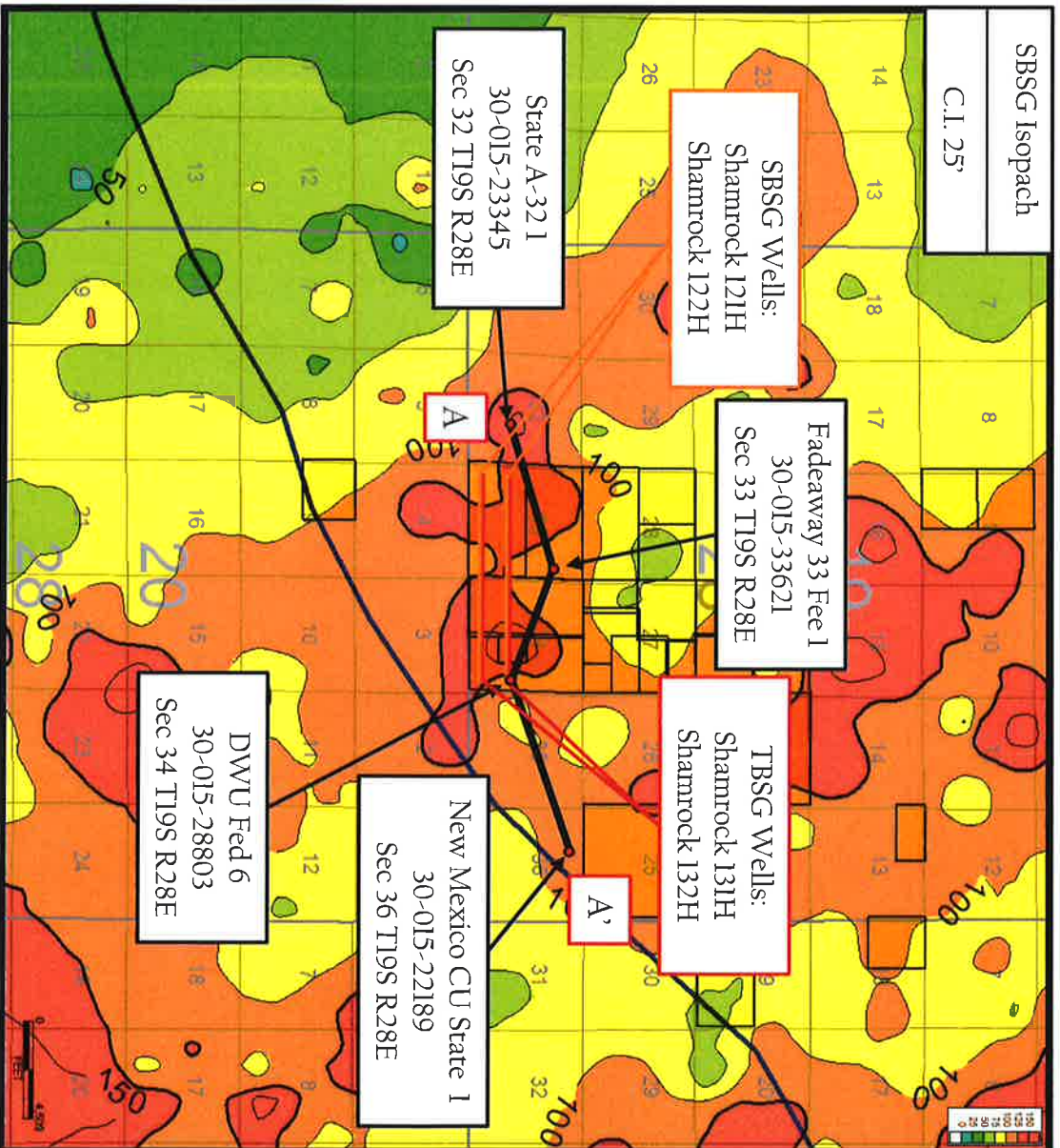
Dawson 34 Fed: SBSG Structure Map



 Colgate Energy

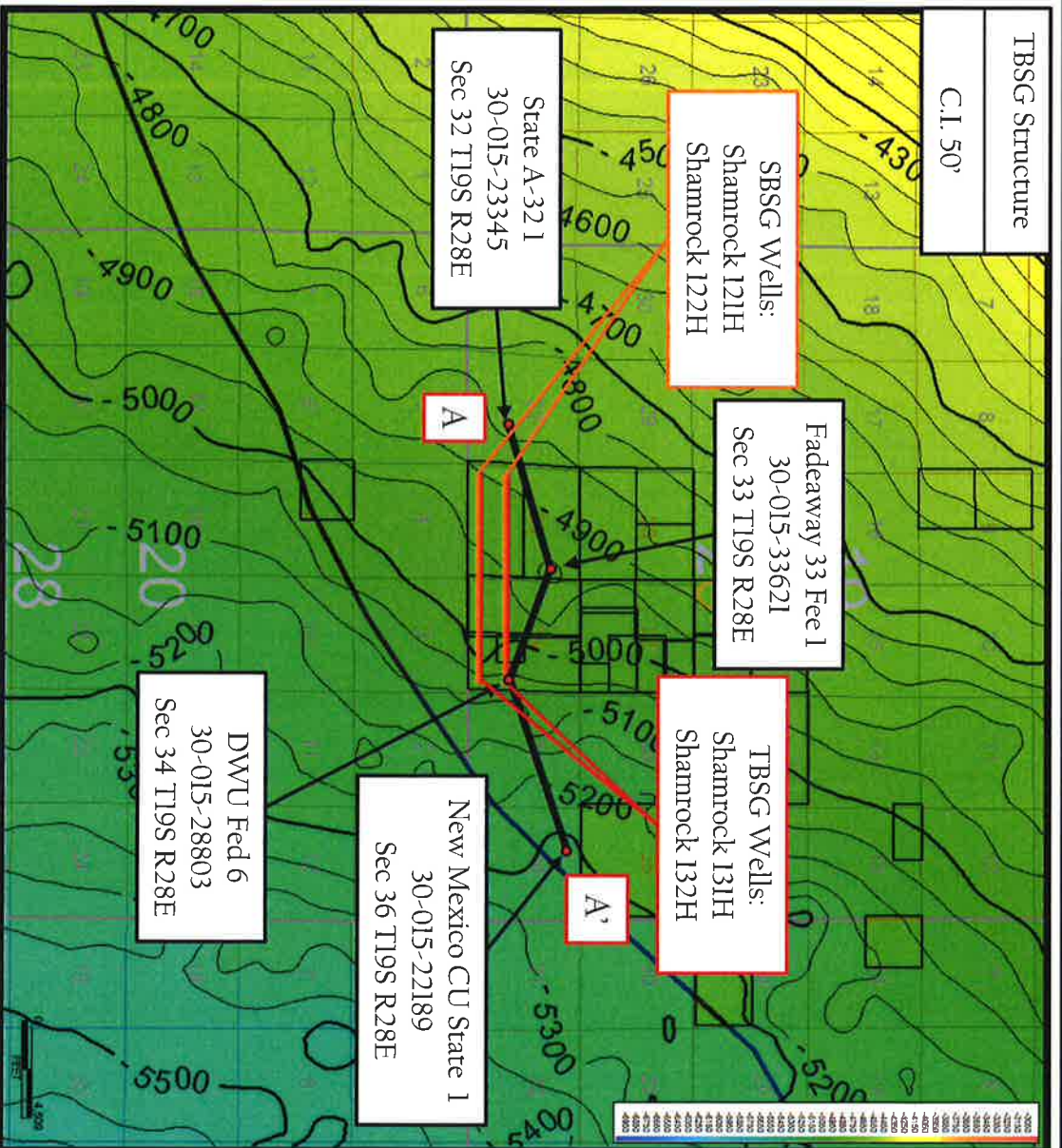
CONFIDENTIAL

Dawson 34 Fed: SBSG Isopach Map



 Colgate Energy

Dawson 34 Fed: TBSG Structure Map



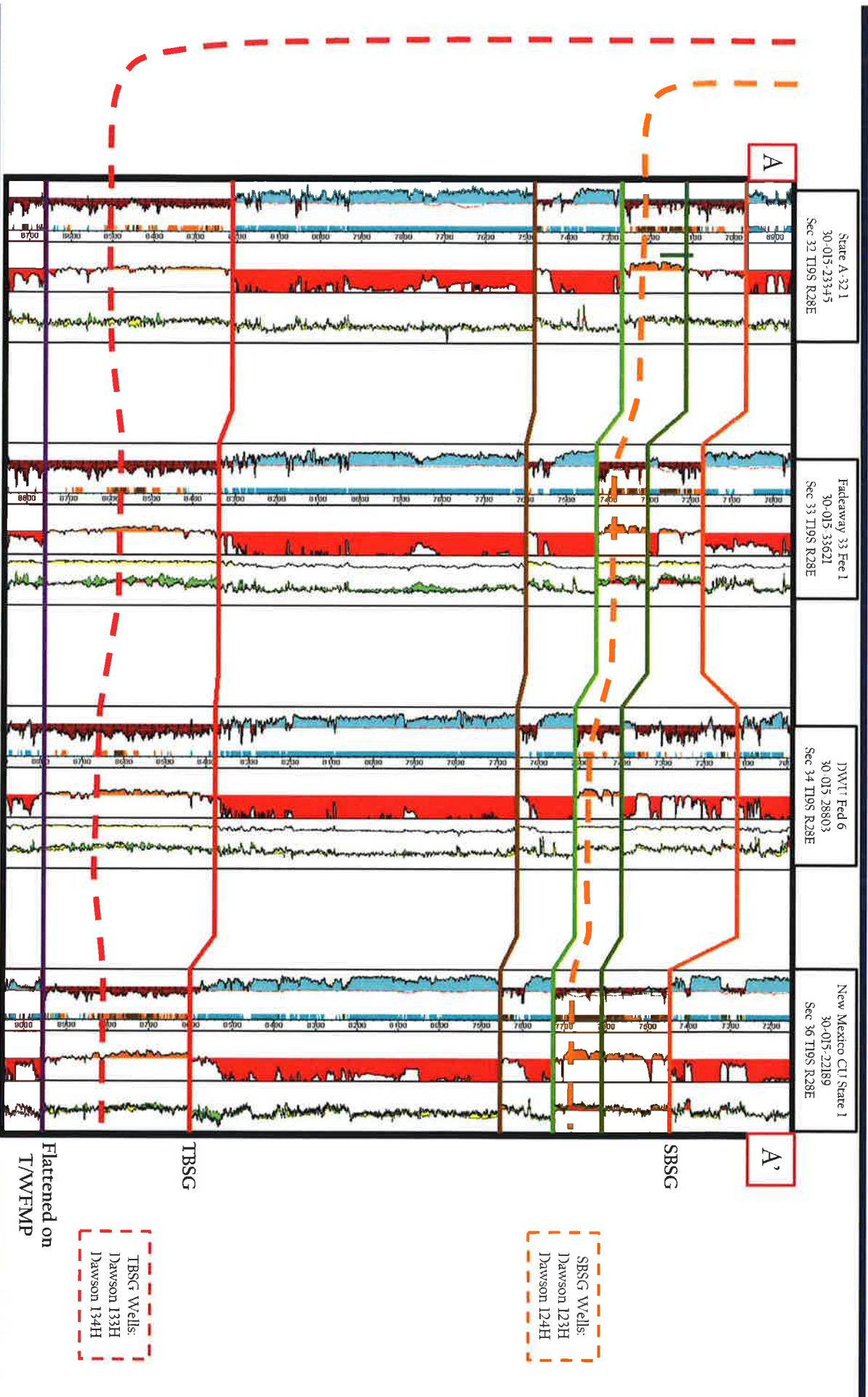
Colgate Energy

COLGATE
ENERGY



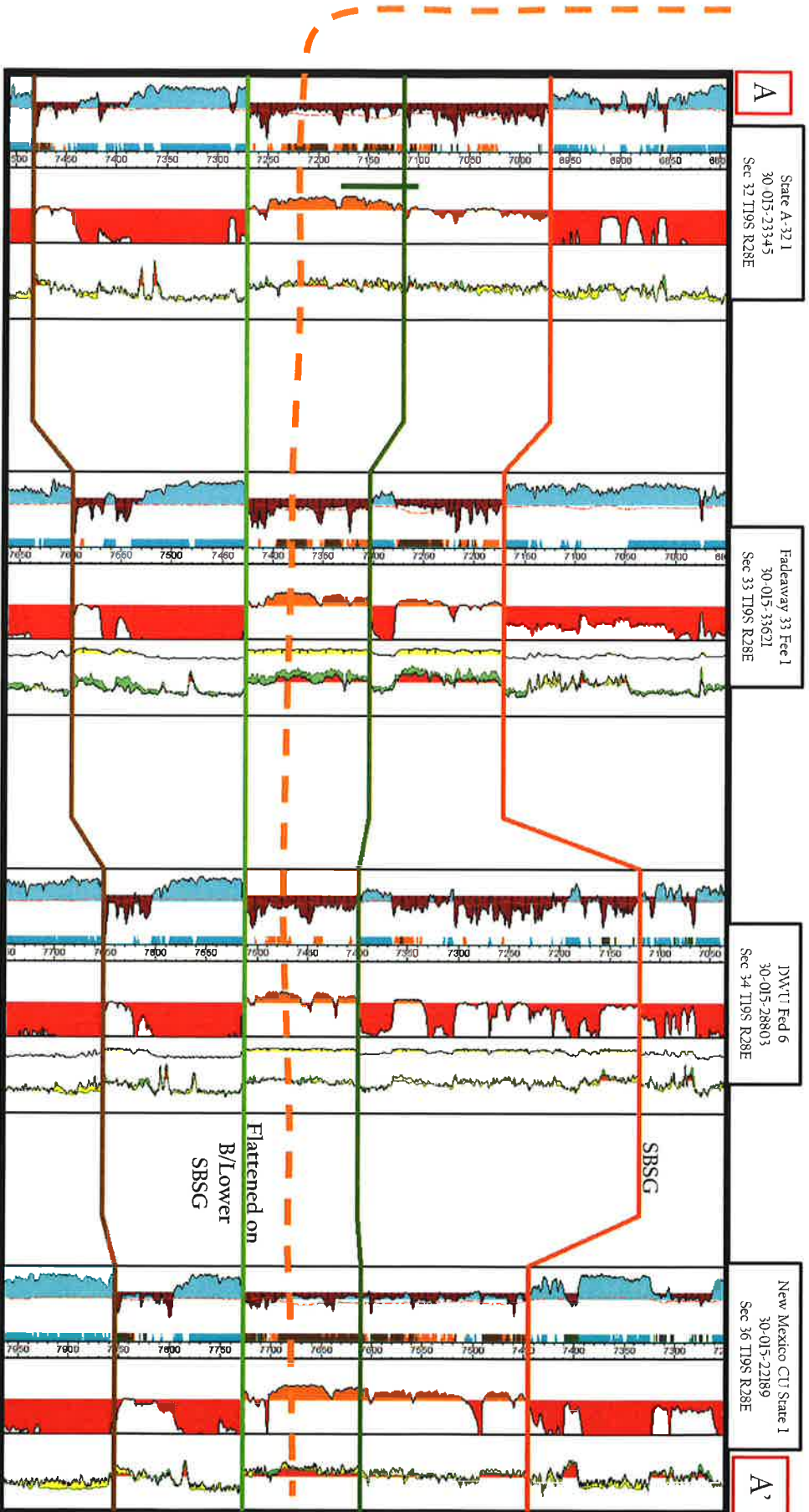
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Dawson 34 Fed: Cross-Section A-A'



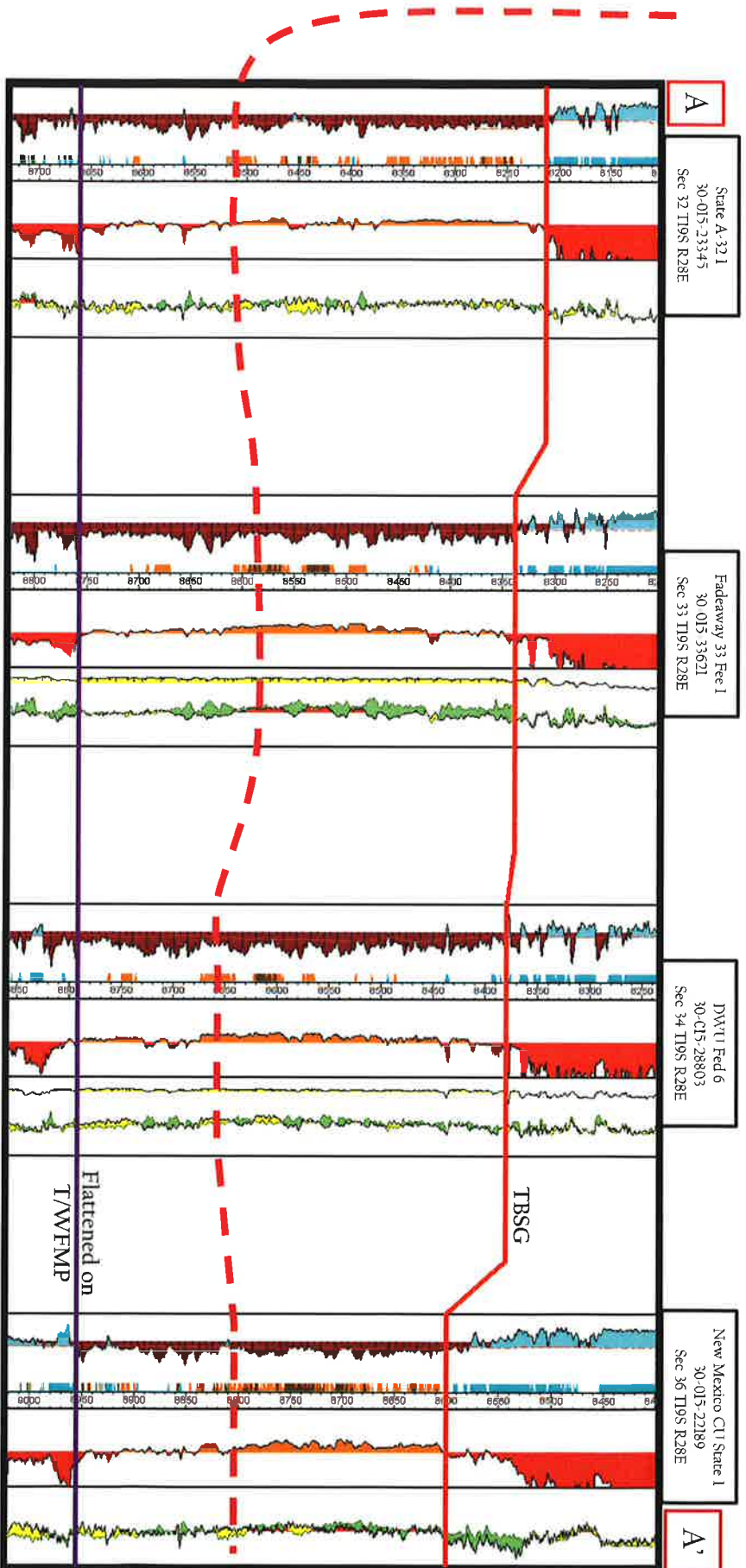
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Dawson 34 Fed: Cross-Section A-A' (SBSG)

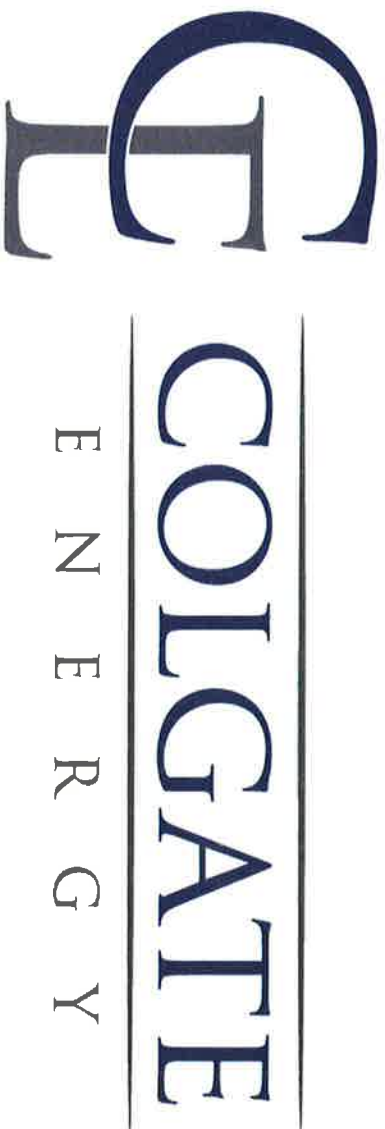


SBSG Wells:
Dawson 123H
Dawson 124H

Dawson 34 Fed: Cross-Section A-A' (TBSG)



TBSG Wells:
Dawson 133H
Dawson 134H

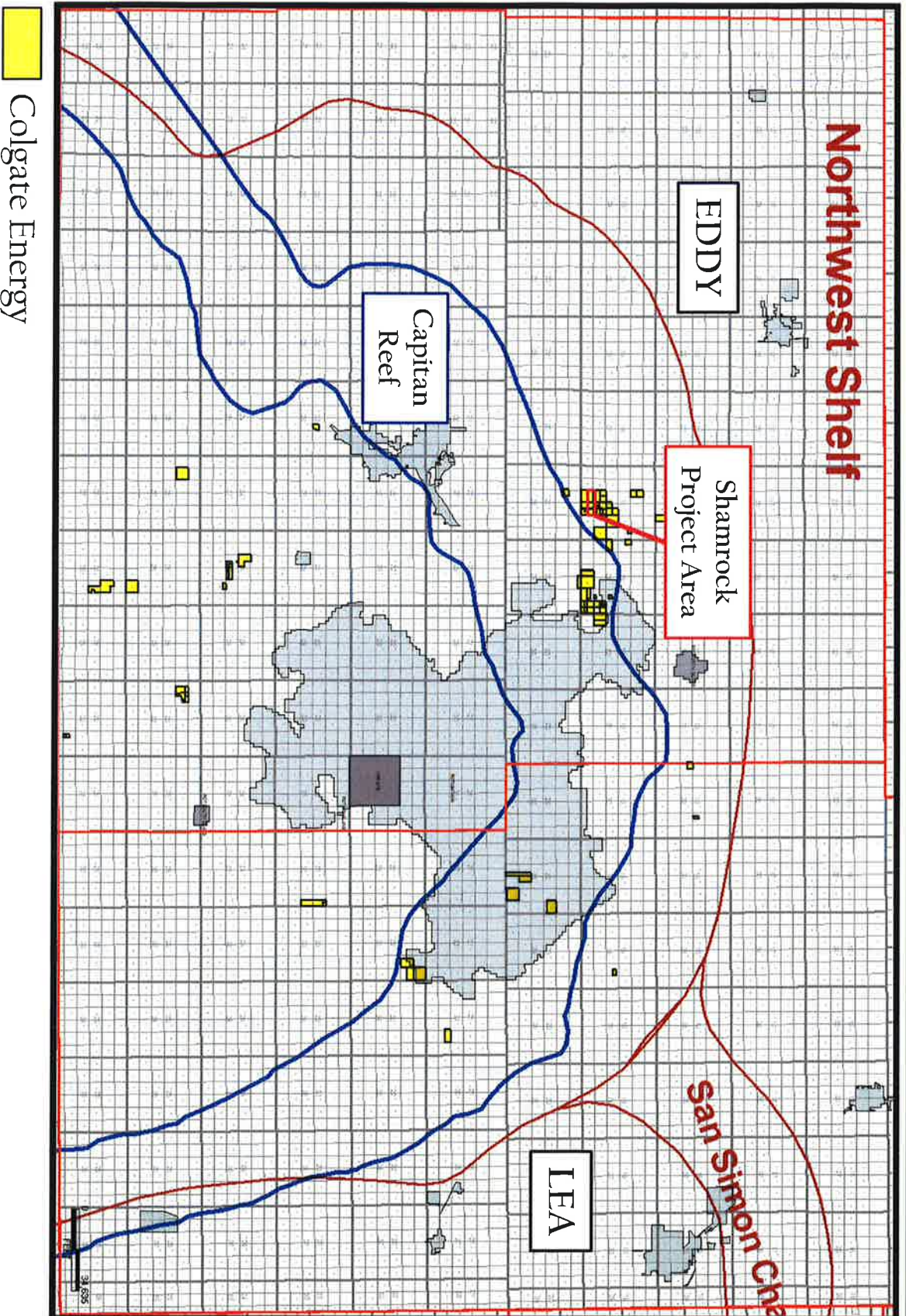


PDU: Shamrock 34 Fed Pooling
5/26/2020

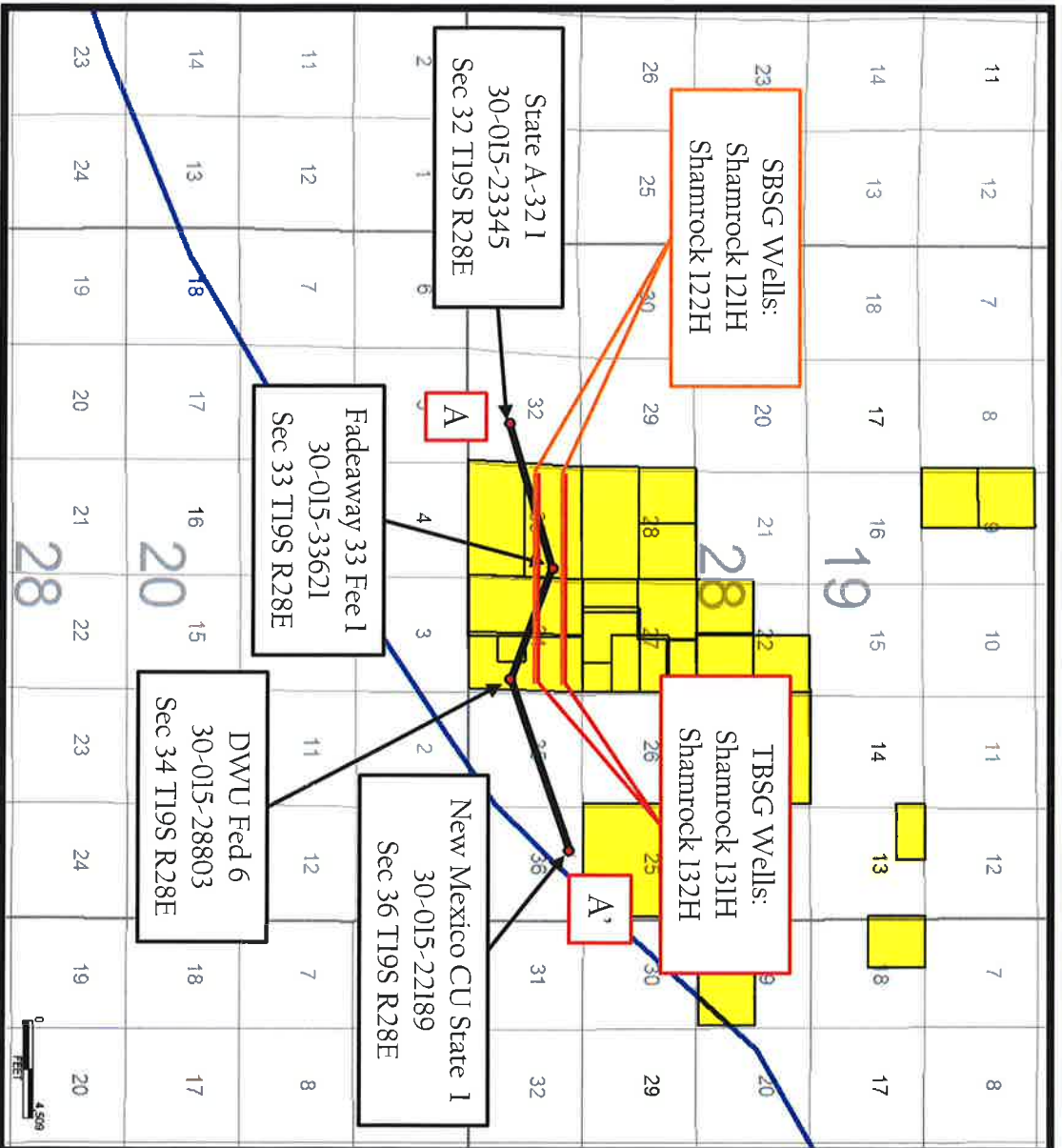


COLGATE
P A R K E R

Shamrock 34 Fed: Regional Locator Map

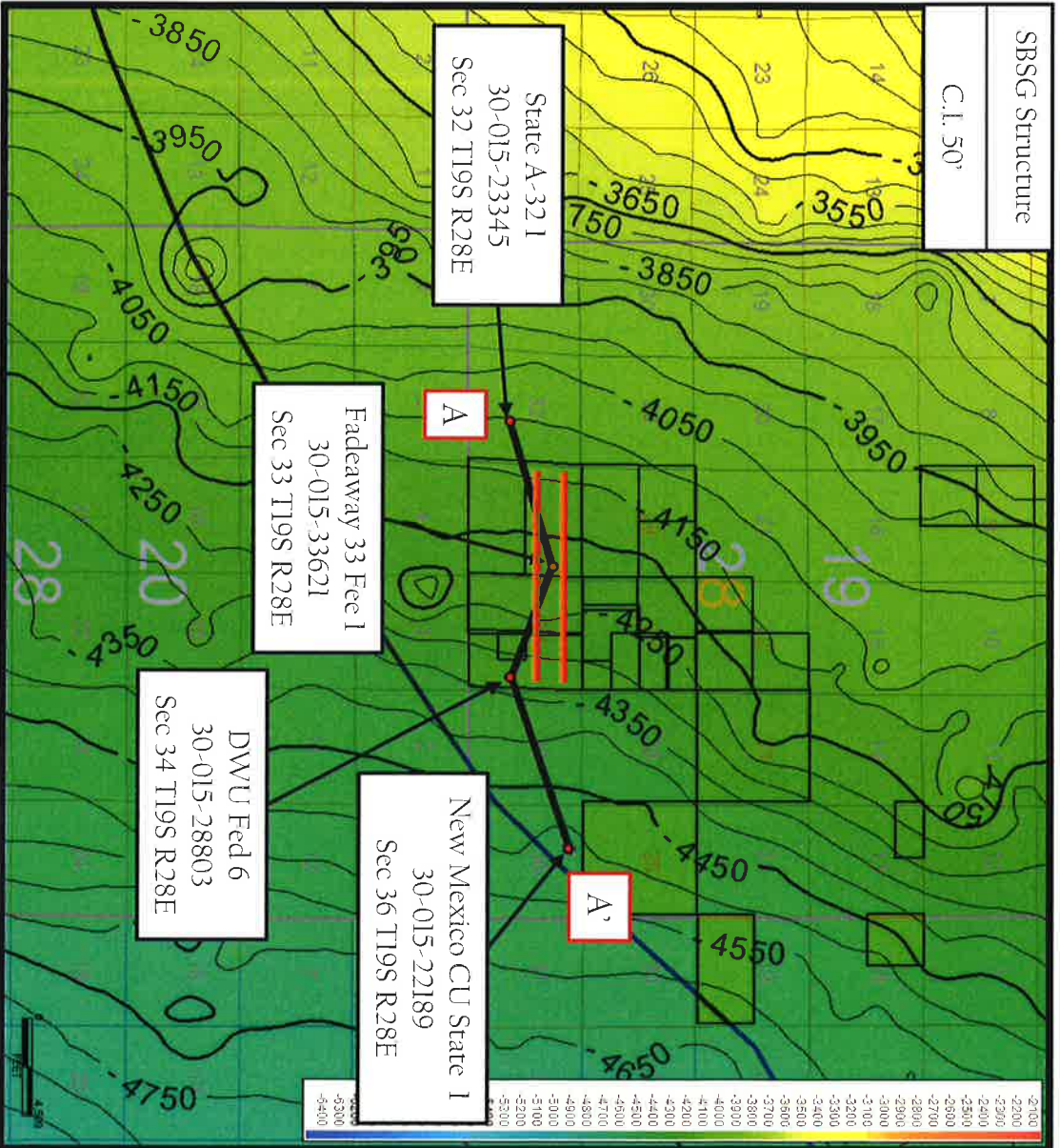


Shamrock 34 Fed: Cross-Section Locator Map



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Shamrock 34 Fed: SBSG Structure Map



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SBSG Isopach

C.I. 25'

State A-321
30-015-23345
Sec 32 T19S R28E

Fadeaway 33 Fee 1
30-015-33621
Sec 33 T19S R28E

DWU Fed 6
30-015-28803
Sec 34 T19S R28E

New Mexico CU State 1
30-015-22189
Sec 36 T19S R28E

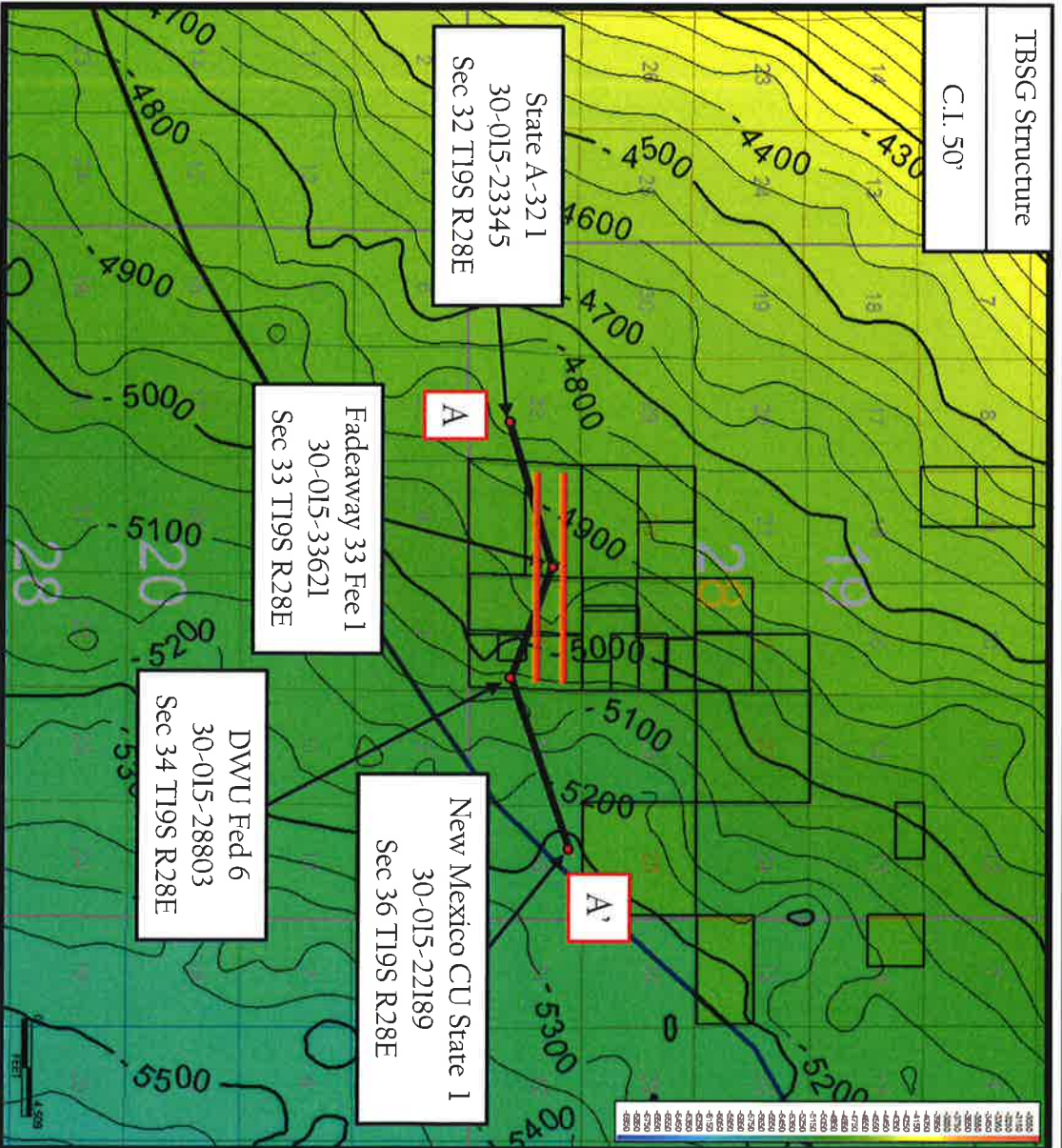
A

A'

0 100 200 300 400 4,500
FEET

9

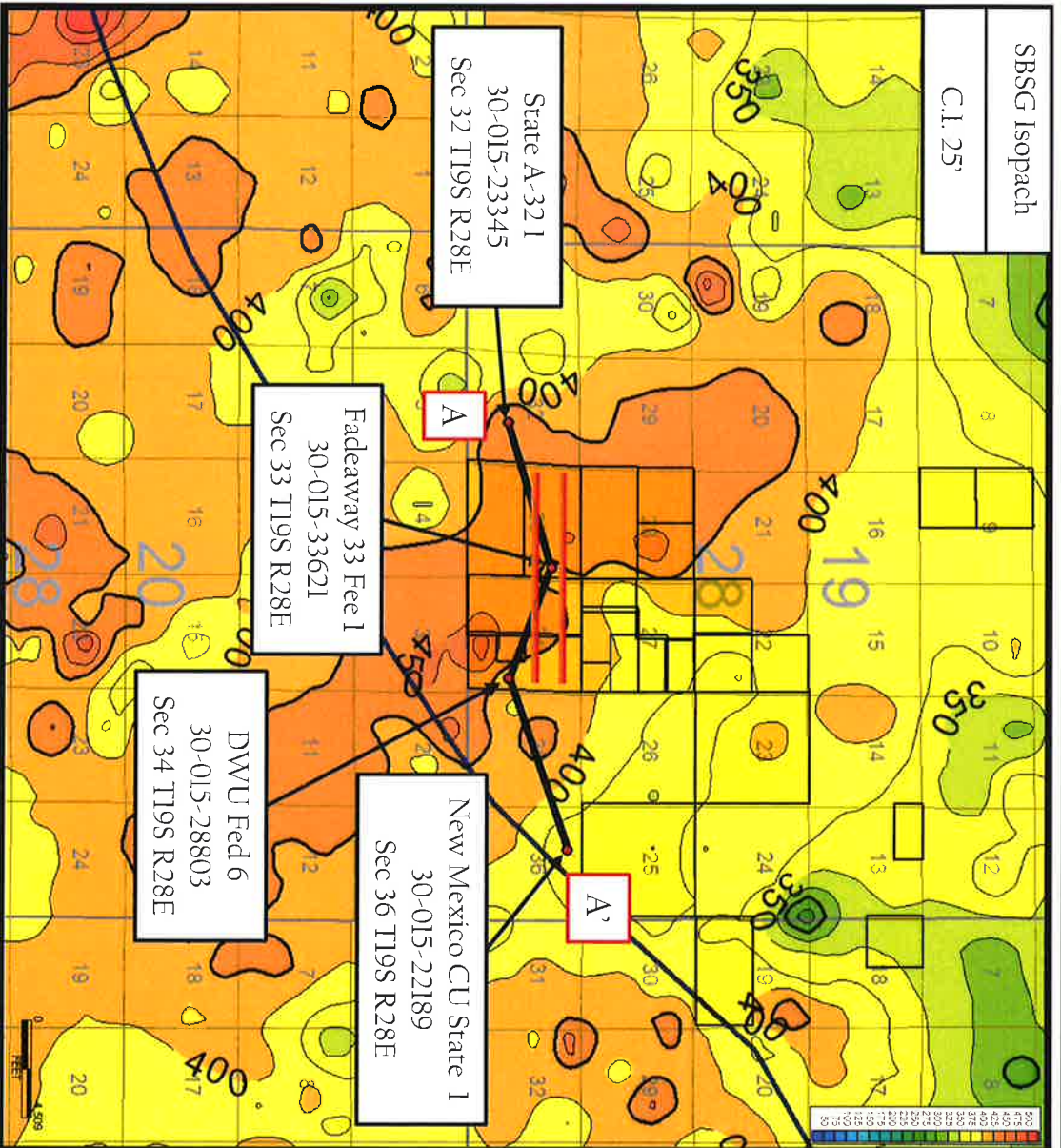
Shamrock 34 Fed: TBSG Structure Map



Colgate Energy

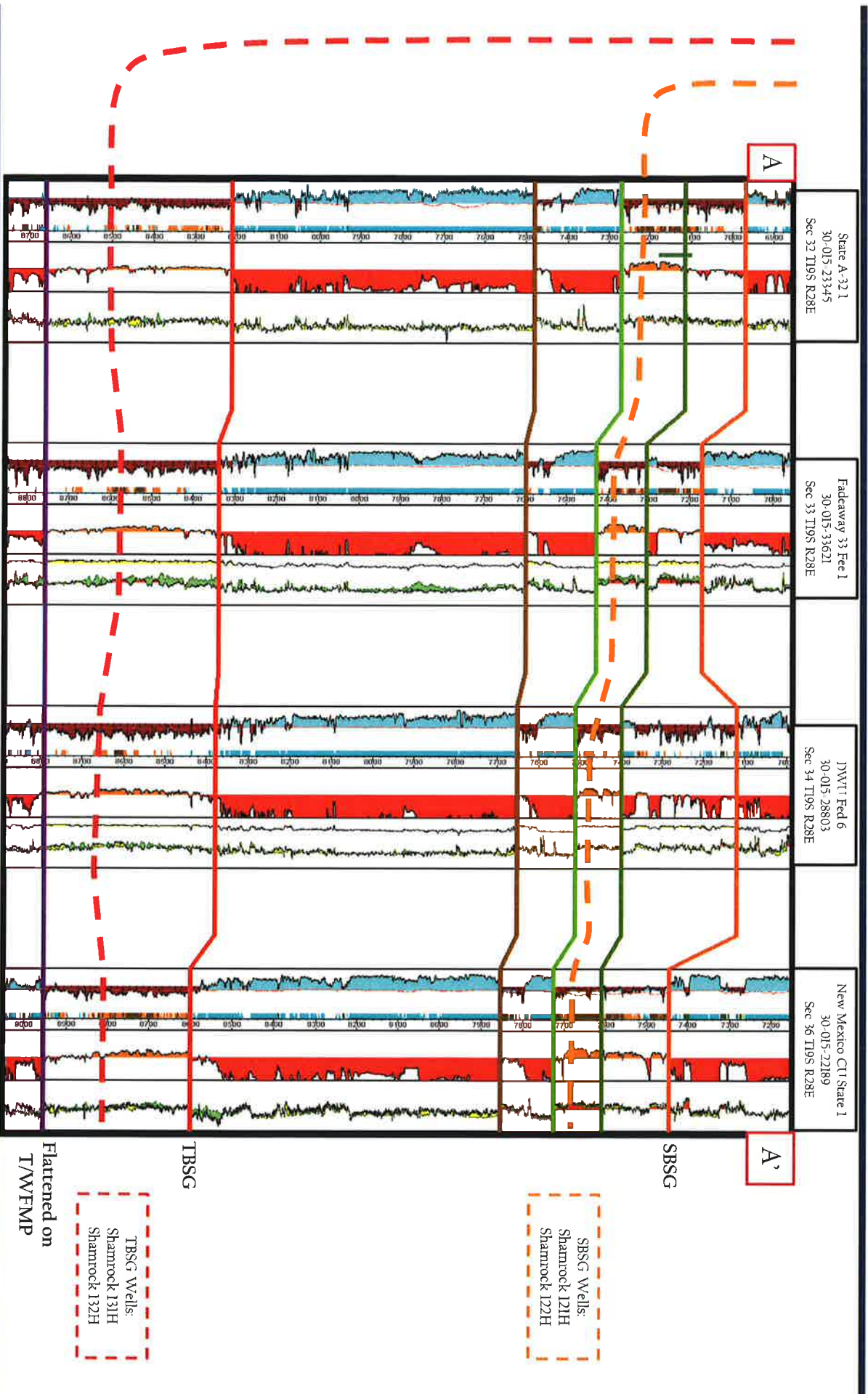
CONFIDENTIAL

Shamrock 34 Fed: TBSG Isopach Map

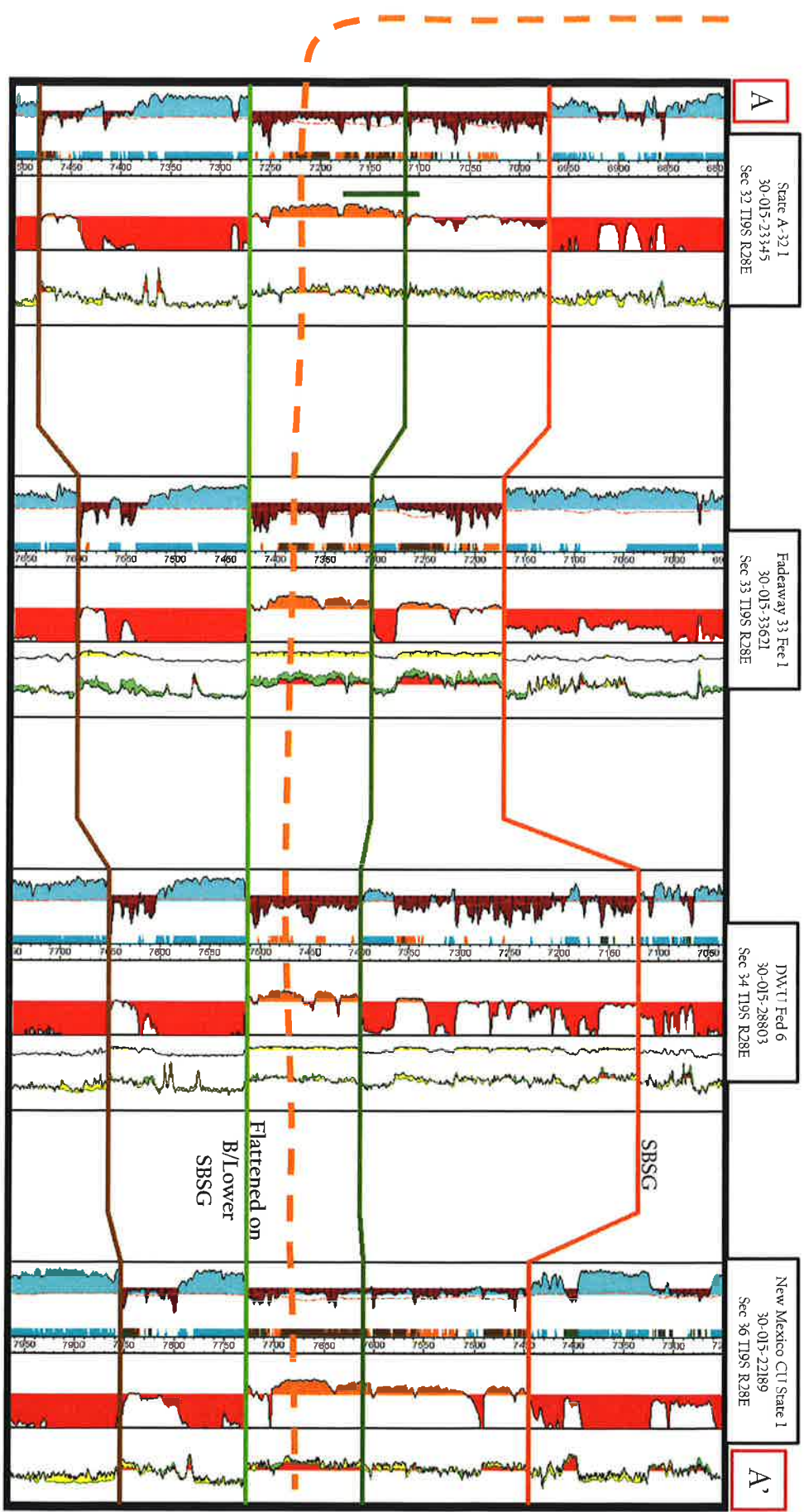


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Shamrock 34 Fed: Cross-Section A-A'

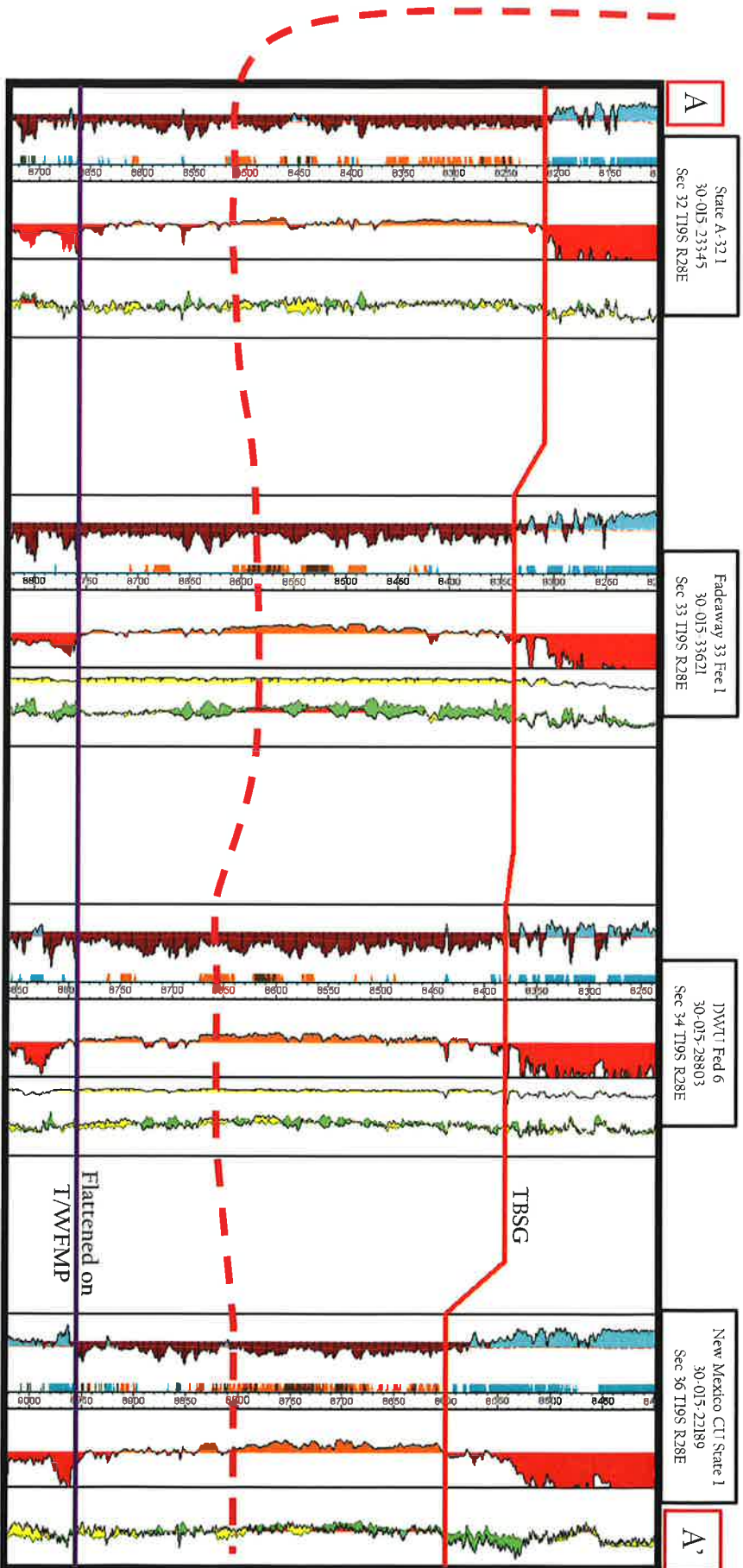


Shamrock 34 Fed: Cross-Section A-A' (SBSG)



SBSG Wells:
Shamrock 121H
Shamrock 122H

Shamrock 34 Fed: Cross-Section A-A' (TBSG)



TBSG Wells:
Shamrock 131H
Shamrock 132H