

District I1625 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) 476-3462Form C-101
August 1, 2011

Permit 294477

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

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

1. Operator Name and Address ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077		2. OGRID Number 372417
		3. API Number 30-025-48601
4. Property Code 325950	5. Property Name DAGGER LAKE 5 STATE	6. Well No. 513H

7. Surface Location

UL - Lot L	Section 5	Township 22S	Range 33E	Lot Idn L	Feet From 2140	N/S Line S	Feet From 350	E/W Line W	County Lea
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8. Proposed Bottom Hole Location

UL - Lot D	Section 32	Township 21S	Range 33E	Lot Idn D	Feet From 100	N/S Line N	Feet From 1254	E/W Line W	County Lea
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9. Pool Information

LEGG;BONE SPRING	37870
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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 3656
16. Multiple N	17. Proposed Depth 19060	18. Formation Bone Spring	19. Contractor	20. Spud Date 4/6/2021
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	17.5	13.375	54.5	1800	500	0
Int1	12.25	9.625	40	4000	950	0
Int1	12.25	9.625	40	5300	330	4000
Prod	8.5	5.5	20	19060	2300	0

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	

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 Braden Harris	Approved By: Paul F Kautz
Title: Vice President	Title: Geologist
Email Address: bharris@advanceenergypartners.com	Approved Date: 4/7/2021
Date: 4/5/2021	Expiration Date: 4/7/2023
Phone: 406-300-3310	Conditions of Approval Attached

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DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3480 Fax: (505) 476-3482

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised August 4, 2011

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-48601	Pool Code 37870	Pool Name LEGG; BONE SPRING
Property Code 325950	Property Name DAGGER LAKE 5 STATE	Well Number 513H
OGRID No. 372417	Operator Name ADVANCE ENERGY PARTNERS HAT MESA	Elevation 3656'

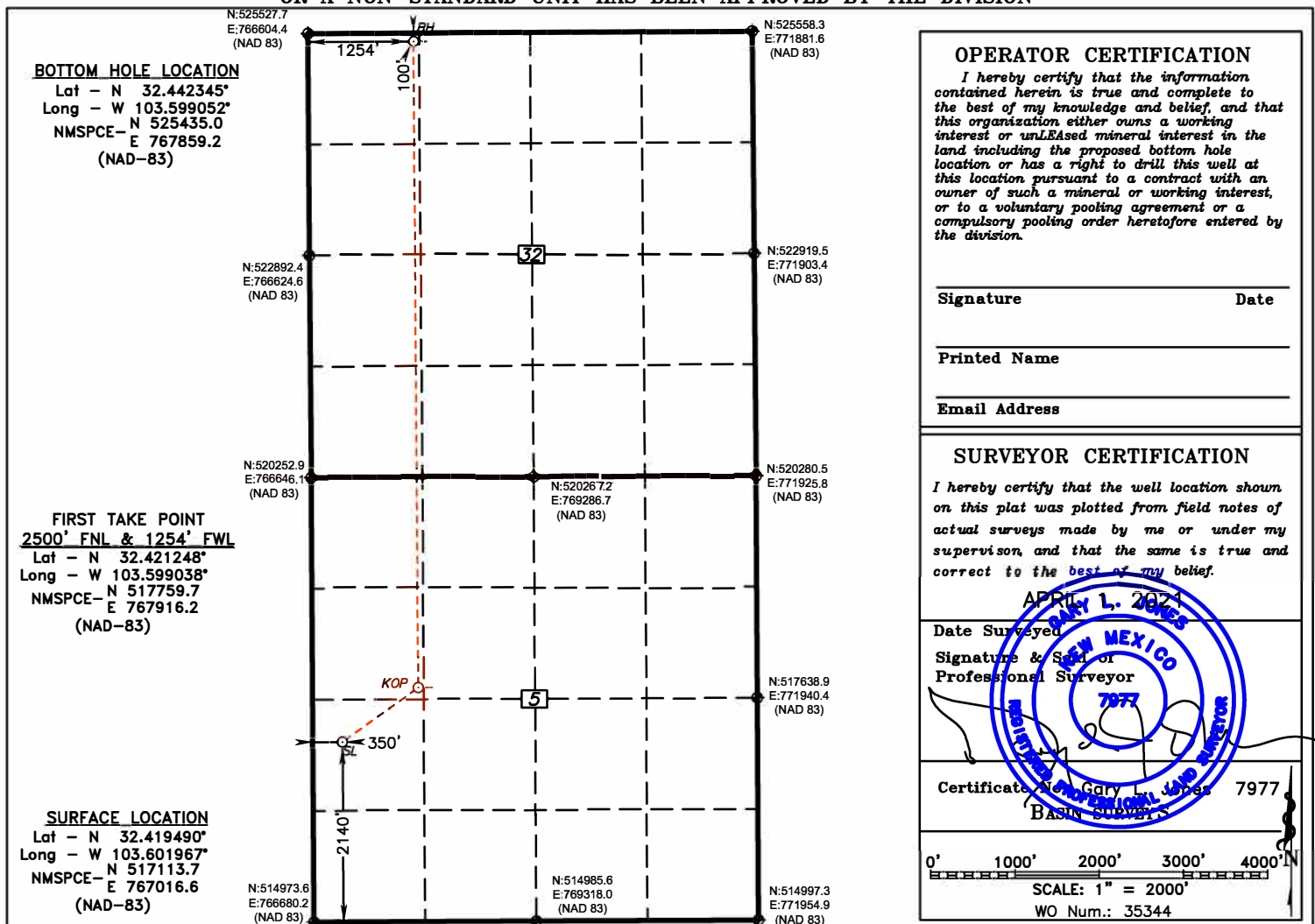
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
L	5	22 S	33 E		2140	SOUTH	350	WEST	LEA

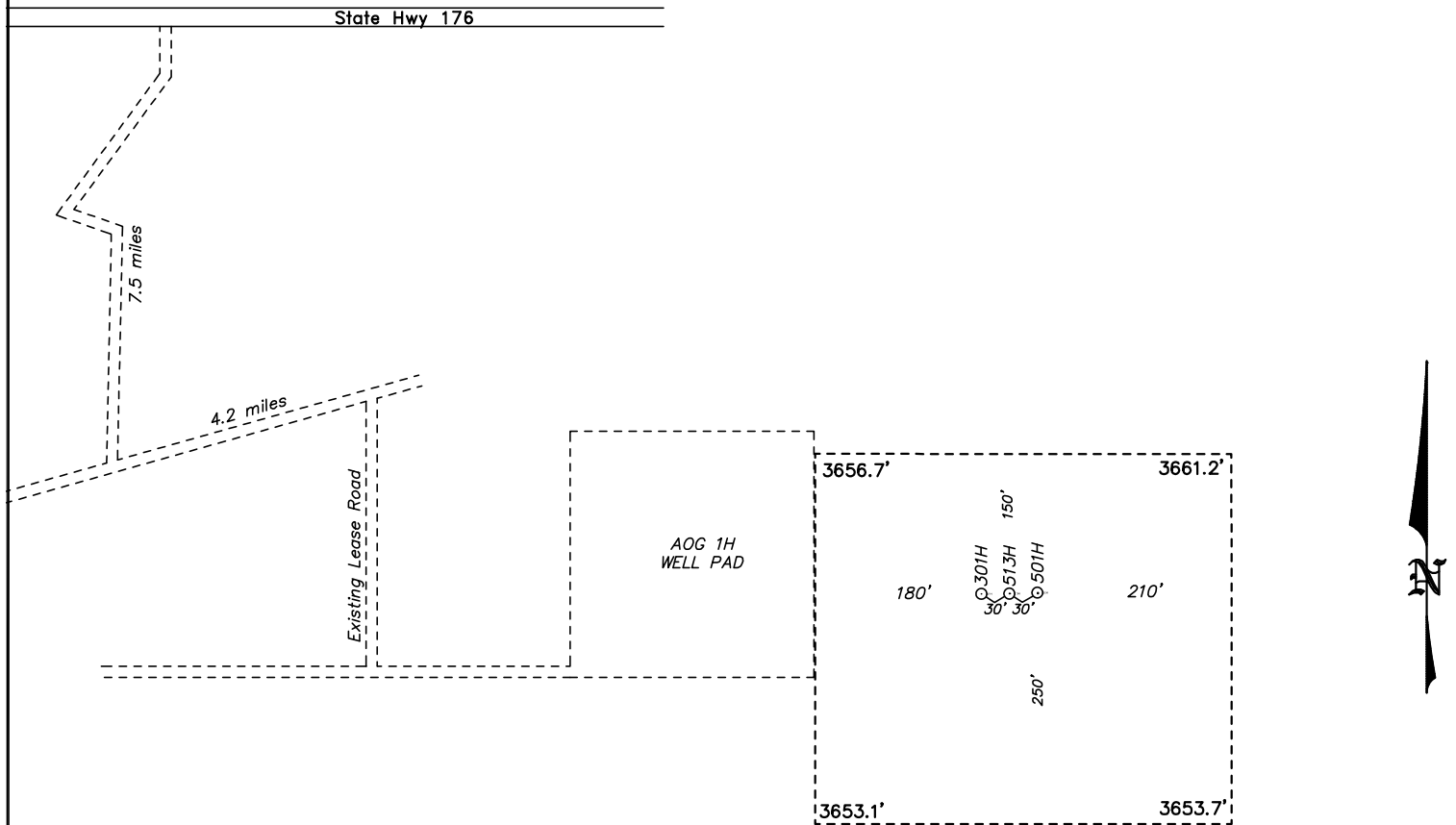
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
D	32	21 S	33 E		100	NORTH	1254	WEST	LEA
Dedicated Acres	Joint or Infill	Consolidation Code	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**



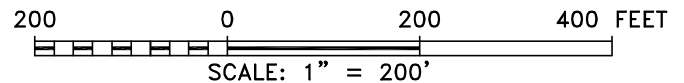
**SECTION 5, TOWNSHIP 22 SOUTH, RANGE 33 EAST. N.M.P.M.,
LEA COUNTY, NEW MEXICO.**



**ADVANCE ENERGY PARTNERS HAT MESA
DAGGER LAKE 5 STATE 513H
ELEV. - 3656'**

Lat - N 32.419490°
Long - W 103.601967°
NMSPCE - N 517113.7
E 767016.6
(NAD-83)

EUNICE, NM IS ±26 MILES TO THE EAST OF LOCATION.



ADVANCE ENERGY PARTNERS HAT MESA

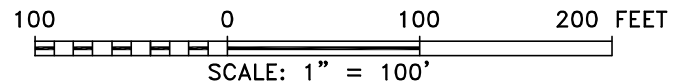
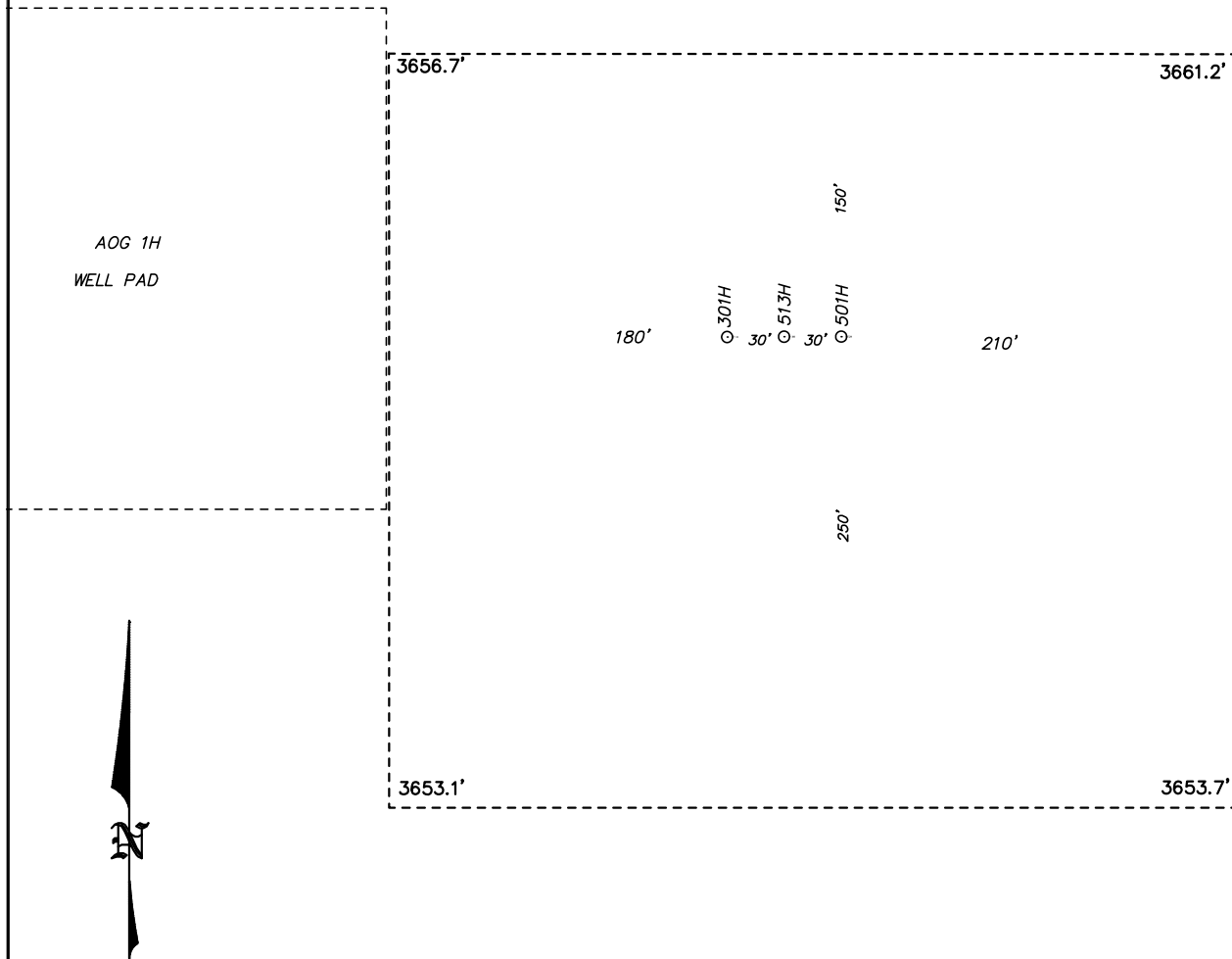
REF: DAGGER LAKE 5 STATE 513H / WELL PAD TOPO

THE DAGGER LAKE 5 STATE 513H LOCATED 2140' FROM
THE SOUTH LINE AND 350' FROM THE WEST LINE OF
SECTION 5, TOWNSHIP 22 SOUTH, RANGE 33 EAST.
N.M.P.M., LEA COUNTY, NEW MEXICO.



P.O. Box 1786 (575) 393-7316 - Office
1120 N. West County Rd. (575) 392-2206 - Fax
Hobbs, New Mexico 88241 basinsurveys.com
focused on excellence in the oilfield

**SECTION 5, TOWNSHIP 22 SOUTH, RANGE 33 EAST. N.M.P.M.,
LEA COUNTY, NEW MEXICO.**



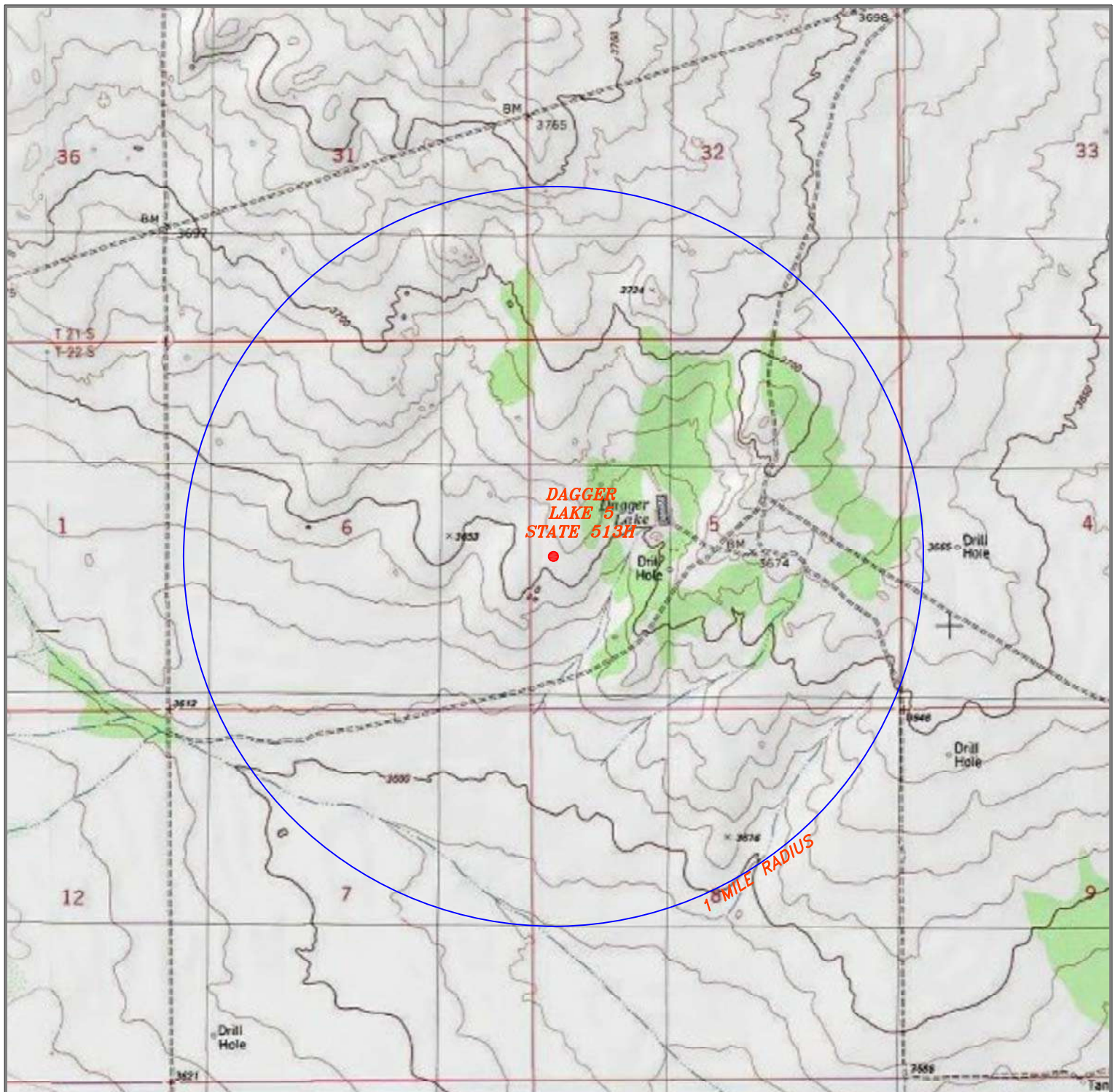
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DAGGER LAKE 5 STATE 513H

Located 2140' FSL and 350' FWL
 Section 5, Township 22 South, Range 33 East,
 N.M.P.M., Lea County, New Mexico.



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0' 1000' 2000' 3000' 1500'
 SCALE: 1" = 2000'

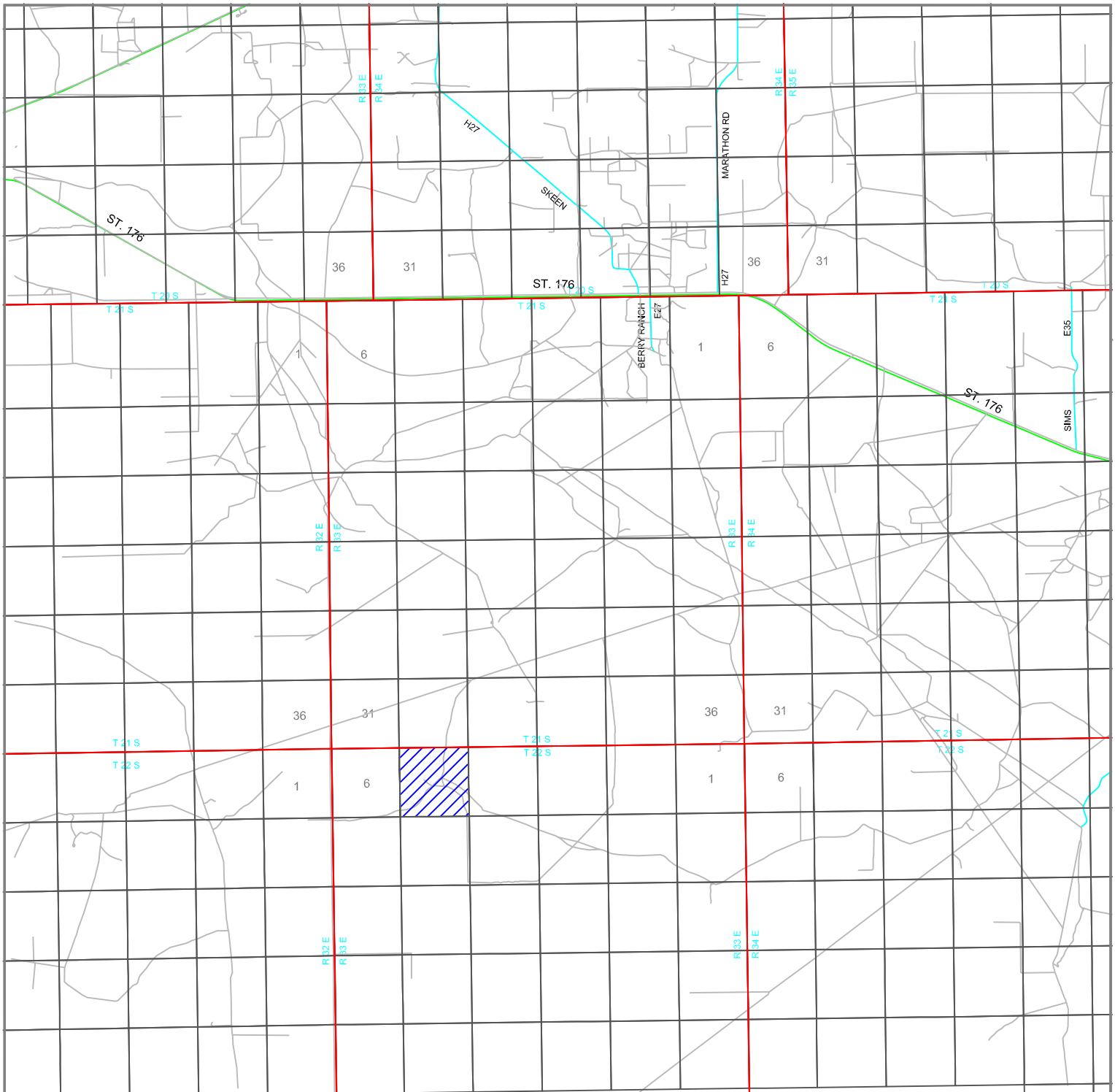
W.O. Number: JG 35344

Survey Date: 04-01-2021

YELLOW TINT - USA LAND
 BLUE TINT - STATE LAND
 NATURAL COLOR - FEE LAND



**ADVANCE
 ENERGY
 PARTNERS
 HAT MESA**



DAGGER LAKE 5 STATE 5131H

Located 2140' FSL and 350' FWL
Section 5, Township 22 South, Range 33 East,
N.M.P.M., Lea County, New Mexico.



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0 1 MI 2 MI 3 MI 4 MI
SCALE: 1" = 2 MILES

W.O. Number: JG 35344

Survey Date: 04-01-2021

YELLOW TINT - USA LAND
BLUE TINT - STATE LAND
NATURAL COLOR - FEE LAND



**ADVANCE
ENERGY
PARTNERS
HAT MESA**



DAGGER LAKE 5 STATE 5131H

Located 2140' FSL and 350' FWL
Section 5, Township 22 South, Range 33 East,
N.M.P.M., Lea County, New Mexico.



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0' 1000' 2000' 3000' 1500'
SCALE: 1" = 2000'

W.O. Number: JG 35344

Survey Date: 04-01-2021

YELLOW TINT - USA LAND
BLUE TINT - STATE LAND
NATURAL COLOR - FEE LAND



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ENERGY
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HAT MESA**

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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

GAS CAPTURE PLAN

Date: 4/7/2021

☒ Original

Operator & OGRID No.: [372417] ADVANCE ENERGY PARTNERS HAT MESA, LLC

☐ Amended - Reason for
Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
DAGGER LAKE 5 STATE #513H	30-025-48601	L-5-22S-33E	2140S 0350W	1500	Flared	

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to TARGA MIDSTREAM SERVICES LLC and will be connected to TARGA MIDSTREAM SERVICES LLC Low Pressure gathering system located in Lea County, New Mexico. It will require 250' of pipeline to connect the facility to Low Pressure gathering system. ADVANCE ENERGY PARTNERS HAT MESA, LLC provides (periodically) to TARGA MIDSTREAM SERVICES LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, ADVANCE ENERGY PARTNERS HAT MESA, LLC and TARGA MIDSTREAM SERVICES LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at TARGA MIDSTREAM SERVICES LLC Processing Plant located in Sec. 05, Twn. 22S, Rng. 33E, Lea County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on TARGA MIDSTREAM SERVICES LLC system at that time. Based on current information, it is ADVANCE ENERGY PARTNERS HAT MESA, LLC's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
 - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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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 Conditions

Permit 294477

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: ADVANCE ENERGY PARTNERS HAT MESA, LLC [372417] 11490 Westheimer Rd., Ste 950 Houston, TX 77077	API Number: 30-025-48601
	Well: DAGGER LAKE 5 STATE #513H

OCD Reviewer	Condition
pkautz	Notify OCD 24 hours prior to casing & cement
pkautz	Will require a administrative order for non-standard location prior to placing the well on production
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	1) SURFACE & INTERMEDIATE CASING - Cement must circulate to surface -- 2) PRODUCTION CASING - Cement must tie back into intermediate casing --
pkautz	If cement does not circulate to surface, must run temperature survey or other log to determine top of cement
pkautz	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water
pkautz	1)- The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud 2)- Drilling Sundries Form C-103 (Casing and Cement test are to be submitted within 10 days 3)- Completion Reports & Logs are to be submitted within 45 days 4)- Deviation / Directional Drill Survey are to be filed with or prior to C-104
pkautz	It is the operator's responsibility to monitor cancellation dates of approved APDs. APD's are good for 2 years and may be extended for one year. Only one 1 year extension will be granted if submitted by C-103 before expiration date. After expiration date or after a 1 year extension must submit new APD. If an APD expires and if site construction has occurred, site remediation is required.
pkautz	Stage Tool 1) Must notify OCD Hobbs Office prior to running Stage Tool at 5753703186 2) If using Stage Tool on Surface casing, Stage Tool must be set greater than 350' from surface and a minimum of 200 feet above surface shoe. 3) When using a Stage Tool on Intermediate or Production Casing Stage must be a minimum of 50 feet below previous casing shoe.

WELL DETAILS: Dagger Lake 5 State 513H

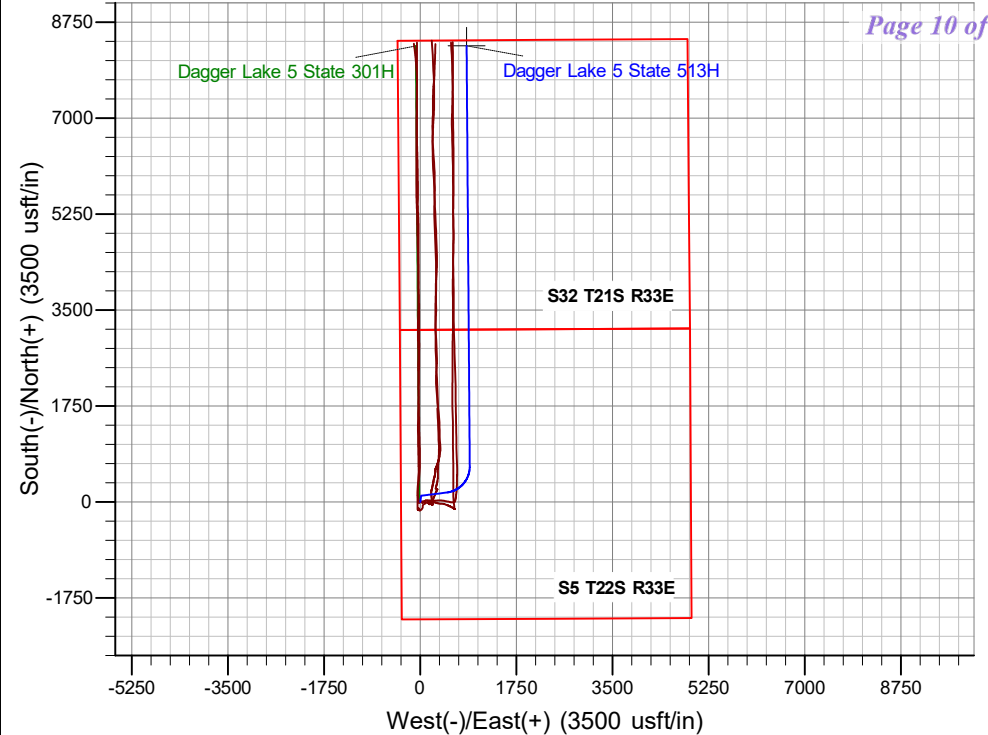
Ground Elev: 3656.0 KB: 3688.5

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	517113.89	767016.68	32° 25' 10.164 N	103° 36' 7.081 W

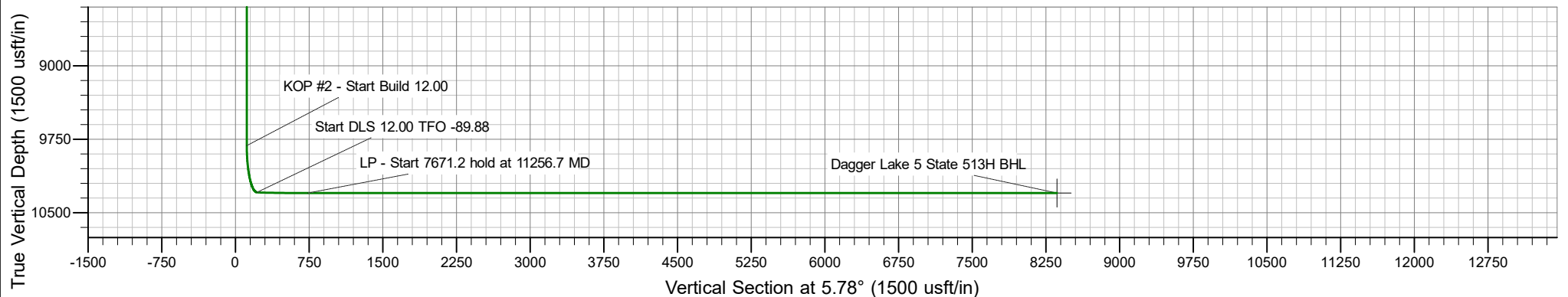
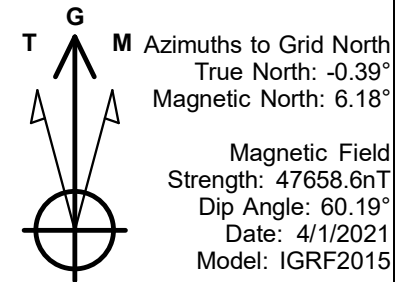
PROJECT DETAILS: Hat Mesa

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

**SECTION DETAILS**

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	4900.0	0.00	0.00	4900.0	0.0	0.0	0.00	0.00	0.0	KOP - Start Build 1.00
3	5400.0	5.00	7.43	5399.4	21.6	2.8	1.00	7.43	21.8	Start 830.3 hold at 5400.0 MD
4	6230.3	5.00	7.43	6226.5	93.4	12.2	0.00	0.00	94.1	Start Drop -1.00
5	6730.3	0.00	0.00	6725.9	115.0	15.0	1.00	180.00	115.9	Start 3089.1 hold at 6730.3 MD
6	9819.4	0.00	0.00	9815.0	115.0	15.0	0.00	0.00	115.9	KOP #2 - Start Build 12.00
7	10561.4	89.00	82.98	10292.6	172.3	480.8	12.00	82.98	219.9	Start DLS 12.00 TFO -89.88
8	11256.7	90.00	359.57	10300.0	650.0	900.0	12.00	-89.88	737.3	LP - Start 7671.2 hold at 11256.7 MD
9	18927.9	90.00	359.57	10300.0	8320.9	842.4	0.00	0.00	8363.5	TD at 18927.9





Advance Energy Partners

Hat Mesa

Dagger Lake 5 State - Pad D

Dagger Lake 5 State 513H

Dagger Lake 5 State 513H

Plan: Dagger Lake 5 State 513H - Prelim

Standard Planning Report

05 April, 2021



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Dagger Lake 5 State 513H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3688.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3688.5usft (Original Well Elev)
Site:	Dagger Lake 5 State - Pad D	North Reference:	Grid
Well:	Dagger Lake 5 State 513H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dagger Lake 5 State 513H		
Design:	Dagger Lake 5 State 513H - Prelim		

Project	Hat Mesa, Lea County, NM		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site						Dagger Lake 5 State - Pad D											
Site Position:						Northing:			517,114.82 usft			Latitude:			32° 25' 10.171 N		
From:			Lat/Long			Easting:			767,046.60 usft			Longitude:			103° 36' 6.732 W		
Position Uncertainty:			0.0 usft			Slot Radius:			13-3/16 "								

Well	Dagger Lake 5 State 513H					
Well Position	+N/-S	0.0 usft	Northing:	517,113.89 usft	Latitude:	32° 25' 10.164 N
	+E/-W	0.0 usft	Easting:	767,016.68 usft	Longitude:	103° 36' 7.081 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,656.0 usft
Grid Convergence:		0.39 °				

Wellbore	Dagger Lake 5 State 513H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/1/2021	6.57	60.19	47,658.61125880

Design	Dagger Lake 5 State 513H - Prelim				
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	5.78	

Plan Survey Tool Program	Date	4/5/2021			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	18,927.2	Dagger Lake 5 State 513H - Prelim	MWD+HRGM	
				OWSG MWD + HRGM	



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Project:	Hat Mesa	MD Reference:	WELL @ 3688.5usft (Original Well Elev)
Site:	Dagger Lake 5 State - Pad D	North Reference:	Grid
Well:	Dagger Lake 5 State 513H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dagger Lake 5 State 513H		
Design:	Dagger Lake 5 State 513H - Prelim		

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	
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,400.0	5.00	7.43	5,399.4	21.6	2.8	1.00	1.00	0.00	7.43	
6,230.3	5.00	7.43	6,226.5	93.4	12.2	0.00	0.00	0.00	0.00	
6,730.3	0.00	0.00	6,725.9	115.0	15.0	1.00	-1.00	0.00	180.00	
9,819.4	0.00	0.00	9,815.0	115.0	15.0	0.00	0.00	0.00	0.00	
10,561.4	89.00	82.98	10,292.6	172.3	480.8	12.00	12.00	0.00	82.98	
11,256.7	90.00	359.57	10,300.0	650.0	900.0	12.00	0.14	-12.00	-89.88	
18,927.9	90.00	359.57	10,300.0	8,320.9	842.4	0.00	0.00	0.00	0.00	Dagger Lake 5 State !



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Dagger Lake 5 State 513H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3688.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3688.5usft (Original Well Elev)
Site:	Dagger Lake 5 State - Pad D	North Reference:	Grid
Well:	Dagger Lake 5 State 513H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dagger Lake 5 State 513H		
Design:	Dagger Lake 5 State 513H - Prelim		

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
1,800.0	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
3,600.0	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
4,700.0	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
KOP - Start Build 1.00									
5,000.0	1.00	7.43	5,000.0	0.9	0.1	0.9	1.00	1.00	0.00
5,100.0	2.00	7.43	5,100.0	3.5	0.5	3.5	1.00	1.00	0.00
5,200.0	3.00	7.43	5,199.9	7.8	1.0	7.8	1.00	1.00	0.00



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Dagger Lake 5 State 513H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3688.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3688.5usft (Original Well Elev)
Site:	Dagger Lake 5 State - Pad D	North Reference:	Grid
Well:	Dagger Lake 5 State 513H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dagger Lake 5 State 513H		
Design:	Dagger Lake 5 State 513H - Prelim		

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)	
5,300.0	4.00	7.43	5,299.7	13.8	1.8	14.0	1.00	1.00	0.00	
5,400.0	5.00	7.43	5,399.4	21.6	2.8	21.8	1.00	1.00	0.00	
Start 830.3 hold at 5400.0 MD										
5,500.0	5.00	7.43	5,499.0	30.3	3.9	30.5	0.00	0.00	0.00	
5,600.0	5.00	7.43	5,598.6	38.9	5.1	39.2	0.00	0.00	0.00	
5,700.0	5.00	7.43	5,698.2	47.5	6.2	47.9	0.00	0.00	0.00	
5,800.0	5.00	7.43	5,797.8	56.2	7.3	56.6	0.00	0.00	0.00	
5,900.0	5.00	7.43	5,897.5	64.8	8.5	65.4	0.00	0.00	0.00	
6,000.0	5.00	7.43	5,997.1	73.5	9.6	74.1	0.00	0.00	0.00	
6,100.0	5.00	7.43	6,096.7	82.1	10.7	82.8	0.00	0.00	0.00	
6,200.0	5.00	7.43	6,196.3	90.8	11.8	91.5	0.00	0.00	0.00	
6,230.3	5.00	7.43	6,226.5	93.4	12.2	94.1	0.00	0.00	0.00	
Start Drop -1.00										
6,300.0	4.30	7.43	6,296.0	99.0	12.9	99.8	1.00	-1.00	0.00	
6,400.0	3.30	7.43	6,395.8	105.6	13.8	106.4	1.00	-1.00	0.00	
6,500.0	2.30	7.43	6,495.6	110.4	14.4	111.3	1.00	-1.00	0.00	
6,600.0	1.30	7.43	6,595.6	113.5	14.8	114.4	1.00	-1.00	0.00	
6,700.0	0.30	7.43	6,695.6	114.9	15.0	115.8	1.00	-1.00	0.00	
6,730.3	0.00	0.00	6,725.9	115.0	15.0	115.9	1.00	-1.00	0.00	
Start 3089.1 hold at 6730.3 MD										
6,800.0	0.00	0.00	6,795.6	115.0	15.0	115.9	0.00	0.00	0.00	
6,900.0	0.00	0.00	6,895.6	115.0	15.0	115.9	0.00	0.00	0.00	
7,000.0	0.00	0.00	6,995.6	115.0	15.0	115.9	0.00	0.00	0.00	
7,100.0	0.00	0.00	7,095.6	115.0	15.0	115.9	0.00	0.00	0.00	
7,200.0	0.00	0.00	7,195.6	115.0	15.0	115.9	0.00	0.00	0.00	
7,300.0	0.00	0.00	7,295.6	115.0	15.0	115.9	0.00	0.00	0.00	
7,400.0	0.00	0.00	7,395.6	115.0	15.0	115.9	0.00	0.00	0.00	
7,500.0	0.00	0.00	7,495.6	115.0	15.0	115.9	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,595.6	115.0	15.0	115.9	0.00	0.00	0.00	
7,700.0	0.00	0.00	7,695.6	115.0	15.0	115.9	0.00	0.00	0.00	
7,800.0	0.00	0.00	7,795.6	115.0	15.0	115.9	0.00	0.00	0.00	
7,900.0	0.00	0.00	7,895.6	115.0	15.0	115.9	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,995.6	115.0	15.0	115.9	0.00	0.00	0.00	
8,100.0	0.00	0.00	8,095.6	115.0	15.0	115.9	0.00	0.00	0.00	
8,200.0	0.00	0.00	8,195.6	115.0	15.0	115.9	0.00	0.00	0.00	
8,300.0	0.00	0.00	8,295.6	115.0	15.0	115.9	0.00	0.00	0.00	
8,400.0	0.00	0.00	8,395.6	115.0	15.0	115.9	0.00	0.00	0.00	
8,500.0	0.00	0.00	8,495.6	115.0	15.0	115.9	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,595.6	115.0	15.0	115.9	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,695.6	115.0	15.0	115.9	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,795.6	115.0	15.0	115.9	0.00	0.00	0.00	
8,900.0	0.00	0.00	8,895.6	115.0	15.0	115.9	0.00	0.00	0.00	
9,000.0	0.00	0.00	8,995.6	115.0	15.0	115.9	0.00	0.00	0.00	
9,100.0	0.00	0.00	9,095.6	115.0	15.0	115.9	0.00	0.00	0.00	
9,200.0	0.00	0.00	9,195.6	115.0	15.0	115.9	0.00	0.00	0.00	
9,300.0	0.00	0.00	9,295.6	115.0	15.0	115.9	0.00	0.00	0.00	
9,400.0	0.00	0.00	9,395.6	115.0	15.0	115.9	0.00	0.00	0.00	
9,500.0	0.00	0.00	9,495.6	115.0	15.0	115.9	0.00	0.00	0.00	
9,600.0	0.00	0.00	9,595.6	115.0	15.0	115.9	0.00	0.00	0.00	
9,700.0	0.00	0.00	9,695.6	115.0	15.0	115.9	0.00	0.00	0.00	
9,800.0	0.00	0.00	9,795.6	115.0	15.0	115.9	0.00	0.00	0.00	
9,819.4	0.00	0.00	9,815.0	115.0	15.0	115.9	0.00	0.00	0.00	
KOP #2 - Start Build 12.00										



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Dagger Lake 5 State 513H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3688.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3688.5usft (Original Well Elev)
Site:	Dagger Lake 5 State - Pad D	North Reference:	Grid
Well:	Dagger Lake 5 State 513H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dagger Lake 5 State 513H		
Design:	Dagger Lake 5 State 513H - Prelim		

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)
9,900.0	9.66	82.98	9,895.2	115.8	21.7	117.4	12.00	12.00	0.00
10,000.0	21.66	82.98	9,991.3	119.1	48.5	123.4	12.00	12.00	0.00
10,100.0	33.66	82.98	10,079.7	124.8	94.5	133.7	12.00	12.00	0.00
10,200.0	45.65	82.98	10,156.6	132.6	157.7	147.8	12.00	12.00	0.00
10,300.0	57.65	82.98	10,218.5	142.1	235.4	165.1	12.00	12.00	0.00
10,400.0	69.64	82.98	10,262.8	153.1	324.1	184.9	12.00	12.00	0.00
10,500.0	81.64	82.98	10,287.6	164.9	420.1	206.4	12.00	12.00	0.00
10,561.4	89.00	82.98	10,292.6	172.3	480.8	219.9	12.00	12.00	0.00
Start DLS 12.00 TFO -89.88									
10,600.0	89.01	78.35	10,293.2	178.6	518.9	230.0	12.00	0.03	-12.00
10,700.0	89.08	66.35	10,294.9	208.9	614.0	269.7	12.00	0.06	-12.00
10,800.0	89.18	54.35	10,296.4	258.2	700.7	327.5	12.00	0.10	-12.00
10,900.0	89.32	42.36	10,297.8	324.6	775.3	401.0	12.00	0.14	-12.00
11,000.0	89.48	30.36	10,298.8	404.9	834.5	486.9	12.00	0.17	-11.99
11,100.0	89.68	18.37	10,299.6	495.9	875.7	581.5	12.00	0.19	-11.99
11,200.0	89.88	6.38	10,299.9	593.4	897.1	680.7	12.00	0.21	-11.99
11,256.7	90.00	359.57	10,300.0	650.0	900.0	737.3	12.00	0.21	-11.99
LP - Start 7671.2 hold at 11256.7 MD									
11,300.0	90.00	359.57	10,300.0	693.3	899.7	780.3	0.00	0.00	0.00
11,400.0	90.00	359.57	10,300.0	793.3	898.9	879.8	0.00	0.00	0.00
11,500.0	90.00	359.57	10,300.0	893.3	898.2	979.2	0.00	0.00	0.00
11,600.0	90.00	359.57	10,300.0	993.3	897.4	1,078.6	0.00	0.00	0.00
11,700.0	90.00	359.57	10,300.0	1,093.2	896.7	1,178.0	0.00	0.00	0.00
11,800.0	90.00	359.57	10,300.0	1,193.2	895.9	1,277.4	0.00	0.00	0.00
11,900.0	90.00	359.57	10,300.0	1,293.2	895.2	1,376.8	0.00	0.00	0.00
12,000.0	90.00	359.57	10,300.0	1,393.2	894.4	1,476.2	0.00	0.00	0.00
12,100.0	90.00	359.57	10,300.0	1,493.2	893.7	1,575.7	0.00	0.00	0.00
12,200.0	90.00	359.57	10,300.0	1,593.2	892.9	1,675.1	0.00	0.00	0.00
12,300.0	90.00	359.57	10,300.0	1,693.2	892.2	1,774.5	0.00	0.00	0.00
12,400.0	90.00	359.57	10,300.0	1,793.2	891.4	1,873.9	0.00	0.00	0.00
12,500.0	90.00	359.57	10,300.0	1,893.2	890.7	1,973.3	0.00	0.00	0.00
12,600.0	90.00	359.57	10,300.0	1,993.2	889.9	2,072.7	0.00	0.00	0.00
12,700.0	90.00	359.57	10,300.0	2,093.2	889.2	2,172.1	0.00	0.00	0.00
12,800.0	90.00	359.57	10,300.0	2,193.2	888.4	2,271.5	0.00	0.00	0.00
12,900.0	90.00	359.57	10,300.0	2,293.2	887.7	2,371.0	0.00	0.00	0.00
13,000.0	90.00	359.57	10,300.0	2,393.2	886.9	2,470.4	0.00	0.00	0.00
13,100.0	90.00	359.57	10,300.0	2,493.2	886.2	2,569.8	0.00	0.00	0.00
13,200.0	90.00	359.57	10,300.0	2,593.2	885.4	2,669.2	0.00	0.00	0.00
13,300.0	90.00	359.57	10,300.0	2,693.2	884.7	2,768.6	0.00	0.00	0.00
13,400.0	90.00	359.57	10,300.0	2,793.2	883.9	2,868.0	0.00	0.00	0.00
13,500.0	90.00	359.57	10,300.0	2,893.2	883.2	2,967.4	0.00	0.00	0.00
13,600.0	90.00	359.57	10,300.0	2,993.2	882.4	3,066.9	0.00	0.00	0.00
13,700.0	90.00	359.57	10,300.0	3,093.2	881.7	3,166.3	0.00	0.00	0.00
13,800.0	90.00	359.57	10,300.0	3,193.2	880.9	3,265.7	0.00	0.00	0.00
13,900.0	90.00	359.57	10,300.0	3,293.2	880.2	3,365.1	0.00	0.00	0.00
14,000.0	90.00	359.57	10,300.0	3,393.2	879.4	3,464.5	0.00	0.00	0.00
14,100.0	90.00	359.57	10,300.0	3,493.2	878.7	3,563.9	0.00	0.00	0.00
14,200.0	90.00	359.57	10,300.0	3,593.2	877.9	3,663.3	0.00	0.00	0.00
14,300.0	90.00	359.57	10,300.0	3,693.2	877.2	3,762.7	0.00	0.00	0.00
14,400.0	90.00	359.57	10,300.0	3,793.2	876.4	3,862.2	0.00	0.00	0.00
14,500.0	90.00	359.57	10,300.0	3,893.2	875.7	3,961.6	0.00	0.00	0.00
14,600.0	90.00	359.57	10,300.0	3,993.2	874.9	4,061.0	0.00	0.00	0.00
14,700.0	90.00	359.57	10,300.0	4,093.2	874.2	4,160.4	0.00	0.00	0.00
14,800.0	90.00	359.57	10,300.0	4,193.2	873.4	4,259.8	0.00	0.00	0.00



Planning Report

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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)
14,900.0	90.00	359.57	10,300.0	4,293.2	872.7	4,359.2	0.00	0.00	0.00
15,000.0	90.00	359.57	10,300.0	4,393.2	871.9	4,458.6	0.00	0.00	0.00
15,100.0	90.00	359.57	10,300.0	4,493.2	871.2	4,558.0	0.00	0.00	0.00
15,200.0	90.00	359.57	10,300.0	4,593.2	870.4	4,657.5	0.00	0.00	0.00
15,300.0	90.00	359.57	10,300.0	4,693.1	869.7	4,756.9	0.00	0.00	0.00
15,400.0	90.00	359.57	10,300.0	4,793.1	868.9	4,856.3	0.00	0.00	0.00
15,500.0	90.00	359.57	10,300.0	4,893.1	868.2	4,955.7	0.00	0.00	0.00
15,600.0	90.00	359.57	10,300.0	4,993.1	867.4	5,055.1	0.00	0.00	0.00
15,700.0	90.00	359.57	10,300.0	5,093.1	866.7	5,154.5	0.00	0.00	0.00
15,800.0	90.00	359.57	10,300.0	5,193.1	865.9	5,253.9	0.00	0.00	0.00
15,900.0	90.00	359.57	10,300.0	5,293.1	865.2	5,353.4	0.00	0.00	0.00
16,000.0	90.00	359.57	10,300.0	5,393.1	864.4	5,452.8	0.00	0.00	0.00
16,100.0	90.00	359.57	10,300.0	5,493.1	863.7	5,552.2	0.00	0.00	0.00
16,200.0	90.00	359.57	10,300.0	5,593.1	862.9	5,651.6	0.00	0.00	0.00
16,300.0	90.00	359.57	10,300.0	5,693.1	862.2	5,751.0	0.00	0.00	0.00
16,400.0	90.00	359.57	10,300.0	5,793.1	861.4	5,850.4	0.00	0.00	0.00
16,500.0	90.00	359.57	10,300.0	5,893.1	860.7	5,949.8	0.00	0.00	0.00
16,600.0	90.00	359.57	10,300.0	5,993.1	859.9	6,049.2	0.00	0.00	0.00
16,700.0	90.00	359.57	10,300.0	6,093.1	859.1	6,148.7	0.00	0.00	0.00
16,800.0	90.00	359.57	10,300.0	6,193.1	858.4	6,248.1	0.00	0.00	0.00
16,900.0	90.00	359.57	10,300.0	6,293.1	857.6	6,347.5	0.00	0.00	0.00
17,000.0	90.00	359.57	10,300.0	6,393.1	856.9	6,446.9	0.00	0.00	0.00
17,100.0	90.00	359.57	10,300.0	6,493.1	856.1	6,546.3	0.00	0.00	0.00
17,200.0	90.00	359.57	10,300.0	6,593.1	855.4	6,645.7	0.00	0.00	0.00
17,300.0	90.00	359.57	10,300.0	6,693.1	854.6	6,745.1	0.00	0.00	0.00
17,400.0	90.00	359.57	10,300.0	6,793.1	853.9	6,844.5	0.00	0.00	0.00
17,500.0	90.00	359.57	10,300.0	6,893.1	853.1	6,944.0	0.00	0.00	0.00
17,600.0	90.00	359.57	10,300.0	6,993.1	852.4	7,043.4	0.00	0.00	0.00
17,700.0	90.00	359.57	10,300.0	7,093.1	851.6	7,142.8	0.00	0.00	0.00
17,800.0	90.00	359.57	10,300.0	7,193.1	850.9	7,242.2	0.00	0.00	0.00
17,900.0	90.00	359.57	10,300.0	7,293.1	850.1	7,341.6	0.00	0.00	0.00
18,000.0	90.00	359.57	10,300.0	7,393.1	849.4	7,441.0	0.00	0.00	0.00
18,100.0	90.00	359.57	10,300.0	7,493.1	848.6	7,540.4	0.00	0.00	0.00
18,200.0	90.00	359.57	10,300.0	7,593.1	847.9	7,639.9	0.00	0.00	0.00
18,300.0	90.00	359.57	10,300.0	7,693.1	847.1	7,739.3	0.00	0.00	0.00
18,400.0	90.00	359.57	10,300.0	7,793.1	846.4	7,838.7	0.00	0.00	0.00
18,500.0	90.00	359.57	10,300.0	7,893.1	845.6	7,938.1	0.00	0.00	0.00
18,600.0	90.00	359.57	10,300.0	7,993.1	844.9	8,037.5	0.00	0.00	0.00
18,700.0	90.00	359.57	10,300.0	8,093.1	844.1	8,136.9	0.00	0.00	0.00
18,800.0	90.00	359.57	10,300.0	8,193.0	843.4	8,236.3	0.00	0.00	0.00
18,900.0	90.00	359.57	10,300.0	8,293.0	842.6	8,335.7	0.00	0.00	0.00
18,927.9	90.00	359.57	10,300.0	8,320.9	842.4	8,363.5	0.00	0.00	0.00
TD at 18927.9 - Dagger Lake 5 State 513H BHL									



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well Dagger Lake 5 State 513H
Company:	Advance Energy Partners	TVD Reference:	WELL @ 3688.5usft (Original Well Elev)
Project:	Hat Mesa	MD Reference:	WELL @ 3688.5usft (Original Well Elev)
Site:	Dagger Lake 5 State - Pad D	North Reference:	Grid
Well:	Dagger Lake 5 State 513H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dagger Lake 5 State 513H		
Design:	Dagger Lake 5 State 513H - Prelim		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
Dagger Lake 5 State 51:	0.00	0.01	10,300.0	8,320.9	842.4	525,434.84	767,859.04	32° 26' 32.442 N	103° 35' 56.587 W
- plan hits target center									
- Point									

Casing Points					
Measured Depth	Vertical Depth	Name		Casing Diameter	Hole Diameter
(usft)	(usft)			(")	(")
10,920.0	10,298.0	LP		5-1/2	5-1/2

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
4,900.0	4,900.0	0.0	0.0	KOP - Start Build 1.00
5,400.0	5,399.4	21.6	2.8	Start 830.3 hold at 5400.0 MD
6,230.3	6,226.5	93.4	12.2	Start Drop -1.00
6,730.3	6,725.9	115.0	15.0	Start 3089.1 hold at 6730.3 MD
9,819.4	9,815.0	115.0	15.0	KOP #2 - Start Build 12.00
10,561.4	10,292.6	172.3	480.8	Start DLS 12.00 TFO -89.88
11,256.7	10,300.0	650.0	900.0	LP - Start 7671.2 hold at 11256.7 MD
18,927.9	10,300.0	8,320.9	842.4	TD at 18927.9