

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

**APPLICATION OF PERMIAN RESOURCES
OPERATING, LLC FOR COMPULSORY
POOLING AND APPROVAL OF
OVERLAPPING SPACING UNIT,
LEA COUNTY, NEW MEXICO. CASE NOS. 25833–25834**

**APPLICATIONS OF PERMIAN RESOURCES
OPERATING, LLC FOR COMPULSORY
POOLING, LEA COUNTY, NEW MEXICO. CASE NOS. 25835–25845**

**APPLICATION OF AVANT OPERATING II, LLC
FOR APPROVAL OF A NON-STANDARD UNIT,
COMPULSORY POOLING, AND TO THE EXTENT
NECESSARY, APPROVAL
OF AN OVERLAPPING SPACING UNIT,
LEA COUNTY, NEW MEXICO CASE NOS. 25827, 25829
& 25831**

**APPLICATION OF AVANT OPERATING II, LLC
FOR APPROVAL OF A NON-STANDARD UNIT AND
COMPULSORY POOLING
LEA COUNTY, NEW MEXICO. CASE NO. 25832**

**PERMIAN RESOURCES OPERATING, LLC’S
REBUTTAL EXHIBIT INDEX**

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- C-13 Avant’s Misleading Approach to Extrapolated Volumes
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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served upon the following counsel of record by electronic mail on April 20, 2026.

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Working Interest Owners — Side-by-Side Comparison of 1.5 Mile Laterals (excluding 2nd BS Wells)

TABLE 1 — AVANT OPERATING II, LLC WI Calculations					
WI Owner	NMA	Unit WI	Tract No.	Tract WI	Force Pool Interest
AVANT OPERATING II, LLC	513.8	53.52%	1	80.28%	
Chief Capital (O&G) II LLC	58.5	6.09%	1	9.14%	JOA - Committed
WR Non-Op LLC	19	1.98%	1	2.97%	Yes
Trainer Partners Ltd	11.2	1.16%	1	1.74%	Yes
TD Minerals, LLC	20.3	2.11%	1	3.17%	JOA - Committed
Earthstone Permian LLC	11.2	1.16%	1	1.74%	Yes
Andrew H. Jackson	3.1	0.32%	1	0.48%	Yes
Diaga Mineral Group	3.1	0.32%	1	0.48%	JOA - Committed
Earthstone Permian LLC	305.6	31.83%	2	95.50%	Yes
Petrolux, Inc.**	8	0.83%	2	2.50%	Under Contract - Committed
MRC Permian Company	6.4	0.67%	2	2.00%	Yes

**Petrolux was conveyed to a predecessor of Earthstone and is owned by Earthstone.

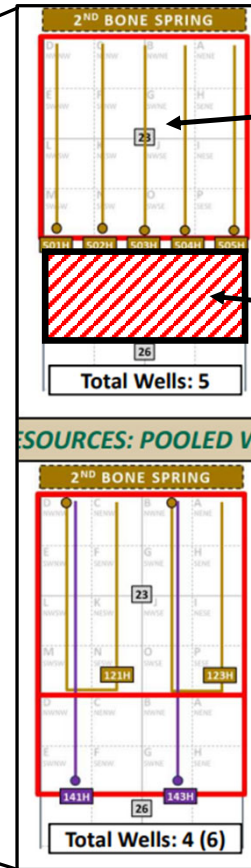
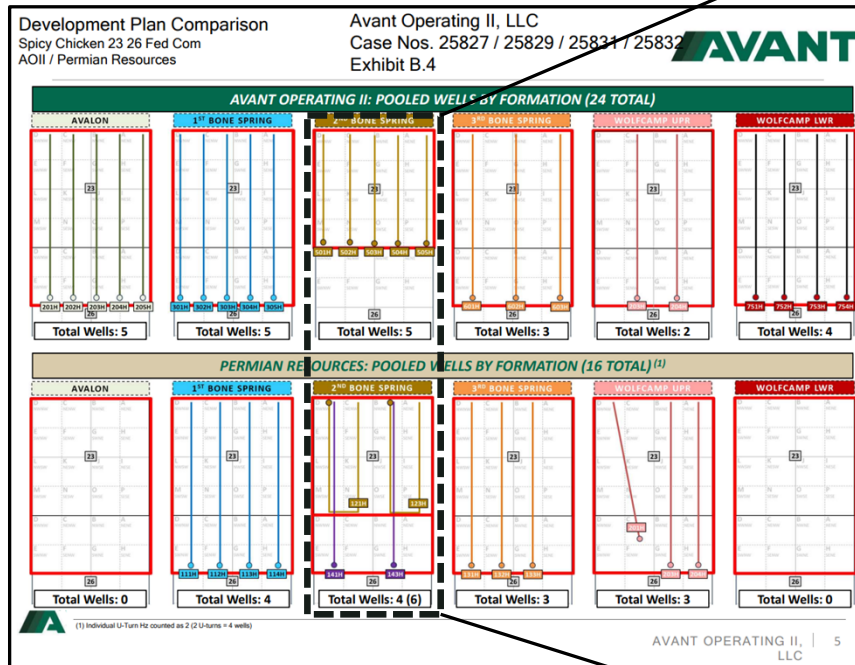
NMA Variance Summary Due to Potential Unaccounted for Conversion of ORRIs				
Party	Table 1 Avant	Table 2 Permian	Variance	Party
AVANT OPERATING II, LLC	513.8	423.689	-90.111	Avant's calculations potentially overstate their WI by ~90 NMA
Earthstone Permian, LLC	324.8	365.862	+41.062	Avant's calculations understate Permian Resources' interest by ~41 NMA

TABLE 2 — Permian Resources WI Calculations					
WI Owner	NMA	Unit WI	Tract No.	Tract WI	Force Pool Interest
Avant Operating II, LLC	423.69	44.13%	1	66.20%	Yes
Chief Capital (O&G) II LLC	48.32	5.03%	1	7.55%	Yes
WR Non-Op LLC*	12.80	1.33%	1	2.00%	Yes - PR Under Contract to Acquire
Trainer Partners, Ltd. (OE Squared)*	52.26	5.44%	1	8.17%	Yes
TD Minerals, LLC*	20.27	2.11%	1	3.17%	Yes
Earthstone Permian LLC	52.26	See below	2	8.17%	Yes
Andrew H. Jackson	2.56	0.27%	1	0.40%	Yes
Diaga Mineral Group, LLC	2.56	0.27%	1	0.40%	Yes - Supports PR Plan
Earthstone Permian LLC**	313.60	See below	2	98.00%	Yes
MRC Permian Company	6.40	0.67%	2	2.00%	Yes
Waterloo Resources LLC*	2.88	0.30%	1	0.45%	Yes - PR Under Contract to Acquire
SITL Energy, LLC*	21.33	2.22%	1	3.33%	Yes
Blue Star Royalty, LLC*	1.07	0.11%	1	0.17%	Yes
Earthstone Permian LLC (Permian Resources Operating, LLC)*	365.862	38.11%	1, 2		Collective Summary of Earthstone Interest

*Parties notated in red are potential WI owners should they convert & Avant has not notated them as potential pooled parties.



Avant Stranding Valuable Acreage



Avant not drilling SBSG SHL in Sec. 23 worth ~\$13MM in PV10

Avant stranding SBSG acreage worth ~\$7MM in PV10

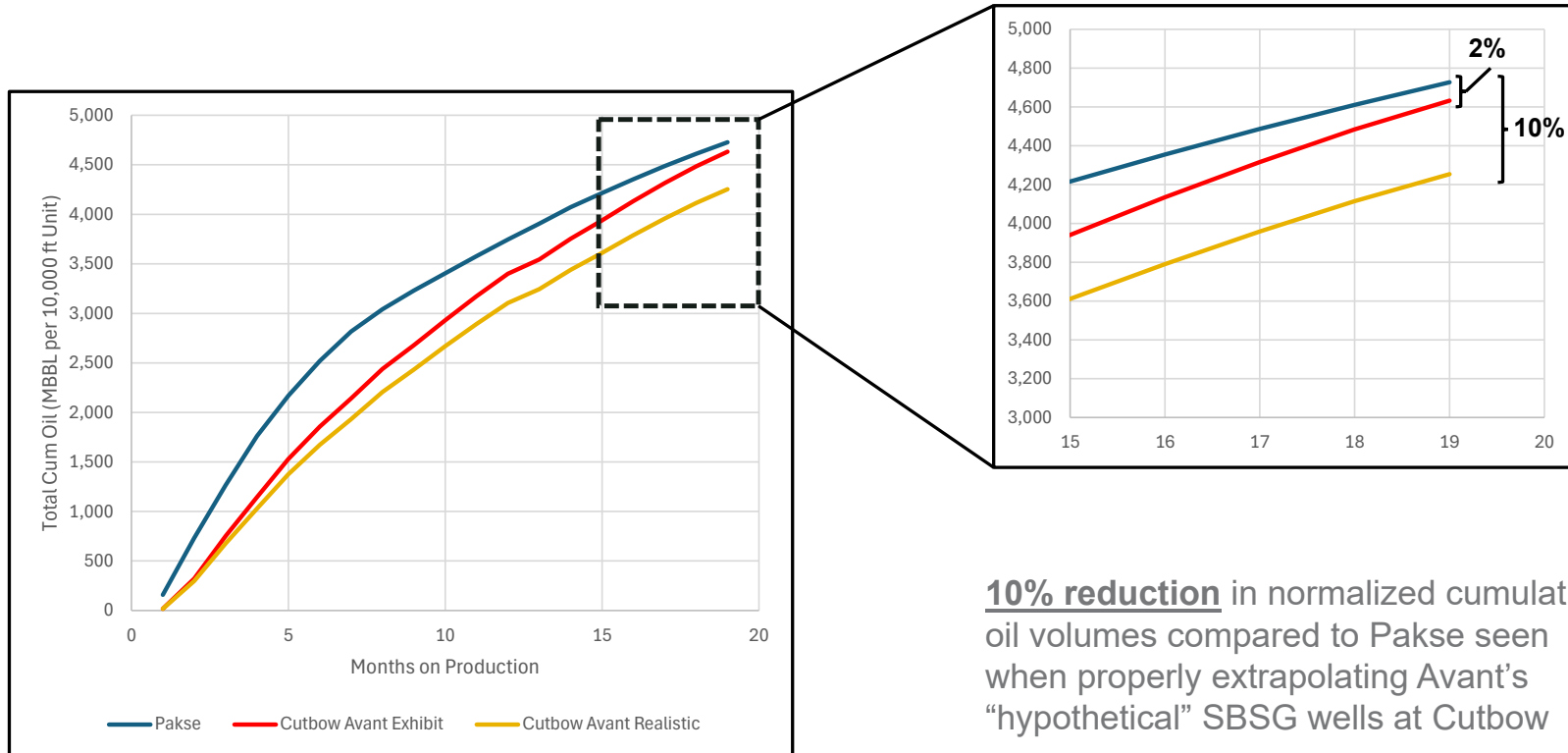
1) Metrics reflect PR's internal underwriting and are intended only to illustrate why WI owners like PR resist Avant's proposal, actual results will differ materially due to risks and assumptions

2) Actual examples that follow provide a more concrete contrast between the plans

3) Cases run with same production and operating expenses between operators, with CAPEX tied to distributed AFEs; commodity price assumption of \$70 oil, \$2 natural gas, and \$21 NGLs, ownership of 100% WI, 75% NRI, and 75% 8/8ths NRI



Avant Approach to Extrapolated Volumes is Misleading



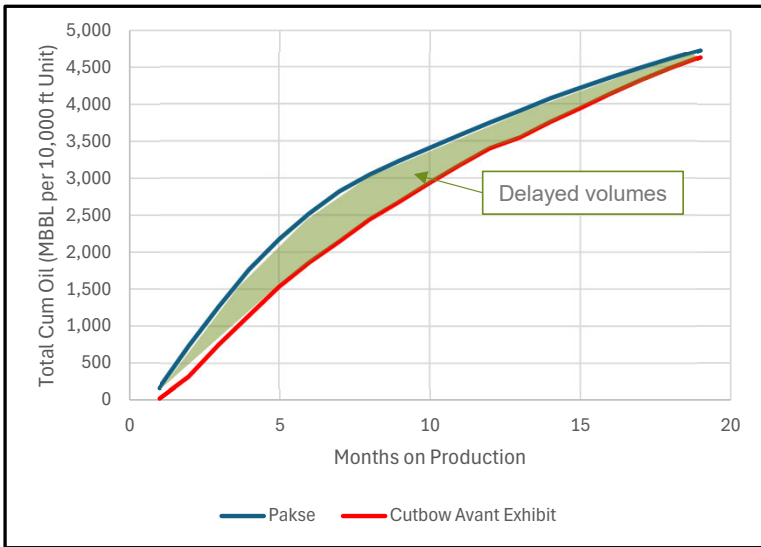
10% reduction in normalized cumulative oil volumes compared to Pakse seen when properly extrapolating Avant’s “hypothetical” SBSG wells at Cutbow

To match Avant’s “2% difference at 19 months” you would need to scaled up their avg SBSG well results to 110%+ MBO
Realistic extrapolated difference in volumes (assuming 17% hit to three extra wells for spacing – in line with other Avant exhibits)



Difference is Material Even if Volumes are Accurate

19 Month Cumulative Production Comparison



- Two serious problems with Avant's claim that the difference is immaterial:
1. Avant requires \$44,000,000 extra versus PR to generate these volumes at Spicy Chicken
 2. Delaying millions of barrels for years compresses their value

$$NPV = \sum \frac{CF_t}{(1+r)^t}$$

Increasing the denominator via higher exponent (delaying) reduces the sum

NPV = Net Present Value
CF = Cashflows

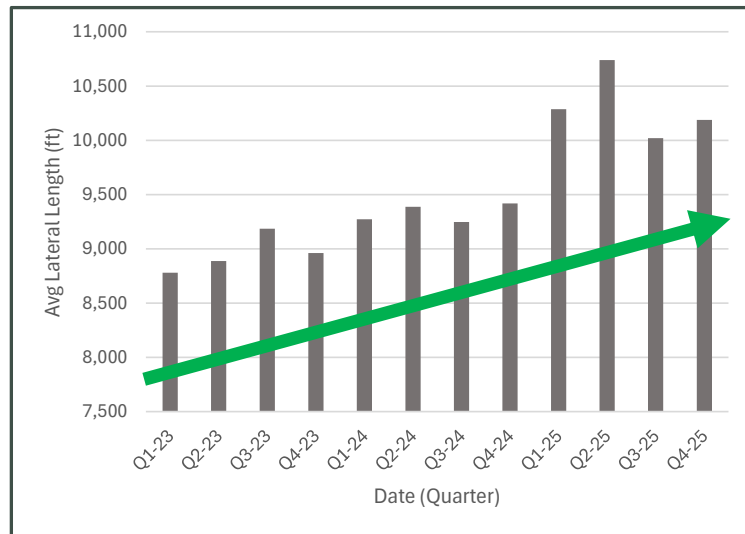
r = discount rate, used to capture cost of capital
t = time period in which cashflows occur



Operational Efficiency Driven by Longer Laterals, Not Shorter

Lower Costs Benefit WI Owners

NM Avg Lateral Length Over Time – All Operators



Quail State wells are all at 5,000' lateral length

According to Enverus (Lea/Eddy Co.) – only **5%** of wells in the last year have been drilled at or below 1-mile, highlighting operators are avoiding this due to the operational inefficiency

Operator	Bench	Lateral Length (ft)	D&C TOTAL/ft (M\$)
Avant	FBSG	7,500	\$1,159
	SBSG SAND	5,000	\$1,429
	TBSG SAND	7,500	\$1,135
	WFMP A	7,500	\$1,169
PR	FBSG	7,500	\$884
	SBSG SAND	10,000	\$796
	TBSG SAND	7,500	\$875
	WFMP A	7,500	\$890
*Diff	FBSG	-	-24%
	SBSG SAND	-	-44%
	TBSG SAND	-	-23%
	WFMP A	-	-24%

PR SBSG SAND wells planned as highly efficient U-turns

All included bar chart well data pulled from Lea and Eddy Co.

*Diff indicates % PR's costs are below Avant's
–costs based on distributed Proposal AFEs

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Total Volume Comparisons

PR Delivering an Optimized Version of Avant's GBV with Much Less Economic Waste

Operator	Formation	Wells	EUR/Well (MMBO)	Unit EUR (MMBO)	CAPEX per Well (M\$)	CAPEX Spent / BO (\$/BO)	Occupation
Avant	Avalon	5	0.44	2.20	\$9,821	\$22	1
	Bone Spring	13	0.66	8.60	\$9,649	\$15	1
	Wolfcamp Shallow	2	0.70	1.40	\$10,359	\$15	1
	Wolfcamp Deep	4	0.61	2.44	\$11,091	\$18	1
TOTAL		24	0.61	14.64	\$9,984	\$16	-
PR	Avalon	4	0.53	2.12	\$7,562	\$14	2
	Bone Spring	11	0.64	7.00	\$7,336	\$12	1
	Wolfcamp Shallow	3	0.58	1.74	\$7,138	\$12	1
	Wolfcamp Deep	4	0.61	2.44	\$8,540	\$14	2
TOTAL		22	0.60	13.30	\$7,569	\$13	-
DIFF						24%	-

Significant economic waste created by Avant across their entire development due to high CAPEX – PR able to develop similar total volumes at a fraction of the cost

Avalon likely uneconomic at Avant CAPEX, assuming any level of elevated H2S – if so, Avant total volumes fall below PR

Utilized Avant's provided EUR volumes from Avant Exhibit C-3 for each bench, except for the Avalon (volumes tied to economics in Exhibit C-17. CAPEX pulled from respective Proposal AFEs when available. Remaining PR CAPEX values (AVLN / WFMP Deep) are adjusted versions of Avant's (0.77x Avant CAPEX – in line with other bench cost comparisons)

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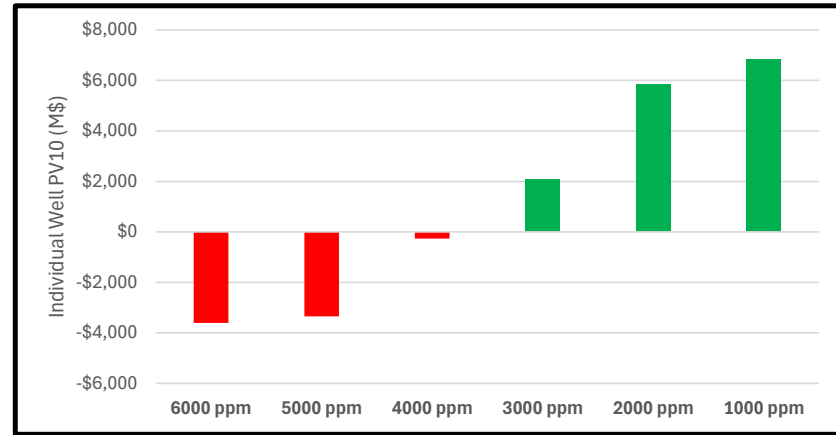
Significant Risk Associated with Aggressive Avalon Development

Further Study and Regional Infrastructure Needed to Mitigate Risk and Protect WI Partners

EFFECTS OF H2S EXPOSURE

<1 PPM		Rotten Egg Smell
50 PPM		Irritated Eyes and Throat
100 PPM		Coughing and Headache
250 PPM		Difficulty Breathing and Vomiting
500 PPM		Loss of Balance
>750 PPM		Death Within Minutes

H2S makes Avant Avalon wells Uneconomic at Low Concentrations



Economics tied to Avant CAPEX quickly diminish with elevated H2S, due to high associated treatment expenses (i.e. their wells are expected to lose money at or above 4000 ppm)

Determining a more accurate H2S ppm estimate and building out the appropriate infrastructure is crucial to reduce the risk of substantial economic waste and environmental hazards

Additionally, there are substantial safety risks associated with a lack of preparation for H2S

1) Metrics reflect PR's internal underwriting and are intended only to illustrate why WI owners like PR resist Avant's proposal, actual results will differ materially due to risks and assumptions

2) Actual examples that follow provide a more concrete contrast between the plans

3) Cases run using Sandra Jean volumes (0.83x for spacing) and applicable H2S treatment expenses (varied by ppm), with CAPEX tied to distributed AFEs; commodity price assumption of \$70 oil, \$2 natural gas, and \$21 NGLs, ownership of 100% WI, 75% NRI, and 75% 8/8ths NRI



Critical H2S Evaluation Methodology

PR regularly updates our H2S approach to optimize for each individual development and its specific subsurface environment

High H2S is a safety, environmental, and economic risk, especially when not planned for, and PR maintains a rigorous process to always be prepared regardless of the circumstances

Permian Resources H2S Considerations				
Region	H2S Threshold	Production Casing (20#)	Cost (\$/ft)	Description
0	0-2000 ppm	P-110 RY	\$23	No sour service casing required
1+	2000+ ppm	T-95	\$30*	Standard sour service design - string enhanced for wellbore integrity and safety

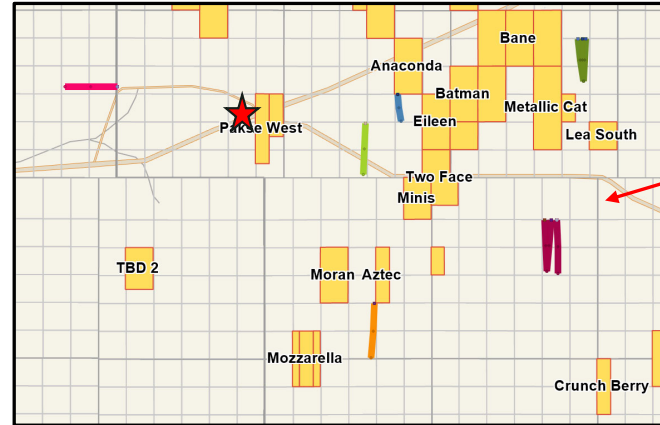
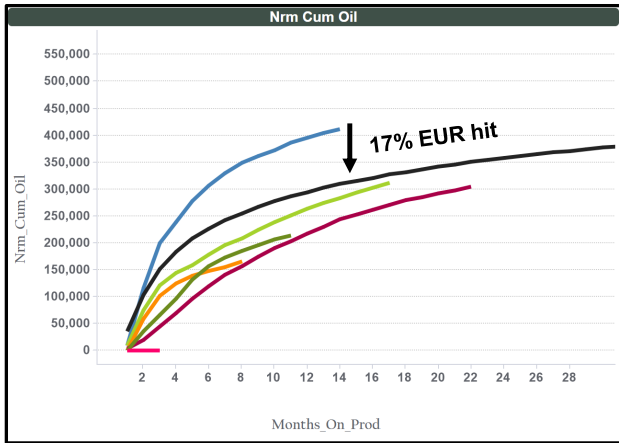
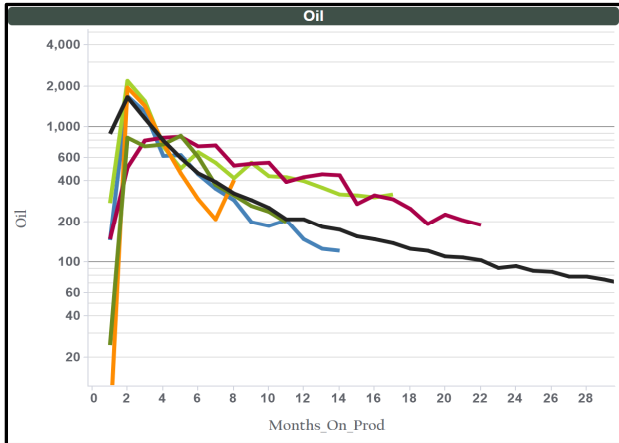
**30% increase in cost per foot to for H2S casing upgrade*

All methodology provided by PR Drilling Department – created based on NACE (National Association of Corrosion Engineers) international standards on metallurgy/corrosion and PR operational experience
H2S region table simplified for exhibit purposes (further technical data incorporated when applying Drilling operations casing plan)



AVLN TC Validation

Oil Rate-Time & Normalized Cumulative Oil Plots



Well Name	API14	Operator
BIG EDDY UNIT 30E ANAKIN 203H	30015462430000	EXXON
BILBREY 34 27 FEDERAL COM 328H	30025536490000	MEWBOURNE
DATE 14 STATE COM 201H	30025519410000	EOG
DATE 14 STATE COM 202H	30025520180000	EOG
DATE 14 STATE COM 203H	30025520190000	EOG
GAVILON FEDERAL COM 104H	30025526670000	MATADOR
LEA UNIT 201H	30025536220000	COTERRA / AVANT
LEA UNIT 202H	30025536230000	COTERRA / AVANT
LEA UNIT 203H	30025536240000	COTERRA / AVANT
SANDRA JEAN 23 FEDERAL COM 206H	30025528790000	COTERRA / AVANT

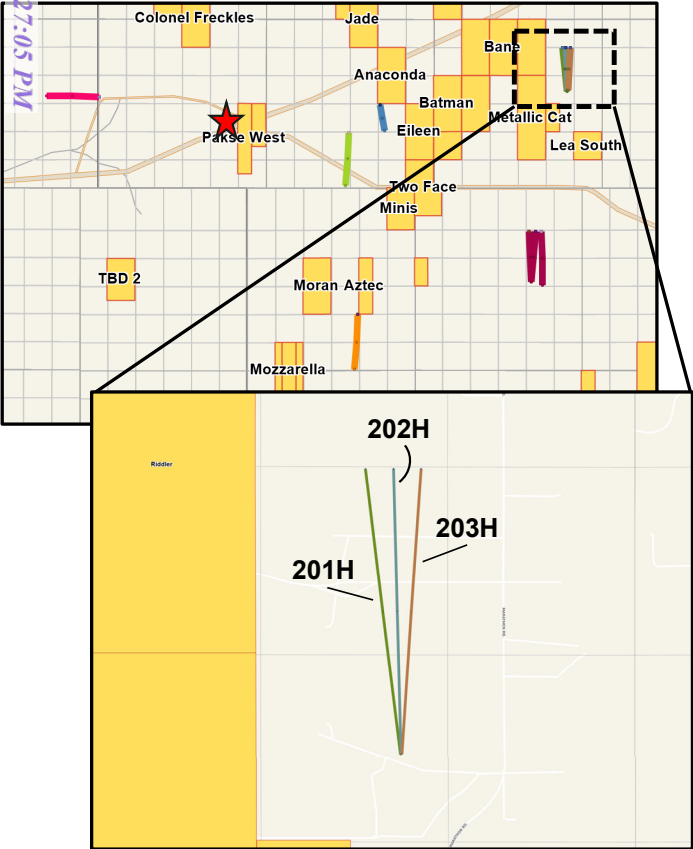


Type curve based on Sandra Jean volumes degraded by 17% for spacing (in line with previous Avant spacing assumptions)

Lea Unit Seeing Significant Spacing Impacts

Indication of Notable Economic Degradation

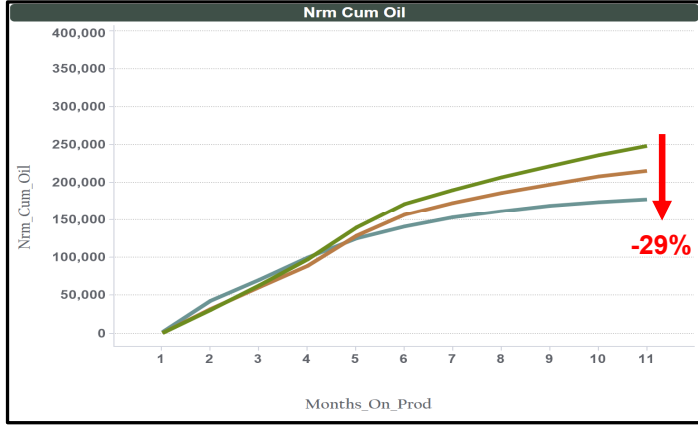
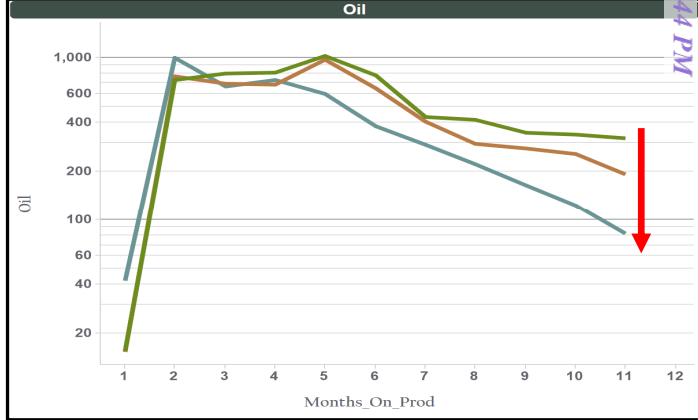
Colors across the Oil Rate vs Time plot, Cumulative Oil vs Time plot, and locator map align to more easily tie DSU locations to their respective results



Spacing impact already observed in high density Avant Avalon wells

- Indication of potentially material economic reduction

“Repeatability” in question due to lack of analogous wells nearby Spicy Chicken

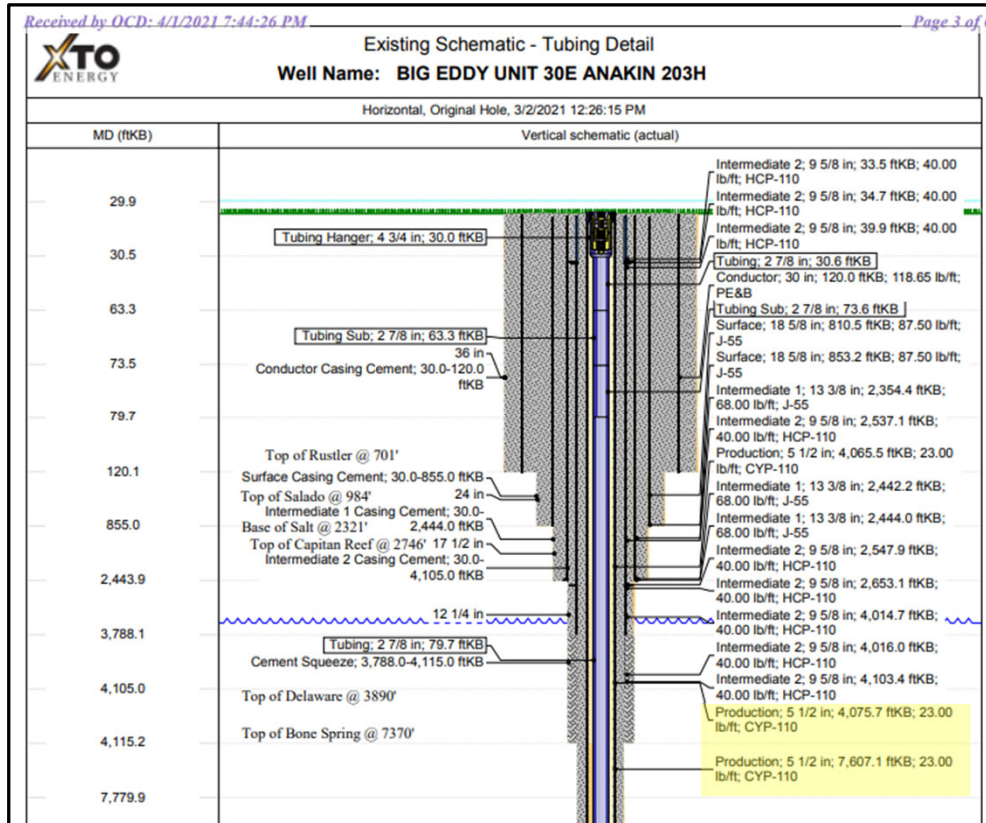


★ Spicy Chicken



Exxon Big Eddy Unit 30E Anakin #203H (AVLN) – P&A'd

Closest Avalon well to Spicy Chicken



Exxon was not prepared for a corrosive environment, and the result was 3 months of production for only 318 total barrels of cumulative oil

The well was P&A'd within three years of it coming online

Repeating this unprepared approach will lead to significant economic waste, in addition to potential safety and environmental risks

CYP-110 H2S rating is equiv. to P-110 (i.e. not meant for high H2S environments)
Well history details were pulled from Enverus and NMOCD filings

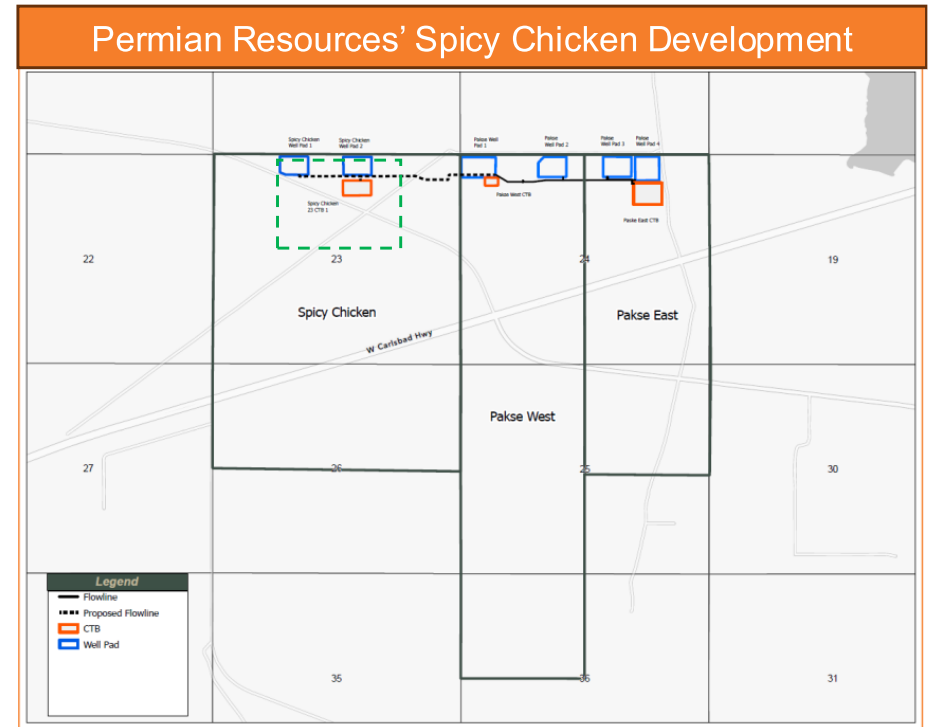


Facilities/Surface Overview

Permian Resources Operating, LLC
Case Nos. 25833-25845
Exhibit D-10

- Spicy Chicken development was originally permitted by Earthstone Energy, with plans to complete additional development to the north and south of the Spicy Chicken
- The unit to the north was not acquired, so the original Spicy Chicken development plan will be consolidated by Permian Resources and reduced to two well pads. A new CTB pad is proposed, but Permian Resources plans to utilize the existing Pakse East CTB. Permian Resources' worst case surface impact is as follows:

- CTB Pad: 5.0 acres
- Well Pads: 12.8 acres
- Flowline ROW: 3.5 acres (temporary impact)
- Total Surface Impact Not Including Flowlines: 17.8 Acres (Avant 17.9)**

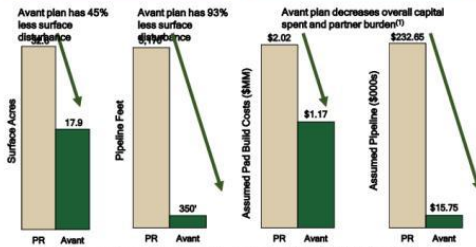
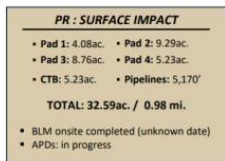


Surface Disturbance Comparison
Spicy Chicken 23 26 Fed Com

Avant Operating II, LLC
Case Nos. 25827 / 25829 / 25831 / 25832
Exhibit C.5

Avant's pad, battery, and pipeline configuration leads to significantly less surface disturbance

- Both Avant and Permian Resources' Spicy Chicken development fall within the designated potash resource area.
 - Approved all-depth drill islands
 - Approved Potash Development Area encompassing sec. 23 (all) and sec. 26 (N2)



(1) Uniform cost assumptions used for both operators. Pad Build: \$1.50/ft². Pipeline: \$45/ft

Facilities/Surface Overview



- Two planned Spicy Chicken well pads will be utilized for the entire development
- Additional space on each pad was approved during the BLM on-site, but is not necessary for development plans

