

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-101

August 1, 2011

Permit 341918

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address Avant Operating, LLC 1515 Wynkoop Street Denver, CO 80202		2. OGRID Number 330396
		3. API Number 30-025-51624
4. Property Code 334083	5. Property Name ANGRY ANGUS 32 STATE COM	6. Well No. 705H

7. Surface Location

UL - Lot M	Section 32	Township 19S	Range 35E	Lot Idn M	Feet From 912	N/S Line S	Feet From 1327	E/W Line E	County Lea
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8. Proposed Bottom Hole Location

UL - Lot A	Section 32	Township 19S	Range 35E	Lot Idn A	Feet From 100	N/S Line N	Feet From 330	E/W Line E	County Lea
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9. Pool Information

KLEIN RANCH;WOLFCAMP	96989
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3699
16. Multiple N	17. Proposed Depth 16462	18. Formation Wolfcamp	19. Contractor	20. Spud Date 7/1/2023
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	14.75	10.75	40.5	1805	710	0
Int1	9.875	7.625	29.7	11012	1135	0
Prod	6.75	5.5	20	16462	770	0

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Pipe	10000	5000	Cameron

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.	OIL CONSERVATION DIVISION	
Signature:		
Printed Name: Electronically filed by Sarah Ferreyros	Approved By: Paul F Kautz	
Title: Director of Regulatory	Title: Geologist	
Email Address: sarah@avantnr.com	Approved Date: 6/16/2023	Expiration Date: 6/16/2025
Date: 6/12/2023	Phone: 720-854-9020	Conditions of Approval Attached

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-102
August 1, 2011

Permit 341918

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-025-51624	2. Pool Code 96989	3. Pool Name KLEIN RANCH;WOLFCAMP
4. Property Code 334083	5. Property Name ANGRY ANGUS 32 STATE COM	6. Well No. 705H
7. OGRID No. 330396	8. Operator Name Avant Operating, LLC	9. Elevation 3699

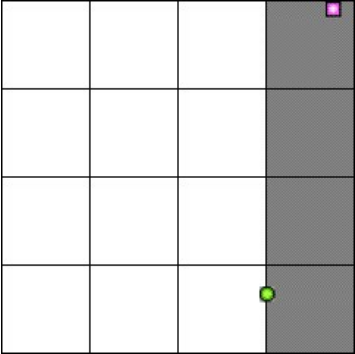
10. Surface Location

UL - Lot M	Section 32	Township 19S	Range 35E	Lot Idn M	Feet From 912	N/S Line S	Feet From 1327	E/W Line E	County Lea
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11. Bottom Hole Location If Different From Surface

UL - Lot A	Section 32	Township 19S	Range 35E	Lot Idn A	Feet From 100	N/S Line N	Feet From 330	E/W Line E	County Lea
12. Dedicated Acres 160.00			13. Joint or Infill		14. Consolidation Code			15. Order No.	

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> E-Signed By: Sarah Ferreyros Title: Director of Regulatory Date: 6/12/2023 SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> Surveyed By: John Vukonich Date of Survey: 5/19/2023 Certificate Number: 14831
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form APD Comments

Permit 341918

PERMIT COMMENTS

Operator Name and Address: Avant Operating, LLC [330396] 1515 Wynkoop Street Denver, CO 80202		API Number: 30-025-51624
		Well: ANGRY ANGUS 32 STATE COM #705H

Created By	Comment	Comment Date
sferreyros	Avant Operating would like to request to batch set surface casing with the other wells on the pad.	6/12/2023

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Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form APD Conditions

Permit 341918

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: Avant Operating, LLC [330396] 1515 Wynkoop Street Denver, CO 80202	API Number: 30-025-51624
	Well: ANGRY ANGUS 32 STATE COM #705H

OCD Reviewer	Condition
pkautz	Notify OCD 24 hours prior to casing & cement
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Avant Operating, LLC **OGRID:** 330396 **Date:** 05/18/2023

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Angry Angus 32 State Com 703H		O-32-T19S-R35E	883FSL/1368FEL	2000 BBL/D	3400 MCF/D	8500 BBL/D
Angry Angus 32 State Com 704H		O-32-T19S-R35E	898FSL/1348FEL	2000 BBL/D	3400 MCF/D	8500 BBL/D
Angry Angus 32 State Com 705H		O-32-T19S-R35E	912FSL/1327FEL	2000 BBL/D	3400 MCF/D	8500 BBL/D

IV. Central Delivery Point Name: Angry Angus CTB 1 [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Angry Angus 32 State Com 703H		07/03/2023	08/25/2023	09/18/2023	12/15/2023	12/15/2023
Angry Angus 32 State Com 704H		07/03/2023	08/25/2023	09/18/2023	12/15/2023	12/15/2023
Angry Angus 32 State Com 705H		07/03/2023	08/25/2023	09/18/2023	12/15/2023	12/15/2023

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: 
Printed Name: John Harper
Title: VP of Geosciences
E-mail Address: John@avantnr.com
Date: 05/22/23
Phone: 678-988-6644
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

Avant Operating, LLC Natural Gas Management Plan

- VI. Separation equipment will be sized by construction engineering staff based on stated manufacturer daily throughput capacities and anticipated daily production rates to ensure adequate capacity. Closed vent system piping, compression needs, and VRUs will be sized utilizing ProMax modelling software to ensure adequate capacity for anticipated production volumes and conditions.
- VII. Avant Operating, LLC (Avant) will take the following actions to comply with the regulations listed in 19.15.27.8:
- A. Avant will maximize the recovery of natural gas by minimizing the waste, as defined by 19.15.2 NMAC, of natural gas through venting and flaring. Avant will ensure that well(s) will be connected to a natural gas gathering system with sufficient capacity to transport natural gas.
 - B. All drilling operations will be equipped with a rig flare located at least 100' from the nearest surface hole. Rig flare will be utilized to combust any natural gas that is brought to surface during normal drilling operations. In the case of emergency venting or flaring the volumes will be estimated and reported appropriately.
 - C. During completion operations any natural gas brought to surface will be flared. Immediately following the finish of completion operations, all well flowback will be directed to permanent separation equipment. Produced natural gas from separation equipment will be sent to sales. It is not anticipated that gas will not meet pipeline standards. However, if natural gas does not meet gathering pipeline quality specifications, Avant will flare the natural gas for 60 days or until the natural gas meets the pipeline quality specifications, whichever is sooner. Avant will ensure that the flare is sized properly and is equipped with automatic igniter or continuous pilot. The gas sample will be analyzed twice per week and the gas will be routed into a gathering system as soon as pipeline specifications are met.
 - D. Natural gas will not be flared with the exceptions and provisions listed in the 19.15.27.8 D.(I) through (4). If there is no adequate takeaway for the separator gas, well(s) will be shut in until the natural gas gathering system is available with exception of emergency or malfunction situations. Venting and/or flaring volumes will be estimated and reported appropriately.
 - E. Avant will comply with the performance standards requirements and provisions listed in 19.15.27.8 (I) through (8). All equipment will be designed and sized to handle maximum anticipated pressures and throughputs to minimize the waste. Production storage tanks constructed after May 25, 2021, will be equipped with automatic gauging system. Flares constructed after May 25, 2021, will be equipped with automatic igniter or continuous pilot. Flares will be located at least 100' from the well and storage tanks unless otherwise approved by the division. Avant will conduct AVO inspections as described in 19.15.27.8 E (5) (a) with frequencies specified in 19.15.27.8 E (5) (b) and (c). All emergencies will be resolved as quickly and safely as feasible to minimize waste.
 - F. The volume of natural gas that is vented or flared as the result of malfunction or emergency during drilling and completions operations will be estimated. The volume of natural gas that is vented, flared, or beneficially used during production operations, will be measured, or estimated. Avant will install equipment to measure

Intent ☒ As Drilled ☐

API #		
Operator Name: Avant Operating, LLC	Property Name: Angry Angus 32 State Com	Well Number 705H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
M	32	19S	35E		50	S	330	E	Lea
Latitude 32.6097410					Longitude -103.4719740				NAD 83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
M	32	19S	35E		100	S	330	E	Lea
Latitude 32.6098784					Longitude -103.4719720				NAD 83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
A	32	19S	35E		100	N	330	E	Lea
Latitude 32.6238830					Longitude -103.4719278				NAD 83

Is this well the defining well for the Horizontal Spacing Unit? ☐ NoIs this well an infill well? ☐ Yes

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name: Avant Operating, LLC	Property Name: Angry Angus 32 State Com	Well Number 704H

KZ 06/29/2018



Avant Operating, LLC

Lea Co., NM (NAD 83)

Angry Angus 32 State Com

Angry Angus 32 State Com 705H

OH

Plan: Plan 0.1

Standard Planning Report

30 May, 2023





Planning Report



Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Angry Angus 32 State Com 705H
Company:	Avant Operating, LLC	TVD Reference:	WELL @ 3725.5usft (3725.5)
Project:	Lea Co., NM (NAD 83)	MD Reference:	WELL @ 3725.5usft (3725.5)
Site:	Angry Angus 32 State Com	North Reference:	Grid
Well:	Angry Angus 32 State Com 705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 0.1		

Project	Lea Co., NM (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Angry Angus 32 State Com			
Site Position:		Northing:	586,958.09 usft	Latitude: 32.6107303°N
From:	Lat/Long	Easting:	802,730.31 usft	Longitude: 103.4844362°W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	

Well	Angry Angus 32 State Com 705H			
Well Position	+N/-S	0.0 usft	Northing:	587,481.49 usft
	+E/-W	0.0 usft	Easting:	805,576.93 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft	Ground Level: 3,699.0 usft
Grid Convergence:	0.46 °			

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2000	12/31/2004	8.55	60.82	49,669.29304019

Design	Plan 0.1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	12.69

Plan Survey Tool Program	Date	5/30/2023		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	16,461.6 Plan 0.1 (OH)	B001Mb_MWD+HRGM	
			OWSG MWD + HRGM	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,733.8	14.68	130.85	5,725.8	-61.1	70.7	2.00	2.00	0.00	130.85	
10,197.8	14.68	130.85	10,044.2	-800.9	926.3	0.00	0.00	0.00	0.00	
10,931.7	0.00	0.00	10,770.0	-862.0	997.0	2.00	-2.00	0.00	180.00	
11,034.2	0.00	0.00	10,872.5	-862.0	997.0	0.00	0.00	0.00	0.00	
11,784.2	90.00	359.66	11,350.0	-384.5	994.2	12.00	12.00	0.00	359.66	
16,461.6	90.00	359.66	11,350.0	4,292.8	966.3	0.00	0.00	0.00	0.00	Angry Angus 32 State



Planning Report



Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Angry Angus 32 State Com 705H
Company:	Avant Operating, LLC	TVD Reference:	WELL @ 3725.5usft (3725.5)
Project:	Lea Co., NM (NAD 83)	MD Reference:	WELL @ 3725.5usft (3725.5)
Site:	Angry Angus 32 State Com	North Reference:	Grid
Well:	Angry Angus 32 State Com 705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 0.1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,780.0	0.00	0.00	1,780.0	0.0	0.0	0.0	0.00	0.00	0.00
RUSTLER									
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,555.0	0.00	0.00	3,555.0	0.0	0.0	0.0	0.00	0.00	0.00
YATES									
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,627.0	0.00	0.00	4,627.0	0.0	0.0	0.0	0.00	0.00	0.00
QUEEN									



Planning Report



Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Angry Angus 32 State Com 705H
Company:	Avant Operating, LLC	TVD Reference:	WELL @ 3725.5usft (3725.5)
Project:	Lea Co., NM (NAD 83)	MD Reference:	WELL @ 3725.5usft (3725.5)
Site:	Angry Angus 32 State Com	North Reference:	Grid
Well:	Angry Angus 32 State Com 705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 0.1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 2.00									
5,100.0	2.00	130.85	5,100.0	-1.1	1.3	-0.8	2.00	2.00	0.00
5,200.0	4.00	130.85	5,199.8	-4.6	5.3	-3.3	2.00	2.00	0.00
5,300.0	6.00	130.85	5,299.5	-10.3	11.9	-7.4	2.00	2.00	0.00
5,400.0	8.00	130.85	5,398.7	-18.2	21.1	-13.2	2.00	2.00	0.00
5,500.0	10.00	130.85	5,497.5	-28.5	32.9	-20.5	2.00	2.00	0.00
5,600.0	12.00	130.85	5,595.6	-40.9	47.4	-29.5	2.00	2.00	0.00
5,700.0	14.00	130.85	5,693.1	-55.7	64.4	-40.2	2.00	2.00	0.00
5,733.8	14.68	130.85	5,725.8	-61.1	70.7	-44.1	2.00	2.00	0.00
Start 4464.0 hold at 5733.8 MD									
5,800.0	14.68	130.85	5,789.8	-72.1	83.4	-52.0	0.00	0.00	0.00
5,900.0	14.68	130.85	5,886.6	-88.7	102.6	-64.0	0.00	0.00	0.00
5,975.9	14.68	130.85	5,960.0	-101.2	117.1	-73.1	0.00	0.00	0.00
DELAWARE									
6,000.0	14.68	130.85	5,983.3	-105.2	121.7	-75.9	0.00	0.00	0.00
6,100.0	14.68	130.85	6,080.1	-121.8	140.9	-87.9	0.00	0.00	0.00
6,200.0	14.68	130.85	6,176.8	-138.4	160.1	-99.9	0.00	0.00	0.00
6,300.0	14.68	130.85	6,273.5	-155.0	179.2	-111.8	0.00	0.00	0.00
6,400.0	14.68	130.85	6,370.3	-171.5	198.4	-123.8	0.00	0.00	0.00
6,500.0	14.68	130.85	6,467.0	-188.1	217.6	-135.7	0.00	0.00	0.00
6,600.0	14.68	130.85	6,563.7	-204.7	236.7	-147.7	0.00	0.00	0.00
6,700.0	14.68	130.85	6,660.5	-221.2	255.9	-159.6	0.00	0.00	0.00
6,800.0	14.68	130.85	6,757.2	-237.8	275.1	-171.6	0.00	0.00	0.00
6,900.0	14.68	130.85	6,853.9	-254.4	294.2	-183.6	0.00	0.00	0.00
7,000.0	14.68	130.85	6,950.7	-271.0	313.4	-195.5	0.00	0.00	0.00
7,100.0	14.68	130.85	7,047.4	-287.5	332.6	-207.5	0.00	0.00	0.00
7,200.0	14.68	130.85	7,144.2	-304.1	351.7	-219.4	0.00	0.00	0.00
7,300.0	14.68	130.85	7,240.9	-320.7	370.9	-231.4	0.00	0.00	0.00
7,400.0	14.68	130.85	7,337.6	-337.2	390.1	-243.3	0.00	0.00	0.00
7,500.0	14.68	130.85	7,434.4	-353.8	409.2	-255.3	0.00	0.00	0.00
7,600.0	14.68	130.85	7,531.1	-370.4	428.4	-267.3	0.00	0.00	0.00
7,700.0	14.68	130.85	7,627.8	-386.9	447.6	-279.2	0.00	0.00	0.00
7,800.0	14.68	130.85	7,724.6	-403.5	466.7	-291.2	0.00	0.00	0.00
7,900.0	14.68	130.85	7,821.3	-420.1	485.9	-303.1	0.00	0.00	0.00
8,000.0	14.68	130.85	7,918.1	-436.7	505.0	-315.1	0.00	0.00	0.00
8,029.9	14.68	130.85	7,947.0	-441.6	510.8	-318.7	0.00	0.00	0.00
Top of BSG									
8,100.0	14.68	130.85	8,014.8	-453.2	524.2	-327.0	0.00	0.00	0.00
8,200.0	14.68	130.85	8,111.5	-469.8	543.4	-339.0	0.00	0.00	0.00
8,300.0	14.68	130.85	8,208.3	-486.4	562.5	-351.0	0.00	0.00	0.00
8,400.0	14.68	130.85	8,305.0	-502.9	581.7	-362.9	0.00	0.00	0.00
8,500.0	14.68	130.85	8,401.7	-519.5	600.9	-374.9	0.00	0.00	0.00
8,600.0	14.68	130.85	8,498.5	-536.1	620.0	-386.8	0.00	0.00	0.00
8,700.0	14.68	130.85	8,595.2	-552.7	639.2	-398.8	0.00	0.00	0.00
8,800.0	14.68	130.85	8,692.0	-569.2	658.4	-410.8	0.00	0.00	0.00
8,900.0	14.68	130.85	8,788.7	-585.8	677.5	-422.7	0.00	0.00	0.00
9,000.0	14.68	130.85	8,885.4	-602.4	696.7	-434.7	0.00	0.00	0.00
9,100.0	14.68	130.85	8,982.2	-618.9	715.9	-446.6	0.00	0.00	0.00
9,200.0	14.68	130.85	9,078.9	-635.5	735.0	-458.6	0.00	0.00	0.00
9,300.0	14.68	130.85	9,175.6	-652.1	754.2	-470.5	0.00	0.00	0.00



Planning Report



Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Angry Angus 32 State Com 705H
Company:	Avant Operating, LLC	TVD Reference:	WELL @ 3725.5usft (3725.5)
Project:	Lea Co., NM (NAD 83)	MD Reference:	WELL @ 3725.5usft (3725.5)
Site:	Angry Angus 32 State Com	North Reference:	Grid
Well:	Angry Angus 32 State Com 705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 0.1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,400.0	14.68	130.85	9,272.4	-668.7	773.4	-482.5	0.00	0.00	0.00
9,500.0	14.68	130.85	9,369.1	-685.2	792.5	-494.5	0.00	0.00	0.00
9,584.6	14.68	130.85	9,451.0	-699.3	808.8	-504.6	0.00	0.00	0.00
Top of FBSG SD									
9,600.0	14.68	130.85	9,465.8	-701.8	811.7	-506.4	0.00	0.00	0.00
9,700.0	14.68	130.85	9,562.6	-718.4	830.9	-518.4	0.00	0.00	0.00
9,800.0	14.68	130.85	9,659.3	-734.9	850.0	-530.3	0.00	0.00	0.00
9,900.0	14.68	130.85	9,756.1	-751.5	869.2	-542.3	0.00	0.00	0.00
9,918.5	14.68	130.85	9,774.0	-754.6	872.8	-544.5	0.00	0.00	0.00
Top of SBSG Shale									
10,000.0	14.68	130.85	9,852.8	-768.1	888.4	-554.2	0.00	0.00	0.00
10,100.0	14.68	130.85	9,949.5	-784.7	907.5	-566.2	0.00	0.00	0.00
10,135.6	14.68	130.85	9,984.0	-790.6	914.4	-570.5	0.00	0.00	0.00
Top of SBSG SD									
10,197.8	14.68	130.85	10,044.2	-800.9	926.3	-577.9	0.00	0.00	0.00
Start Drop -2.00									
10,200.0	14.63	130.85	10,046.3	-801.2	926.7	-578.2	2.00	-2.00	0.00
10,300.0	12.63	130.85	10,143.4	-816.6	944.5	-589.3	2.00	-2.00	0.00
10,400.0	10.63	130.85	10,241.4	-829.8	959.8	-598.8	2.00	-2.00	0.00
10,500.0	8.63	130.85	10,340.0	-840.8	972.4	-606.7	2.00	-2.00	0.00
10,600.0	6.63	130.85	10,439.1	-849.5	982.5	-613.0	2.00	-2.00	0.00
10,700.0	4.63	130.85	10,538.6	-855.9	989.9	-617.6	2.00	-2.00	0.00
10,752.5	3.58	130.85	10,591.0	-858.3	992.8	-619.4	2.00	-2.00	0.00
Top of TBSG Carb									
10,800.0	2.63	130.85	10,638.4	-860.0	994.7	-620.6	2.00	-2.00	0.00
10,900.0	0.63	130.85	10,738.3	-861.9	996.9	-621.9	2.00	-2.00	0.00
10,931.7	0.00	0.00	10,770.0	-862.0	997.0	-622.0	2.00	-2.00	0.00
Start 102.5 hold at 10931.7 MD									
11,000.0	0.00	0.00	10,838.3	-862.0	997.0	-622.0	0.00	0.00	0.00
11,034.2	0.00	0.00	10,872.5	-862.0	997.0	-622.0	0.00	0.00	0.00
KOP #2 - Start Build 12.00									
11,100.0	7.90	359.66	10,938.1	-857.5	997.0	-617.6	12.00	12.00	0.00
11,200.0	19.90	359.66	11,035.0	-833.5	996.8	-594.2	12.00	12.00	0.00
11,204.2	20.40	359.66	11,039.0	-832.0	996.8	-592.8	12.00	12.00	0.00
Top of TBSG SD									
11,300.0	31.90	359.66	11,124.8	-789.9	996.6	-551.8	12.00	12.00	0.00
11,302.6	32.20	359.66	11,127.0	-788.5	996.6	-550.4	12.00	12.00	0.00
Top WFMP									
11,400.0	43.90	359.66	11,203.6	-728.6	996.2	-492.0	12.00	12.00	0.00
11,437.9	48.44	359.66	11,229.8	-701.3	996.0	-465.4	12.00	12.00	0.00
Angry Angus 32 State Com 705H FTP									
11,500.0	55.90	359.66	11,267.9	-652.2	995.8	-417.7	12.00	12.00	0.00
11,600.0	67.90	359.66	11,314.9	-564.2	995.2	-331.9	12.00	12.00	0.00
11,700.0	79.90	359.66	11,342.6	-468.3	994.7	-238.4	12.00	12.00	0.00
11,784.2	90.00	359.66	11,350.0	-384.5	994.2	-156.8	12.00	12.00	0.00
LP - Start 4677.4 hold at 11784.2 MD									
11,800.0	90.00	359.66	11,350.0	-368.7	994.1	-141.4	0.00	0.00	0.00
11,900.0	90.00	359.66	11,350.0	-268.7	993.5	-44.0	0.00	0.00	0.00
12,000.0	90.00	359.66	11,350.0	-168.7	992.9	53.4	0.00	0.00	0.00
12,100.0	90.00	359.66	11,350.0	-68.7	992.3	150.8	0.00	0.00	0.00
12,200.0	90.00	359.66	11,350.0	31.3	991.7	248.3	0.00	0.00	0.00
12,300.0	90.00	359.66	11,350.0	131.3	991.1	345.7	0.00	0.00	0.00



Planning Report



Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Angry Angus 32 State Com 705H
Company:	Avant Operating, LLC	TVD Reference:	WELL @ 3725.5usft (3725.5)
Project:	Lea Co., NM (NAD 83)	MD Reference:	WELL @ 3725.5usft (3725.5)
Site:	Angry Angus 32 State Com	North Reference:	Grid
Well:	Angry Angus 32 State Com 705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 0.1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,400.0	90.00	359.66	11,350.0	231.3	990.5	443.1	0.00	0.00	0.00
12,500.0	90.00	359.66	11,350.0	331.3	989.9	540.6	0.00	0.00	0.00
12,600.0	90.00	359.66	11,350.0	431.3	989.3	638.0	0.00	0.00	0.00
12,700.0	90.00	359.66	11,350.0	531.2	988.7	735.4	0.00	0.00	0.00
12,800.0	90.00	359.66	11,350.0	631.2	988.1	832.8	0.00	0.00	0.00
12,900.0	90.00	359.66	11,350.0	731.2	987.5	930.3	0.00	0.00	0.00
13,000.0	90.00	359.66	11,350.0	831.2	986.9	1,027.7	0.00	0.00	0.00
13,100.0	90.00	359.66	11,350.0	931.2	986.3	1,125.1	0.00	0.00	0.00
13,200.0	90.00	359.66	11,350.0	1,031.2	985.7	1,222.5	0.00	0.00	0.00
13,300.0	90.00	359.66	11,350.0	1,131.2	985.1	1,320.0	0.00	0.00	0.00
13,400.0	90.00	359.66	11,350.0	1,231.2	984.5	1,417.4	0.00	0.00	0.00
13,500.0	90.00	359.66	11,350.0	1,331.2	983.9	1,514.8	0.00	0.00	0.00
13,600.0	90.00	359.66	11,350.0	1,431.2	983.3	1,612.2	0.00	0.00	0.00
13,700.0	90.00	359.66	11,350.0	1,531.2	982.8	1,709.7	0.00	0.00	0.00
13,800.0	90.00	359.66	11,350.0	1,631.2	982.2	1,807.1	0.00	0.00	0.00
13,900.0	90.00	359.66	11,350.0	1,731.2	981.6	1,904.5	0.00	0.00	0.00
14,000.0	90.00	359.66	11,350.0	1,831.2	981.0	2,001.9	0.00	0.00	0.00
14,100.0	90.00	359.66	11,350.0	1,931.2	980.4	2,099.4	0.00	0.00	0.00
14,200.0	90.00	359.66	11,350.0	2,031.2	979.8	2,196.8	0.00	0.00	0.00
14,300.0	90.00	359.66	11,350.0	2,131.2	979.2	2,294.2	0.00	0.00	0.00
14,400.0	90.00	359.66	11,350.0	2,231.2	978.6	2,391.7	0.00	0.00	0.00
14,500.0	90.00	359.66	11,350.0	2,331.2	978.0	2,489.1	0.00	0.00	0.00
14,600.0	90.00	359.66	11,350.0	2,431.2	977.4	2,586.5	0.00	0.00	0.00
14,700.0	90.00	359.66	11,350.0	2,531.2	976.8	2,683.9	0.00	0.00	0.00
14,800.0	90.00	359.66	11,350.0	2,631.2	976.2	2,781.4	0.00	0.00	0.00
14,900.0	90.00	359.66	11,350.0	2,731.2	975.6	2,878.8	0.00	0.00	0.00
15,000.0	90.00	359.66	11,350.0	2,831.2	975.0	2,976.2	0.00	0.00	0.00
15,100.0	90.00	359.66	11,350.0	2,931.2	974.4	3,073.6	0.00	0.00	0.00
15,200.0	90.00	359.66	11,350.0	3,031.2	973.8	3,171.1	0.00	0.00	0.00
15,300.0	90.00	359.66	11,350.0	3,131.2	973.2	3,268.5	0.00	0.00	0.00
15,400.0	90.00	359.66	11,350.0	3,231.2	972.6	3,365.9	0.00	0.00	0.00
15,500.0	90.00	359.66	11,350.0	3,331.2	972.0	3,463.3	0.00	0.00	0.00
15,600.0	90.00	359.66	11,350.0	3,431.2	971.4	3,560.8	0.00	0.00	0.00
15,700.0	90.00	359.66	11,350.0	3,531.2	970.8	3,658.2	0.00	0.00	0.00
15,800.0	90.00	359.66	11,350.0	3,631.2	970.2	3,755.6	0.00	0.00	0.00
15,900.0	90.00	359.66	11,350.0	3,731.2	969.7	3,853.1	0.00	0.00	0.00
16,000.0	90.00	359.66	11,350.0	3,831.2	969.1	3,950.5	0.00	0.00	0.00
16,100.0	90.00	359.66	11,350.0	3,931.2	968.5	4,047.9	0.00	0.00	0.00
16,200.0	90.00	359.66	11,350.0	4,031.2	967.9	4,145.3	0.00	0.00	0.00
16,300.0	90.00	359.66	11,350.0	4,131.2	967.3	4,242.8	0.00	0.00	0.00
16,400.0	90.00	359.66	11,350.0	4,231.2	966.7	4,340.2	0.00	0.00	0.00
16,461.6	90.00	359.66	11,350.0	4,292.8	966.3	4,400.2	0.00	0.00	0.00
TD at 16461.6 - Angry Angus 32 State Com 705H LTP/BHL									



Planning Report



Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Angry Angus 32 State Com 705H
Company:	Avant Operating, LLC	TVD Reference:	WELL @ 3725.5usft (3725.5)
Project:	Lea Co., NM (NAD 83)	MD Reference:	WELL @ 3725.5usft (3725.5)
Site:	Angry Angus 32 State Com	North Reference:	Grid
Well:	Angry Angus 32 State Com 705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 0.1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
Angry Angus 32 State C	0.00	0.00	11,350.0	-802.5	994.0	586,679.02	806,570.92	32.6098784°N	103.4719720°W
- plan misses target center by 157.1usft at 11437.9usft MD (11229.8 TVD, -701.3 N, 996.0 E)									
- Point									
Angry Angus 32 State C	0.00	0.00	11,350.0	4,292.8	966.3	591,774.30	806,543.24	32.6238830°N	103.4719278°W
- plan hits target center									
- Point									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,780.0	1,780.0	RUSTLER				
3,555.0	3,555.0	YATES				
4,627.0	4,627.0	QUEEN				
5,975.9	5,960.0	DELAWARE				
8,029.9	7,947.0	Top of BSGL				
9,584.6	9,451.0	Top of FBSG SD				
9,918.5	9,774.0	Top of SBSG Shale				
10,135.6	9,984.0	Top of SBSG SD				
10,752.5	10,591.0	Top of TBSG Carb				
11,204.2	11,039.0	Top of TBSG SD				
11,302.6	11,127.0	Top WFMP				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
5,000.0	5,000.0	0.0	0.0	KOP - Start Build 2.00	
5,733.8	5,725.8	-61.1	70.7	Start 4464.0 hold at 5733.8 MD	
10,197.8	10,044.2	-800.9	926.3	Start Drop -2.00	
10,931.7	10,770.0	-862.0	997.0	Start 102.5 hold at 10931.7 MD	
11,034.2	10,872.5	-862.0	997.0	KOP #2 - Start Build 12.00	
11,784.2	11,350.0	-384.5	994.2	LP - Start 4677.4 hold at 11784.2 MD	
16,461.6	11,350.0	4,292.8	966.3	TD at 16461.6	