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

APPLICATION OF APACHE CORPORATION FOR APPROVAL OF A NON-STANDARD HORIZONTAL WELL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

Case No. 24141

APPLICATION OF AVANT OPERATING, LLC FOR COMPULSORY POOLING AND APPROVAL OF NON-STANDARD SPACING UNIT, LEA COUNTY, NEW MEXICO

Case No. 24254

AVANT OPERATING, LLC'S NOTICE OF AMENDED REBUTTAL EXHIBITS

Avant Operating, LLC ("Avant") is submitting the attached amended rebuttal exhibit packet, which includes the following amended exhibits:

- 1) Exhibit A-28, which is amended at the first bullet point to address the Hearing Examiner's ruling on Avant's communications with CXA Oil and Gas Holdings, LP; and
- 2) Exhibit C-18, which is amended to correct table headings from 5,000 lateral feet to 7,500 lateral feet.

Respectfully submitted,

HINKLE SHANOR LLP

/s/ Dana S. Hardy

Dana S. Hardy Jaclyn McLean P.O. Box 2068

Santa Fe, NM 87504-2068

Phone: (505) 982-4554 Facsimile: (505) 982-8623 dhardy@hinklelawfirm.com jmclean@hinklelawfirm.com

Counsel for Avant Operating, LLC

CERTIFICATE OF SERVICE

I hereby certify that on June 3, 2024, I have caused to be served a true and correct copy of the above referenced pleasing to the following counsel by electronic means:

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/s/ Dana S. Hardy

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REBUTTAL EXHIBIT INDEX

Rebuttal Land Exhibits

A-27	Avant's Control of Working Interest Ownership in the Unit				
A-28	Letter of Support from CXA Oil & Gas Holdings, LP				
A-29	Apache's Term Assignment				
Rebuttal Geology Exhibits					
B-18	Summary of Apache's Inaccurate Depth Argument				
B-19	Apache's Performance and Engineering Analysis Ignores Geology				
B-20	Avant Compliance with OCD Filing Requirements				
B-21	Apache History of Unlawful Venting and Flaring				
B-22	Apache Oil and Produced Water Spill History				
Rebuttal Reservoir Engineering Exhibits					
C-16	Apache's Summary of Activity is Inaccurate				
C-17	Avant Drilling Operations Minimize Disturbance				
C-18	Avant Outperforms in Analogous Rock Quality				

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APA DID NOT FACTOR IN AVANT'S CONTROL

APA's interest figures are unsupported by Avant's title examination but still result in Avant's majority control after factoring in Avant's recent transactions, JOAs and letters of support:

WI OWNER	APACHE TITLE FIGURES	STATUS		
Wadi Petroleum, Inc.	1.4286000%*	JOA signed with Avant 5/2024		
Red Bird Ventures, Inc.	1.3726000%*	JOA signed with Avant 5/2024		
Southwest Royalties, Inc.	0.208100%*	JOA signed with Avant 5/2024		
Roy L. McKay/McKay Oil Corp.	0.006375%*	Sold to Avant 5/2024		
CXA Oil & Gas Holdings, LP	5.579193%	Sold portion to Avant 10/2023; JOA signed with Avant. Letter of support for Avant as operator, oppose Apache signed 5/2024.		
Northern Oil and Gas Inc.	15.712496%	Trading to Avant entities; Agreement signed 5/2024		
Legion Production Partners, LLC	24.399738%	Avant Entity		
Avant Operating, LLC*	1.614211%	Avant Entity		
Double Cabin Minerals, LLC*	0.807105%	Avant Entity		
Rock Products, Inc.	0.123495%	JOA signed with Avant 5/2024		
Osprey Oil & Gas	0.123495%	JOA signed with Avant 5/2024		
Westlawn Fortuna, Inc.**	0.041748%	Predecessor, DENM, traded portion to Avant 9/2023; JOA signed with Avant for retained interests 5/2024		
Compass Oil & Gas, LP	0.601563%	Sold portion to Avant 5/2024; JOA signed with Avant for retained interests 5/2024		
TOTAL AVANT COMMITTED:	52.018719%			

^{*} Not properly broken out by Apache so assumed Avant view on interests.

Source: Figures come from Apache Case No. 24141, page 6, titled "Consolidated WI Ownership by Unit" with exceptions noted.



^{**}Westlawn Fortuna, Inc. corporate name change to Ellipsis Oil and Gas Inc. 11/2023. As such, Avant lists Ellipsis Oil and Gas Inc. in title.

CXA LETTER OF SUPPORT FOR AVANT AS OPERATOR

APA claims CXA's support but evidence shows otherwise:

- CXA signed a JOA with APA
- CXA signed JOA with Avant after understanding APA had not in fact been named operator
- Letter of support provides:
 - Clear preference for Avant as operator with preference to Avant's development plans
 - Opposes Apache Corporation (Apache/APA) as operator



KONA OIL AND GAS PROPERTIES, LP 1302 WEST AVENUE AUSTIN, TEXAS 78701

WWW.KONAINC.NET

PHONE: (512) 472-1212 FAX: (512) 472-1213 EMAIL: KONA@KONAINC.NET

May 24, 2024

New Mexico Oil Conservation Division Via e-filing by Avant Operating, LLC in Case Nos. 24254

Support for Avant Operating, LLC Grayling 14 Fed Com Development Plan Case No. 24254. Lea County, New Mexico

Dear OCD:

CXA Oil & Gas Holdings, LP ("CXA"), a 100%owned subsidiary of Kona Oil & Gas Properties, LP ("KOGP"), submits this letter in support of Avant Operating, LLC's ("Avant") Grayling 14 Fed Com Development Plan, in Case No. 24254, Lea County, New Mexico. In CXA's opinion, Avant's proposed Grayling Development Plan will prevent waste and protect correlative rights because Avant's proposed plan will efficiently and effectively develop the acreage. CXA and Avant have been in discussions and CXA supports Avant as operator of the acreage at issue. CXA opposes Apache Corporation's ("Apache") being named operator because Apache's proposed development plans will result in waste, are inefficient, and Apache has not run a rig in Lea County, NM in several years.

CXA states that Avant has the right to represent its interests in these cases and supports the designation of Avant as operator and its planned development described in the above captioned cases.

Should you have any questions, please email me at ryoungblood@konainc.net or call me at 512.472.1212

Sincerely

Ryan Youngblood, Manager of the GP of CXA



Proposes 4

4 160-acre

Spacing Units

2 FBSG Wells,

2 SBSG Wells

Wells,

APA Term

Marathon

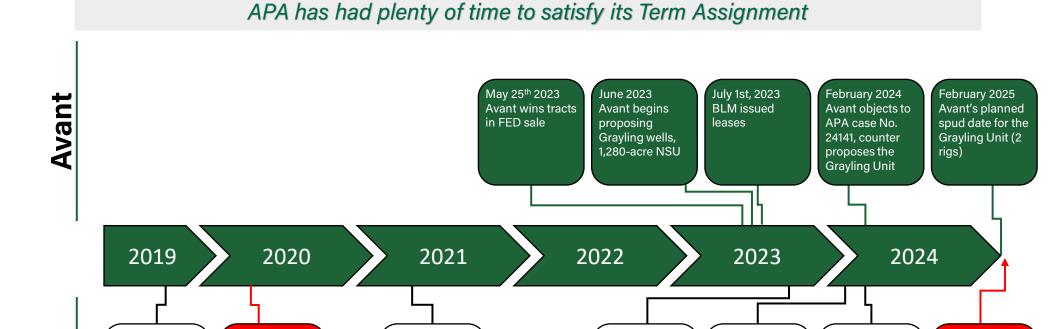
term.

Assianment with

signed/effective

3/31/2020 - 5yr

APA TERM ASSIGNMENT TO BE SATISFIED BY AVANT



 APA signed term assignment nearly 5 years ago. APA had plenty of time to satisfy its obligations under said agreement further demonstrating lack of diligence in developing these lands.

September 2023

APA counter-

1,280-acre NSU

4 FBSG Wells,

4 SBSG Wells

proposes

 Avant plans to drill wells before APA's term assignment expires on March 31, 2025 upon approval of pooling order.



Avant Operating, LLC

Case No. 24254

Exhibit A-29

Permits

Expire *

No Compulsory

Pooling filed, no

extensions filed

AVANT OPERATING, LLC - GRAYLING 14 FED COM

January 2024

Notice of 1,280-

APA Sends

acre NSU

February 2024

Case No 24141

BS Pooling

APA Applies for

APA Term

Assignment to

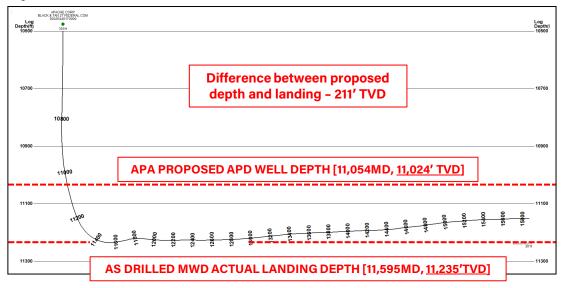
expire 3/31/2025

SUMMARY OF APA'S INACCURATE DEPTH ARGUMENT

Summary of APA's Inaccurate Depth Argument

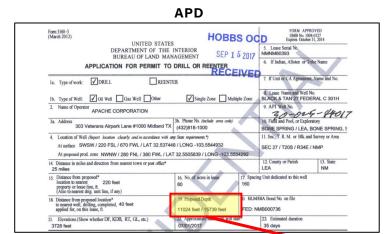
- APD and AFE proposal depths are an estimate and TVD variances are common within reason
- For example: APA Black & Tan 301H APD
 - Proposed TVD of 11,024' TVD,
 - As-drilled MWD data shows the well was landed 11,235' TVD (211' below proposed depth)
 - Entire lateral was drilled well-below the proposed depth
- APA's suggestion that Avant intends to drill the Grayling 300H series wells in a tight carbonate is inaccurate and is based on a minor footage difference

Apache Black & Tan 301H as Drilled Hz Wellbore



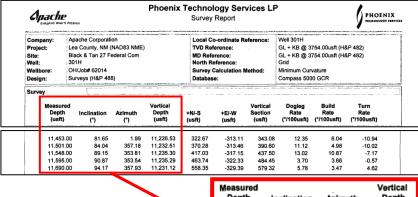
Source: New Mexico Energy, Minerals and Natural Resources Department. (https://ocdimage.emnrd.nm.gov/imaging/WellFileView.aspx?RefType=WF&RefID=30025440170000)

APA's Black & Tan Unit With Exact Same Issue



19. Proposed Depth 11024 feet / 15739 feet

Survey Report



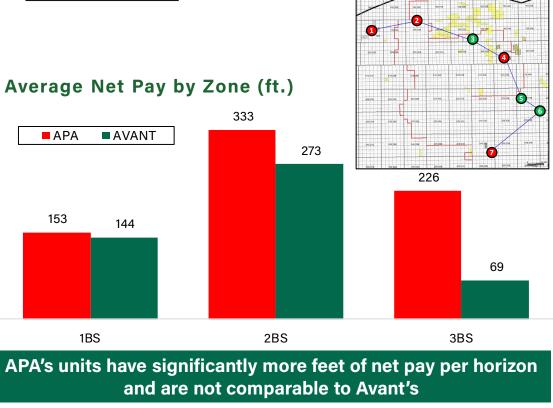
Depth Depth Inclination Azimuth (°) (°) (usft) 1,453.00 81.65 11,226.53 11,501.00 84.04 357.18 11,232.51 11,548.00 89.15 353.81 11,235.30 11.595.00 90.87 353.54 11,235.29 11,690.00 357.93 11,231.12

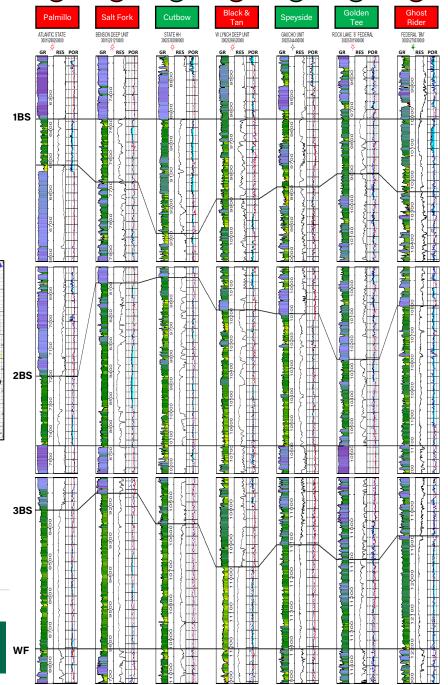
APA'S PEFORMANCE AND ENGINEERING ANALYSIS IGNORES GEOLOGY

Summary

- APA's reference wells are not appropriate analogs because they are located in an area of superior reservoir quality and thickness vs. Avant wells
- APA has little to no relevant offset analogs to Grayling as a result of no offset activity in the several years within a 10-mile radius

APA's comparison of Salt Fork 2BS/3BS wells vs. Avant Cutbow 3BS is entirely irrelevant given the >75% higher net pay in those zones at Salt Fork vs. Cutbow







AVANT COMPLIANCE WITH FILING REQUIREMENTS

Summary

- Contrary to APA's allegations of Avant's compliance related to OCD filings, Avant has consistently submitted the required operations reports in a timely manner
- As demonstrated in subsequent slides, Avant has had active communication with the EMNRD to confirm that its submissions were received and that it was in compliance
- As evidenced in Avant's communication with the EMNRD, there has been and continues to be a significant backlog for C-104 approvals
 - Other operators in the area have hundreds of submitted but unapproved C-104s due to this
- APA's lack of unapproved filings is solely attributable to its operational inactivity in the area
- APA's misunderstanding of the process is a direct result of no activity in New Mexico in over a year

Well Name	API Number	Surf Casing SUB	Int Casing SUB	Prod Casing SUB	C-104RT SUB	C-104NW SUB
Angry Angus 32 State Com 701H	30-025-51567	10/30/23	11/6/23	11/27/23	2/8/24	2/20/24
Angry Angus 32 State Com 702H	30-025-51568	10/30/23	11/3/23	11/20/23	2/8/24	2/20/24
Angry Angus 32 State Com 703H	30-025-51622	9/7/23	9/15/23	10/26/23	2/13/24	2/20/24
Angry Angus 32 State Com 704H	30-025-51623	9/7/23	9/21/23	10/17/23	2/8/24	2/21/24
Angry Angus 32 State Com 705H	30-025-51624	9/7/23	9/15/23	10/9/23	2/8/24	2/21/24
Cutbow 36 1 Federal Com 304H	30-025-51499	1/19/24	1/19/24	1/19/24	3/21/24	4/16/24
Cutbow 36 1 Federal Com 305H	30-025-51500	1/11/24	1/11/24	1/11/24	3/21/24	4/16/24
Cutbow 36 1 Federal Com 306H	30-025-51501	1/8/24	1/8/24	1/8/24	3/21/24	4/16/24
Cutbow 36 1 Federal Com 601H	30-025-50701	APVD 8/11/23	APVD 8/11/23	1/3/23	6/18/23	7/14/23
Cutbow 36 1 Federal Com 602H	30-025-50674	APVD 8/11/23	APVD 8/11/23	12/22/22	6/18/23	7/14/23
Cutbow 36 1 Federal Com 603H	30-025-50635	APVD 8/11/23	APVD 8/11/23	APVD 8/11/23	6/18/23	6/30/23
Cutbow 36 1 Federal Com 604H	30-025-51035	9/13/23	9/13/23	9/13/23	12/20/23	2/16/24
Cutbow 36 1 Federal Com 605H	30-025-51187	9/13/23	9/13/23	9/13/23	12/20/23	3/5/24
Cutbow 36 1 Federal Com 606H	30-025-51036	9/15/23	9/15/23	9/15/23	12/20/23	3/5/24
Golden Tee 31 Federal Com 304H	30-025-49327	APVD 1/6/23	APVD 1/6/23	APVD 1/6/23	12/29/22	3/29/23
Golden Tee 31 Federal Com 305H	30-025-49328	APVD 7/26/23	9/15/22	9/15/22	12/29/22	3/29/23
Golden Tee 31 Federal Com 306H	30-025-49329	APVD 8/11/23	APVD 8/11/23	APVD 8/11/23	12/29/22	3/29/23
Golden Tee 31 Federal Com 504H	30-025-49406	3/8/23	3/8/23	3/8/23	12/29/22	3/29/23
Golden Tee 31 Federal Com 505H	30-025-49331	APVD 8/22/23	APVD 8/22/23	APVD 8/22/23	12/29/22	3/29/23
Golden Tee 31 Federal Com 506H	30-025-49332	APVD 8/11/23	APVD 8/11/23	APVD 8/11/23	12/29/22	3/29/23
Golden Tee 31 Federal Com 601H	30-025-50929	4/3/23	4/3/23	4/8/23	8/24/23	9/7/23
Golden Tee 31 Federal Com 602H	30-025-50930	4/3/23	4/3/23	4/8/23	8/24/23	9/11/23
Golden Tee 31 Federal Com 603H	30-025-50896	4/3/23	4/8/23	12/13/23	8/24/23	9/11/23
Golden Tee 31 Federal Com 604H	30-025-49390	3/13/23	3/13/23	3/16/23	11/28/23	2/12/24
Golden Tee 31 Federal Com 605H	30-025-49391	3/16/23	3/16/23	5/10/23	11/28/23	2/12/24
Golden Tee 31 Federal Com 606H	30-025-49392	8/7/23	3/13/23	3/1/23	12/12/23	2/12/24
Speyside 18 Federal Com 301H	30-025-51301	APVD 1/4/2023	APVD 1/4/2023	APVD 1/4/2023	12/12/23	3/5/24
Speyside 18 Federal Com 302H	30-025-51302	APVD 1/4/2023	APVD 1/4/2023	APVD 1/4/2023	12/12/23	3/5/24
Speyside 18 Federal Com 601H	30-025-51305	APVD 1/4/2023	APVD 1/4/2023	APVD 1/4/2023	12/13/23	3/6/24
Speyside 18 Federal Com 602H	30-025-51306	APVD 1/4/2023	APVD 1/4/2023	APVD 1/4/2023	12/13/23	3/12/24
			_			

All required operations reports were submitted in compliance with all requirements



AVANT'S DIRECT DIALOGUE WITH THE EMNRD (1 of 2)

From: Martinez, Patricia, EMNRD < Patricial_Martinez@emnrd.nm.gov>

Sent: Tuesday, April 9, 2024 9:58 AM
To: Meghan Twele mtwele@outlook.com
Subject: RE: [EXTERNAL] Rejected C-104 RTs

Hi Meghan

Yes, the C-104 NWs are good as well. We have a huge backlog of C-104s and if we come upon C-104 RIs that are "Too Late" then we can instantly reject and at a later date try to work on the C-104 NWs that way we can clear out some of our C-104 Backlog.

Thanks

PATRICIA MARTINEZ

EMNRD – OCD SOUTH 1625 N. FRENCH DR. HOBBS, NM 88240 575.602.4387 CELL

patricial.martinez@emnrd.nm.gov

From: Meghan Twele <mtwele@outlook.com>

Sent: Tuesday, April 9, 2024 9:41 AM

To: Martinez, Patricia, EMNRD < PatriciaL.Martinez@emnrd.nm.gov>

Subject: RE: [EXTERNAL] Rejected C-104 RTs

Thanks Patricia.

We had another 10 C-104 RTs rejected for the same reason that were submitted by a consulting company that no longer works for us. Will the C-104 NWs be good for these as well?



Meghan Twele

Contract Regulatory Analyst

1515 Wynkoop Street, Suite 700 | Denver, CO |

8020

www.avantnr.com

Owner-DNVR Regulatory Services, LLC

Email: mtwele@outlook.com Phone:720-339-6880



AVANT'S DIRECT DIALOGUE WITH THE EMNRD (2 of 2)

From: Martinez, Patricia, EMNRD < Patricial.Martinez@emnrd.nm.gov>

Sent: Monday, April 8, 2024 2:42 PM
To: Meghan Twele mtwele@outlook.com

Subject: RE: [EXTERNAL] Rejected C-104 RTs

Hi Meghan

Yes the NW C-104s will suffice for reporting and at this time and we don't need anything else.

Thank you,

PATRICIA MARTINEZ

EMNRD - OCD SOUTH
1625 N. FRENCH DR.
HOBBS, NM 88240
575.602.4387 CELL
patricial.martinez@emnrd.nm.gov

From: Meghan Twele <mtwele@outlook.com>

Sent: Monday, April 8, 2024 2:35 PM

To: Martinez, Patricia, EMNRD < Patricial.Martinez@emnrd.nm.gov>

Subject: [EXTERNAL] Rejected C-104 RTs

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Hi Patricia,

I received the attached notifications rejecting the Golden Tee C-104 RTs for reason being "too late". I submitted these on behalf of Avant when I started because I noticed they were missing. Will the C-104 NWs suffice for reporting, or do you need anything else?



Meghan Twele

Contract Regulatory Analyst

1515 Wynkoop Street, Suite 700 | Denver, CO |

80202

www.avantnr.com

Owner—DNVR Regulatory Services, LLC

Email: mtwele@outlook.com Phone:720-339-6880



APA HAS A HISTORY OF UNLAWFUL VENTING AND FLARING

Summary of APA's Recent Violations

- In February 2024, APA reached a settlement with the EMNRD and the EPA in which APA agreed to pay a \$4 MM fine for failing to comply with federal and state requirements to capture and control air emissions
- APA is also required to spend an additional estimated \$5.5 MM for preventative measures and to address the environmental harm caused by its violations
- 422 separate pads were identified and must be brought into compliance with federal and state clean air regulations, and as to offset past illegal emissions
- APA's assertion that it is exceeding its 98% Target Gas Capture Rate is in direct conflict with APA's recent significant violations and associated settlement

APA ignored its recent air quality fine to incorrectly portray APA as an operator with superior environmental practices and standards



Tuesday, February 13, 2024

Archived News Para Noticias en Español

Videos

Company Also Will Spend \$5.5 Million for Preventative Measures and to Help Address Environmental Harm Caused by Its Violations

For Immediate Release

Office of Public Affairs

Apache Corporation (Apache) has agreed to pay \$4 million in civil penalties and undertake projects expected to cost at least \$5.5 million to ensure 422 of its oil and gas well pads in New Mexico and Texas comply with state and federal clean air regulations and offset past illegal emissions.

Apache's agreement settles a civil suit-filed jointly by the United States, on behalf of the Environmental Protection Agency (EPA), and the New Mexico Environment Department (NMED) alleging that Apache failed to comply with federal and state requirements to capture and control air emissions from 23 of its oil and gas production operations in New Mexico and Texas. EPA and NMED identified the alleged violations through field investigations and repeated flyover surveillance conducted in 2019, 2020 and 2022.

Compliance with this robust settlement will result in annual reductions of more than 9.650 tons of volatile organic compounds (VOCs) and 900 tons of methane, which equates to more than 25,000 tons of carbon dioxide (CO2). VOCs are a key component in the formation of ground-level ozone or smog, which irritates lungs, exacerbates diseases including asthma and can increase

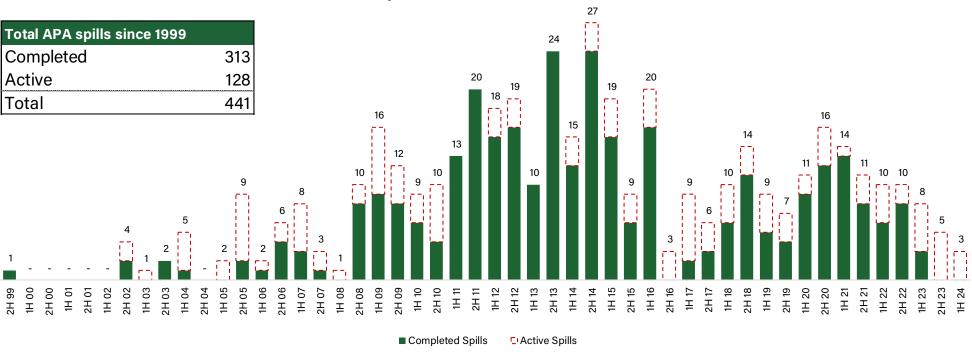
AVANT OPERATING, LLC - GRAYLING 14 FED COM

APA OIL AND PRODUCED WATER SPILL HISTORY

APA's Total Spills Since 1999

- APA has been a habitual offender when it comes to produced water and oil spills across New Mexico dating back to 2002
- APA has had 441 reported spills since 1994
 - Of those 441 spills, 128 are still active to this day

APA's Semi-Annual NM Oil and Water Spills



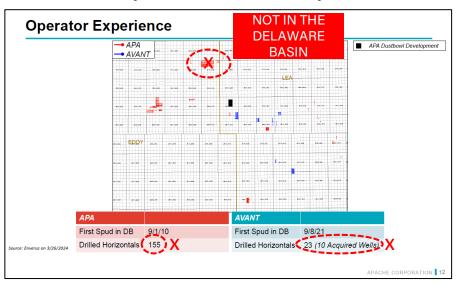
APA has been a poor environmental steward in New Mexico with a long history of oil and produced water spills, many of which have yet to be remedied



APA'S SUMMARY OF ACTIVITY IS INACCURATE

APA INCORRECTLY ASSERTS AVANT'S AND <u>ITS OWN</u> ACTIVITY IN NEW MEXICO DELAWARE

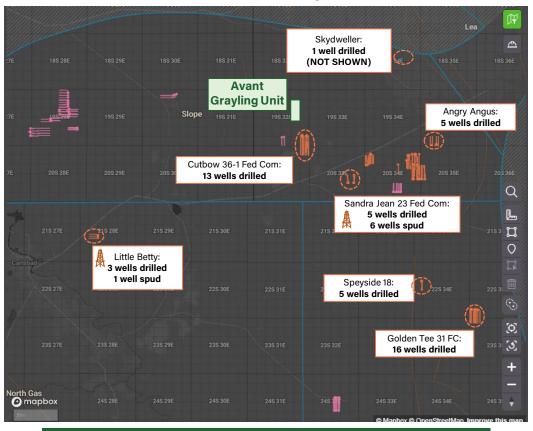
APA's Assertion of Avant's Experience (Slide 12, Exhibit B)



Operator Experience per Enverus

	APA ⁽¹⁾	Avant
First Hz Spud in New Mexico	Aug 2012	Sep 2021
Drilled Horizontals	84	101 (46 acquired) √
Avg. New Wells per Year (2)	7	18 🗸
Active Rigs	0	2 ✓

Enverus Activity - Apache vs. Avant Operating (Screenshot as of May 25, 2024)



Avant has been and continues to be much more active in the New Mexico Delaware than APA

Source: Enverus as of May 25, 2024. Includes New Mexico Delaware Basin horizontal wells only, excludes TA and P&A'd wells.

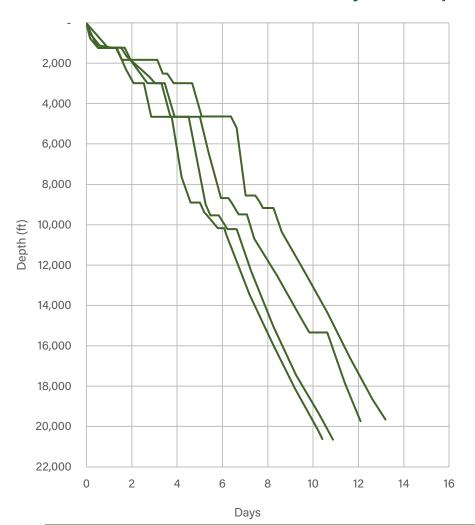
- (1) First horizontal for APA per Enverus is the Lusk 34 Federal 002H.
- (2) Excludes Avant's 46 acquired wells and its 7 wells in progress.

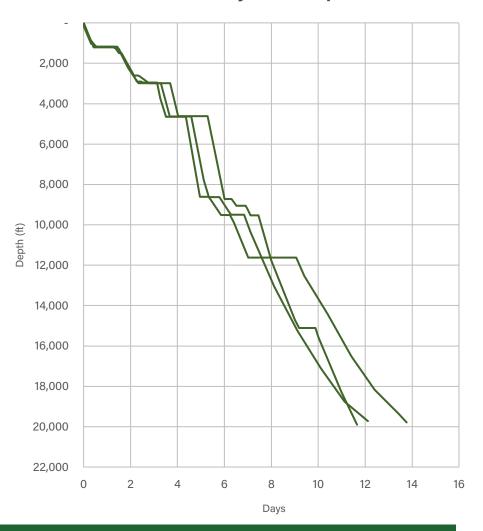


AVANT DRILLING OPS MINIMIZE DISTURBANCE

Cutbow 301-302H / 501-502H Days vs. Depth

Cutbow 304-306H Days vs. Depth





Average of 12.1 days spud to TD on Avant recent Cutbow wells

Avant's consistent activity around Grayling has resulted in operational efficiencies that minimize surface disturbances and reduce development costs

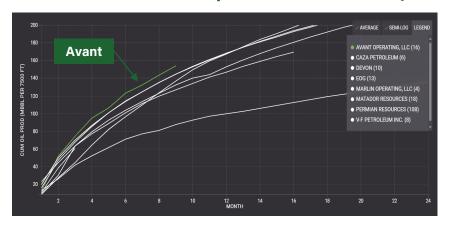


AVANT OUTPERFORMS IN ANALOGOUS ROCK QUALITY

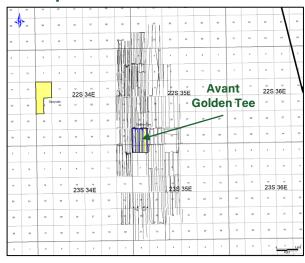
Summary

- Avant's Golden Tee wells have outperformed offset wells drilled by other operators on a lateral length normalized basis at tighter densities
 - 6 wells in the 3BS vs. ~5 wells for others
 - 5 wells in the 1BS/2BS vs. ~4 wells for others
- Avant significantly outperformed offset operators on a normalized well-by-well basis
- Additionally, Avant drove higher recoveries on a unit basis with more wells drilled per bench

Cum Oil Production per 7,500' Lateral (MBo)

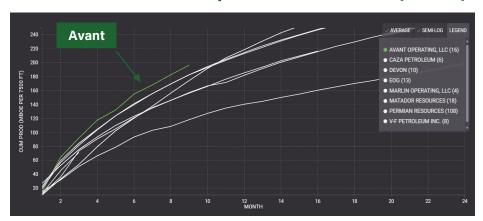


Locator Map



Well selection based on all wells within the area of like rock quality to Golden Tee

Cum Boe Production per 7,500' Lateral (MBoe)



Results in Avant's Golden Tee Unit demonstrate (A) Avant's ability to outperform offset operators in analogous rock quality; and (B) Avant's ability to efficiently and economically extract more reserves per unit with additional wells

