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### **Exhibit B**

Affidavit of Sergio Ojeda

OCD Cases 21078 & 21079
OCD Case 21239
(Weaver wells)
Colgate Operating, LLC

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Weaver & Big Burro wells

### 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. 21239** 

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

CASE NO. 21078, 21079

### <u>AFFIDAVIT</u>

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 Weaver State Com Wells Nos. 121H, 131H, 122H, and 132H to test the 2<sup>nd</sup> and 3<sup>rd</sup> Bone Spring Sand underlying the N/2 of Sections 27 and 28; and the Big Burro State Com Well Nos. 123H, 124H, 133H and 134H, all in Township 19 South, Range 28 East, NMPM, Eddy County, New Mexico. The study includes:

### SBSG-TBSG Gun Barrel Development map

The Gun Barrel visuals essentially puts all horizontal wells in a 2D view for us. It consists of a Geology Type Log on the left side of the page and depicts both the depths and log signatures of our SBSG/TBSG Target intervals. The locator map is on the bottom right of the page. The green box is our Big Burro/Weaver St. DSU and the Red Star is location of our Type Log. The

main middle section of the Gun Barrel Plot depicts our development plans. The empty circles are our proposed locations. The filled in circles are wells that are already drilled. The plus sign in the circles mean the wells are perpendicular to our DSU. In this case the "plus sign" wells would be drilled or proposed N-S unlike our DSU that is E-W. We also label the footages from each lease line and our proposed interwell spacing. This Gun Barrel basically helps us understand where all our offset wells sit relative to our DSU. It also helps us plan interwell spacing as we think through offset frac hits and other potential operational issues.

### Regional Locator Map

The Regional Locator Map shows our Big Burro's DSU relative position to the Delaware Basin. Big Burro is positioned on the deep slope of the Northern Delaware Basin.

### Cross-Section Locator Map

This visual shows our Cross-Section line "A-A". The Black Boxes label (Name, API. Location) all of our logs used in the Cross-Sections. The Big Red Boxes label our proposed TBSG locations. The Orange Boxes label our proposed SBSG locations. The Yellow Color fill is Colgate Acreage.

### SBSG Structure Map

The Second Bone Spring (SBSG) Subsea Structure Map is made off the base of our Target Interval. The orange colors are relative high and the blue colors are relative deep. It shows a N-S strike direction with dip to the East. The dip is~150' per mile to the East. The dip is relatively similar from Section 30 west of Big Burro DSU to Section 27 on the East side of our DSU. There is no evidence that there is any kind of major faulting from Section 30-27.

### **SBSG** Isopach Map

The SBSG Isopach map shows the total gross thickness of our Target Interval. The Contour Interval is 25' and the dark red is the Thickest section of Sand and the light green/blue is the Thinnest section of Sands. Big Burro and Weaver State DSU have an average of ~75' of Sand. A 2 mile DSU from Section 30 – Section 29 would have an average of ~100' of Sand. This would give Apache a slight advantage of drilling a 2 mile well from Section 30 -29.

### TBSG Structure Map

The Third Bone Spring (TBSG) Subsea Structure Map is made off the base of our Target Interval. The light green colors are relative high and the blue colors are relative deep. It shows a NE/SW strike direction with dip to the SE. The dip is ~150' per mile to the SE. The dip is relatively similar from Section 30 west of Big Burro DSU to Section 27 on the East side of our DSU. There is no evidence that there is any kind of major faulting from Section 30-27.

### TBSG Middle/Lower Net Pay Map

The TBSG Net Pay map shows the Net Pay of what we Colgate consider to be the Channel Sand Target Intervals. The Contour Interval is 10' and the dark red is the Thickest section of Sand and the light green/blue is the Thinnest section of Sands. Big Burro and Weaver State DSU have an average greater than ~70' of Sand. A 2 mile DSU from Section 30 – Section 29 would have an average greater than ~70' of Sand as well. This would give both Colgate and Apache similar TBSG Net Pay while drilling a 2 mile well from Sections 30-29 and Sections 28-27 respectively.

### Cross-Section A-A'

Cross-Section A-A' is a stratigraphic E-W Cross-Section that displays both SBSG and TBSG Target intervals. The First, Second and Third Log Tracks are: GR, Resistivity, and Density Porosity, respectively. You can see that both SBSG/TBSG have good Net Pay moving through all

the logs. The only slightly thinner net pay on here would be the most eastern log (Eddy Av #1) which SBSG has slightly less Net Pay and thinner gross section than the rest of the logs. The Orange Dashed Line Represents our proposed SBSG Target. The Red Dashed Line represent our proposed TBSG Target.

### Cross-Section A-A' (SBSG)

This zoomed in SBSG Cross-Section A-A' has the same well logs and scale as the previous display. The Dark Green line is the top of our target interval and the Lighter Green Line is the Base of our Target Interval. Again, the Orange Dashed Line represents our proposed SBSG Target. This Cross-Section shows that the Lower SBSG Target Interval correlates from Section 30 through Section 27. It also shows that a 2 Mile DSU from Section 30-29 would have a slight Iso/Net Pay advantage to our Big Burro/Weaver Section 28-27 2 Mile DSU as the gross iso and Net Pay thin to the East.

### Cross-Section A-A' (TBSG)

This zoomed in TBSG Cross-Section A-A' has the same well logs and scale as the previous display only we added orange pay flags that represent the Middle Channel Sands. The Dark Red line is the top of TBSG interval and the Purple Line is the Base of our TBSG Interval. Again, the Red Dashed Line represents our proposed TBSG Target. This Cross-Section shows that although the Gross Iso thickness varies slightly across the sections the actual TBSG Target Channel Sands are similar and correlate very well from Section 30 through Section 27. It also shows that a 2 Mile DSU from Section 30-29 would be similar Net Pay to our proposed Big Burro/Weaver Section 28-27 2 Mile DSU.

- 3. I conclude from the foregoing exhibits for the Weaver and Big Burro 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,

4. 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 day of August, 2020 by Sergio Ojeda on behalf of Colgate Operating, LLC.

Notary Public

My Commission Expires:

JORDAN IRETON
Notary Public, State of Texas
Comm. Expires 05-29-2022
Notary ID 129034221

Section 30-29 would be similar Net Pay to our proposed Big Burro/Weaver Section 28-27 2 Mile DSU.

- 3. I conclude from the foregoing exhibits for the Weaver and Big Burro 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.
- Each quarter section encountered by each of the wells in the proposed unit will contribute more or less equally to production,

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

SERGIO OJEDA

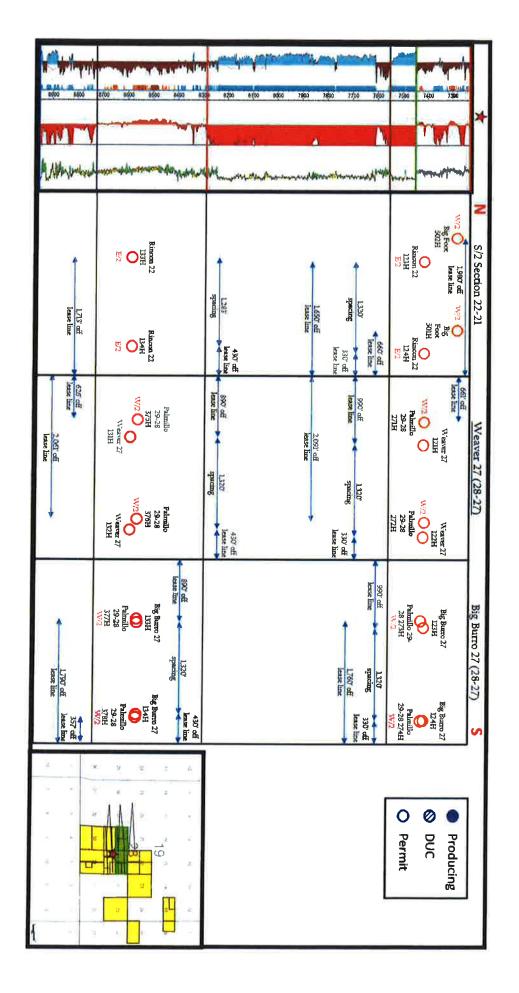
SUBSCRIBED AND SWORN to before me this many day of August, 2020 by Sergio Ojeda on behalf of Colgate Operating, LLC.

My Commission Expires:

KATHRYN HANSON Notary Public, State of Texas Comm. Expires 08-18-2021 Notary ID 131250643

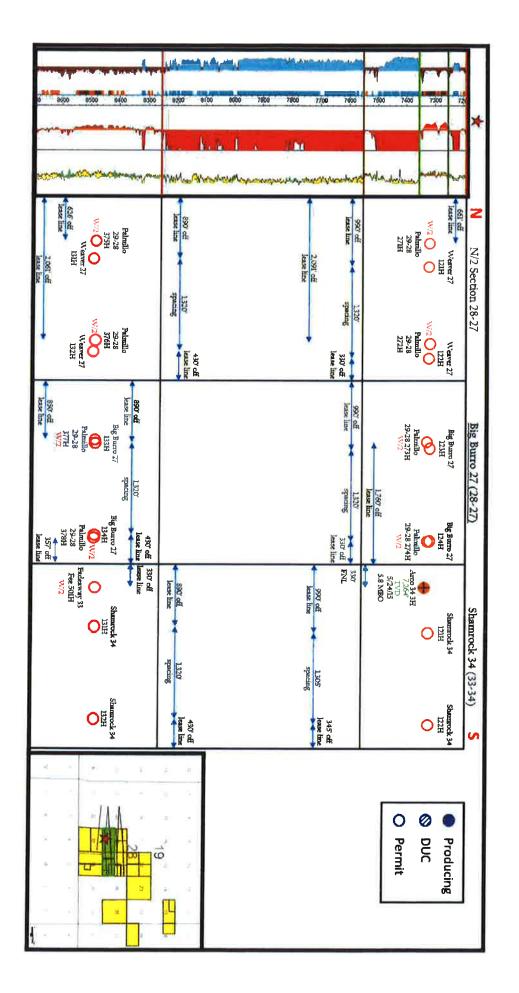
## Gun Barrel Development: Weaver 27 State





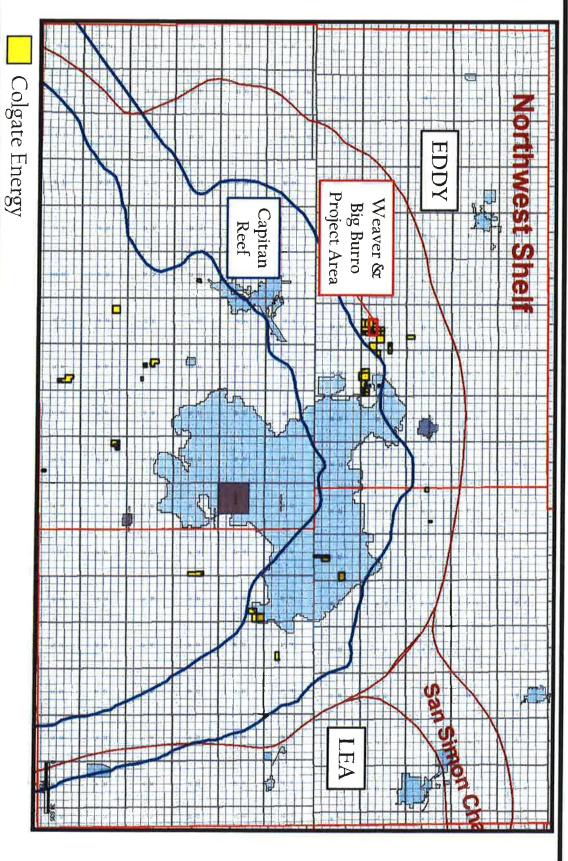
## Gun Barrel Development: Big Burro 27 State





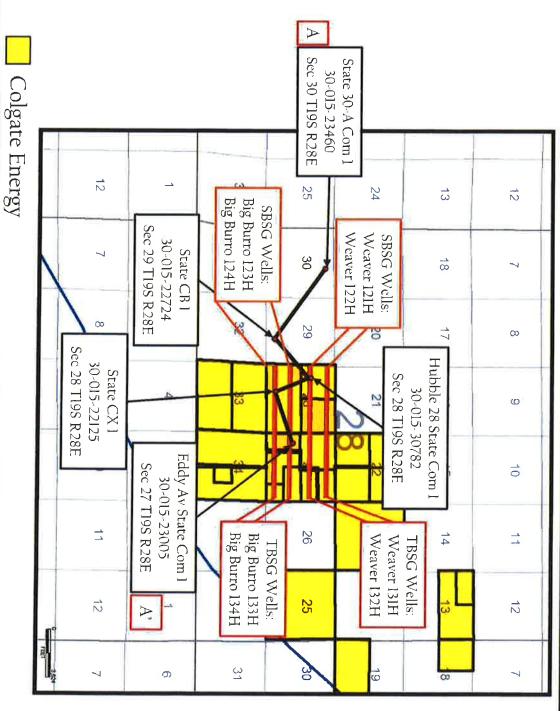
# Regional Locator Map: Weaver & Big Burro & COLGAIL





## Cross-Section Locator Map: Weaver & Big Burro

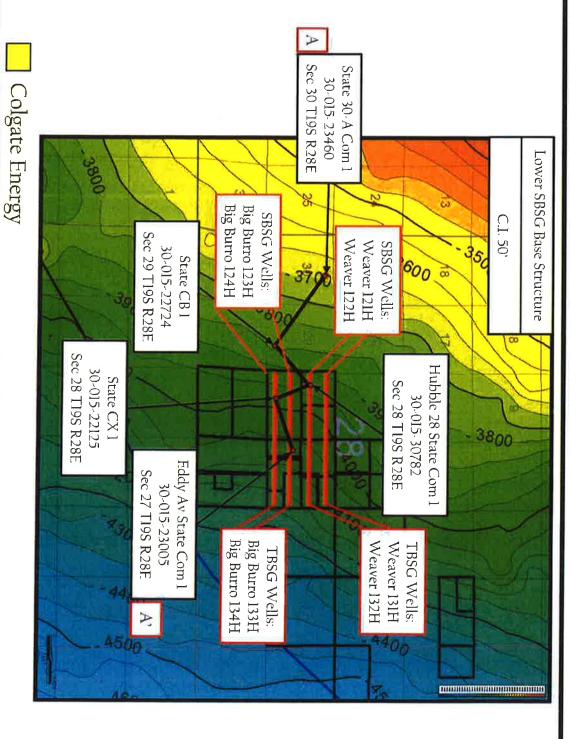




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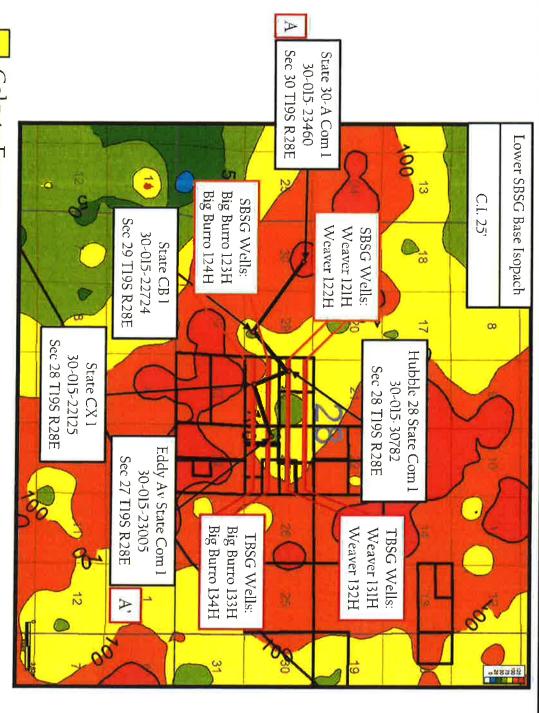
### Lower SBSG Base Structure Map: Weaver & Big Burro





### Lower SBSG Base Isopach Map: Weaver & Big Burro

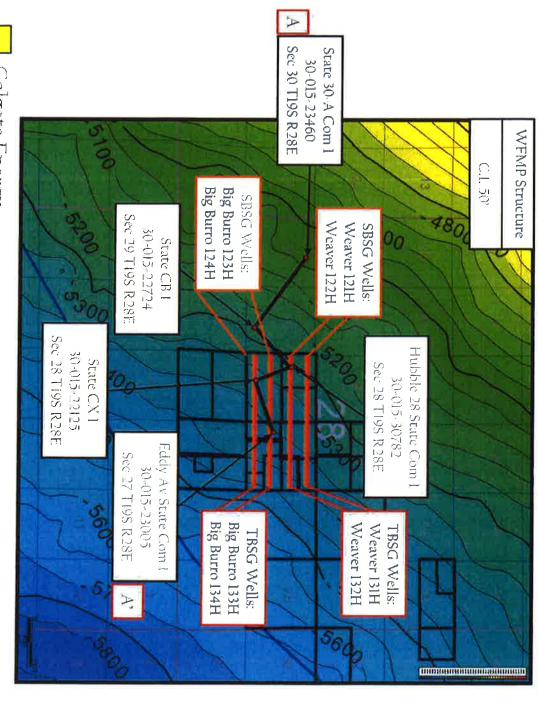




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### WFMP Structure Map: Weaver & Big Burro

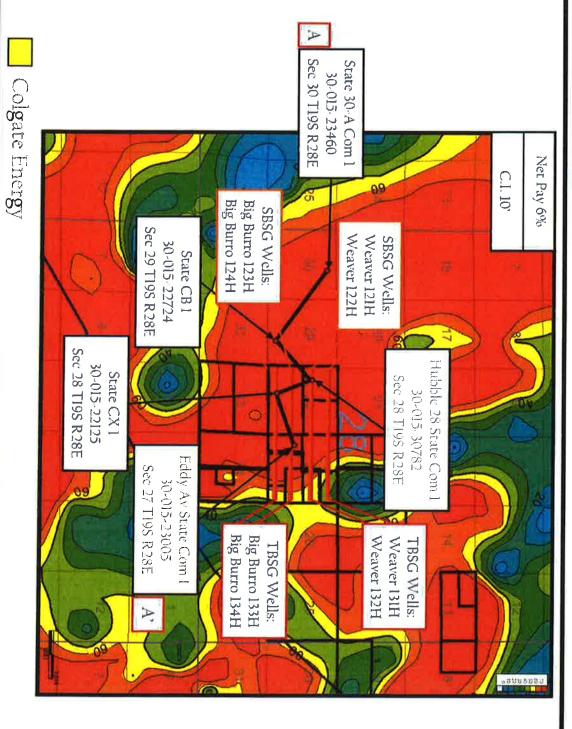




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## TBSG Middle & Lower Sand Net Pay Map: 6%, 30 ohms

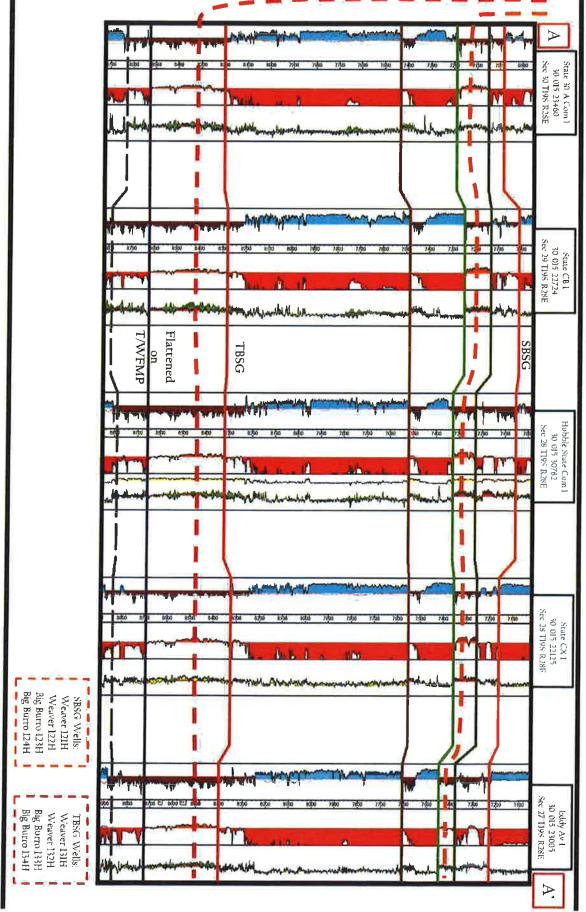




CONFIDENTIAL Ex.B-Ex.1-013

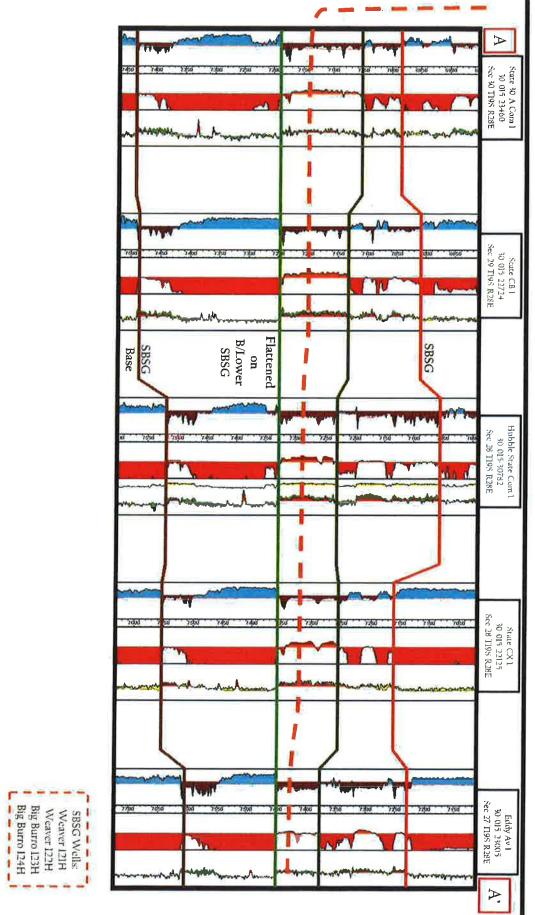
### Cross-Section A-A': Weaver & Big Burro





### SBSG Cross-Section A-A': Weaver & Big Burro





### TBSG Cross-Section A-A': Weaver & Big Burro



