

Office
 District I – (575) 393-6161
 1625 N. French Dr., Hobbs, NM 88240
 District II – (575) 748-1283
 811 S. First St., Artesia, NM 88210
 District III – (505) 334-6178
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV – (505) 476-3460
 1220 S. St. Francis Dr., Santa Fe, NM
 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised July 18, 2013

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

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-53274
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☐ FEE ☒
2. Name of Operator Silverback Operating II, LLC		6. State Oil & Gas Lease No.
3. Address of Operator IH10 West Suite 201, San Antonio, TX 78257		7. Lease Name or Unit Agreement Name MARGARET
4. Well Location Unit Letter <u>P</u> : <u>1115</u> feet from the <u>S</u> line and <u>238</u> feet from the <u>E</u> line Section <u>22</u> Township <u>18-S</u> Range <u>26-E</u> NMPM County <u>EDDY</u>		8. Well Number 103H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3,317' GR		9. OGRID Number 330968
		10. Pool name or Wildcat ATOKA;GLORIETA-YESO

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK ☐	REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐	ALTERING CASING ☐
PULL OR ALTER CASING ☐	COMMENCE DRILLING OPNS. ☐
DOWNHOLE COMMINGLE ☐	P AND A ☐
CLOSED-LOOP SYSTEM ☐	CASING/CEMENT JOB ☐
OTHER: ☐	OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Silverback request to change the KOP and FTP of the subject well. Please find attached the revised C-102 and the new directional survey plan.

Silverback would also like to request permission to drill a pilot hole to a TVD of 5000'.

Pilot Hole Plan is to drill 8-3/4" hole to 5000' TVD through the Blinerbry, Tubb and Abo formations. Plug back as follows: Plug 1: 4700' - 4800' (45 sx), Plug 2: 4550' - 4650' (45 sx), Plug 3: 4150' - 4250' (45 sx), Plug 4: 2041' - 3900' (800 sx)
 All cement plugs Class C neat @ 14.8 ppg, 1.33 cf/sx

Please see the attached C-102 and WBD of Pilot hole plan.

Spud Date:

2/14/23

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Fatma Abdallah TITLE Regulatory Manager DATE 02/02/2023

Type or print name Fatma Abdallah E-mail address: fabdallah@silverbackexp.com PHONE: 210-585-3316

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):

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Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-53274	² Pool Code 3250	³ Pool Name ATOKA; GLORIETA-YESO
⁴ Property Code 333447	⁵ Property Name MARGARET	⁶ Well Number 103H
⁷ OGRID No. 330968	⁸ Operator Name SILVERBACK OPERATING II, LLC	⁹ Elevation 3,317'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	22	18-S	26-E		1,115'	SOUTH	238'	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	22	18-S	26-E		1,165'	SOUTH	569'	EAST	EDDY

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

SURFACE HOLE LOCATION (SHL) NAD 83, NM EAST ZONE, U.S. FOOT X: 532521.29 Y: 628993.57 LAT.: N32.729139 LONG.: W104.362003 BOTTOM HOLE LOCATION (BHL) NAD 83, NM EAST ZONE, U.S. FOOT X: 532190.12 Y: 629044.92 LAT.: N32.729280 LONG.: W104.363080	LINE TABLE <table border="1"> <thead> <tr> <th>LINE #</th> <th>BEARING</th> <th>LENGTH</th> </tr> </thead> <tbody> <tr><td>L1</td><td>S89°21'29"E</td><td>2,653'</td></tr> <tr><td>L2</td><td>N89°53'54"E</td><td>2,649'</td></tr> <tr><td>L3</td><td>S89°27'06"E</td><td>2,638'</td></tr> <tr><td>L4</td><td>S89°27'06"E</td><td>2,638'</td></tr> <tr><td>L5</td><td>S0°19'20"W</td><td>2,636'</td></tr> <tr><td>L6</td><td>S0°19'20"W</td><td>2,636'</td></tr> <tr><td>L7</td><td>N89°47'10"W</td><td>2,629'</td></tr> </tbody> </table>	LINE #	BEARING	LENGTH	L1	S89°21'29"E	2,653'	L2	N89°53'54"E	2,649'	L3	S89°27'06"E	2,638'	L4	S89°27'06"E	2,638'	L5	S0°19'20"W	2,636'	L6	S0°19'20"W	2,636'	L7	N89°47'10"W	2,629'	LINE TABLE <table border="1"> <thead> <tr> <th>LINE #</th> <th>BEARING</th> <th>LENGTH</th> </tr> </thead> <tbody> <tr><td>L8</td><td>N89°49'29"W</td><td>2,637'</td></tr> <tr><td>L9</td><td>N89°49'23"W</td><td>2,647'</td></tr> <tr><td>L10</td><td>N89°49'31"W</td><td>2,647'</td></tr> <tr><td>L11</td><td>N0°34'17"E</td><td>2,648'</td></tr> <tr><td>L12</td><td>N0°20'04"W</td><td>2,666'</td></tr> <tr><td>L13</td><td>N0°12'31"E</td><td>2,646'</td></tr> <tr><td>L14</td><td>N0°12'31"E</td><td>2,659'</td></tr> </tbody> </table>	LINE #	BEARING	LENGTH	L8	N89°49'29"W	2,637'	L9	N89°49'23"W	2,647'	L10	N89°49'31"W	2,647'	L11	N0°34'17"E	2,648'	L12	N0°20'04"W	2,666'	L13	N0°12'31"E	2,646'	L14	N0°12'31"E	2,659'	¹⁷ OPERATOR CERTIFICATION 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 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. <u>Fatma Abdallah</u> 02/03/2023 Signature Date <u>Fatma Abdallah</u> Printed Name <u>fabdallah@silverbackexp.com</u> E-mail Address
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¹⁸ SURVEYOR CERTIFICATION 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. 2/3/23 Date of Survey <u>Matthew C. Bissett</u> Signature and Seal of Professional Surveyor 20450 Certificate Number	GPS DATUM NAD83 NM EAST ZONE 0' 1000' 2000' W E S T18S-R26E SECTION 15 SECTION 14 SECTION 27 SECTION 26 L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 L12 L13 L14 Found RR Spike Found 1/2" IRON ROD Found 1/2" Rebar Found RAILROAD SPIKE Found 3/8" IRON ROD NW/4 NE/4 SW/4 SE/4 N81°11'08"W 335.12' 238' 569' 1,115' (SHL) (BHL) MATTHEW C. BISSETT NEW MEXICO 20450 PROFESSIONAL SURVEYOR																																																		

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WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-53274	² Pool Code 3250	³ Pool Name ATOKA; GLORIETA-YESO
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⁷ OGRID No. 330968	⁸ Operator Name SILVERBACK OPERATING II, LLC	⁹ Elevation 3,317'

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UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	22	18-S	26-E		1,115'	SOUTH	238'	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

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¹² Dedicated Acres	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.

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¹⁰ Surface Location

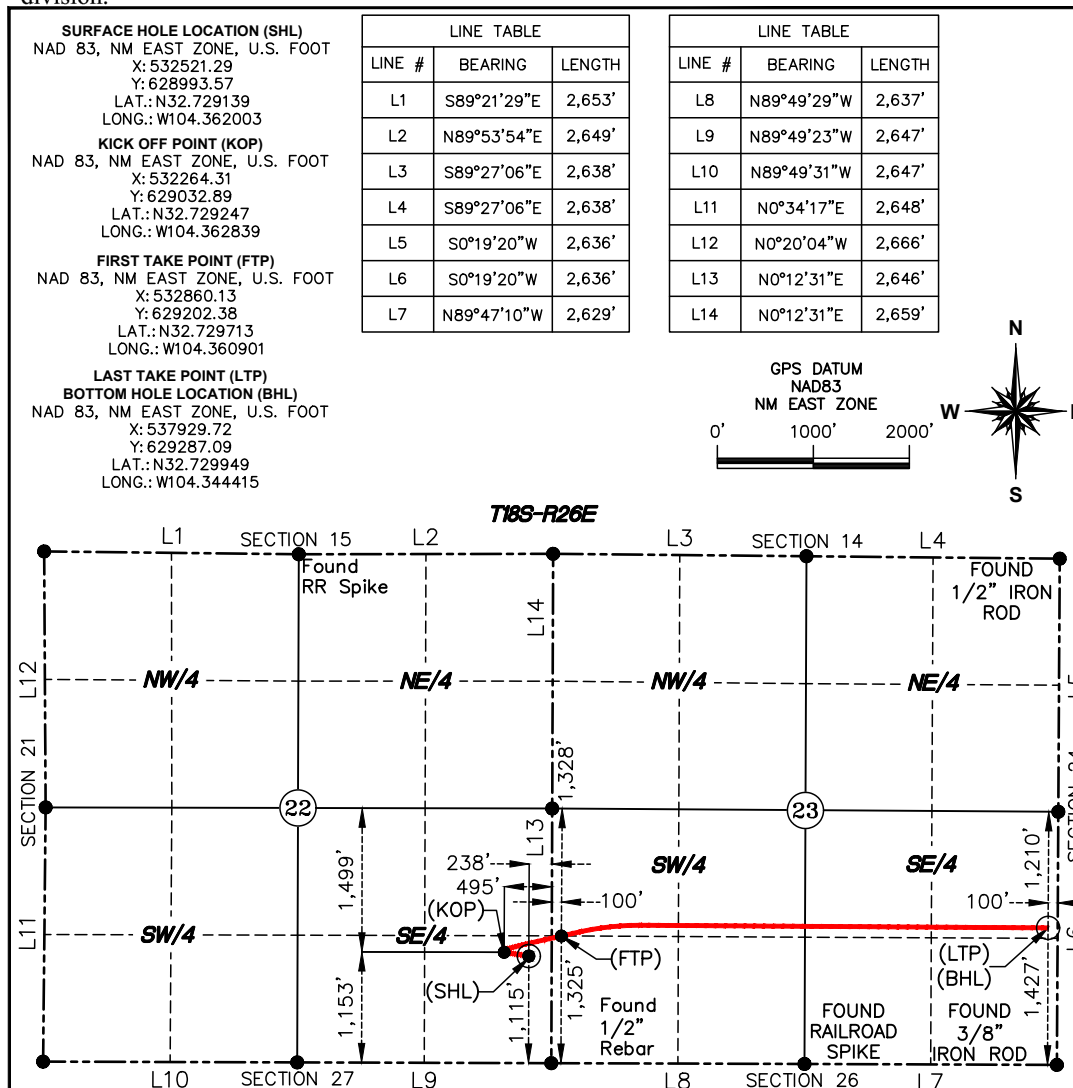
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P	22	18-S	26-E		1,115'	SOUTH	238'	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	23	18-S	26-E		1,427'	SOUTH	100'	EAST	EDDY

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

¹⁷ OPERATOR CERTIFICATION

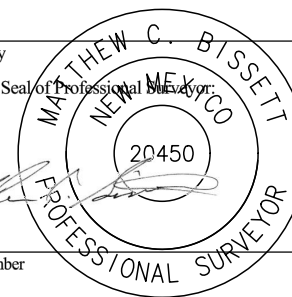
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Fatma Abdallah 2/2/2023
Signature Date
Fatma Abdallah
Printed Name
fabdallah@silverbackexp.com
E-mail Address

¹⁸ SURVEYOR CERTIFICATION

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.

2/2/23
Date of Survey
Signature and Seal of Professional Surveyor:
Matthew C. Bissett
20450
Certificate Number



AFE:

API: 30-015-53274

REGULATORY: NMOCD

PERMIT # 329360

RIG: Precision 826

KB: 3331 (14')

GL: 3317'



CAMERON WELLHEAD

9-5/8" x 7"

11-5K SSD-II

SHL:

Margaret #103H

Paddock

Eddy County, NM

Sec. 22, T-18S, R-26E; 1115 FSL, 238 FEL

Lat: 32.729139, Long: -104.362003 (NAD83)

HOLE SIZE	MD	FORMATION	TVD	MUD	CASING	CEMENT	SPECIAL INSTRUCTIONS
12 1/4"	120	16" Conductor	120	8.4 ppg FRESH TD MW 9.5 ppg	9.625" 36# J-55 BTC	LEAD: 12.5 PPG Top of Lead: 0 0 TAIL: 14.8 PPG Top of Tail: 910 20% Excess	
8 3/4" VERTICAL	1,210	SURF CSG PT	1,208	DRILLOUT MW 8.9 ppg CUT BRINE KOP MW 8.9 ppg EOC MW	SPLIT STRING 7" 32# L-80 HC TCBC-HT 0 - 3300'	LEAD: 11.5 PPG Top of Lead: 0 50% OH Excess TAIL: 14.8 PPG Top of Tail (KOP): 2041' 20% Excess	Pilot Hole Plan Drill 8-3/4" hole to 5000' TVD through the Blinerbry, Tubb and Abo formations. Plug back as follows: Plug 1: 4700' - 4800' (45 sx) Plug 2: 4550' - 4650' (45 sx) Plug 3: 4150' - 4250' (45 sx) Plug 4: 2041' - 3900' (800 sx) All cement plugs Class C neat @ 14.8 ppg, 1.33 cf/sx
8 3/4" CURVE	2,041	KOP	2,074	8.9 ppg	CUT BRINE	TD MW 9.1 ppg	8,262' MD
	3,219	Blinerbry	3,188		5.5" 20# L-80 HC PIXS	WET SHOE	5,406' VS
	3,300	EOC	2,853				2,981' TVD
	EOC VS = 454'			Plug #4	Lat. Azi = VS Azi. = 90.37°	Est BHST = 94°F, Est BHCT = 77°F	BHL: 1427 FSL, 100 FEL
8 3/4" LATERAL	4,201	Lower Blinerbry	4,170	Plug #3	Cement Plugs Plug 1: 4700' - 4800' (45 sx) Plug 2: 4550' - 4650' (45 sx) Plug 3: 4150' - 4250' (45 sx) Plug 4: 2041' - 3900' (800 sx) Class C neat @ 14.8 ppg, 1.33 cf/sx		
	4,609	Tubb	4,578	Plug #2			
	4,736	Abo	4,704	Plug #1			
	5,031	PILOT HOLE TD	5,000				
	DIRECTIONAL PLAN						
	MD	INC	AZI	TVD	ANNOTATION		
	0	0.00	0.000	0			
	500	0.00	0.000	500	Build 2*/100		
	1,106	12.11	278.700	1,101	Hold 12.11 Inc, 278.7 Azi		
	2,041	12.11	278.700	2,015	KOP 9*/100'		
	2,834	60.00	77.350	2,691	Hold 200'		
	2,984	60.00	77.350	2,766	Build 9*/100'		
	3,300	88.50	77.350	2,851	LP 88.5* Inc, 77.35* Azi		
	3,375	88.50	77.350	2,853	Turn 2*/100'		
	4,026	88.50	90.370	2,870	Hold 88.5 Inc, 90.37 Azi		
	8,262	88.50	90.370	2,981	PBTD		

DIRECTIONS TO LOCATION:

From Artesia, NM at the intersection of HWY 82 & HWY 285, drive south on HWY 285 ~8.2 miles to E. Dayton Road (41). Turn left (east) onto E. Dayton Road (41) and drive 0.96 miles, veer right and continue for 1.06 miles to a lease road. Turn left (north) and proceed 0.20 miles to the location entrance.

Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

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

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

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

Received for Imaging: 2/7/2023 9:18:11 AM

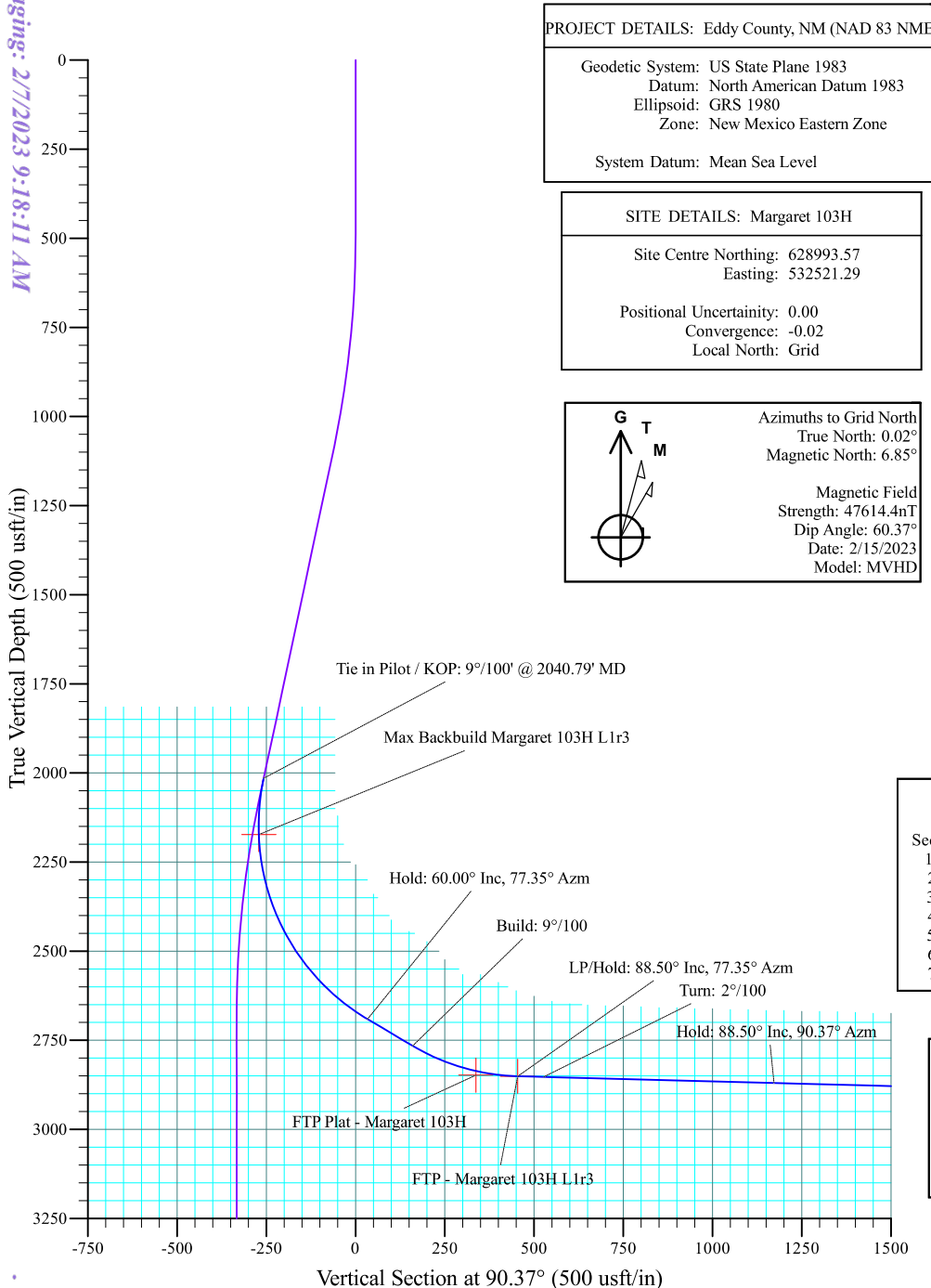


Silverback Exploration

Margaret 103H
Eddy County, NM (NAD 83 NME)
Job No. WT-23-***
Lateral 1r3



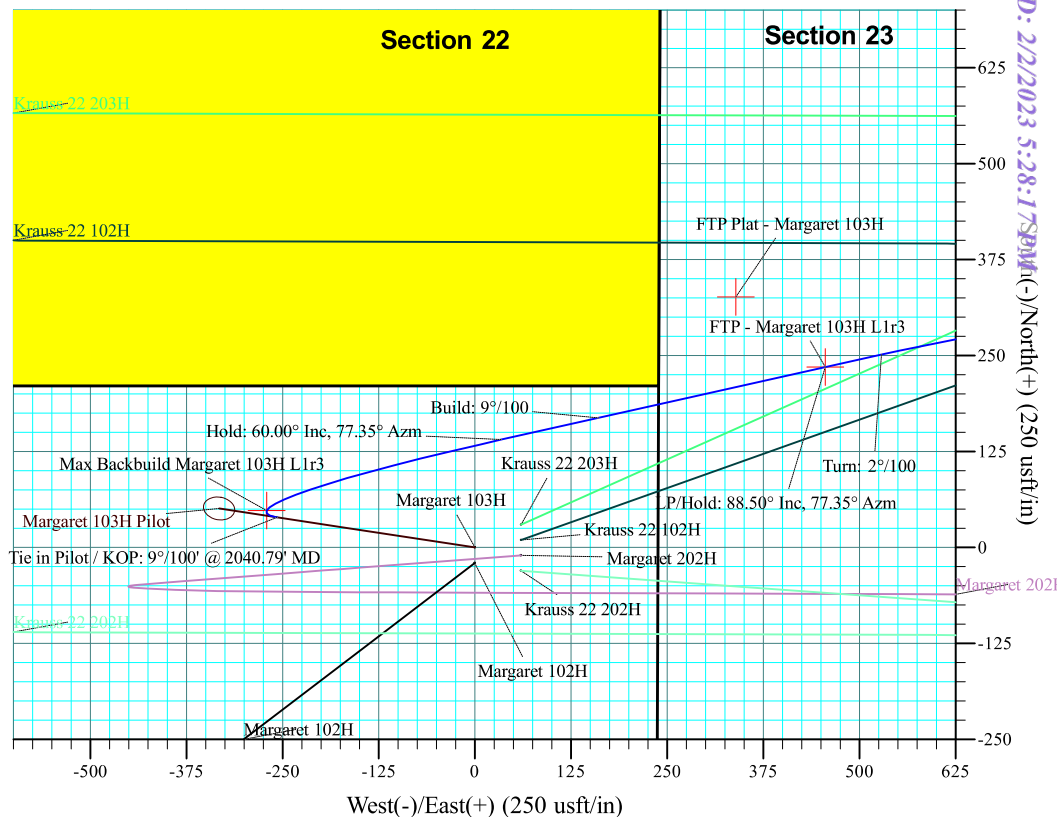
Received by OCD: 2/2/2023 5:28:17 PM (-) North (+) (250 usft/in)



PROJECT DETAILS: Eddy County, NM (NAD 83 NME)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

SITE DETAILS: Margaret 103H
Site Centre Northing: 628993.57
Easting: 532521.29
Positional Uncertainty: 0.00
Convergence: -0.02
Local North: Grid

Azimuths to Grid North
True North: 0.02°
Magnetic North: 6.85°
Magnetic Field
Strength: 47614.4nT
Dip Angle: 60.37°
Date: 2/15/2023
Model: MVHD



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	2040.79	12.11	278.70	2015.48	39.32	-256.97	0.000	0.00	-257.22	Tie in Pilot / KOP: 9°/100' @ 2040.79'
2	2833.63	60.00	77.35	2690.95	140.51	34.47	9.000	160.57	33.56	Hold: 60.00° Inc, 77.35° Azm
3	2983.63	60.00	77.35	2765.95	168.95	161.21	0.000	0.00	160.12	Build: 9°/100
4	3300.32	88.50	77.35	2851.04	235.01	455.56	9.000	0.00	454.03	LP/Hold: 88.50° Inc, 77.35° Azm
5	3375.32	88.50	77.35	2853.00	251.43	528.71	0.000	0.00	527.08	Turn: 2°/100
6	4026.09	88.50	90.37	2870.11	320.86	1174.14	2.000	90.17	1172.05	Hold: 88.50° Inc, 90.37° Azm
7	8261.92	88.50	90.37	2981.00	293.52	5408.43	0.000	0.00	5406.42	PBHL

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Max Backbuild Margaret 103H L1r3	2173.45	48.06	-270.61	629041.63	532250.68	32.72927	-104.36288
FTP Plat - Margaret 103H	2848.00	326.41	339.26	629319.98	532860.55	32.73004	-104.36090
FTP - Margaret 103H L1r3	2851.04	235.01	455.56	629228.58	532976.85	32.72979	-104.36042
LTP/PBHL - Margaret 103H L1r3	2981.00	293.52	5408.43	629287.09	537929.72	32.72995	-104.36042

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSet	Target	Annotation
1	2040.79	12.11	278.70	2015.48	39.32	-256.97	0.000	0.00	-257.22		Tic in Pilot / KOP: 9°/100' @ 2040.79' MD
2	2833.63	60.00	77.35	2690.95	140.51	34.47	9.000	160.57	33.56		Hold: 60.00° Inc, 77.35° Azm
3	2983.63	60.00	77.35	2765.95	168.95	161.21	0.000	0.00	160.12		Build: 9°/100
4	3300.32	88.50	77.35	2851.04	235.01	455.56	9.000	0.00	454.03	FTP - Margaret 103H L1r3	LP/Hold: 88.50° Inc, 77.35° Azm
5	3375.32	88.50	77.35	2853.00	251.43	528.71	0.000	0.00	527.08		Turn: 2°/100
6	4026.09	88.50	90.37	2870.11	320.86	1174.14	2.000	90.17	1172.05		Hold: 88.50° Inc, 90.37° Azm
7	8261.92	88.50	90.37	2981.00	293.52	5408.43	0.000	0.00	5406.42	LTP/PBHL - Margaret 103H L1r3	PBHL

SITE DETAILS: Margaret 103H

Site Centre Northing: 628993.57
Easting: 532521.29

Positional Uncertainty: 0.00
Convergence: -0.02
Local North: Grid

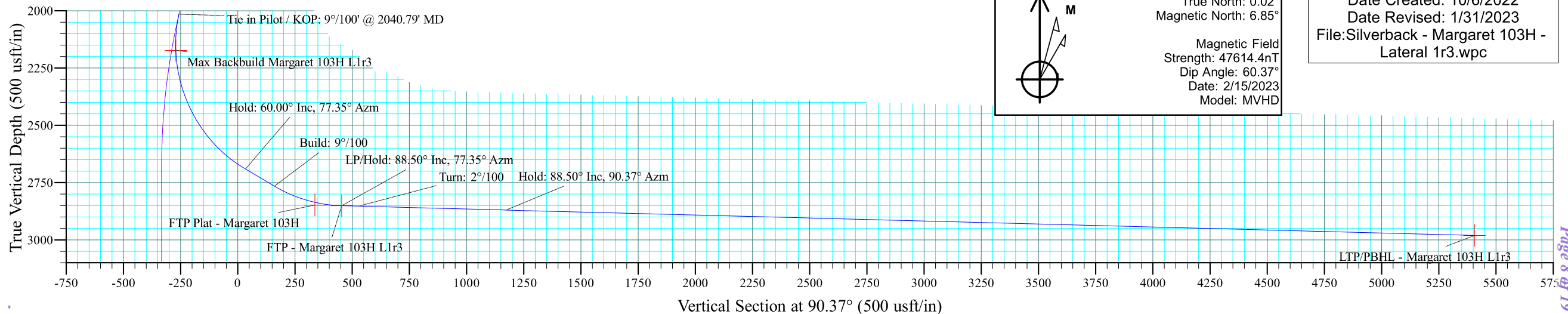
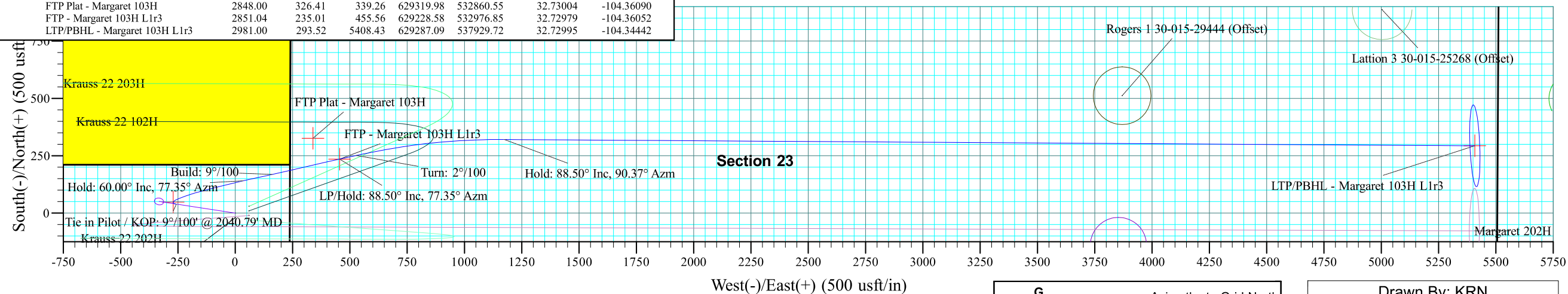
PROJECT DETAILS: Eddy County, NM (NAD 83 NME)

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

System Datum: Mean Sea Level

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Max Backbuild Margaret 103H L1r3	2173.45	48.06	-270.61	629041.63	532250.68	32.72927	-104.36288
FTP Plat - Margaret 103H	2848.00	326.41	339.26	629319.98	532860.55	32.73004	-104.36090
FTP - Margaret 103H L1r3	2851.04	235.01	455.56	629228.58	532976.85	32.72979	-104.36052
LTP/PBHL - Margaret 103H L1r3	2981.00	293.52	5408.43	629287.09	537929.72	32.72995	-104.34442



Azimuths to Grid North
True North: 0.02°
Magnetic North: 6.85°

Magnetic Field
Strength: 47614.4nT
Dip Angle: 60.37°
Date: 2/15/2023
Model: MVHD

Drawn By: KRN
Date Created: 10/6/2022
Date Revised: 1/31/2023
File: Silverback - Margaret 103H -
Lateral 1r3.wpc

Silverback Exploration

Eddy County, NM (NAD 83 NME)

Margaret 103H

Margaret 103H

OH

Plan: Lateral 1r3

Standard Planning Report

31 January, 2023

Aim Directional Services

Planning Report

Database:	EDM 5000.17-Aim-DB	Local Co-ordinate Reference:	Well Margaret 103H
Company:	Silverback Exploration	TVD Reference:	Well @ 3331.00usft (14'KB)
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	Well @ 3331.00usft (14'KB)
Site:	Margaret 103H	North Reference:	Grid
Well:	Margaret 103H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Lateral 1r3		

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

Site	Margaret 103H				
Site Position:		Northing:	628,993.57 usft	Latitude:	32.72914
From:	Map	Easting:	532,521.29 usft	Longitude:	-104.36201
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "		

Well	Margaret 103H					
Well Position	+N/-S	0.00 usft	Northing:	628,993.57 usft	Latitude:	32.72914
	+E/-W	0.00 usft	Easting:	532,521.29 usft	Longitude:	-104.36201
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,317.00 usft
Grid Convergence:		-0.02 °				

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	MVHD	2/15/2023	6.83	60.37	47,614.38130841

Design	Lateral 1r3				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	2,040.79
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	90.37	

Plan Survey Tool Program	Date	1/31/2023			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	2,040.79	8,261.92	Lateral 1r3 (OH)	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	
2,040.79	12.11	278.70	2,015.48	39.32	-256.97	0.000	0.000	0.000	0.00		
2,833.63	60.00	77.35	2,690.95	140.51	34.47	9.000	6.040	20.011	160.57		
2,983.63	60.00	77.35	2,765.95	168.95	161.21	0.000	0.000	0.000	0.00		
3,300.32	88.50	77.35	2,851.04	235.01	455.56	9.000	9.000	0.000	0.00	FTP - Margaret 103	
3,375.32	88.50	77.35	2,853.00	251.43	528.71	0.000	0.000	0.000	0.00		
4,026.09	88.50	90.37	2,870.11	320.86	1,174.14	2.000	0.000	2.001	90.17		
8,261.92	88.50	90.37	2,981.00	293.52	5,408.43	0.000	0.000	0.000	0.00	LTP/PBHL - Margar	

Aim Directional Services

Planning Report

Database:	EDM 5000.17-Aim-DB	Local Co-ordinate Reference:	Well Margaret 103H
Company:	Silverback Exploration	TVD Reference:	Well @ 3331.00usft (14'KB)
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	Well @ 3331.00usft (14'KB)
Site:	Margaret 103H	North Reference:	Grid
Well:	Margaret 103H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Lateral 1r3		

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.000	0.000	0.000
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.000	0.000	0.000
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.000	0.000	0.000
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.000	0.000	0.000
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.000	0.000	0.000
600.00	2.00	278.70	599.98	0.26	-1.73	-1.73	2.000	2.000	0.000
700.00	4.00	278.70	699.84	1.06	-6.90	-6.90	2.000	2.000	0.000
800.00	6.00	278.70	799.45	2.37	-15.51	-15.53	2.000	2.000	0.000
900.00	8.00	278.70	898.70	4.22	-27.56	-27.59	2.000	2.000	0.000
1,000.00	10.00	278.70	997.47	6.58	-43.02	-43.06	2.000	2.000	0.000
1,105.50	12.11	278.70	1,101.00	9.64	-63.02	-63.08	2.000	2.000	0.000
1,200.00	12.11	278.70	1,193.40	12.64	-82.61	-82.69	0.000	0.000	0.000
1,300.00	12.11	278.70	1,291.17	15.82	-103.35	-103.45	0.000	0.000	0.000
1,400.00	12.11	278.70	1,388.95	18.99	-124.09	-124.21	0.000	0.000	0.000
1,500.00	12.11	278.70	1,486.72	22.16	-144.83	-144.97	0.000	0.000	0.000
1,600.00	12.11	278.70	1,584.50	25.33	-165.56	-165.72	0.000	0.000	0.000
1,700.00	12.11	278.70	1,682.27	28.51	-186.30	-186.48	0.000	0.000	0.000
1,800.00	12.11	278.70	1,780.05	31.68	-207.04	-207.24	0.000	0.000	0.000
1,900.00	12.11	278.70	1,877.82	34.85	-227.78	-228.00	0.000	0.000	0.000
2,000.00	12.11	278.70	1,975.60	38.03	-248.51	-248.76	0.000	0.000	0.000
2,040.79	12.11	278.70	2,015.48	39.32	-256.97	-257.22	0.000	0.000	0.000
Tie in Pilot / KOP: 9°/100' @ 2040.79' MD									
2,050.00	11.33	280.10	2,024.50	39.63	-258.82	-259.07	9.000	-8.451	15.241
2,100.00	7.30	292.78	2,073.83	41.72	-266.59	-266.85	9.000	-8.063	25.343
2,150.00	4.31	327.74	2,123.58	44.54	-270.52	-270.81	9.000	-5.973	69.922
2,200.00	4.94	25.54	2,173.45	48.07	-270.60	-270.90	9.000	1.244	115.615
2,250.00	8.40	51.38	2,223.11	52.30	-266.82	-267.15	9.000	6.927	51.670
2,300.00	12.54	61.33	2,272.27	57.18	-259.20	-259.56	9.000	8.275	19.893
2,350.00	16.86	66.32	2,320.63	62.70	-247.79	-248.19	9.000	8.644	9.982
2,400.00	21.25	69.30	2,367.88	68.82	-232.67	-233.11	9.000	8.789	5.972
2,450.00	25.68	71.30	2,413.73	75.50	-213.92	-214.40	9.000	8.859	3.996
2,500.00	30.13	72.74	2,457.90	82.70	-191.66	-192.19	9.000	8.899	2.885
2,550.00	34.59	73.84	2,500.13	90.38	-166.03	-166.61	9.000	8.923	2.202
2,600.00	39.06	74.72	2,540.14	98.48	-137.18	-137.81	9.000	8.939	1.754
2,650.00	43.54	75.44	2,577.69	106.97	-105.30	-105.99	9.000	8.949	1.446
2,700.00	48.02	76.06	2,612.56	115.78	-70.58	-71.32	9.000	8.957	1.226
2,750.00	52.50	76.59	2,644.52	124.86	-33.23	-34.04	9.000	8.963	1.064
2,800.00	56.98	77.06	2,673.37	134.16	6.51	5.65	9.000	8.967	0.943
2,833.63	60.00	77.35	2,690.95	140.51	34.47	33.56	9.000	8.970	0.865
Hold: 60.00° Inc, 77.35° Azm									
2,900.00	60.00	77.35	2,724.13	153.09	90.55	89.56	0.000	0.000	0.000
2,983.63	60.00	77.35	2,765.95	168.95	161.21	160.12	0.000	0.000	0.000
Build: 9°/100									
3,000.00	61.47	77.35	2,773.96	172.08	175.15	174.04	9.000	9.000	0.000
3,050.00	65.97	77.35	2,796.09	181.89	218.88	217.70	9.000	9.000	0.000
3,100.00	70.47	77.35	2,814.63	192.06	264.18	262.93	9.000	9.000	0.000
3,150.00	74.97	77.35	2,829.48	202.51	310.75	309.44	9.000	9.000	0.000
3,200.00	79.47	77.35	2,840.54	213.19	358.32	356.93	9.000	9.000	0.000
3,250.00	83.97	77.35	2,847.73	224.02	406.58	405.13	9.000	9.000	0.000
3,300.32	88.50	77.35	2,851.04	235.01	455.56	454.03	9.000	9.000	0.000
LP/Hold: 88.50° Inc, 77.35° Azm									
3,375.32	88.50	77.35	2,853.00	251.43	528.71	527.08	0.000	0.000	0.000

Aim Directional Services

Planning Report

Database:	EDM 5000.17-Aim-DB	Local Co-ordinate Reference:	Well Margaret 103H
Company:	Silverback Exploration	TVD Reference:	Well @ 3331.00usft (14'KB)
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	Well @ 3331.00usft (14'KB)
Site:	Margaret 103H	North Reference:	Grid
Well:	Margaret 103H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Lateral 1r3		

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)
Turn: 2°/100									
3,400.00	88.50	77.84	2,853.65	256.73	552.81	551.14	2.000	-0.006	2.001
3,500.00	88.49	79.84	2,856.27	276.07	650.88	649.09	2.000	-0.005	2.001
3,600.00	88.49	81.85	2,858.90	291.98	749.57	747.67	2.000	-0.003	2.001
3,700.00	88.49	83.85	2,861.54	304.42	848.75	846.77	2.000	-0.001	2.001
3,800.00	88.49	85.85	2,864.17	313.40	948.31	946.26	2.000	0.001	2.001
3,900.00	88.49	87.85	2,866.80	318.90	1,048.12	1,046.03	2.000	0.003	2.001
4,000.00	88.50	89.85	2,869.43	320.91	1,148.06	1,145.96	2.000	0.005	2.001
4,026.09	88.50	90.37	2,870.11	320.86	1,174.14	1,172.05	2.000	0.006	2.001
Hold: 88.50° Inc, 90.37° Azm									
4,100.00	88.50	90.37	2,872.04	320.39	1,248.02	1,245.93	0.000	0.000	0.000
4,200.00	88.50	90.37	2,874.66	319.74	1,347.98	1,345.89	0.000	0.000	0.000
4,300.00	88.50	90.37	2,877.28	319.09	1,447.95	1,445.86	0.000	0.000	0.000
4,400.00	88.50	90.37	2,879.90	318.45	1,547.91	1,545.82	0.000	0.000	0.000
4,500.00	88.50	90.37	2,882.52	317.80	1,647.87	1,645.79	0.000	0.000	0.000
4,600.00	88.50	90.37	2,885.13	317.16	1,747.84	1,745.75	0.000	0.000	0.000
4,700.00	88.50	90.37	2,887.75	316.51	1,847.80	1,845.72	0.000	0.000	0.000
4,800.00	88.50	90.37	2,890.37	315.87	1,947.77	1,945.69	0.000	0.000	0.000
4,900.00	88.50	90.37	2,892.99	315.22	2,047.73	2,045.65	0.000	0.000	0.000
5,000.00	88.50	90.37	2,895.61	314.58	2,147.69	2,145.62	0.000	0.000	0.000
5,100.00	88.50	90.37	2,898.22	313.93	2,247.66	2,245.58	0.000	0.000	0.000
5,200.00	88.50	90.37	2,900.84	313.29	2,347.62	2,345.55	0.000	0.000	0.000
5,300.00	88.50	90.37	2,903.46	312.64	2,447.58	2,445.51	0.000	0.000	0.000
5,400.00	88.50	90.37	2,906.08	311.99	2,547.55	2,545.48	0.000	0.000	0.000
5,500.00	88.50	90.37	2,908.70	311.35	2,647.51	2,645.45	0.000	0.000	0.000
5,600.00	88.50	90.37	2,911.31	310.70	2,747.48	2,745.41	0.000	0.000	0.000
5,700.00	88.50	90.37	2,913.93	310.06	2,847.44	2,845.38	0.000	0.000	0.000
5,800.00	88.50	90.37	2,916.55	309.41	2,947.40	2,945.34	0.000	0.000	0.000
5,900.00	88.50	90.37	2,919.17	308.77	3,047.37	3,045.31	0.000	0.000	0.000
6,000.00	88.50	90.37	2,921.78	308.12	3,147.33	3,145.27	0.000	0.000	0.000
6,100.00	88.50	90.37	2,924.40	307.48	3,247.29	3,245.24	0.000	0.000	0.000
6,200.00	88.50	90.37	2,927.02	306.83	3,347.26	3,345.21	0.000	0.000	0.000
6,300.00	88.50	90.37	2,929.64	306.18	3,447.22	3,445.17	0.000	0.000	0.000
6,400.00	88.50	90.37	2,932.26	305.54	3,547.18	3,545.14	0.000	0.000	0.000
6,500.00	88.50	90.37	2,934.87	304.89	3,647.15	3,645.10	0.000	0.000	0.000
6,600.00	88.50	90.37	2,937.49	304.25	3,747.11	3,745.07	0.000	0.000	0.000
6,700.00	88.50	90.37	2,940.11	303.60	3,847.08	3,845.03	0.000	0.000	0.000
6,800.00	88.50	90.37	2,942.73	302.96	3,947.04	3,945.00	0.000	0.000	0.000
6,900.00	88.50	90.37	2,945.35	302.31	4,047.00	4,044.97	0.000	0.000	0.000
7,000.00	88.50	90.37	2,947.96	301.67	4,146.97	4,144.93	0.000	0.000	0.000
7,100.00	88.50	90.37	2,950.58	301.02	4,246.93	4,244.90	0.000	0.000	0.000
7,200.00	88.50	90.37	2,953.20	300.37	4,346.89	4,344.86	0.000	0.000	0.000
7,300.00	88.50	90.37	2,955.82	299.73	4,446.86	4,444.83	0.000	0.000	0.000
7,400.00	88.50	90.37	2,958.44	299.08	4,546.82	4,544.79	0.000	0.000	0.000
7,500.00	88.50	90.37	2,961.05	298.44	4,646.78	4,644.76	0.000	0.000	0.000
7,600.00	88.50	90.37	2,963.67	297.79	4,746.75	4,744.73	0.000	0.000	0.000
7,700.00	88.50	90.37	2,966.29	297.15	4,846.71	4,844.69	0.000	0.000	0.000
7,800.00	88.50	90.37	2,968.91	296.50	4,946.68	4,944.66	0.000	0.000	0.000
7,900.00	88.50	90.37	2,971.53	295.86	5,046.64	5,044.62	0.000	0.000	0.000
8,000.00	88.50	90.37	2,974.14	295.21	5,146.60	5,144.59	0.000	0.000	0.000
8,100.00	88.50	90.37	2,976.76	294.57	5,246.57	5,244.55	0.000	0.000	0.000
8,200.00	88.50	90.37	2,979.38	293.92	5,346.53	5,344.52	0.000	0.000	0.000
8,261.92	88.50	90.37	2,981.00	293.52	5,408.43	5,406.42	0.000	0.000	0.000

Aim Directional Services

Planning Report

Database:	EDM 5000.17-Aim-DB	Local Co-ordinate Reference:	Well Margaret 103H
Company:	Silverback Exploration	TVD Reference:	Well @ 3331.00usft (14'KB)
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	Well @ 3331.00usft (14'KB)
Site:	Margaret 103H	North Reference:	Grid
Well:	Margaret 103H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Lateral 1r3		

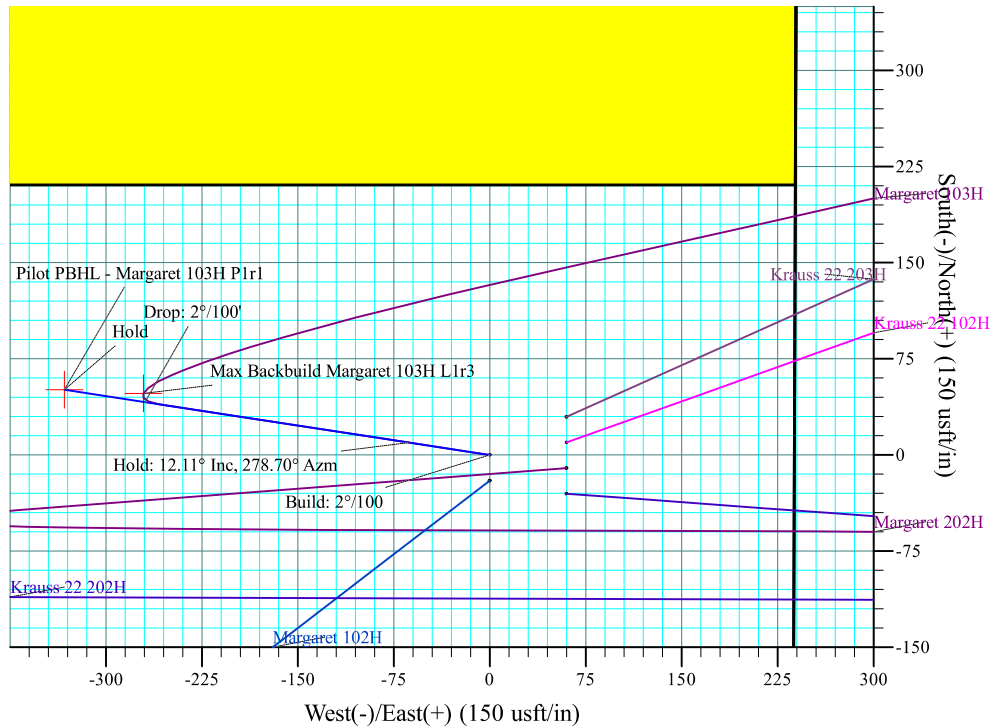
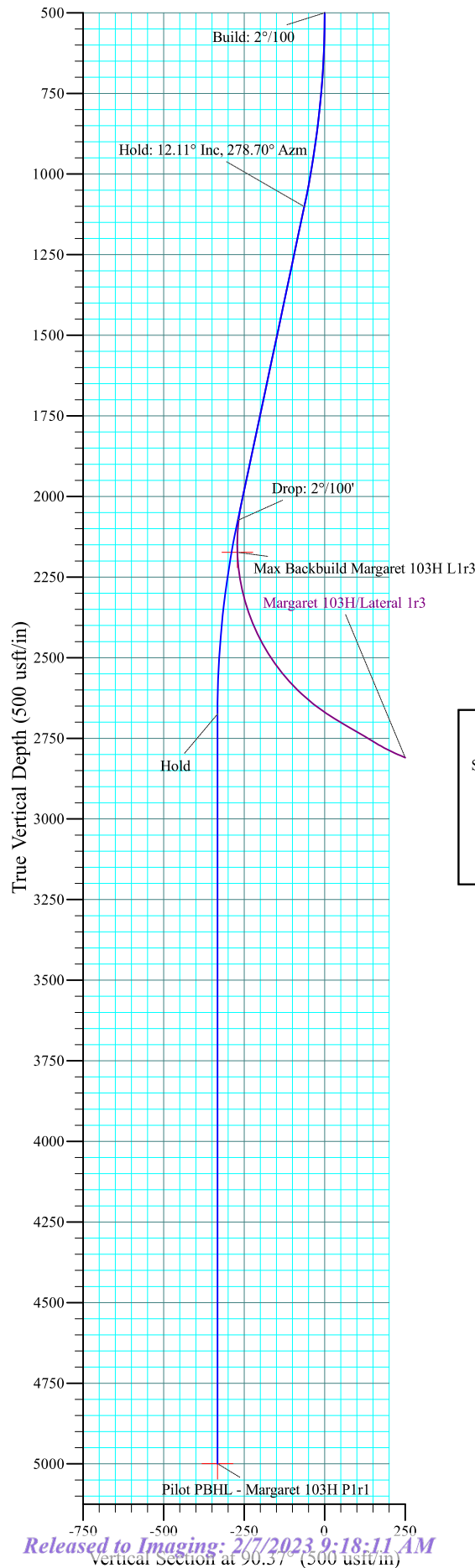
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
PBHL									

Design Targets									
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	
	- Shape								Latitude Longitude
Max Backbuild Marga		0.00	0.00	2,173.45	48.06	-270.61	629,041.64	532,250.69	32.72927 -104.36289
	- plan misses target center by 0.01usft at 2200.00usft MD (2173.44 TVD, 48.07 N, -270.60 E)								
	- Point								
FTP Plat - Margaret 1		0.00	360.00	2,848.00	326.41	339.26	629,319.98	532,860.55	32.73004 -104.36090
	- plan misses target center by 114.82usft at 3207.21usft MD (2841.81 TVD, 214.74 N, 365.24 E)								
	- Point								
FTP - Margaret 103H		0.00	360.00	2,851.04	235.01	455.56	629,228.59	532,976.85	32.72979 -104.36052
	- plan hits target center								
	- Point								
LTP/PBHL - Margaret		0.00	360.00	2,981.00	293.52	5,408.43	629,287.09	537,929.72	32.72995 -104.34442
	- plan hits target center								
	- Point								

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
2,040.79	2,015.48	39.32	-256.97	Tie in Pilot / KOP: 9°/100' @ 2040.79' MD	
2,833.63	2,690.95	140.51	34.47	Hold: 60.00° Inc, 77.35° Azm	
2,983.63	2,765.95	168.95	161.21	Build: 9°/100	
3,300.32	2,851.04	235.01	455.56	LP/Hold: 88.50° Inc, 77.35° Azm	
3,375.32	2,853.00	251.43	528.71	Turn: 2°/100	
4,026.09	2,870.11	320.86	1,174.14	Hold: 88.50° Inc, 90.37° Azm	
8,261.92	2,981.00	293.52	5,408.43	PBHL	



Margaret 103H
Eddy County, NM (NAD 83 NME)
Job No. WT-22-141
Pilot 1r1



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	
2	500.00	0.00	0.00	500.00	0.00	0.00	0.000	0.00	0.00	Build: 2°/100'
3	1105.50	12.11	278.70	1101.00	9.64	-63.02	2.000	278.70	-63.08	Hold: 12.11° Inc, 278.70° Azm
4	2101.08	12.11	278.70	2074.43	41.24	-269.48	0.000	0.00	-269.74	Drop: 2°/100'
5	2706.58	0.00	0.00	2675.43	50.88	-332.49	2.000	180.00	-332.82	Hold
6	5031.15	0.00	0.00	5000.00	50.88	-332.49	0.000	0.00	-332.82	PBHL

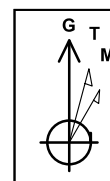
DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Max Backbuild Margaret 103H L1r3	2173.45	48.06	-270.61	629041.63	532250.68	32.72927	-104.36288
Pilot PBHL - Margaret 103H P1r1	5000.00	50.88	-332.49	629044.45	532188.80	32.72928	-104.36308

PROJECT DETAILS: Eddy County, NM (NAD 83 NME)

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

SITE DETAILS: Margaret 103H

Site Centre Northing: 628993.57
Easting: 532521.29
Positional Uncertainty: 0.00
Convergence: -0.02
Local North: Grid



Azimuths to Grid North
True North: 0.02°
Magnetic North: 6.85°

Magnetic Field
Strength: 47614.4nT
Dip Angle: 60.37°
Date: 2/15/2023
Model: MVHD

Silverback Exploration

Eddy County, NM (NAD 83 NME)

Margaret 103H

Margaret 103H

Pilot

Plan: Pilot 1r1

Standard Planning Report

31 January, 2023

Aim Directional Services

Planning Report

Database:	EDM 5000.17-Aim-DB	Local Co-ordinate Reference:	Well Margaret 103H
Company:	Silverback Exploration	TVD Reference:	Well @ 3331.00usft (14'KB)
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	Well @ 3331.00usft (14'KB)
Site:	Margaret 103H	North Reference:	Grid
Well:	Margaret 103H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Pilot		
Design:	Pilot 1r1		

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

Site		Margaret 103H			
Site Position:		Northing:	628,993.57 usft	Latitude:	32.72914
From:	Map	Easting:	532,521.29 usft	Longitude:	-104.36201
Position Uncertainty:		0.00 usft	Slot Radius:	13-3/16 "	

Well	Margaret 103H					
Well Position	+N/-S	0.00 usft	Northing:	628,993.57 usft	Latitude:	32.72914
	+E/-W	0.00 usft	Easting:	532,521.29 usft	Longitude:	-104.36201
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,317.00 usft
Grid Convergence:	-0.02 °					

Wellbore	Pilot				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	MVHD	2/15/2023	6.83	60.37	47,614.38130841

Design	Pilot 1r1				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	90.37	

Plan Survey Tool Program	Date	1/31/2023			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	5,031.15 Pilot 1r1 (Pilot)	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	
0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.00		
500.00	0.00	0.00	500.00	0.00	0.00	0.000	0.000	0.000	0.00		
1,105.50	12.11	278.70	1,101.00	9.64	-63.02	2.000	2.000	0.000	278.70		
2,101.08	12.11	278.70	2,074.43	41.24	-269.48	0.000	0.000	0.000	0.00		
2,706.58	0.00	0.00	2,675.43	50.88	-332.49	2.000	-2.000	0.000	180.00		
5,031.15	0.00	0.00	5,000.00	50.88	-332.49	0.000	0.000	0.000	0.00		

Aim Directional Services

Planning Report

Database:	EDM 5000.17-Aim-DB	Local Co-ordinate Reference:	Well Margaret 103H
Company:	Silverback Exploration	TVD Reference:	Well @ 3331.00usft (14'KB)
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	Well @ 3331.00usft (14'KB)
Site:	Margaret 103H	North Reference:	Grid
Well:	Margaret 103H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Pilot		
Design:	Pilot 1r1		

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.000	0.000	0.000
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.000	0.000	0.000
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.000	0.000	0.000
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.000	0.000	0.000
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.000	0.000	0.000
Build: 2°/100									
600.00	2.00	278.70	599.98	0.26	-1.73	-1.73	2.000	2.000	0.000
700.00	4.00	278.70	699.84	1.06	-6.90	-6.90	2.000	2.000	0.000
800.00	6.00	278.70	799.45	2.37	-15.51	-15.53	2.000	2.000	0.000
900.00	8.00	278.70	898.70	4.22	-27.56	-27.59	2.000	2.000	0.000
1,000.00	10.00	278.70	997.47	6.58	-43.02	-43.06	2.000	2.000	0.000
1,105.50	12.11	278.70	1,101.00	9.64	-63.02	-63.08	2.000	2.000	0.000
Hold: 12.11° Inc, 278.70° Azm									
1,200.00	12.11	278.70	1,193.40	12.64	-82.61	-82.69	0.000	0.000	0.000
1,300.00	12.11	278.70	1,291.17	15.82	-103.35	-103.45	0.000	0.000	0.000
1,400.00	12.11	278.70	1,388.95	18.99	-124.09	-124.21	0.000	0.000	0.000
1,500.00	12.11	278.70	1,486.72	22.16	-144.83	-144.97	0.000	0.000	0.000
1,600.00	12.11	278.70	1,584.50	25.33	-165.56	-165.72	0.000	0.000	0.000
1,700.00	12.11	278.70	1,682.27	28.51	-186.30	-186.48	0.000	0.000	0.000
1,800.00	12.11	278.70	1,780.05	31.68	-207.04	-207.24	0.000	0.000	0.000
1,900.00	12.11	278.70	1,877.82	34.85	-227.78	-228.00	0.000	0.000	0.000
2,000.00	12.11	278.70	1,975.60	38.03	-248.51	-248.76	0.000	0.000	0.000
2,101.08	12.11	278.70	2,074.43	41.24	-269.48	-269.74	0.000	0.000	0.000
Drop: 2°/100'									
2,200.00	10.13	278.70	2,171.48	44.12	-288.34	-288.61	2.000	-2.000	0.000
2,300.00	8.13	278.70	2,270.21	46.52	-304.02	-304.32	2.000	-2.000	0.000
2,400.00	6.13	278.70	2,369.43	48.40	-316.29	-316.60	2.000	-2.000	0.000
2,500.00	4.13	278.70	2,469.03	49.75	-325.13	-325.45	2.000	-2.000	0.000
2,600.00	2.13	278.70	2,568.87	50.58	-330.53	-330.85	2.000	-2.000	0.000
2,706.58	0.00	0.00	2,675.43	50.88	-332.49	-332.82	2.000	-2.000	0.000
Hold									
2,800.00	0.00	0.00	2,768.85	50.88	-332.49	-332.82	0.000	0.000	0.000
2,900.00	0.00	0.00	2,868.85	50.88	-332.49	-332.82	0.000	0.000	0.000
3,000.00	0.00	0.00	2,968.85	50.88	-332.49	-332.82	0.000	0.000	0.000
3,100.00	0.00	0.00	3,068.85	50.88	-332.49	-332.82	0.000	0.000	0.000
3,200.00	0.00	0.00	3,168.85	50.88	-332.49	-332.82	0.000	0.000	0.000
3,300.00	0.00	0.00	3,268.85	50.88	-332.49	-332.82	0.000	0.000	0.000
3,400.00	0.00	0.00	3,368.85	50.88	-332.49	-332.82	0.000	0.000	0.000
3,500.00	0.00	0.00	3,468.85	50.88	-332.49	-332.82	0.000	0.000	0.000
3,600.00	0.00	0.00	3,568.85	50.88	-332.49	-332.82	0.000	0.000	0.000
3,700.00	0.00	0.00	3,668.85	50.88	-332.49	-332.82	0.000	0.000	0.000
3,800.00	0.00	0.00	3,768.85	50.88	-332.49	-332.82	0.000	0.000	0.000
3,900.00	0.00	0.00	3,868.85	50.88	-332.49	-332.82	0.000	0.000	0.000
4,000.00	0.00	0.00	3,968.85	50.88	-332.49	-332.82	0.000	0.000	0.000
4,100.00	0.00	0.00	4,068.85	50.88	-332.49	-332.82	0.000	0.000	0.000
4,200.00	0.00	0.00	4,168.85	50.88	-332.49	-332.82	0.000	0.000	0.000
4,300.00	0.00	0.00	4,268.85	50.88	-332.49	-332.82	0.000	0.000	0.000
4,400.00	0.00	0.00	4,368.85	50.88	-332.49	-332.82	0.000	0.000	0.000
4,500.00	0.00	0.00	4,468.85	50.88	-332.49	-332.82	0.000	0.000	0.000
4,600.00	0.00	0.00	4,568.85	50.88	-332.49	-332.82	0.000	0.000	0.000
4,700.00	0.00	0.00	4,668.85	50.88	-332.49	-332.82	0.000	0.000	0.000
4,800.00	0.00	0.00	4,768.85	50.88	-332.49	-332.82	0.000	0.000	0.000

Aim Directional Services

Planning Report

Database:	EDM 5000.17-Aim-DB	Local Co-ordinate Reference:	Well Margaret 103H
Company:	Silverback Exploration	TVD Reference:	Well @ 3331.00usft (14'KB)
Project:	Eddy County, NM (NAD 83 NME)	MD Reference:	Well @ 3331.00usft (14'KB)
Site:	Margaret 103H	North Reference:	Grid
Well:	Margaret 103H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Pilot		
Design:	Pilot 1r1		

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)	
4,900.00	0.00	0.00	4,868.85	50.88	-332.49	-332.82	0.000	0.000	0.000	
5,000.00	0.00	0.00	4,968.85	50.88	-332.49	-332.82	0.000	0.000	0.000	
5,031.15	0.00	0.00	5,000.00	50.88	-332.49	-332.82	0.000	0.000	0.000	
PBHL										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
Max Backbuild Marga	0.00	0.00	2,173.45	48.06	-270.61	629,041.64	532,250.69	32.72927	-104.36289	
- plan misses target center by 18.24usft at 2198.66usft MD (2170.16 TVD, 44.09 N, -288.10 E)										
- Point										
Pilot PBHL - Margaret	0.00	0.00	5,000.00	50.88	-332.49	629,044.45	532,188.80	32.72928	-104.36309	
- plan hits target center										
- Point										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
500.00	500.00	0.00	0.00	Build: 2°/100	
1,105.50	1,101.00	9.64	-63.02	Hold: 12.11° Inc, 278.70° Azm	
2,101.08	2,074.43	41.24	-269.48	Drop: 2°/100'	
2,706.58	2,675.43	50.88	-332.49	Hold	
5,031.15	5,000.00	50.88	-332.49	PBHL	

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

CONDITIONS

Action 182234

CONDITIONS

Operator: Silverback Operating II, LLC IH10 West, Suite 201 San Antonio, TX 78257	OGRID: 330968
	Action Number: 182234
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Adhere to previous NMOCD Conditions of Approval	2/7/2023