<u>District I</u> 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

Depth to Ground water

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 328887

Distance to nearest surface water

		APPLICAT	TION FOR PERM	IT TO DRILL, RI	E-ENTER, DEEP	EN, PLUGBAC	CK, OR ADD	AZO	NE		
	me and Address erback Operating	I, LLC						2. OGR	RID Number 330968		
	0 West, Suite 201 Antonio, TX 7825	7						3. API I	Number 30-015-5015	5	
4. Property Code 5. Property Name 333043 BOYD Y							6. Well No. 204H				
				7. St	urface Location						
UL - Lot G	Section 14	Township 19S	Range 25E	Lot Idn	Feet From 2003	N/S Line	Feet From 21	33	E/W Line	County	Eddy
				8. Proposed	Bottom Hole Locat	tion					
UL - Lot G	Section 15	Township 19S	Range 25E	Lot Idn G	Feet From 2413	N/S Line	Feet From 2	536	E/W Line E	County	Eddy
				9. Po	ool Information						
N. SEVEN RIV	VERS; GLORIETA	YESO							97565		
				Addition	nal Well Information						
11. Work Type New	v Well	12. Well Typ O		13. Cable/Rotary	14. Leas	14. Lease Type 15. G		ound Leve	el Elevation		
16. Multiple 17. Proposed Depth N 8989			18. Formation Yeso	19. Con	19. Contractor 20. Spud Date 12/21/20			1/2022			

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

21. Proposed Casing and Cement Program

Distance from nearest fresh water well

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC					
Surf	12.25	9.625	36	1250	266	0					
Prod	8.75	7	32	3350	166	0					
Prod	8.75	5.5	20	8989	1727	2606					

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program									
Туре	Working Pressure	Test Pressure	Manufacturer						
Double Ram	5000	5000	Shaffer						

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. Signature:				OIL CONSERVATION	ON DIVISION	
Printed Name:	Electronically filed by Matthew Alle	ey	Approved By:	Katherine Pickford		
Title:	Chief Financial Officer		Title:	Geoscientist		
Email Address:	malley@silverbackexp.com		Approved Date:	11/14/2022 Expiration Date: 11/14/2024		
Date:	11/11/2022	Phone: 303-513-0990	Conditions of Appr	oval Attached		

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 Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

District IV

1220 S. St. Francis Dr. Santa Fe. NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

L10

SECTION 22

L9

State of New Mexico

Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr.

Santa Fe, NM 87505

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- ⁵⁰¹⁵⁵		² Pool Code		
		97565	N-YESO	
⁴ Property Code		⁵ Pr	operty Name	⁶ Well Number
333043	B		BOYD Y	204H
⁷ OGRID No.		8 O _I	⁹ Elevation	
330968	8 SILVERBACK		OPERATING II, LLC	3,422'

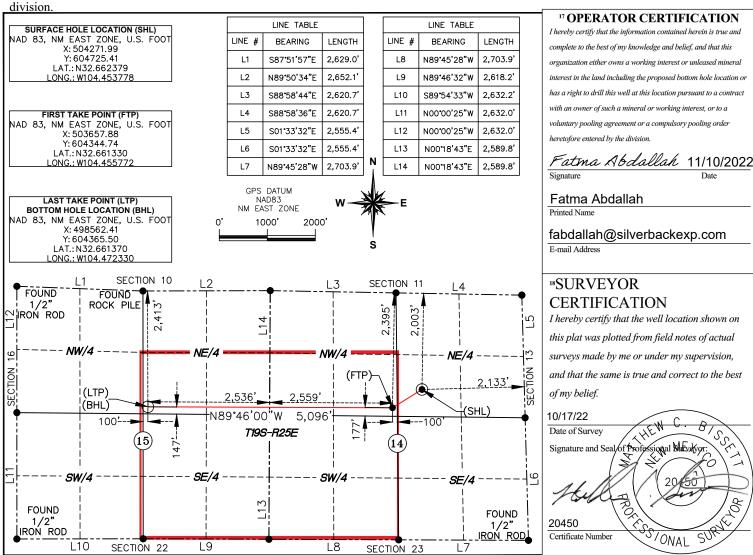
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	14	19-S	25-E		2,003'	NORTH	2,133'	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section 15	Township 19-S	Range 25-E	Lot Idn	Feet from the 2,413'	North/South line NORTH	Feet from the 2,536'	East/West line EAST	County EDDY
12 Dedicated Acres	13 Joint or	Infill 14 (Consolidation	Code 15 Or	der No.				
480									

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the



L8

SECTION 23

<u>District I</u> 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

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 APD Comments

Permit 328887

PERMIT COMMENTS

Operator Name and Address:	API Number:
Silverback Operating II, LLC [330968]	30-015-50155
IH10 West, Suite 201	Well:
San Antonio, TX 78257	BOYD Y #204H

Created E	y Comment	Comment Date
fabdalla	h Boyd Y will be a 480 acre designated unit. A C103 sundry will be submitted to change the acres for the existing Boyd Y 101H, 102H, 201H and 103H wells.	11/11/2022

Form APD Conditions

Permit 328887

<u>District I</u> 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

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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**

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
Silverback Operating II, LLC [330968]	30-015-50155
IH10 West, Suite 201	Well:
San Antonio, TX 78257	BOYD Y #204H

	•
OCD	Condition
Reviewer	
kpickford	Will require administrative order for non-standard spacing unit
kpickford	Notify OCD 24 hours prior to casing & cement
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104
kpickford	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
kpickford	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
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing
kpickford	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

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: Silve	rback Operating l	II, LLC	OGRID:	330968	Date:	11 / 10 / 2022	
II. Type: 🗵 Origina	al 🗆 Amendmen	t due to □ 19.15.27.9	9.D(6)(a) NMAC	C □ 19.15.27.9.D(6)(b) NMAC □	Other.	
If Other, please desc	cribe:						_
III. Well(s): Provide be recompleted from	e the following in a single well pa	nformation for each red or connected to a connected	new or recomple central delivery p	ted well or set of voint.	wells proposed to	be drilled or proposed	l to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D	
BOYD Y 104H	30-015-	G-14-19S-25E	1,983' N 2,133' E	515	800	3,000	
BOYD Y 204H	30-015-	G-14-19S-25E	2,003' N 2,133' E	515	800	3,000	
BOYD Y 205H	30-015-	G-14-19S-25E	1,963' N 2,132' E	515	800	3,000	
IV. Central Deliver V. Anticipated Sch proposed to be record	edule: Provide th	e following informa				19.15.27.9(D)(1) NMAs proposed to be drilled	-
Well Name	API	Spud Date	TD Reached Date	Completion Commencement			on
BOYD Y 104H	30-015-	12/10/22	12/19/22	1/6/23	2/2/23	2/2/23	
BOYD Y 204H	30-015-	12/21/22	12/29/22	1/6/23	2/2/23	2/2/23	_
BOYD Y 205H	30-015-	12/01/22	12/09/22	1/6/23	2/2/23	2/2/23	
VI. Separation Equ	-	h a complete descrip	-	-		nt to optimize gas captur	re.

- 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. A	nticipate	d Natura	I Gas Pi	roduction:
-------	-----------	----------	----------	------------

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	on.

XIII.	Line Pressure.	Operator	does 🗆 does	not anticipate	e that its existing	ng well(s) co	onnected to	the same seg	ment,	or portion	n, of the
natura	al gas gathering	system(s) de	scribed above	will continue	to meet antici	pated increa	ses in line p	oressure cause	ed by	the new w	vell(s).

	Attach (Inerator'	c nlan	to manage i	production	in recnance	to the incre-	ased line pressu	ıre
ш	Attach (operator	s blan	to manage i	broduction	in response	to the incre	ased line bresst	ire

XIV. Confi	identiality: \square	Operator asserts	confidentiality	pursuant to	Section	71-2-8 NM	SA 1978	for the	information	provided in
Section 2 as	s provided in Pa	ragraph (2) of Su	bsection D of 1	9.15.27.9 NN	AC, and	d attaches a	full descri	ption of	the specific	information
for which co	onfidentiality is	asserted and the	basis for such a	assertion.						

(i)

Section 3 - Certifications Effective May 25, 2021

Operator certifies that, a	after reasonable inquiry and based on the available information at the time of submittal:
one hundred percent of	to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering
hundred percent of the a into account the current	able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. box, Operator will select one of the following:
Well Shut-In. ☐ Opera D of 19.15.27.9 NMAC	tor will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection ; or
Venting and Flaring P	lan. Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential
alternative beneficial us	es 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

Section 4 - Notices

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

other alternative beneficial uses approved by the division.

- (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: Fatma Abdallah
Printed Name: Fatma Abdallah
Title: Regulatory Manager
E-mail Address: fabdallah@silverbackexp.com
Date: 11/10/2022
Phone: 210-585-3316
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

Separation Equipment

Silverback Operating II (LLC) has sampled existing producing wells and performed laboratory testing to determine composition. Performance of existing producing wells was analyzed to predict expected production volumes including a low probably, high volume production case (approximately 75% higher than type curve or most likely amount of production). Production composition and the volumes were utilized as inputs to a process model which predicts relative amounts of gas, oil and water throughout the process. The high volume case was used to size equipment, piping and instrumentation. Equipment sizing is based on drop settlement and limits the amount of carry over to the gas phase.

Each well has a dedicated 3 phase separator and gas from that separator is taken directly to gas sales. Facility piping and pipeline were sized to allow peak volumes to flow with minimal pressure loss and deliver to midstream gatherer at an acceptable pressure. Water is conveyed directly to tankage.

Oil from 3 phase separators is comingled and conveyed to a heated separator for enhanced liquid-liquid separation and degassing. Vapors from the heater treater are routed to a Vapor Recovery Unit (VRU).

Oil and water storage tanks vapor outlets are common and utilize a closed vent vapor system to ensure all working & breathing and flashing losses are routed to the Vapor Recovery Unit (VRU) Site VRUs are sized to accommodate peak expected production volume. Flash volumes were estimated using the high volume case and process modeling software. Gas from the VRU outlet is combined with $1_{\rm st}$ stage separation gas and sent to sales.

Venting and Flaring

Silverback Operating II, LLC will ensure pipeline connectivity before producing hydrocarbons and will operate a closed vent vapor capture system that is designed to capture all associated and evolved gas during normal operation. Venting or flaring will only occur during start up and shut down, maintenance activities or equipment failure or upset. Silverback may utilize the following from list A-I of Section 3 for its operations to minimize flaring:

- a) Power generation on lease Natural gas driven gen set to produce power required to run supply well pad electrical loads
- c) Compression on lease gas lift or gas compression as required
- d) Liquids removal on lease gas pressure will be used to convey fluids as needed

Best Management Practices

Silverback utilizes automate engineering controls included in facility design to minimize venting and flaring. Additionally, operational best practices support minimization of flare and venting as described below.

If the main gas outlet becomes unavailable and pressure increases on the outlet sales line, produced gas will be routed directly to the facility flare. The facility control system will alert personnel to the need for maintenance and appropriate response to the temporary flaring event.

The facility design includes a closed vent vapor capture system to route flash or evolved from the heater treater and tanks to the Vapor Recovery Unit (VRU) Compressor. If the VRU requires planned or unplanned maintenance, vapors will automatically be routed to the facility flare.

For maintenance activities, Silverback will utilize the facility flare to blowdown equipment and piping whenever practical to minimize venting

Received by OCD: 11/14/2022 1:42:14 PM Silverback Exploration



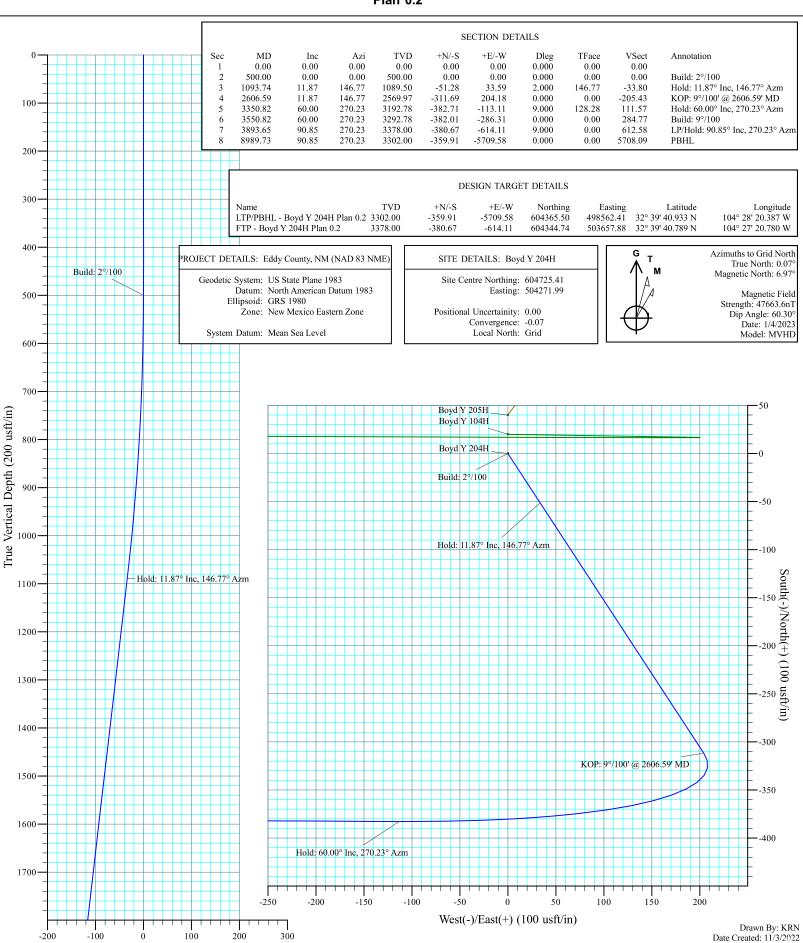
Vertical Section at 270.23° (200 usft/in)

Boyd Y 204H Eddy County, NM (NAD 83 NME) Job No. WT-22-*** Plan 0.2



Date Revised: 11/10/2022

File:Silverback - Boyd Y 204H - Plan 0.2 - Int.wpc





LTP/PBHL - Boyd Y 204H Plan 0.2 3302.00

FTP - Boyd Y 204H Plan 0.2

Silverback Exploration

Boyd Y 204H Eddy County, NM (NAD 83 NME) Job No. WT-22-*** Plan 0.2



	SECTION DETAILS														
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	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	1093.74	11.87	146.77	1089.50	-51.28	33.59	2.000	146.77	-33.80		Hold: 11.87° Inc, 146.77° Azm				
4	2606.59	11.87	146.77	2569.97	-311.69	204.18	0.000	0.00	-205.43		KOP: 9°/100' @ 2606.59' MD				
5	3350.82	60.00	270.23	3192.78	-382.71	-113.11	9.000	128.28	111.57		Hold: 60.00° Inc, 270.23° Azm				
6	3550.82	60.00	270.23	3292.78	-382.01	-286.31	0.000	0.00	284.77		Build: 9°/100				
7	3893.65	90.85	270.23	3378.00	-380.67	-614.11	9.000	0.00	612.58	FTP - Boyd Y 204H Plan 0.2	LP/Hold: 90.85° Inc, 270.23° Azm				
8	8989.73	90.85	270.23	3302.00	-359.91	-5709.58	0.000	0.00	5708.09	LTP/PBHL - Boyd Y 204H Plan 0.2	PBHL				

Easting

Section 15

498562.41

503657.88

Latitude Longitude

32° 39' 40.933 N 104° 28' 20.387 W

32° 39' 40.789 N 104° 27' 20.780 W

DESIGN TARGET DETAILS

+E/-W

-5709.58

-614.11

Northing 604365.50

604344.74

TVD

3378.00

+N/-S

-359.91

-380.67

SITE DETAILS: Boyd Y 204H

Site Centre Northing: 604725.41 Easting: 504271.99

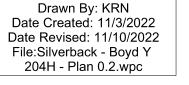
Positional Uncertainity: 0.00 Convergence: -0.07 Local North: Grid PROJECT DETAILS: Eddy County, NM (NAD 83 NME

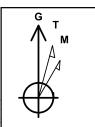
Geodetic System: US State Plane 1983 Datum: North American Datum 1983

Ellipsoid: GRS 1980

Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level





Azimuths to Grid North True North: 0.07° Magnetic North: 6.97° CD: 11/14/2022 1:42:14 PM

Page 12 of 15

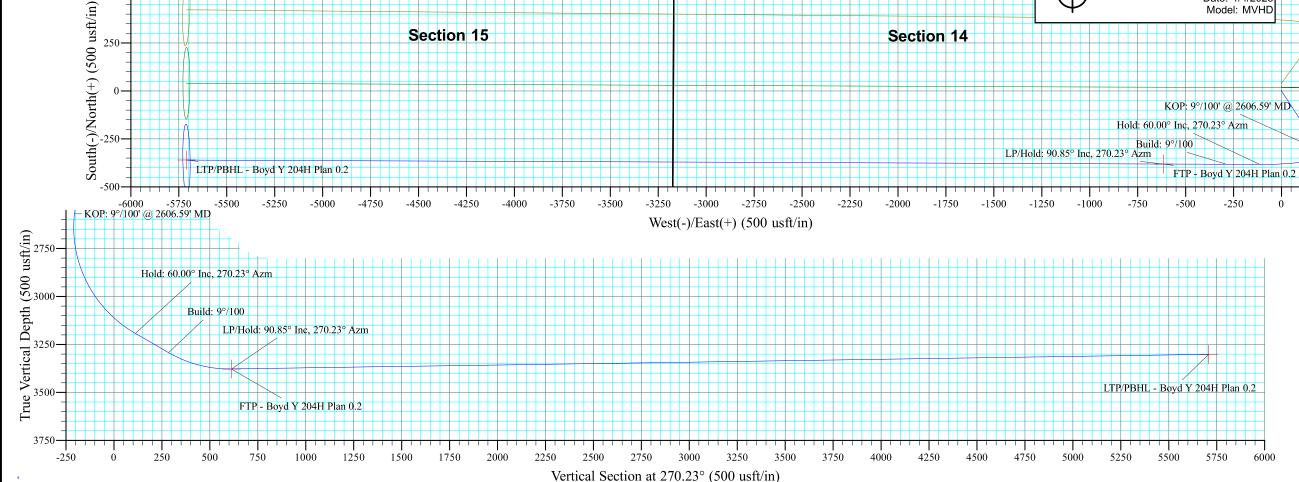
Magnetic Field Strength: 47663.6nT Dip Angle: 60.30° Date: 1/4/2023 Model: MVHD



Hold: 60.00° Inc, 270.23° Azm

Build: 9°/100

FTP - Boyd Y 204H Plan 0.2



Silverback Exploration

Eddy County, NM (NAD 83 NME) Boyd Y 204H Boyd Y 204H

OH

Plan: Plan 0.2

Standard Planning Report

10 November, 2022

Aim Directional Services

Planning Report

Database: Company: Project:

EDM 5000.15 Single User Db

Silverback Exploration Eddy County, NM (NAD 83 NME)

Boyd Y 204H Site: Well: Boyd Y 204H ОН Wellbore:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Boyd Y 204H

Well @ 3438.00usft (RKB 16') Well @ 3438.00usft (RKB 16')

Minimum Curvature

Design: **Project**

Eddy County, NM (NAD 83 NME)

Map System: Geo Datum:

US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone

System Datum:

Mean Sea Level

Map Zone:

Site

Well

Boyd Y 204H

Plan 0.2

Site Position: From:

Well Position

Мар

Boyd Y 204H

Northing: Easting:

604,725.41 usft 504,271.99 usft 13-3/16 "

Latitude: Longitude: **Grid Convergence:**

32° 39' 44.563 N 104° 27' 13.601 W -0.07°

Position Uncertainty:

0.00 usft

Slot Radius:

Latitude:

32° 39' 44.563 N

+E/-W **Position Uncertainty**

0.00 usft 0.00 usft

0.00 usft

Northing: Easting: Wellhead Elevation:

1/4/2023

604,725.41 usft 504,271.99 usft

Longitude: Ground Level:

60.30

104° 27' 13.601 W 3,422.00 usft

Wellbore

ОН

+N/-S

Magnetics Model Name MVHD

Sample Date

Declination (°) 6.90 **Dip Angle** (°)

Field Strength (nT)

47,663.550

Design

Plan 0.2

Audit Notes:

Version:

Vertical Section: Depth From (TVD)

PLAN

Tie On Depth: +E/-W

0.00

(usft) 0.00

Phase:

+N/-S (usft) 0.00

(usft) 0.00

Direction (°) 270.23

Plan Survey Tool Program

Depth From

Depth To (usft)

Survey (Wellbore)

Date 11/10/2022

Tool Name

Remarks

(usft) 1

0.00

8,989.73 Plan 0.2 (OH)

MWD+HRGM

OWSG MWD + HRGM

Plan Section	ıs									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	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	
1,093.74	11.87	146.77	1,089.50	-51.28	33.59	2.000	2.000	0.000	146.77	
2,606.59	11.87	146.77	2,569.97	-311.69	204.18	0.000	0.000	0.000	0.00	
3,350.82	60.00	270.23	3,192.78	-382.71	-113.11	9.000	6.466	16.589	128.28	
3,550.82	60.00	270.23	3,292.78	-382.01	-286.31	0.000	0.000	0.000	0.00	
3,893.65	90.85	270.23	3,378.00	-380.67	-614.11	9.000	9.000	0.000	0.00 F	TP - Boyd Y 204H
8,989.73	90.85	270.23	3,302.00	-359.91	-5,709.58	0.000	0.000	0.000	0.00 L	TP/PBHL - Boyd Y

Aim Directional Services

Planning Report

Database: Company: Project:

Design:

EDM 5000.15 Single User Db

Silverback Exploration Eddy County, NM (NAD 83 NME)

Boyd Y 204H Site: Boyd Y 204H Well: Wellbore: OH Plan 0.2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Boyd Y 204H

Well @ 3438.00usft (RKB 16') Well @ 3438.00usft (RKB 16')

Minimum Curvature

Measured Depth Ind (usft)	clination (°)	Azimuth (°)	(usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
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Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LTP/PBHL - Boyd Y 2 - Point	0.00	0.00	3,302.00	-359.91	-5,709.58	604,365.50	498,562.41	32° 39' 40.933 N	104° 28' 20.387 W
FTP - Boyd Y 204H P - Point	0.00	0.00	3,378.00	-380.67	-614.11	604,344.74	503,657.88	32° 39' 40.789 N	104° 27' 20.780 W

Casing Points						
n	Measured Depth (usft)	Vertical Depth (usft)		Name	Casing Diameter (")	Hole Diameter (")
	9,113.21		20" Casing		20	24

Plan Annotations				
Measured	Vertical	Local Coor	dinates	Comment
Depth	Depth	+N/-S	+E/-W	
(usft)	(usft)	(usft)	(usft)	
500.00	500.00	0.00	0.00	Build: 2°/100
1,093.74	1,089.50	-51.28	33.59	Hold: 11.87° Inc, 146.77° Azm
2,606.59	2,569.97	-311.69	204.18	KOP: 9°/100' @ 2606.59' MD
3,350.82	3,192.78	-382.71	-113.11	Hold: 60.00° Inc, 270.23° Azm
3,550.82	3,292.78	-382.01	-286.31	Build: 9°/100
3,893.65	3,378.00	-380.67	-614.11	LP/Hold: 90.85° Inc, 270.23° Azm
8,989.73	3,302.00	-359.91	-5,709.58	PBHL