Submit 1 Copy To Appropriate District 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

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

Form C-103
Revised July 18, 2013

WELL API NO. 30-015-53757

5. Indicate Type of Lease STATE [x] FEE [ ]

6. State Oil & Gas Lease No. E101670008

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.)

7. Lease Name or Unit Agreement Name: GREASEWOOD 5 STATE COM

1. Type of Well: Oil Well [x] Gas Well [ ] Other

8. Well Number 201H

2. Name of Operator: SILVERBACK OPERATING II, LLC

9. OGRID Number 330968

3. Address of Operator: 19707 West IH 10, Suite 201, San Antonio, TX 78257

10. Pool name or Wildcat: PENASCO DRAW, SA-YESO (ASSOC)

4. Well Location
Unit Letter E : 1809' feet from the NORTH line and 370' feet from the WEST line
Section 4 Township 19S Range 25E NMPM County EDDY

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3566'

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	[ ]	PLUG AND ABANDON	[ ]	REMEDIAL WORK	[ ]	ALTERING CASING	[ ]
TEMPORARILY ABANDON	[ ]	CHANGE PLANS	[x]	COMMENCE DRILLING OPNS.	[ ]	P AND A	[ ]
PULL OR ALTER CASING	[ ]	MULTIPLE COMPL	[ ]	CASING/CEMENT JOB	[ ]		
DOWNHOLE COMMINGLE	[ ]						
CLOSED-LOOP SYSTEM	[ ]						
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 Operating II, LLC. has changed the well number and the target depth of the subject well. SHL has not changed.

The subject well was originally permitted with well number 102H. However, the new well number is now 201H and the MD is now 8419' and TVD at 2721'. Please see the new C-102 plat attached as well as a new directional plan and updated NGMP.

Please note the lease type should be STATE.

Spud Date: | 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 08/25/2023

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

For State Use Only

APPROVED BY: Ward Rikala TITLE Petroleum Specialist A DATE 9/29/2023
Conditions of Approval (if any):

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

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	[2] Pool Code	[3] Pool Name
30-015-53757	50270	PENASCO DRAW, SA-YESO (ASSOC)

[4] Property Code	[5] Property Name	[6] Well Number
333974	GREASEWOOD 5 STATE COM	201H

[7] OGRID No.	[8] Operator Name	[9] Elevation
330968	SILVERBACK EXPLORATION II, LLC	3,566'

[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
E	4	19-S	25-E		1,809'	NORTH	370'	WEST	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
E	5	19-S	25-E		1,336'	NORTH	100'	WEST	EDDY

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

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.

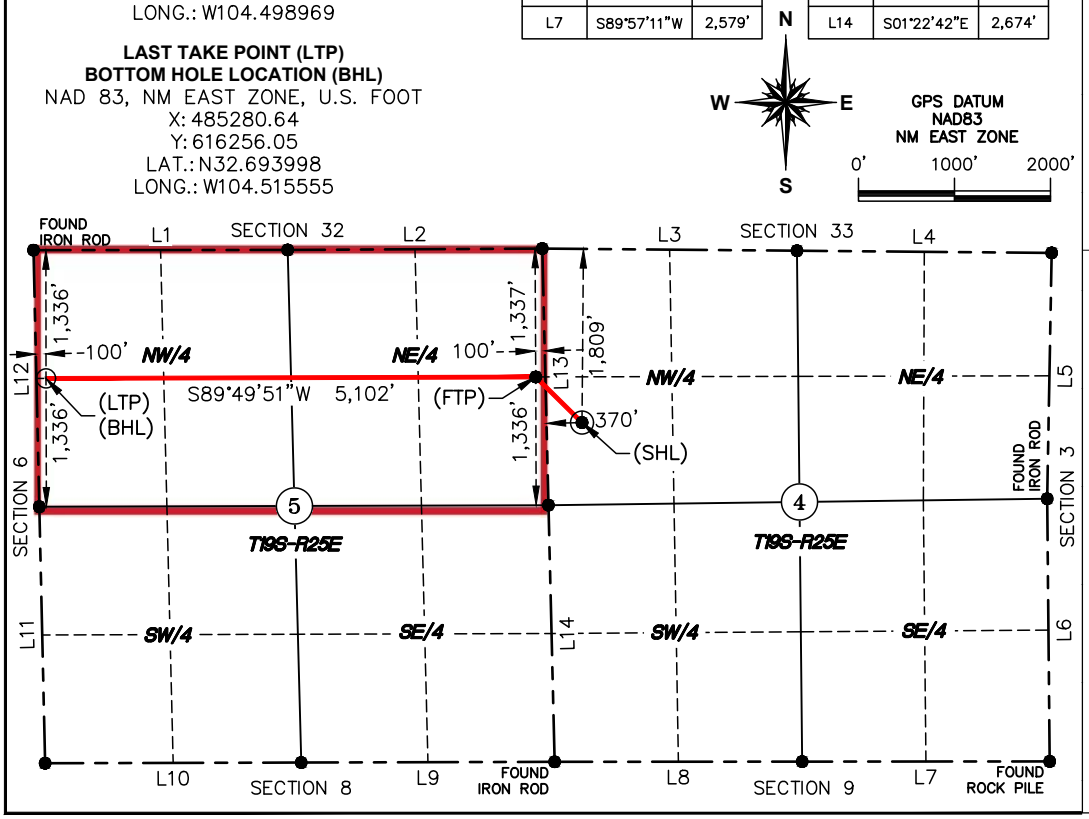
SURFACE HOLE LOCATION (SHL)
NAD 83, NM EAST ZONE, U.S. FOOT
X: 490864.36
Y: 615796.32
LAT.: N32.692760
LONG.: W104.497402

FIRST TAKE POINT (FTP)
NAD 83, NM EAST ZONE, U.S. FOOT
X: 490382.80
Y: 616271.12
LAT.: N32.694063
LONG.: W104.498969

LAST TAKE POINT (LTP)
BOTTOM HOLE LOCATION (BHL)
NAD 83, NM EAST ZONE, U.S. FOOT
X: 485280.64
Y: 616256.05
LAT.: N32.693998
LONG.: W104.515555

LINE TABLE		
LINE #	BEARING	LENGTH
L1	N89°57'20"E	2,648'
L2	N89°41'15"E	2,653'
L3	S89°30'55"E	2,653'
L4	S89°30'55"E	2,653'
L5	S01°02'46"W	2,562'
L6	S00°32'52"E	2,736'
L7	S89°57'11"W	2,579'

LINE TABLE		
LINE #	BEARING	LENGTH
L8	S89°57'11"W	2,579'
L9	S89°50'18"W	2,640'
L10	S89°50'31"W	2,668'
L11	N01°17'50"W	2,673'
L12	N01°17'50"W	2,673'
L13	S01°22'42"E	2,674'
L14	S01°22'42"E	2,674'



[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.

Fatma Abdallah — 08/25/2023
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.

7/28/23
Date of Survey

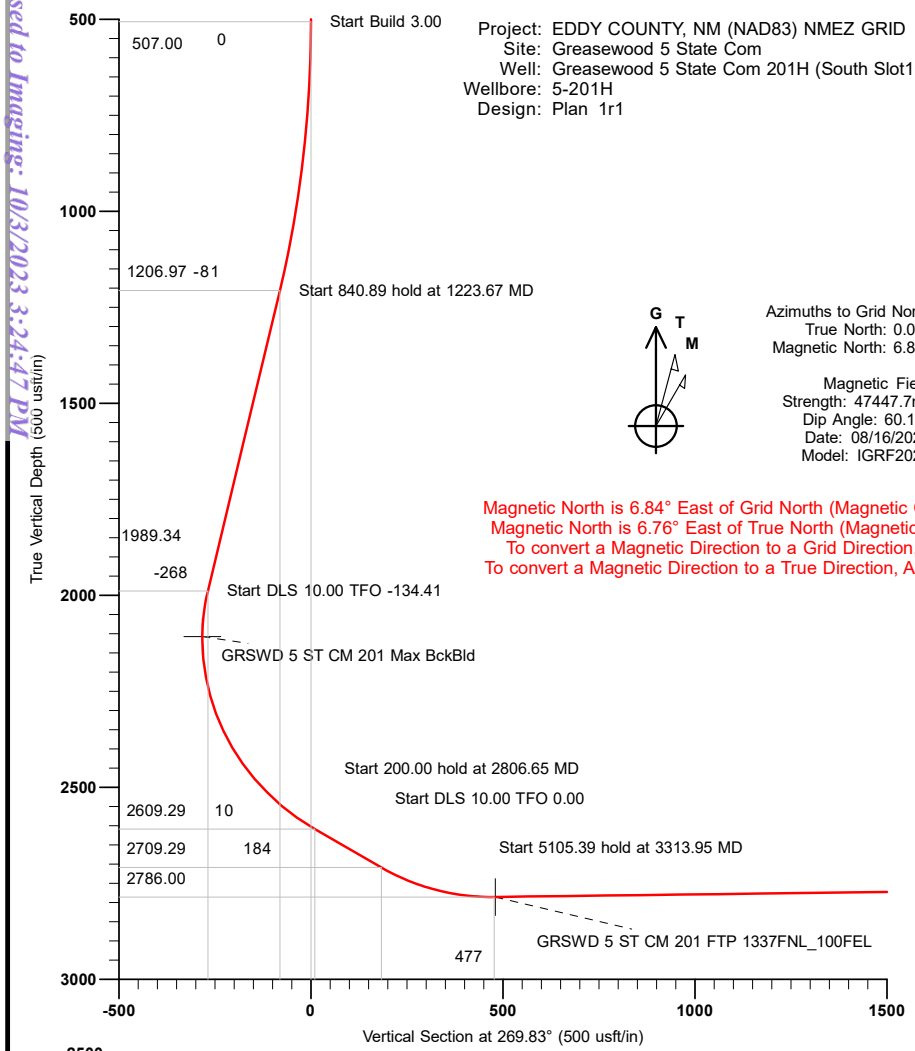
Signature and Seal of Professional Surveyor:

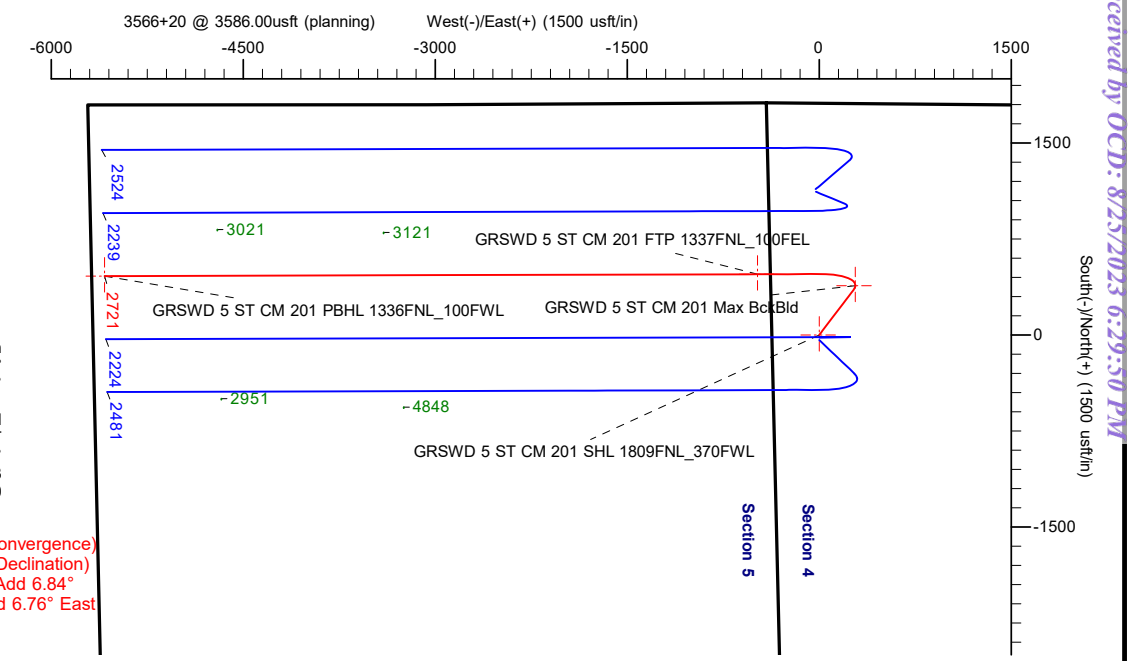
MATTHEW C. BISSETT
NEW MEXICO
20450
PROFESSIONAL SURVEYOR

20450
Certificate Number

SILVERBACK EXPLORATION

Project: EDDY COUNTY, NM (NAD83) NMEZ GRID
Site: Greasewood 5 State Com
Well: Greasewood 5 State Com 201H (South Slot1)
Wellbore: 5-201H
Design: Plan 1r1





Azimuths to Grid North
True North: 0.09°
Magnetic North: 6.84°

Magnetic Field
Strength: 47447.7nT
Dip Angle: 60.12°
Date: 08/16/2023
Model: IGRF2020

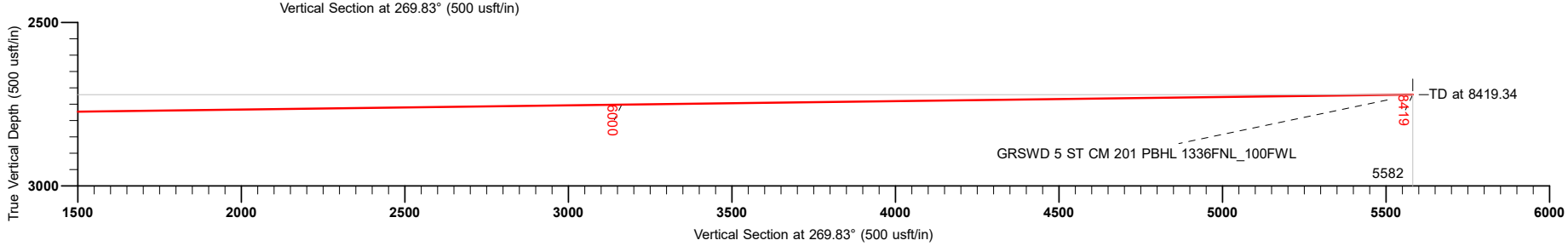
Magnetic North is 6.84° East of Grid North (Magnetic Convergence)
Magnetic North is 6.76° East of True North (Magnetic Declination)
To convert a Magnetic Direction to a Grid Direction, Add 6.84°
To convert a Magnetic Direction to a True Direction, Add 6.76° East

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
GRSWD 5 ST CM 201 SHL 1809FNL_370FWL	0.00	0.00	0.00	615796.32	490864.36	Point
GRSWD 5 ST CM 201 Max BckBld	2107.67	385.72	281.75	616182.04	491146.11	Point
GRSWD 5 ST CM 201 PBHL 1336FNL_100FWL	2721.00	459.73	-5583.72	616256.05	485280.64	Point
GRSWD 5 ST CM 201 FTP 1337FNL_100FEL	2786.00	474.80	-481.56	616271.12	490382.80	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	507.00	0.00	0.00	507.00	0.00	0.00	0.00	0.00	0.00	Start Build 3.00
3	1223.67	21.50	37.30	1206.97	105.71	80.53	3.00	37.30	-80.84	Start 840.89 hold at 1223.67 MD
4	2064.56	21.50	37.30	1989.34	350.87	267.29	0.00	0.00	-268.33	Start DLS 10.00 TFO -134.41
5	2806.65	60.00	269.83	2609.29	476.11	-11.79	10.00	-134.41	10.38	Start 200.00 hold at 2806.65 MD
6	3006.65	60.00	269.83	2709.29	475.59	-184.99	0.00	0.00	183.58	Start DLS 10.00 TFO 0.00
7	3313.95	90.73	269.83	2786.00	474.73	-478.76	10.00	0.00	477.35	Start 5105.39 hold at 3313.95 MD
8	8419.34	90.73	269.83	2721.00	459.73	-5583.72	0.00	0.00	5582.33	TD at 8419.34



Plan: Plan 1r1 (Greasewood 5 State Com 201H (South Slot1)/5-201H)
Created By: Mekka Williams
eSomina Well Design
mekka@esominawelldesign.com
18:09, August 18 2023

PRIME SOLUTIONS SERVICES

SILVERBACK EXPLORATION

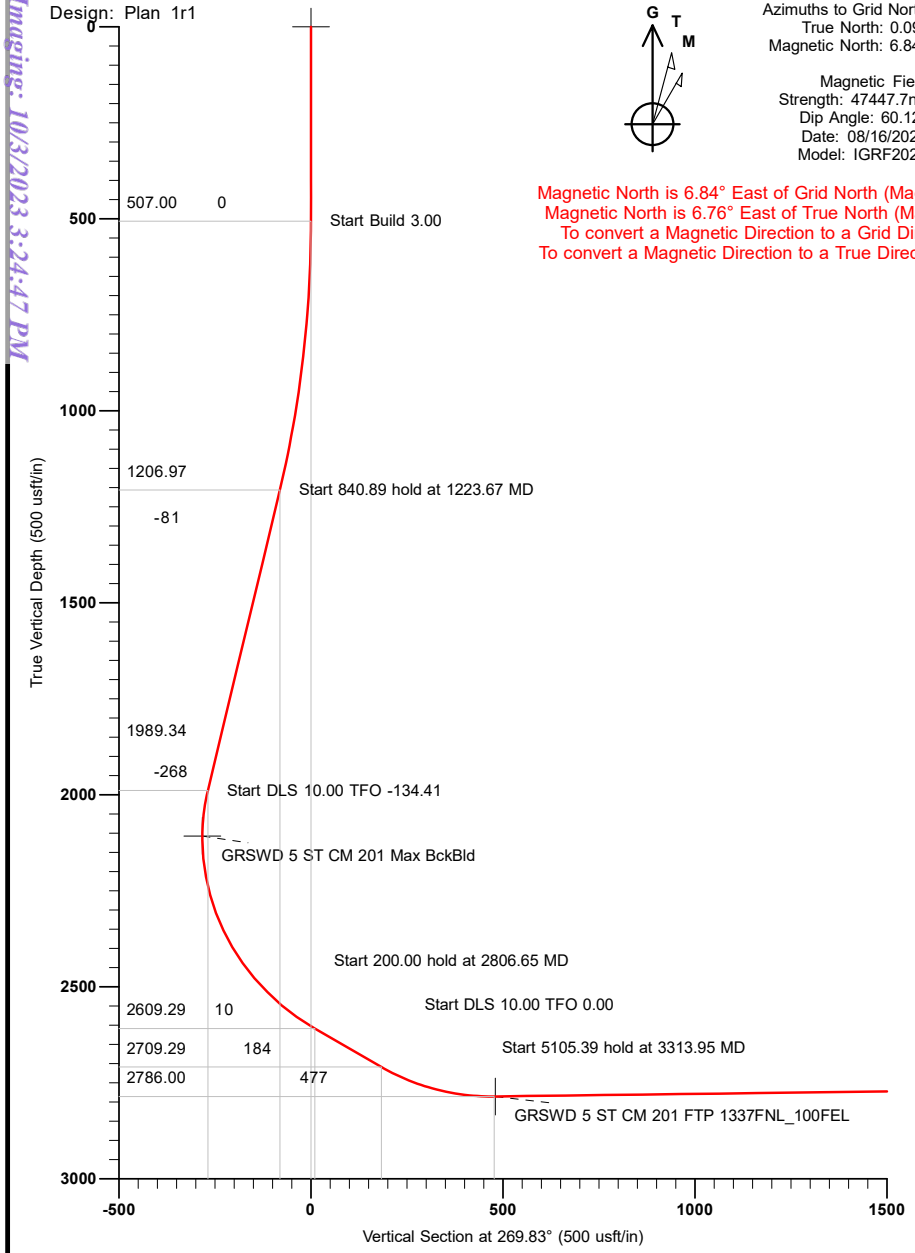
Project: EDDY COUNTY, NM (NAD83) NMEZ GRID
Site: Greasewood 5 State Com
Well: Greasewood 5 State Com 201H (South Slot1)
Wellbore: 5-201H
Design: Plan 1r1

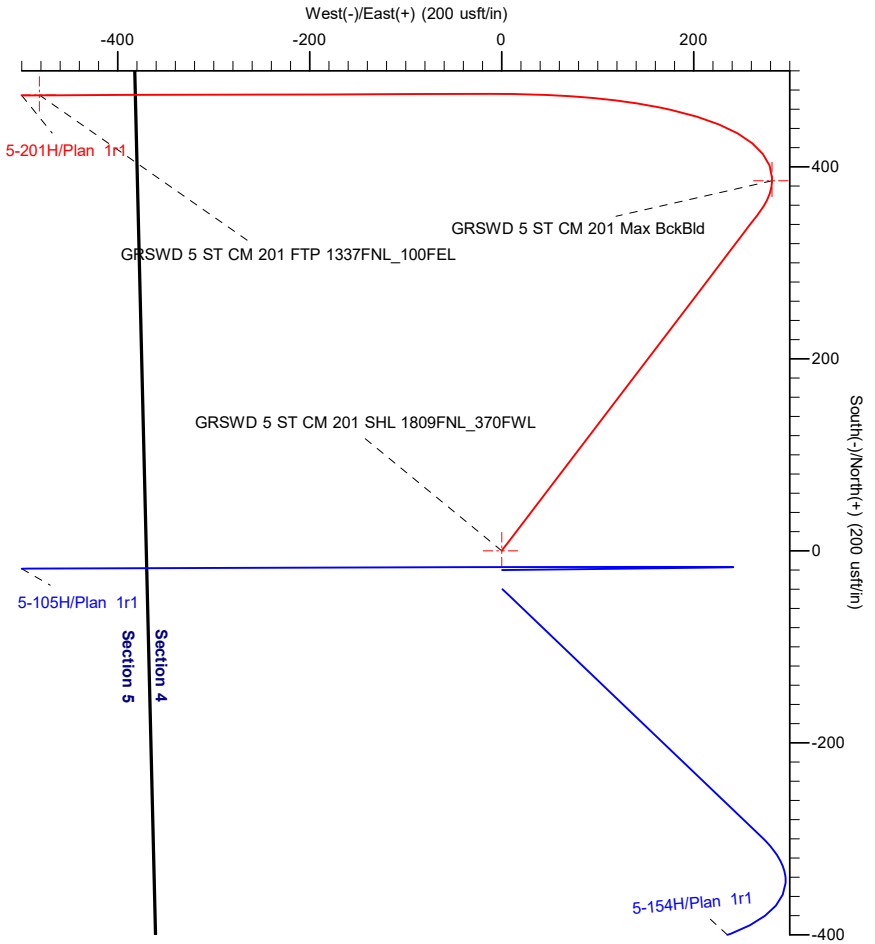
3566+20 @ 3586.00usft (planning)

Azimuths to Grid North
True North: 0.09°
Magnetic North: 6.84°

Magnetic Field
Strength: 47447.7nT
Dip Angle: 60.12°
Date: 08/16/2023
Model: IGRF2020

Magnetic North is 6.84° East of Grid North (Magnetic Convergence)
Magnetic North is 6.76° East of True North (Magnetic Declination)
To convert a Magnetic Direction to a Grid Direction, Add 6.84°
To convert a Magnetic Direction to a True Direction, Add 6.76° East





DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
GRSWD 5 ST CM 201 SHL 1809FNL_370FWL	0.00	0.00	0.00	615796.32	490864.36	Point
GRSWD 5 ST CM 201 Max BckBld	2107.67	385.72	281.75	616182.04	491146.11	Point
GRSWD 5 ST CM 201 PBHL 1336FNL_100FWL	2721.00	459.73	-5583.72	616256.05	485280.64	Point
GRSWD 5 ST CM 201 FTP 1337FNL_100FEL	2786.00	474.80	-481.56	616271.12	490382.80	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	507.00	0.00	0.00	507.00	0.00	0.00	0.00	0.00	0.00	Start Build 3.00
3	1223.67	21.50	37.30	1206.97	105.71	80.53	3.00	37.30	-80.84	Start 840.89 hold at 1223.67 MD
4	2064.56	21.50	37.30	1989.34	350.87	267.29	0.00	0.00	-268.33	Start DLS 10.00 TFO -134.41
5	2806.65	60.00	269.83	2609.29	476.11	-11.79	10.00	-134.41	10.38	Start 200.00 hold at 2806.65 MD
6	3006.65	60.00	269.83	2709.29	475.59	-184.99	0.00	0.00	183.58	Start DLS 10.00 TFO 0.00
7	3313.95	90.73	269.83	2786.00	474.73	-478.76	10.00	0.00	477.35	Start 5105.39 hold at 3313.95 MD
8	8419.34	90.73	269.83	2721.00	459.73	-5583.72	0.00	0.00	5582.33	TD at 8419.34

Plan: Plan 1r1 (Greasewood 5 State Com 201H (South Slot1)/5-201H)
Created By: Mekka Williams
eSomina Well Design
mekka@esominawelldesign.com
18:10, August 18 2023

PRIME SOLUTIONS SERVICES

SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID
Greasewood 5 State Com
Greasewood 5 State Com 201H (South Slot1)

5-201H

Plan: Plan 1r1

Standard Planning Report

18 August, 2023

Planning Report

Database:	PRIME_EDM	**Local Co-ordinate Reference:**	Well Greasewood 5 State Com 201H (South Slot1)
Company:	SILVERBACK EXPLORATION	**TVD Reference:**	3566+20 @ 3586.00usft (planning)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	**MD Reference:**	3566+20 @ 3586.00usft (planning)
Site:	Greasewood 5 State Com	**North Reference:**	Grid
Well:	Greasewood 5 State Com 201H (South Slot1)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	5-201H		
Design:	Plan 1r1		

Project EDDY COUNTY, NM (NAD83) NMEZ GRID

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Greasewood 5 State Com

Site Position:		**Northing:**	616,915.56 usft	**Latitude:**	32.6958362
From:	Map	**Easting:**	490,837.43 usft	**Longitude:**	-104.4974948
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	-0.09 °

Well Greasewood 5 State Com 201H (South Slot1)

Well Position	**+N/-S**	-1,119.24 usft	**Northing:**	615,796.32 usft	**Latitude:**	32.6927599
	+E/-W	26.93 usft	**Easting:**	490,864.36 usft	**Longitude:**	-104.4974016
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	3,566.00 usft

Wellbore 5-201H

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	08/16/23	6.76	60.12	47,447.66297439

Design Plan 1r1

Audit Notes:

Version:	**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	269.83

Plan Survey Tool Program **Date** 08/18/23

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	8,419.34	Plan 1r1 (5-201H)	MWD	
				OWSG MWD - Standard	

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	0.00	0.00	0.00	0.00	
507.00	0.00	0.00	507.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,223.67	21.50	37.30	1,206.97	105.71	80.53	3.00	3.00	0.00	37.30	
2,064.56	21.50	37.30	1,989.34	350.87	267.29	0.00	0.00	0.00	0.00	
2,806.65	60.00	269.83	2,609.29	476.11	-11.79	10.00	5.19	-17.18	-134.41	
3,006.65	60.00	269.83	2,709.29	475.59	-184.99	0.00	0.00	0.00	0.00	
3,313.95	90.73	269.83	2,786.00	474.73	-478.76	10.00	10.00	0.00	0.00	
8,419.34	90.73	269.83	2,721.00	459.73	-5,583.72	0.00	0.00	0.00	0.00	GRSWD 5 ST CM 20

Planning Report

Database:	PRIME_EDM	**Local Co-ordinate Reference:**	Well Greasewood 5 State Com 201H (South Slot1)
Company:	SILVERBACK EXPLORATION	**TVD Reference:**	3566+20 @ 3586.00usft (planning)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	**MD Reference:**	3566+20 @ 3586.00usft (planning)
Site:	Greasewood 5 State Com	**North Reference:**	Grid
Well:	Greasewood 5 State Com 201H (South Slot1)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	5-201H		
Design:	Plan 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	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
507.00	0.00	0.00	507.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 3.00									
600.00	2.79	37.30	599.96	1.80	1.37	-1.38	3.00	3.00	0.00
700.00	5.79	37.30	699.67	7.75	5.90	-5.93	3.00	3.00	0.00
800.00	8.79	37.30	798.85	17.84	13.59	-13.65	3.00	3.00	0.00
900.00	11.79	37.30	897.23	32.05	24.42	-24.51	3.00	3.00	0.00
1,000.00	14.79	37.30	994.54	50.34	38.35	-38.49	3.00	3.00	0.00
1,100.00	17.79	37.30	1,090.52	72.65	55.34	-55.56	3.00	3.00	0.00
1,200.00	20.79	37.30	1,184.89	98.92	75.36	-75.65	3.00	3.00	0.00
1,223.67	21.50	37.30	1,206.97	105.71	80.53	-80.84	3.00	3.00	0.00
Start 840.89 hold at 1223.67 MD									
1,300.00	21.50	37.30	1,277.99	127.97	97.48	-97.86	0.00	0.00	0.00
1,400.00	21.50	37.30	1,371.03	157.12	119.69	-120.16	0.00	0.00	0.00
1,500.00	21.50	37.30	1,464.07	186.28	141.90	-142.46	0.00	0.00	0.00
1,600.00	21.50	37.30	1,557.11	215.43	164.11	-164.75	0.00	0.00	0.00
1,700.00	21.50	37.30	1,650.15	244.58	186.32	-187.05	0.00	0.00	0.00
1,800.00	21.50	37.30	1,743.20	273.74	208.53	-209.34	0.00	0.00	0.00
1,900.00	21.50	37.30	1,836.24	302.89	230.74	-231.64	0.00	0.00	0.00
2,000.00	21.50	37.30	1,929.28	332.05	252.95	-253.94	0.00	0.00	0.00
2,064.56	21.50	37.30	1,989.34	350.87	267.29	-268.33	0.00	0.00	0.00
Start DLS 10.00 TFO -134.41									
2,100.00	19.18	29.58	2,022.58	361.10	274.10	-275.17	10.00	-6.55	-21.79
2,150.00	16.62	15.53	2,070.18	375.14	280.07	-281.18	10.00	-5.11	-28.10
2,200.00	15.29	357.92	2,118.28	388.63	281.75	-282.90	10.00	-2.67	-35.21
2,250.00	15.49	339.01	2,166.52	401.46	279.12	-280.31	10.00	0.40	-37.81
2,300.00	17.17	322.19	2,214.53	413.53	272.20	-273.42	10.00	3.37	-33.64
2,350.00	19.97	309.11	2,261.94	424.76	261.04	-262.30	10.00	5.59	-26.16
2,400.00	23.48	299.46	2,308.40	435.05	245.74	-247.03	10.00	7.03	-19.31
2,450.00	27.44	292.32	2,353.54	444.33	226.39	-227.71	10.00	7.91	-14.28
2,500.00	31.67	286.91	2,397.04	452.53	203.17	-204.51	10.00	8.46	-10.83
2,550.00	36.08	282.68	2,438.55	459.58	176.23	-177.59	10.00	8.82	-8.46
2,600.00	40.61	279.26	2,477.75	465.43	145.79	-147.17	10.00	9.06	-6.82
2,650.00	45.22	276.43	2,514.36	470.04	112.07	-113.46	10.00	9.23	-5.66
2,700.00	49.90	274.02	2,548.10	473.37	75.33	-76.74	10.00	9.35	-4.82
2,750.00	54.62	271.93	2,578.70	475.40	35.86	-37.27	10.00	9.44	-4.19
2,800.00	59.37	270.06	2,605.93	476.11	-6.05	4.63	10.00	9.50	-3.73
2,806.65	60.00	269.83	2,609.29	476.11	-11.79	10.38	10.00	9.53	-3.51
Start 200.00 hold at 2806.65 MD									
2,900.00	60.00	269.83	2,655.96	475.87	-92.63	91.22	0.00	0.00	0.00
3,006.65	60.00	269.83	2,709.29	475.59	-184.99	183.58	0.00	0.00	0.00
Start DLS 10.00 TFO 0.00									
3,050.00	64.33	269.83	2,729.52	475.48	-223.32	221.90	10.00	10.00	0.00
3,100.00	69.33	269.83	2,749.18	475.34	-269.27	267.86	10.00	10.00	0.00
3,150.00	74.33	269.83	2,764.77	475.20	-316.76	315.35	10.00	10.00	0.00
3,200.00	79.33	269.83	2,776.15	475.06	-365.43	364.02	10.00	10.00	0.00
3,250.00	84.33	269.83	2,783.25	474.91	-414.91	413.50	10.00	10.00	0.00
3,300.00	89.33	269.83	2,786.01	474.77	-464.82	463.41	10.00	10.00	0.00

Planning Report

Database:	PRIME_EDM	**Local Co-ordinate Reference:**	Well Greasewood 5 State Com 201H (South Slot1)
Company:	SILVERBACK EXPLORATION	**TVD Reference:**	3566+20 @ 3586.00usft (planning)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	**MD Reference:**	3566+20 @ 3586.00usft (planning)
Site:	Greasewood 5 State Com	**North Reference:**	Grid
Well:	Greasewood 5 State Com 201H (South Slot1)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	5-201H		
Design:	Plan 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)
3,313.95	90.73	269.83	2,786.00	474.73	-478.76	477.35	10.00	10.00	0.00
Start 5105.39 hold at 3313.95 MD									
3,400.00	90.73	269.83	2,784.91	474.47	-564.81	563.40	0.00	0.00	0.00
3,500.00	90.73	269.83	2,783.63	474.18	-664.80	663.39	0.00	0.00	0.00
3,600.00	90.73	269.83	2,782.36	473.89	-764.79	763.38	0.00	0.00	0.00
3,700.00	90.73	269.83	2,781.09	473.59	-864.78	863.38	0.00	0.00	0.00
3,800.00	90.73	269.83	2,779.81	473.30	-964.78	963.37	0.00	0.00	0.00
3,900.00	90.73	269.83	2,778.54	473.01	-1,064.77	1,063.36	0.00	0.00	0.00
4,000.00	90.73	269.83	2,777.27	472.71	-1,164.76	1,163.35	0.00	0.00	0.00
4,100.00	90.73	269.83	2,775.99	472.42	-1,264.75	1,263.34	0.00	0.00	0.00
4,200.00	90.73	269.83	2,774.72	472.12	-1,364.74	1,363.34	0.00	0.00	0.00
4,300.00	90.73	269.83	2,773.45	471.83	-1,464.73	1,463.33	0.00	0.00	0.00
4,400.00	90.73	269.83	2,772.17	471.54	-1,564.73	1,563.32	0.00	0.00	0.00
4,500.00	90.73	269.83	2,770.90	471.24	-1,664.72	1,663.31	0.00	0.00	0.00
4,600.00	90.73	269.83	2,769.63	470.95	-1,764.71	1,763.30	0.00	0.00	0.00
4,700.00	90.73	269.83	2,768.35	470.66	-1,864.70	1,863.29	0.00	0.00	0.00
4,800.00	90.73	269.83	2,767.08	470.36	-1,964.69	1,963.29	0.00	0.00	0.00
4,900.00	90.73	269.83	2,765.81	470.07	-2,064.68	2,063.28	0.00	0.00	0.00
5,000.00	90.73	269.83	2,764.54	469.77	-2,164.67	2,163.27	0.00	0.00	0.00
5,100.00	90.73	269.83	2,763.26	469.48	-2,264.67	2,263.26	0.00	0.00	0.00
5,200.00	90.73	269.83	2,761.99	469.19	-2,364.66	2,363.25	0.00	0.00	0.00
5,300.00	90.73	269.83	2,760.72	468.89	-2,464.65	2,463.25	0.00	0.00	0.00
5,400.00	90.73	269.83	2,759.44	468.60	-2,564.64	2,563.24	0.00	0.00	0.00
5,500.00	90.73	269.83	2,758.17	468.31	-2,664.63	2,663.23	0.00	0.00	0.00
5,600.00	90.73	269.83	2,756.90	468.01	-2,764.62	2,763.22	0.00	0.00	0.00
5,700.00	90.73	269.83	2,755.62	467.72	-2,864.61	2,863.21	0.00	0.00	0.00
5,800.00	90.73	269.83	2,754.35	467.42	-2,964.61	2,963.21	0.00	0.00	0.00
5,900.00	90.73	269.83	2,753.08	467.13	-3,064.60	3,063.20	0.00	0.00	0.00
6,000.00	90.73	269.83	2,751.80	466.84	-3,164.59	3,163.19	0.00	0.00	0.00
6,100.00	90.73	269.83	2,750.53	466.54	-3,264.58	3,263.18	0.00	0.00	0.00
6,200.00	90.73	269.83	2,749.26	466.25	-3,364.57	3,363.17	0.00	0.00	0.00
6,300.00	90.73	269.83	2,747.98	465.96	-3,464.56	3,463.17	0.00	0.00	0.00
6,400.00	90.73	269.83	2,746.71	465.66	-3,564.55	3,563.16	0.00	0.00	0.00
6,500.00	90.73	269.83	2,745.44	465.37	-3,664.55	3,663.15	0.00	0.00	0.00
6,600.00	90.73	269.83	2,744.16	465.07	-3,764.54	3,763.14	0.00	0.00	0.00
6,700.00	90.73	269.83	2,742.89	464.78	-3,864.53	3,863.13	0.00	0.00	0.00
6,800.00	90.73	269.83	2,741.62	464.49	-3,964.52	3,963.12	0.00	0.00	0.00
6,900.00	90.73	269.83	2,740.34	464.19	-4,064.51	4,063.12	0.00	0.00	0.00
7,000.00	90.73	269.83	2,739.07	463.90	-4,164.50	4,163.11	0.00	0.00	0.00
7,100.00	90.73	269.83	2,737.80	463.61	-4,264.49	4,263.10	0.00	0.00	0.00
7,200.00	90.73	269.83	2,736.52	463.31	-4,364.49	4,363.09	0.00	0.00	0.00
7,300.00	90.73	269.83	2,735.25	463.02	-4,464.48	4,463.08	0.00	0.00	0.00
7,400.00	90.73	269.83	2,733.98	462.72	-4,564.47	4,563.08	0.00	0.00	0.00
7,500.00	90.73	269.83	2,732.71	462.43	-4,664.46	4,663.07	0.00	0.00	0.00
7,600.00	90.73	269.83	2,731.43	462.14	-4,764.45	4,763.06	0.00	0.00	0.00
7,700.00	90.73	269.83	2,730.16	461.84	-4,864.44	4,863.05	0.00	0.00	0.00
7,800.00	90.73	269.83	2,728.89	461.55	-4,964.43	4,963.04	0.00	0.00	0.00
7,900.00	90.73	269.83	2,727.61	461.26	-5,064.43	5,063.04	0.00	0.00	0.00
8,000.00	90.73	269.83	2,726.34	460.96	-5,164.42	5,163.03	0.00	0.00	0.00
8,100.00	90.73	269.83	2,725.07	460.67	-5,264.41	5,263.02	0.00	0.00	0.00
8,200.00	90.73	269.83	2,723.79	460.37	-5,364.40	5,363.01	0.00	0.00	0.00
8,300.00	90.73	269.83	2,722.52	460.08	-5,464.39	5,463.00	0.00	0.00	0.00
8,400.00	90.73	269.83	2,721.25	459.79	-5,564.38	5,562.99	0.00	0.00	0.00

Planning Report

Database:	PRIME_EDM	**Local Co-ordinate Reference:**	Well Greasewood 5 State Com 201H (South Slot1)
Company:	SILVERBACK EXPLORATION	**TVD Reference:**	3566+20 @ 3586.00usft (planning)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	**MD Reference:**	3566+20 @ 3586.00usft (planning)
Site:	Greasewood 5 State Com	**North Reference:**	Grid
Well:	Greasewood 5 State Com 201H (South Slot1)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	5-201H		
Design:	Plan 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)
8,419.34	90.73	269.83	2,721.00	459.73	-5,583.72	5,582.33	0.00	0.00	0.00
TD at 8419.34									

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
GRSWD 5 ST CM 201 S - plan hits target center - Point	0.00	360.00	0.00	0.00	0.00	615,796.32	490,864.36	32.6927599	-104.4974016
GRSWD 5 ST CM 201 M - plan hits target center - Point	0.00	0.00	2,107.67	385.72	281.75	616,182.04	491,146.11	32.6938213	-104.4964877
GRSWD 5 ST CM 201 F - plan hits target center - Point	0.00	360.00	2,721.00	459.73	-5,583.72	616,256.05	485,280.64	32.6939985	-104.5155546
GRSWD 5 ST CM 201 F - plan misses target center by 0.09usft at 3316.74usft MD (2785.97 TVD, 474.72 N, -481.56 E) - Point	0.00	0.00	2,786.00	474.80	-481.56	616,271.12	490,382.80	32.6940629	-104.4989694

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
507.00	507.00	0.00	0.00	Start Build 3.00
1,223.67	1,206.97	105.71	80.53	Start 840.89 hold at 1223.67 MD
2,064.56	1,989.34	350.87	267.29	Start DLS 10.00 TFO -134.41
2,806.65	2,609.29	476.11	-11.79	Start 200.00 hold at 2806.65 MD
3,006.65	2,709.29	475.59	-184.99	Start DLS 10.00 TFO 0.00
3,313.95	2,786.00	474.73	-478.76	Start 5105.39 hold at 3313.95 MD
8,419.34	2,721.00	459.73	-5,583.72	TD at 8419.34

SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID
Greasewood 5 State Com
Greasewood 5 State Com 201H (South Slot1)

5-201H
Plan 1r1

Anticollision Report

18 August, 2023

Anticollision Report

Company:	SILVERBACK EXPLORATION	**Local Co-ordinate Reference:**	Well Greasewood 5 State Com 201H (South Slot1)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	**TVD Reference:**	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	**MD Reference:**	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Greasewood 5 State Com 201H (South Slot1)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	5-201H	**Database:**	PRIME_EDM
Reference Design:	Plan 1r1	**Offset TVD Reference:**	Reference Datum

Reference Plan 1r1

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum ellipse separation of 0.00 usft	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 08/18/23

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	8,419.34	Plan 1r1 (5-201H)	MWD	OWSG MWD - Standard

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation	Warning
Greasewood 5 State Com						
Greasewood 5 State Com 104H (North Slot2) - 5-104H -	2,354.77	2,168.44	614.29	591.77	27.274	CC
Greasewood 5 State Com 104H (North Slot2) - 5-104H -	8,419.34	7,862.93	689.28	477.25	3.251	ES, SF
Greasewood 5 State Com 105H (South Slot2) - 5-105H -	415.40	415.40	20.00	16.72	6.109	CC
Greasewood 5 State Com 105H (South Slot2) - 5-105H -	507.00	507.00	20.00	16.02	5.031	ES
Greasewood 5 State Com 105H (South Slot2) - 5-105H -	8,419.34	7,877.73	700.11	493.91	3.395	SF
Greasewood 5 State Com 153H (North Slot1) - 5-153H -						Out of range
Greasewood 5 State Com 154H (South Slot3) - 5-154H -	507.00	507.00	39.99	36.00	10.009	CC, ES
Greasewood 5 State Com 154H (South Slot3) - 5-154H -	8,419.34	8,209.41	937.43	664.39	3.433	SF
Greasewood BD State 1 (Offset) PA - GW BD ST 1 - GW						Out of range
Greasewood BD State 10 (Offset) Active - GW BD ST 1	6,237.51	2,777.92	333.94	185.32	2.247	CC, ES
Greasewood BD State 10 (Offset) Active - GW BD ST 1	6,300.00	2,777.12	339.74	186.49	2.217	SF
Greasewood BD State 8 (Offset) PA - GW BD ST 8 - GW	7,400.00	2,763.14	966.08	733.69	4.157	SF
Greasewood BD State 8 (Offset) PA - GW BD ST 8 - GW	7,500.00	2,761.87	960.04	732.86	4.226	ES
Greasewood BD State 8 (Offset) PA - GW BD ST 8 - GW	7,508.21	2,761.76	960.00	733.35	4.236	CC
Greasewood BD State 9 (Offset) PA - GW BD ST 9 - GW	7,536.51	2,761.61	361.56	178.68	1.977	CC, ES
Greasewood BD State 9 (Offset) PA - GW BD ST 9 - GW	7,600.00	2,760.80	367.09	181.06	1.973	SF

Offset Design Greasewood 5 State Com - Greasewood 5 State Com 104H (North Slot2) - 5-104H - Plan 1r1

Survey Program: 0-MWD

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,200.00	1,184.89	1,321.73	1,297.80	9.76	9.29	-37.67	1,056.54	125.19	965.54	951.42	14.12	68.378	
1,223.67	1,206.97	1,343.27	1,318.11	9.82	9.33	-37.73	1,053.80	131.84	955.96	941.66	14.30	66.847	
1,300.00	1,277.99	1,412.62	1,383.48	9.95	9.48	-37.29	1,044.98	153.24	924.74	909.89	14.85	62.253	
1,400.00	1,371.03	1,503.47	1,469.12	10.15	9.69	-36.67	1,033.42	181.28	883.92	868.31	15.61	56.610	
1,500.00	1,464.07	1,595.75	1,557.03	10.37	10.02	-36.23	1,021.78	206.61	843.14	826.68	16.46	51.222	
1,600.00	1,557.11	1,688.07	1,647.83	10.60	10.52	-36.84	1,010.66	218.25	802.22	784.55	17.67	45.407	
1,700.00	1,650.15	1,775.55	1,734.64	10.84	11.01	-38.58	1,000.91	215.62	761.59	743.30	18.29	41.644	
1,800.00	1,743.20	1,854.94	1,812.34	11.10	11.77	-41.25	992.90	201.77	722.51	703.63	18.88	38.265	
1,900.00	1,836.24	1,924.75	1,878.58	11.37	12.31	-44.48	986.65	180.80	686.88	667.37	19.52	35.194	
2,000.00	1,929.28	1,984.90	1,933.32	11.67	12.72	-47.91	981.93	156.37	657.03	636.77	20.26	32.428	
2,064.56	1,989.34	2,018.96	1,963.10	11.86	12.94	-50.10	979.56	140.03	641.98	621.19	20.79	30.881	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	**Local Co-ordinate Reference:**	Well Greasewood 5 State Com 201H (South Slot1)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	**TVD Reference:**	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	**MD Reference:**	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Greasewood 5 State Com 201H (South Slot1)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	5-201H	**Database:**	PRIME_EDM
Reference Design:	Plan 1r1	**Offset TVD Reference:**	Reference Datum

Offset Design Greasewood 5 State Com - Greasewood 5 State Com 104H (North Slot2) - 5-104H - Plan 1r1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,100.00	2,022.58	2,036.78	1,978.28	11.99	13.05	-43.35	978.40	130.78	635.27	614.20	21.07	30.147	
2,150.00	2,070.18	2,062.14	1,999.40	12.35	13.20	-30.81	976.87	116.81	627.49	606.05	21.43	29.274	
2,200.00	2,118.28	2,087.77	2,020.09	12.81	13.34	-14.85	975.45	101.77	621.61	599.88	21.73	28.603	
2,250.00	2,166.52	2,113.62	2,040.27	13.29	13.48	2.28	974.16	85.67	617.53	595.57	21.96	28.120	
2,300.00	2,214.53	2,139.68	2,059.87	13.72	13.62	17.22	973.00	68.53	615.14	592.98	22.17	27.749	
2,350.00	2,261.94	2,165.93	2,078.81	14.03	13.75	28.35	971.98	50.39	614.30	591.81	22.49	27.320	
2,354.77	2,266.42	2,168.44	2,080.58	14.05	13.76	29.22	971.89	48.61	614.29	591.77	22.52	27.274	CC
2,400.00	2,308.40	2,200.00	2,102.14	14.23	13.91	35.64	970.88	25.59	614.91	591.92	22.99	26.745	
2,450.00	2,353.54	2,218.87	2,114.42	14.38	14.00	41.10	970.37	11.27	616.59	593.35	23.24	26.531	
2,500.00	2,397.04	2,250.00	2,133.64	14.53	14.14	44.31	969.72	-13.20	619.42	595.77	23.65	26.187	
2,550.00	2,438.55	2,272.27	2,146.56	14.69	14.23	46.68	969.39	-31.33	623.09	599.22	23.87	26.103	
2,600.00	2,477.75	2,300.00	2,161.67	14.86	14.35	48.08	969.12	-54.58	627.51	603.34	24.17	25.964	
2,650.00	2,514.36	2,333.31	2,178.53	15.05	14.45	48.83	969.01	-83.31	632.40	607.90	24.50	25.811	
2,700.00	2,548.10	2,381.98	2,202.86	15.24	14.61	49.13	968.88	-125.46	636.42	611.27	25.16	25.300	
2,750.00	2,578.70	2,431.46	2,227.60	15.44	14.82	49.59	968.76	-168.31	639.02	613.13	25.90	24.677	
2,800.00	2,605.93	2,481.36	2,252.55	15.66	15.08	50.28	968.63	-211.53	640.05	613.34	26.72	23.957	
2,806.65	2,609.29	2,488.02	2,255.88	15.70	15.11	50.39	968.61	-217.29	640.07	613.27	26.80	23.881	
2,816.54	2,614.23	2,497.91	2,260.83	15.74	15.17	50.39	968.59	-225.86	640.07	613.13	26.94	23.760	
2,900.00	2,655.96	2,550.00	2,285.84	16.18	15.54	50.31	968.45	-271.53	641.59	614.04	27.54	23.295	
3,006.65	2,709.29	2,607.84	2,307.97	16.99	16.09	49.79	968.29	-324.94	650.68	622.32	28.37	22.936	
3,050.00	2,729.52	2,625.00	2,313.27	17.41	16.28	49.20	968.24	-341.25	655.73	627.08	28.65	22.887	
3,100.00	2,749.18	2,656.19	2,321.40	17.97	16.66	48.53	968.15	-371.36	660.52	631.14	29.37	22.487	
3,150.00	2,764.77	2,681.97	2,326.62	18.61	17.01	48.06	968.08	-396.60	664.28	634.19	30.09	22.079	
3,200.00	2,776.15	2,707.70	2,330.47	19.31	17.38	47.73	968.00	-422.04	666.95	636.07	30.88	21.595	
3,250.00	2,783.25	2,733.41	2,332.94	20.08	17.78	47.54	967.93	-447.62	668.51	636.75	31.76	21.047	
3,300.00	2,786.01	2,759.09	2,334.03	20.88	18.19	47.49	967.85	-473.28	668.95	636.23	32.72	20.446	
3,313.95	2,786.00	2,766.26	2,334.09	21.12	18.31	47.50	967.83	-480.45	668.87	635.90	32.97	20.288	
3,329.07	2,785.81	2,775.37	2,334.00	21.38	18.46	47.50	967.80	-489.56	668.82	635.54	33.27	20.101	
3,400.00	2,784.91	2,843.68	2,332.73	22.62	19.68	47.47	967.60	-557.86	669.09	633.91	35.18	19.017	
3,500.00	2,783.63	2,943.68	2,330.87	24.48	21.60	47.44	967.31	-657.84	669.49	631.41	38.08	17.580	
3,600.00	2,782.36	3,043.67	2,329.01	26.45	23.65	47.40	967.01	-757.82	669.88	628.76	41.12	16.289	
3,700.00	2,781.09	3,143.67	2,327.15	28.50	25.78	47.36	966.71	-857.80	670.28	626.01	44.27	15.140	
3,800.00	2,779.81	3,243.67	2,325.29	30.61	27.98	47.33	966.42	-957.78	670.68	623.17	47.51	14.118	
3,900.00	2,778.54	3,343.67	2,323.43	32.76	30.22	47.29	966.12	-1,057.76	671.07	620.27	50.81	13.209	
4,000.00	2,777.27	3,443.67	2,321.57	34.96	32.50	47.25	965.83	-1,157.74	671.47	617.31	54.16	12.398	
4,100.00	2,775.99	3,543.67	2,319.71	37.19	34.80	47.22	965.53	-1,257.72	671.87	614.31	57.56	11.673	
4,200.00	2,774.72	3,643.66	2,317.85	39.45	37.12	47.18	965.23	-1,357.70	672.26	611.27	60.99	11.022	
4,300.00	2,773.45	3,743.66	2,315.99	41.73	39.46	47.14	964.94	-1,457.68	672.66	608.21	64.46	10.436	
4,400.00	2,772.17	3,843.66	2,314.13	44.03	41.82	47.11	964.64	-1,557.66	673.06	605.11	67.95	9.906	
4,500.00	2,770.90	3,943.66	2,312.27	46.35	44.18	47.07	964.35	-1,657.64	673.46	602.00	71.46	9.425	
4,600.00	2,769.63	4,043.66	2,310.41	48.68	46.56	47.03	964.05	-1,757.62	673.86	598.87	74.98	8.987	
4,700.00	2,768.35	4,143.66	2,308.55	51.02	48.94	47.00	963.75	-1,857.60	674.26	595.73	78.52	8.587	
4,800.00	2,767.08	4,243.65	2,306.69	53.37	51.33	46.96	963.46	-1,957.58	674.66	592.58	82.08	8.220	
4,900.00	2,765.81	4,343.65	2,304.82	55.73	53.73	46.92	963.16	-2,057.56	675.05	589.41	85.64	7.882	
5,000.00	2,764.54	4,443.65	2,302.96	58.10	56.13	46.89	962.87	-2,157.54	675.45	586.24	89.21	7.571	
5,100.00	2,763.26	4,543.65	2,301.10	60.48	58.54	46.85	962.57	-2,257.52	675.85	583.06	92.79	7.283	
5,200.00	2,761.99	4,643.65	2,299.24	62.86	60.95	46.81	962.27	-2,357.51	676.25	579.87	96.38	7.017	
5,300.00	2,760.72	4,743.65	2,297.38	65.25	63.36	46.78	961.98	-2,457.49	676.65	576.68	99.97	6.769	
5,400.00	2,759.44	4,843.64	2,295.52	67.64	65.78	46.74	961.68	-2,557.47	677.06	573.49	103.56	6.538	
5,500.00	2,758.17	4,943.64	2,293.66	70.04	68.20	46.70	961.39	-2,657.45	677.46	570.29	107.16	6.322	
5,600.00	2,756.90	5,043.64	2,291.80	72.44	70.62	46.67	961.09	-2,757.43	677.86	567.09	110.76	6.120	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	**Local Co-ordinate Reference:**	Well Greasewood 5 State Com 201H (South Slot1)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	**TVD Reference:**	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	**MD Reference:**	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Greasewood 5 State Com 201H (South Slot1)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	5-201H	**Database:**	PRIME_EDM
Reference Design:	Plan 1r1	**Offset TVD Reference:**	Reference Datum

Offset Design Greasewood 5 State Com - Greasewood 5 State Com 104H (North Slot2) - 5-104H - Plan 1r1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,700.00	2,755.62	5,143.64	2,289.94	74.84	73.05	46.63	960.79	-2,857.41	678.26	563.89	114.37	5.931	
5,800.00	2,754.35	5,243.64	2,288.08	77.25	75.48	46.59	960.50	-2,957.39	678.66	560.69	117.97	5.753	
5,900.00	2,753.08	5,343.63	2,286.22	79.66	77.91	46.56	960.20	-3,057.37	679.06	557.49	121.57	5.586	
6,000.00	2,751.80	5,443.63	2,284.36	82.07	80.34	46.52	959.91	-3,157.35	679.47	554.29	125.18	5.428	
6,100.00	2,750.53	5,543.63	2,282.50	84.49	82.77	46.49	959.61	-3,257.33	679.87	551.08	128.79	5.279	
6,200.00	2,749.26	5,643.63	2,280.64	86.91	85.20	46.45	959.31	-3,357.31	680.27	547.88	132.39	5.138	
6,300.00	2,747.98	5,743.63	2,278.78	89.33	87.64	46.41	959.02	-3,457.29	680.67	544.68	136.00	5.005	
6,400.00	2,746.71	5,843.63	2,276.92	91.75	90.07	46.38	958.72	-3,557.27	681.08	541.48	139.60	4.879	
6,500.00	2,745.44	5,943.62	2,275.06	94.18	92.51	46.34	958.43	-3,657.25	681.48	538.28	143.21	4.759	
6,600.00	2,744.16	6,043.62	2,273.20	96.60	94.95	46.31	958.13	-3,757.23	681.89	535.08	146.81	4.645	
6,700.00	2,742.89	6,143.62	2,271.34	99.03	97.39	46.27	957.83	-3,857.21	682.29	531.88	150.41	4.536	
6,800.00	2,741.62	6,243.62	2,269.48	101.46	99.83	46.24	957.54	-3,957.19	682.69	528.68	154.01	4.433	
6,900.00	2,740.34	6,343.62	2,267.61	103.89	102.27	46.20	957.24	-4,057.17	683.10	525.49	157.61	4.334	
7,000.00	2,739.07	6,443.62	2,265.75	106.32	104.71	46.16	956.95	-4,157.16	683.50	522.30	161.21	4.240	
7,100.00	2,737.80	6,543.61	2,263.89	108.75	107.15	46.13	956.65	-4,257.14	683.91	519.10	164.80	4.150	
7,200.00	2,736.52	6,643.61	2,262.03	111.18	109.59	46.09	956.35	-4,357.12	684.32	515.92	168.40	4.064	
7,300.00	2,735.25	6,743.61	2,260.17	113.62	112.04	46.06	956.06	-4,457.10	684.72	512.73	171.99	3.981	
7,400.00	2,733.98	6,843.61	2,258.31	116.05	114.48	46.02	955.76	-4,557.08	685.13	509.55	175.58	3.902	
7,500.00	2,732.71	6,943.61	2,256.45	118.49	116.93	45.99	955.47	-4,657.06	685.53	506.37	179.17	3.826	
7,600.00	2,731.43	7,043.61	2,254.59	120.93	119.37	45.95	955.17	-4,757.04	685.94	503.19	182.75	3.753	
7,700.00	2,730.16	7,143.60	2,252.73	123.36	121.82	45.92	954.87	-4,857.02	686.35	500.01	186.34	3.683	
7,800.00	2,728.89	7,243.60	2,250.87	125.80	124.26	45.88	954.58	-4,957.00	686.75	496.84	189.92	3.616	
7,900.00	2,727.61	7,343.60	2,249.01	128.24	126.71	45.84	954.28	-5,056.98	687.16	493.67	193.50	3.551	
8,000.00	2,726.34	7,443.60	2,247.15	130.68	129.15	45.81	953.99	-5,156.96	687.57	490.50	197.07	3.489	
8,100.00	2,725.07	7,543.60	2,245.29	133.12	131.60	45.77	953.69	-5,256.94	687.98	487.33	200.64	3.429	
8,200.00	2,723.79	7,643.60	2,243.43	135.56	134.05	45.74	953.39	-5,356.92	688.39	484.17	204.22	3.371	
8,300.00	2,722.52	7,743.59	2,241.57	138.00	136.50	45.70	953.10	-5,456.90	688.79	481.01	207.78	3.315	
8,400.00	2,721.25	7,843.59	2,239.71	140.45	138.94	45.67	952.80	-5,556.88	689.20	477.86	211.35	3.261	
8,419.34	2,721.00	7,862.93	2,239.35	140.92	139.42	45.66	952.75	-5,576.22	689.28	477.25	212.04	3.251	ES, SF

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	**Local Co-ordinate Reference:**	Well Greasewood 5 State Com 201H (South Slot1)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	**TVD Reference:**	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	**MD Reference:**	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Greasewood 5 State Com 201H (South Slot1)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	5-201H	**Database:**	PRIME_EDM
Reference Design:	Plan 1r1	**Offset TVD Reference:**	Reference Datum

Offset Design Greasewood 5 State Com - Greasewood 5 State Com 105H (South Slot2) - 5-105H - Plan 1r1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	178.60	-19.99	0.49	20.00				
100.00	100.00	100.00	100.00	0.31	0.31	178.60	-19.99	0.49	20.00	19.52	0.47	42.341	
200.00	200.00	200.00	200.00	0.95	0.95	178.60	-19.99	0.49	20.00	18.49	1.50	13.295	
300.00	300.00	300.00	300.00	1.46	1.46	178.60	-19.99	0.49	20.00	17.63	2.36	8.457	
400.00	400.00	400.00	400.00	1.89	1.89	178.60	-19.99	0.49	20.00	16.84	3.15	6.340	
415.40	415.40	415.40	415.40	1.96	1.96	178.60	-19.99	0.49	20.00	16.72	3.27	6.109	CC
507.00	507.00	507.00	507.00	2.36	2.35	178.56	-19.99	0.50	20.00	16.02	3.97	5.031	ES
600.00	599.96	599.93	599.89	3.25	3.13	138.11	-19.96	3.10	21.83	17.06	4.77	4.575	
700.00	699.67	699.55	699.18	4.87	4.79	132.22	-19.86	10.90	28.07	22.03	6.04	4.647	
800.00	798.85	798.53	797.32	6.16	6.07	126.93	-19.71	23.77	38.93	31.72	7.21	5.399	
900.00	897.23	896.61	893.76	7.23	7.12	123.14	-19.49	41.52	54.41	46.08	8.34	6.525	
1,000.00	994.54	993.49	988.02	8.16	8.03	120.55	-19.22	63.89	74.38	64.94	9.44	7.881	
1,100.00	1,090.52	1,089.85	1,080.71	9.00	8.31	119.04	-18.89	90.23	98.45	88.15	10.30	9.556	
1,200.00	1,184.89	1,186.16	1,173.19	9.76	8.49	119.71	-18.57	117.09	125.23	114.01	11.22	11.160	
1,223.67	1,206.97	1,208.82	1,194.95	9.82	8.53	120.08	-18.49	123.41	131.94	120.51	11.43	11.543	
1,300.00	1,277.99	1,281.83	1,265.06	9.95	8.69	121.67	-18.24	143.78	153.90	141.79	12.11	12.705	
1,400.00	1,371.03	1,377.47	1,356.90	10.15	8.90	123.18	-17.91	170.46	182.79	169.76	13.03	14.024	
1,500.00	1,464.07	1,473.11	1,448.75	10.37	9.12	124.27	-17.59	197.14	211.77	197.79	13.98	15.148	
1,600.00	1,557.11	1,570.92	1,542.77	10.60	9.39	125.21	-17.26	224.08	240.72	225.77	14.95	16.105	
1,700.00	1,650.15	1,677.04	1,647.47	10.84	10.30	128.81	-16.94	240.40	267.07	251.11	15.96	16.730	
1,800.00	1,743.20	1,776.75	1,747.03	11.10	10.83	135.06	-16.73	237.90	291.97	274.14	17.83	16.378	
1,900.00	1,836.24	1,865.39	1,834.00	11.37	11.60	142.33	-16.60	221.23	319.64	300.81	18.83	16.978	
2,000.00	1,929.28	1,941.24	1,905.62	11.67	12.18	149.40	-16.54	196.46	353.92	334.61	19.32	18.320	
2,064.56	1,989.34	1,983.57	1,943.99	11.86	12.47	153.52	-16.53	178.58	380.66	361.12	19.55	19.474	
2,100.00	2,022.58	2,005.37	1,963.20	11.99	12.61	164.49	-16.53	168.28	396.64	377.00	19.64	20.197	
2,150.00	2,070.18	2,035.86	1,989.38	12.35	12.80	-177.24	-16.53	152.67	419.73	399.95	19.77	21.225	
2,200.00	2,118.28	2,066.07	2,014.48	12.81	12.97	-155.86	-16.55	135.85	442.98	423.06	19.92	22.239	
2,250.00	2,166.52	2,100.00	2,041.55	13.29	13.15	-133.41	-16.57	115.41	466.02	445.88	20.14	23.140	
2,300.00	2,214.53	2,125.87	2,061.36	13.72	13.27	-113.94	-16.60	98.77	488.42	468.15	20.27	24.091	
2,350.00	2,261.94	2,150.00	2,079.13	14.03	13.39	-98.63	-16.63	82.46	510.03	489.65	20.38	25.022	
2,400.00	2,308.40	2,185.04	2,103.69	14.23	13.53	-86.69	-16.68	57.47	530.48	509.82	20.65	25.683	
2,450.00	2,353.54	2,214.43	2,123.08	14.38	13.64	-77.83	-16.73	35.39	549.70	529.04	20.67	26.599	
2,500.00	2,397.04	2,250.00	2,144.99	14.53	13.76	-70.86	-16.80	7.38	567.56	546.79	20.77	27.325	
2,550.00	2,438.55	2,272.89	2,158.16	14.69	13.83	-65.69	-16.85	-11.35	583.77	563.23	20.54	28.426	
2,600.00	2,477.75	2,300.00	2,172.76	14.86	13.90	-61.48	-16.91	-34.18	598.39	577.96	20.42	29.302	
2,650.00	2,514.36	2,342.89	2,194.33	15.05	13.95	-57.85	-17.02	-71.26	610.95	590.24	20.71	29.500	
2,700.00	2,548.10	2,391.56	2,218.67	15.24	14.00	-55.06	-17.15	-113.41	620.29	599.08	21.22	29.236	
2,750.00	2,578.70	2,441.04	2,243.40	15.44	14.06	-53.07	-17.28	-156.26	626.15	604.27	21.88	28.615	
2,800.00	2,605.93	2,490.95	2,268.36	15.66	14.15	-51.78	-17.40	-199.48	628.44	605.78	22.66	27.734	
2,806.65	2,609.29	2,497.60	2,271.68	15.70	14.17	-51.66	-17.42	-205.24	628.47	605.70	22.76	27.608	
2,900.00	2,655.96	2,550.00	2,296.59	16.18	14.37	-51.56	-17.56	-251.32	630.71	607.44	23.27	27.099	
3,006.65	2,709.29	2,612.92	2,319.87	16.99	14.92	-50.92	-17.73	-309.73	640.76	616.62	24.14	26.548	
3,050.00	2,729.52	2,635.70	2,326.38	17.41	15.22	-50.19	-17.80	-331.56	646.19	621.71	24.48	26.394	
3,100.00	2,749.18	2,661.88	2,332.55	17.97	15.62	-49.48	-17.87	-356.99	651.56	626.50	25.06	25.995	
3,150.00	2,764.77	2,687.96	2,337.31	18.61	16.05	-48.92	-17.95	-382.63	655.94	630.17	25.76	25.460	
3,200.00	2,776.15	2,713.98	2,340.66	19.31	16.51	-48.50	-18.02	-408.43	659.27	632.71	26.56	24.824	
3,250.00	2,783.25	2,739.95	2,342.59	20.08	16.98	-48.21	-18.10	-434.33	661.53	634.09	27.44	24.109	
3,300.00	2,786.01	2,765.90	2,343.12	20.88	17.47	-48.07	-18.18	-460.26	662.70	634.30	28.40	23.333	
3,313.95	2,786.00	2,773.68	2,343.00	21.12	17.61	-48.05	-18.20	-468.05	662.83	634.16	28.67	23.122	
3,400.00	2,784.91	2,858.67	2,341.02	22.62	19.30	-47.99	-18.45	-553.01	663.44	632.26	31.18	21.280	
3,500.00	2,783.63	2,958.66	2,338.69	24.48	21.37	-47.92	-18.74	-652.98	664.15	629.90	34.25	19.392	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	**Local Co-ordinate Reference:**	Well Greasewood 5 State Com 201H (South Slot1)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	**TVD Reference:**	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	**MD Reference:**	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Greasewood 5 State Com 201H (South Slot1)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	5-201H	**Database:**	PRIME_EDM
Reference Design:	Plan 1r1	**Offset TVD Reference:**	Reference Datum

Offset Design Greasewood 5 State Com - Greasewood 5 State Com 105H (South Slot2) - 5-105H - Plan 1r1

Survey Program: 0-MWD

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
3,600.00	2,782.36	3,058.66	2,336.36	26.45	23.53	-47.86	-19.04	-752.94	664.86	627.42	37.44	17.757	
3,700.00	2,781.09	3,158.65	2,334.03	28.50	25.74	-47.79	-19.33	-852.91	665.57	624.84	40.73	16.343	
3,800.00	2,779.81	3,258.65	2,331.70	30.61	27.99	-47.72	-19.63	-952.88	666.28	622.20	44.08	15.116	
3,900.00	2,778.54	3,358.64	2,329.37	32.76	30.28	-47.65	-19.92	-1,052.84	666.99	619.51	47.48	14.047	
4,000.00	2,777.27	3,458.63	2,327.04	34.96	32.59	-47.59	-20.22	-1,152.81	667.71	616.77	50.93	13.110	
4,100.00	2,775.99	3,558.63	2,324.70	37.19	34.92	-47.52	-20.51	-1,252.78	668.42	614.01	54.41	12.285	
4,200.00	2,774.72	3,658.62	2,322.37	39.45	37.27	-47.45	-20.81	-1,352.74	669.13	611.22	57.91	11.554	
4,300.00	2,773.45	3,758.62	2,320.04	41.73	39.63	-47.39	-21.10	-1,452.71	669.85	608.42	61.43	10.904	
4,400.00	2,772.17	3,858.61	2,317.71	44.03	42.00	-47.32	-21.39	-1,552.68	670.57	605.60	64.97	10.321	
4,500.00	2,770.90	3,958.61	2,315.38	46.35	44.38	-47.25	-21.69	-1,652.64	671.29	602.77	68.52	9.797	
4,600.00	2,769.63	4,058.60	2,313.05	48.68	46.76	-47.19	-21.98	-1,752.61	672.01	599.93	72.08	9.323	
4,700.00	2,768.35	4,158.60	2,310.72	51.02	49.16	-47.12	-22.28	-1,852.58	672.72	597.08	75.64	8.894	
4,800.00	2,767.08	4,258.59	2,308.39	53.37	51.56	-47.06	-22.57	-1,952.55	673.45	594.24	79.21	8.502	
4,900.00	2,765.81	4,358.58	2,306.06	55.73	53.97	-46.99	-22.87	-2,052.51	674.17	591.39	82.78	8.144	
5,000.00	2,764.54	4,458.58	2,303.73	58.10	56.38	-46.93	-23.16	-2,152.48	674.89	588.53	86.36	7.815	
5,100.00	2,763.26	4,558.57	2,301.40	60.48	58.79	-46.86	-23.46	-2,252.45	675.61	585.68	89.93	7.512	
5,200.00	2,761.99	4,658.57	2,299.07	62.86	61.21	-46.79	-23.75	-2,352.41	676.34	582.83	93.51	7.233	
5,300.00	2,760.72	4,758.56	2,296.74	65.25	63.63	-46.73	-24.05	-2,452.38	677.06	579.98	97.08	6.974	
5,400.00	2,759.44	4,858.56	2,294.41	67.64	66.05	-46.66	-24.34	-2,552.35	677.79	577.13	100.66	6.734	
5,500.00	2,758.17	4,958.55	2,292.08	70.04	68.47	-46.60	-24.64	-2,652.31	678.52	574.29	104.23	6.510	
5,600.00	2,756.90	5,058.54	2,289.75	72.44	70.90	-46.53	-24.93	-2,752.28	679.24	571.44	107.80	6.301	
5,700.00	2,755.62	5,158.54	2,287.42	74.84	73.33	-46.47	-25.22	-2,852.25	679.97	568.61	111.37	6.106	
5,800.00	2,754.35	5,258.53	2,285.09	77.25	75.76	-46.41	-25.52	-2,952.21	680.70	565.77	114.93	5.923	
5,900.00	2,753.08	5,358.53	2,282.76	79.66	78.19	-46.34	-25.81	-3,052.18	681.43	562.94	118.49	5.751	
6,000.00	2,751.80	5,458.52	2,280.43	82.07	80.63	-46.28	-26.11	-3,152.15	682.16	560.11	122.05	5.589	
6,100.00	2,750.53	5,558.52	2,278.10	84.49	83.06	-46.21	-26.40	-3,252.11	682.89	557.29	125.60	5.437	
6,200.00	2,749.26	5,658.51	2,275.76	86.91	85.50	-46.15	-26.70	-3,352.08	683.63	554.47	129.15	5.293	
6,300.00	2,747.98	5,758.51	2,273.43	89.33	87.94	-46.09	-26.99	-3,452.05	684.36	551.66	132.70	5.157	
6,400.00	2,746.71	5,858.50	2,271.10	91.75	90.37	-46.02	-27.29	-3,552.01	685.10	548.86	136.24	5.029	
6,500.00	2,745.44	5,958.49	2,268.77	94.18	92.81	-45.96	-27.58	-3,651.98	685.83	546.05	139.78	4.907	
6,600.00	2,744.16	6,058.49	2,266.44	96.60	95.25	-45.89	-27.88	-3,751.95	686.57	543.26	143.31	4.791	
6,700.00	2,742.89	6,158.48	2,264.11	99.03	97.69	-45.83	-28.17	-3,851.91	687.30	540.47	146.84	4.681	
6,800.00	2,741.62	6,258.48	2,261.78	101.46	100.13	-45.77	-28.46	-3,951.88	688.04	537.68	150.36	4.576	
6,900.00	2,740.34	6,358.47	2,259.45	103.89	102.58	-45.71	-28.76	-4,051.85	688.78	534.90	153.88	4.476	
7,000.00	2,739.07	6,458.47	2,257.12	106.32	105.02	-45.64	-29.05	-4,151.82	689.52	532.13	157.39	4.381	
7,100.00	2,737.80	6,558.46	2,254.79	108.75	107.46	-45.58	-29.35	-4,251.78	690.26	529.36	160.90	4.290	
7,200.00	2,736.52	6,658.46	2,252.46	111.18	109.91	-45.52	-29.64	-4,351.75	691.00	526.60	164.40	4.203	
7,300.00	2,735.25	6,758.45	2,250.13	113.62	112.35	-45.45	-29.94	-4,451.72	691.74	523.85	167.90	4.120	
7,400.00	2,733.98	6,858.44	2,247.80	116.05	114.80	-45.39	-30.23	-4,551.68	692.49	521.10	171.39	4.040	
7,500.00	2,732.71	6,958.44	2,245.47	118.49	117.24	-45.33	-30.53	-4,651.65	693.23	518.36	174.87	3.964	
7,600.00	2,731.43	7,058.43	2,243.14	120.93	119.69	-45.27	-30.82	-4,751.62	693.98	515.62	178.36	3.891	
7,700.00	2,730.16	7,158.43	2,240.81	123.36	122.13	-45.21	-31.12	-4,851.58	694.72	512.89	181.83	3.821	
7,800.00	2,728.89	7,258.42	2,238.48	125.80	124.58	-45.14	-31.41	-4,951.55	695.47	510.17	185.30	3.753	
7,900.00	2,727.61	7,358.42	2,236.15	128.24	127.03	-45.08	-31.70	-5,051.52	696.21	507.45	188.77	3.688	
8,000.00	2,726.34	7,458.41	2,233.82	130.68	129.47	-45.02	-32.00	-5,151.48	696.96	504.74	192.23	3.626	
8,100.00	2,725.07	7,558.41	2,231.49	133.12	131.92	-44.96	-32.29	-5,251.45	697.71	502.03	195.68	3.566	
8,200.00	2,723.79	7,658.40	2,229.16	135.56	134.37	-44.90	-32.59	-5,351.42	698.46	499.33	199.13	3.508	
8,300.00	2,722.52	7,758.39	2,226.82	138.00	136.82	-44.84	-32.88	-5,451.38	699.21	496.64	202.57	3.452	
8,400.00	2,721.25	7,858.39	2,224.49	140.45	138.80	-44.78	-33.18	-5,551.35	699.96	494.31	205.65	3.404	
8,419.34	2,721.00	7,877.73	2,224.04	140.92	139.12	-44.76	-33.23	-5,570.68	700.11	493.91	206.19	3.395	SF

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	**Local Co-ordinate Reference:**	Well Greasewood 5 State Com 201H (South Slot1)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	**TVD Reference:**	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	**MD Reference:**	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Greasewood 5 State Com 201H (South Slot1)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	5-201H	**Database:**	PRIME_EDM
Reference Design:	Plan 1r1	**Offset TVD Reference:**	Reference Datum

Offset Design Greasewood 5 State Com - Greasewood 5 State Com 154H (South Slot3) - 5-154H - Plan 1r1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	178.61	-39.98	0.97	39.99				
100.00	100.00	100.00	100.00	0.31	0.31	178.61	-39.98	0.97	39.99	39.52	0.47	84.666	
200.00	200.00	200.00	200.00	0.95	0.95	178.61	-39.98	0.97	39.99	38.49	1.50	26.587	
300.00	300.00	300.00	300.00	1.46	1.46	178.61	-39.98	0.97	39.99	37.63	2.36	16.912	
400.00	400.00	400.00	400.00	1.89	1.89	178.61	-39.98	0.97	39.99	36.84	3.15	12.679	
507.00	507.00	507.00	507.00	2.36	2.36	178.61	-39.98	0.97	39.99	36.00	4.00	10.009	CC, ES
600.00	599.96	598.52	598.49	3.25	2.61	141.04	-41.49	2.56	43.34	38.27	5.07	8.547	
700.00	699.67	696.13	695.82	4.87	4.27	140.36	-46.44	7.73	54.36	46.85	7.51	7.240	
800.00	798.85	792.08	791.02	6.16	5.65	139.59	-54.65	16.32	72.97	63.52	9.45	7.719	
900.00	897.23	885.60	883.13	7.23	6.72	138.87	-65.82	28.01	98.95	87.89	11.05	8.951	
1,000.00	994.54	976.02	971.32	8.16	7.62	138.19	-79.57	42.40	132.03	119.59	12.44	10.613	
1,100.00	1,090.52	1,062.75	1,054.94	9.00	8.39	137.49	-95.45	59.02	171.86	158.19	13.67	12.572	
1,200.00	1,184.89	1,145.36	1,133.54	9.76	9.07	136.75	-113.00	77.38	218.07	203.29	14.78	14.754	
1,223.67	1,206.97	1,164.27	1,151.37	9.82	9.21	136.56	-117.35	81.93	229.89	214.91	14.98	15.346	
1,300.00	1,277.99	1,224.05	1,207.32	9.95	9.68	136.67	-131.89	97.15	269.29	253.71	15.58	17.279	
1,400.00	1,371.03	1,305.33	1,282.29	10.15	10.31	136.33	-153.59	119.85	323.13	306.66	16.47	19.618	
1,500.00	1,464.07	1,382.62	1,352.92	10.37	10.59	135.89	-175.26	142.54	378.24	361.18	17.06	22.166	
1,600.00	1,557.11	1,465.99	1,429.11	10.60	10.78	135.53	-198.65	167.00	433.42	415.73	17.69	24.500	
1,700.00	1,650.15	1,549.37	1,505.31	10.84	10.96	135.25	-222.03	191.47	488.60	470.28	18.33	26.661	
1,800.00	1,743.20	1,632.74	1,581.50	11.10	11.15	135.03	-245.41	215.94	543.80	524.80	19.00	28.627	
1,900.00	1,836.24	1,716.11	1,657.70	11.37	11.35	134.85	-268.79	240.41	598.99	579.30	19.70	30.413	
2,000.00	1,929.28	1,799.48	1,733.89	11.67	11.57	134.70	-292.18	264.88	654.20	633.77	20.42	32.036	
2,064.56	1,989.34	1,861.99	1,791.50	11.86	11.76	134.76	-309.60	281.65	689.61	668.57	21.04	32.774	
2,100.00	2,022.58	1,899.33	1,826.72	11.99	11.94	144.45	-319.79	288.73	708.65	687.13	21.52	32.936	
2,150.00	2,070.18	1,952.79	1,877.90	12.35	12.17	161.11	-333.96	294.71	734.85	712.71	22.14	33.189	
2,200.00	2,118.28	2,007.31	1,930.60	12.81	12.28	-178.90	-347.79	295.74	760.09	737.55	22.55	33.710	
2,250.00	2,166.52	2,063.01	1,984.49	13.29	12.46	-157.83	-361.16	291.50	784.15	761.27	22.88	34.279	
2,300.00	2,214.53	2,119.99	2,039.12	13.72	12.79	-139.08	-373.91	281.66	806.79	783.51	23.29	34.644	
2,350.00	2,261.94	2,178.26	2,093.92	14.03	13.20	-124.29	-385.83	265.95	827.83	804.01	23.82	34.747	
2,400.00	2,308.40	2,237.75	2,148.17	14.23	13.65	-113.16	-396.72	244.18	847.06	822.70	24.35	34.781	
2,450.00	2,353.54	2,298.31	2,201.04	14.38	14.09	-104.75	-406.35	216.32	864.30	839.50	24.80	34.847	
2,500.00	2,397.04	2,359.70	2,251.61	14.53	14.51	-98.27	-414.51	182.52	879.39	854.21	25.18	34.919	
2,550.00	2,438.55	2,421.62	2,298.93	14.69	14.90	-93.16	-421.02	143.16	892.21	866.67	25.54	34.932	
2,600.00	2,477.75	2,483.69	2,342.10	14.86	15.27	-89.06	-425.72	98.86	902.64	876.72	25.92	34.822	
2,650.00	2,514.36	2,545.50	2,380.34	15.05	15.63	-85.72	-428.53	50.43	910.60	884.23	26.37	34.533	
2,700.00	2,548.10	2,606.62	2,413.08	15.24	15.99	-82.98	-429.45	-1.15	916.07	889.15	26.92	34.028	
2,750.00	2,578.70	2,655.05	2,437.32	15.44	16.27	-81.02	-429.59	-43.08	919.36	891.83	27.54	33.387	
2,800.00	2,605.93	2,704.96	2,462.27	15.66	16.58	-79.74	-429.71	-86.30	920.65	892.41	28.25	32.594	
2,806.65	2,609.29	2,711.61	2,465.60	15.70	16.63	-79.62	-429.73	-92.06	920.67	892.31	28.36	32.466	
2,895.56	2,653.74	2,800.52	2,510.05	16.15	17.24	-79.62	-429.96	-169.06	920.67	890.69	29.98	30.713	
2,900.00	2,655.96	2,801.14	2,510.36	16.18	17.25	-79.62	-429.96	-169.59	920.68	890.67	30.01	30.678	
3,006.65	2,709.29	2,886.17	2,547.26	16.99	18.05	-79.23	-430.19	-246.11	922.19	890.14	32.05	28.772	
3,050.00	2,729.52	2,918.95	2,558.40	17.41	18.42	-78.84	-430.28	-276.94	923.34	890.39	32.95	28.020	
3,100.00	2,749.18	2,956.56	2,568.98	17.97	18.88	-78.45	-430.39	-313.02	924.52	890.43	34.09	27.117	
3,150.00	2,764.77	3,000.00	2,578.22	18.61	19.46	-78.10	-430.52	-355.46	925.54	890.10	35.44	26.116	
3,200.00	2,776.15	3,031.29	2,582.87	19.31	19.92	-77.89	-430.61	-386.39	926.30	889.62	36.68	25.251	
3,250.00	2,783.25	3,068.48	2,586.19	20.08	20.48	-77.72	-430.72	-423.43	926.87	888.77	38.10	24.328	
3,300.00	2,786.01	3,105.61	2,587.10	20.88	21.07	-77.61	-430.83	-460.54	927.20	887.62	39.57	23.431	
3,313.95	2,786.00	3,116.96	2,586.92	21.12	21.26	-77.60	-430.87	-471.89	927.24	887.23	40.01	23.175	
3,400.00	2,784.91	3,203.01	2,585.13	22.62	22.74	-77.56	-431.13	-557.92	927.40	884.30	43.10	21.517	
3,500.00	2,783.63	3,303.01	2,583.05	24.48	24.60	-77.51	-431.43	-657.90	927.58	880.68	46.90	19.776	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	**Local Co-ordinate Reference:**	Well Greasewood 5 State Com 201H (South Slot1)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	**TVD Reference:**	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	**MD Reference:**	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Greasewood 5 State Com 201H (South Slot1)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	5-201H	**Database:**	PRIME_EDM
Reference Design:	Plan 1r1	**Offset TVD Reference:**	Reference Datum

Offset Design Greasewood 5 State Com - Greasewood 5 State Com 154H (South Slot3) - 5-154H - Plan 1r1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
3,600.00	2,782.36	3,403.01	2,580.97	26.45	26.57	-77.46	-431.73	-757.87	927.76	876.89	50.87	18.236	
3,700.00	2,781.09	3,503.00	2,578.89	28.50	28.62	-77.41	-432.03	-857.85	927.95	872.97	54.98	16.879	
3,800.00	2,779.81	3,603.00	2,576.81	30.61	30.74	-77.36	-432.33	-957.82	928.13	868.95	59.18	15.683	
3,900.00	2,778.54	3,703.00	2,574.73	32.76	32.91	-77.31	-432.63	-1,057.80	928.32	864.85	63.47	14.626	
4,000.00	2,777.27	3,802.99	2,572.65	34.96	35.12	-77.27	-432.93	-1,157.77	928.50	860.68	67.82	13.690	
4,100.00	2,775.99	3,902.99	2,570.57	37.19	37.36	-77.22	-433.24	-1,257.75	928.69	856.46	72.23	12.857	
4,200.00	2,774.72	4,002.99	2,568.49	39.45	39.63	-77.17	-433.54	-1,357.72	928.87	852.19	76.68	12.113	
4,300.00	2,773.45	4,102.98	2,566.41	41.73	41.92	-77.12	-433.84	-1,457.70	929.06	847.89	81.17	11.446	
4,400.00	2,772.17	4,202.98	2,564.33	44.03	44.22	-77.07	-434.14	-1,557.67	929.25	843.56	85.69	10.844	
4,500.00	2,770.90	4,302.98	2,562.25	46.35	46.55	-77.02	-434.44	-1,657.64	929.44	839.20	90.23	10.300	
4,600.00	2,769.63	4,402.97	2,560.17	48.68	48.89	-76.98	-434.74	-1,757.62	929.63	834.82	94.80	9.806	
4,700.00	2,768.35	4,502.97	2,558.09	51.02	51.24	-76.93	-435.05	-1,857.59	929.81	830.43	99.39	9.356	
4,800.00	2,767.08	4,602.97	2,556.01	53.37	53.60	-76.88	-435.35	-1,957.57	930.01	826.02	103.99	8.943	
4,900.00	2,765.81	4,702.96	2,553.93	55.73	55.96	-76.83	-435.65	-2,057.54	930.20	821.59	108.60	8.565	
5,000.00	2,764.54	4,802.96	2,551.85	58.10	58.34	-76.78	-435.95	-2,157.52	930.39	817.16	113.23	8.217	
5,100.00	2,763.26	4,902.96	2,549.77	60.48	60.72	-76.73	-436.25	-2,257.49	930.58	812.72	117.86	7.895	
5,200.00	2,761.99	5,002.95	2,547.69	62.86	63.11	-76.69	-436.55	-2,357.47	930.77	808.26	122.51	7.598	
5,300.00	2,760.72	5,102.95	2,545.61	65.25	65.50	-76.64	-436.85	-2,457.44	930.97	803.80	127.16	7.321	
5,400.00	2,759.44	5,202.95	2,543.53	67.64	67.90	-76.59	-437.16	-2,557.42	931.16	799.34	131.82	7.064	
5,500.00	2,758.17	5,302.94	2,541.45	70.04	70.30	-76.54	-437.46	-2,657.39	931.36	794.87	136.49	6.824	
5,600.00	2,756.90	5,402.94	2,539.37	72.44	72.71	-76.49	-437.76	-2,757.37	931.55	790.40	141.16	6.599	
5,700.00	2,755.62	5,502.94	2,537.29	74.84	75.11	-76.45	-438.06	-2,857.34	931.75	785.92	145.83	6.389	
5,800.00	2,754.35	5,602.93	2,535.21	77.25	77.53	-76.40	-438.36	-2,957.32	931.95	781.44	150.51	6.192	
5,900.00	2,753.08	5,702.93	2,533.13	79.66	79.94	-76.35	-438.66	-3,057.29	932.14	776.95	155.19	6.006	
6,000.00	2,751.80	5,802.93	2,531.05	82.07	82.36	-76.30	-438.96	-3,157.26	932.34	772.47	159.87	5.832	
6,100.00	2,750.53	5,902.93	2,528.97	84.49	84.78	-76.25	-439.27	-3,257.24	932.54	767.98	164.56	5.667	
6,200.00	2,749.26	6,002.92	2,526.89	86.91	87.20	-76.21	-439.57	-3,357.21	932.74	763.49	169.25	5.511	
6,300.00	2,747.98	6,102.92	2,524.81	89.33	89.62	-76.16	-439.87	-3,457.19	932.94	759.00	173.94	5.364	
6,400.00	2,746.71	6,202.92	2,522.73	91.75	92.04	-76.11	-440.17	-3,557.16	933.14	754.51	178.63	5.224	
6,500.00	2,745.44	6,302.91	2,520.65	94.18	94.47	-76.06	-440.47	-3,657.14	933.34	750.02	183.32	5.091	
6,600.00	2,744.16	6,402.91	2,518.57	96.60	96.90	-76.01	-440.77	-3,757.11	933.55	745.53	188.01	4.965	
6,700.00	2,742.89	6,502.91	2,516.49	99.03	99.33	-75.97	-441.07	-3,857.09	933.75	741.04	192.71	4.845	
6,800.00	2,741.62	6,602.90	2,514.41	101.46	101.76	-75.92	-441.38	-3,957.06	933.95	736.55	197.40	4.731	
6,900.00	2,740.34	6,702.90	2,512.33	103.89	104.19	-75.87	-441.68	-4,057.04	934.16	732.06	202.10	4.622	
7,000.00	2,739.07	6,802.90	2,510.25	106.32	106.62	-75.82	-441.98	-4,157.01	934.36	727.57	206.79	4.518	
7,100.00	2,737.80	6,902.89	2,508.17	108.75	109.06	-75.77	-442.28	-4,256.99	934.57	723.08	211.49	4.419	
7,200.00	2,736.52	7,002.89	2,506.09	111.18	111.49	-75.73	-442.58	-4,356.96	934.77	718.59	216.18	4.324	
7,300.00	2,735.25	7,102.89	2,504.01	113.62	113.93	-75.68	-442.88	-4,456.94	934.98	714.10	220.88	4.233	
7,400.00	2,733.98	7,202.88	2,501.93	116.05	116.36	-75.63	-443.19	-4,556.91	935.19	709.62	225.57	4.146	
7,500.00	2,732.71	7,302.88	2,499.85	118.49	118.80	-75.58	-443.49	-4,656.88	935.39	705.13	230.26	4.062	
7,600.00	2,731.43	7,402.88	2,497.77	120.93	121.24	-75.54	-443.79	-4,756.86	935.60	700.65	234.96	3.982	
7,700.00	2,730.16	7,502.87	2,495.70	123.36	123.68	-75.49	-444.09	-4,856.83	935.81	696.16	239.65	3.905	
7,800.00	2,728.89	7,602.87	2,493.62	125.80	126.12	-75.44	-444.39	-4,956.81	936.02	691.68	244.34	3.831	
7,900.00	2,727.61	7,702.87	2,491.54	128.24	128.56	-75.39	-444.69	-5,056.78	936.23	687.20	249.03	3.759	
8,000.00	2,726.34	7,802.86	2,489.46	130.68	131.00	-75.34	-444.99	-5,156.76	936.44	682.72	253.72	3.691	
8,100.00	2,725.07	7,902.86	2,487.38	133.12	133.44	-75.30	-445.30	-5,256.73	936.66	678.25	258.41	3.625	
8,200.00	2,723.79	8,002.86	2,485.30	135.56	135.88	-75.25	-445.60	-5,356.71	936.87	673.77	263.10	3.561	
8,300.00	2,722.52	8,102.85	2,483.22	138.00	138.33	-75.20	-445.90	-5,456.68	937.08	669.30	267.79	3.499	
8,400.00	2,721.25	8,202.85	2,481.14	140.45	140.77	-75.15	-446.20	-5,556.66	937.30	664.83	272.47	3.440	
8,419.34	2,721.00	8,209.41	2,481.00	140.92	140.93	-75.15	-446.22	-5,563.21	937.43	664.39	273.03	3.433	SF

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	SILVERBACK EXPLORATION	**Local Co-ordinate Reference:**	Well Greasewood 5 State Com 201H (South Slot1)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	**TVD Reference:**	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	**MD Reference:**	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Greasewood 5 State Com 201H (South Slot1)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	5-201H	**Database:**	PRIME_EDM
Reference Design:	Plan 1r1	**Offset TVD Reference:**	Reference Datum

Offset Design Greasewood 5 State Com - Greasewood BD State 10 (Offset) Active - GW BD ST 10 - GW BD ST 10 A

Offset Site Error: 0.00 usft

Survey Program: 410-INC-ONLY

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,300.00	2,760.72	2,789.86	2,760.72	65.25	71.45	92.05	800.08	-3,403.06	995.14	918.17	76.97	12.929	
5,400.00	2,759.44	2,788.58	2,759.44	67.64	71.42	91.83	800.08	-3,403.06	901.57	822.84	78.73	11.452	
5,500.00	2,758.17	2,787.31	2,758.17	70.04	71.39	91.61	800.08	-3,403.06	809.54	728.45	81.09	9.983	
5,600.00	2,756.90	2,786.04	2,756.90	72.44	71.36	91.39	800.08	-3,403.06	719.63	635.35	84.28	8.538	
5,700.00	2,755.62	2,784.76	2,755.62	74.84	71.33	91.17	800.08	-3,403.06	632.76	544.12	88.64	7.139	
5,800.00	2,754.35	2,783.49	2,754.35	77.25	71.30	90.96	800.08	-3,403.06	550.37	455.72	94.65	5.815	
5,900.00	2,753.08	2,782.22	2,753.08	79.66	71.27	90.74	800.08	-3,403.06	474.78	371.74	103.03	4.608	
6,000.00	2,751.80	2,780.94	2,751.80	82.07	71.25	90.52	800.08	-3,403.06	409.78	295.18	114.60	3.576	
6,100.00	2,750.53	2,779.67	2,750.53	84.49	71.22	90.30	800.08	-3,403.06	361.14	231.79	129.35	2.792	
6,200.00	2,749.26	2,778.40	2,749.26	86.91	71.19	90.08	800.08	-3,403.06	336.04	191.79	144.25	2.330	
6,237.51	2,748.78	2,777.92	2,748.78	87.82	71.18	90.00	800.08	-3,403.06	333.94	185.32	148.62	2.247	CC, ES
6,300.00	2,747.98	2,777.12	2,747.98	89.33	71.16	89.86	800.08	-3,403.06	339.74	186.49	153.24	2.217	SF
6,400.00	2,746.71	2,775.85	2,746.71	91.75	71.13	89.65	800.08	-3,403.06	371.37	217.92	153.45	2.420	
6,500.00	2,745.44	2,774.58	2,745.44	94.18	71.10	89.43	800.08	-3,403.06	424.74	276.94	147.80	2.874	
6,600.00	2,744.16	2,773.30	2,744.16	96.60	71.07	89.21	800.08	-3,403.06	492.84	352.58	140.26	3.514	
6,700.00	2,742.89	2,772.03	2,742.89	99.03	71.04	88.99	800.08	-3,403.06	570.42	437.46	132.96	4.290	
6,800.00	2,741.62	2,770.76	2,741.62	101.46	71.02	88.77	800.08	-3,403.06	654.11	527.51	126.60	5.167	
6,900.00	2,740.34	2,769.48	2,740.34	103.89	70.99	88.55	800.08	-3,403.06	741.85	620.59	121.26	6.118	
7,000.00	2,739.07	2,768.21	2,739.07	106.32	70.96	88.33	800.08	-3,403.06	832.35	715.53	116.82	7.125	
7,100.00	2,737.80	2,766.94	2,737.80	108.75	70.93	88.12	800.08	-3,403.06	924.82	811.69	113.13	8.175	

Anticollision Report

Company:	SILVERBACK EXPLORATION	**Local Co-ordinate Reference:**	Well Greasewood 5 State Com 201H (South Slot1)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	**TVD Reference:**	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	**MD Reference:**	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Greasewood 5 State Com 201H (South Slot1)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	5-201H	**Database:**	PRIME_EDM
Reference Design:	Plan 1r1	**Offset TVD Reference:**	Reference Datum

Offset Design Greasewood 5 State Com - Greasewood BD State 8 (Offset) PA - GW BD ST 8 - GW BD ST 8 AsDrille

Offset Site Error: 0.00 usft

Survey Program: 360-INC-ONLY

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,300.00	2,735.25	2,764.41	2,735.25	113.62	142.92	-90.16	-497.59	-4,669.85	982.32	746.78	235.53	4.171	
7,400.00	2,733.98	2,763.14	2,733.98	116.05	142.83	-90.08	-497.59	-4,669.85	966.08	733.69	232.39	4.157	SF
7,500.00	2,732.71	2,761.87	2,732.71	118.49	142.73	-90.01	-497.59	-4,669.85	960.04	732.86	227.17	4.226	ES
7,508.21	2,732.60	2,761.76	2,732.60	118.69	142.72	-90.00	-497.59	-4,669.85	960.00	733.35	226.65	4.236	CC
7,600.00	2,731.43	2,760.59	2,731.43	120.93	142.64	-89.93	-497.59	-4,669.85	964.38	744.32	220.06	4.382	
7,700.00	2,730.16	2,759.32	2,730.16	123.36	142.55	-89.85	-497.59	-4,669.85	978.97	767.49	211.48	4.629	

Anticollision Report

Company:	SILVERBACK EXPLORATION	**Local Co-ordinate Reference:**	Well Greasewood 5 State Com 201H (South Slot1)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	**TVD Reference:**	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	**MD Reference:**	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Greasewood 5 State Com 201H (South Slot1)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	5-201H	**Database:**	PRIME_EDM
Reference Design:	Plan 1r1	**Offset TVD Reference:**	Reference Datum

Offset Design Greasewood 5 State Com - Greasewood BD State 9 (Offset) PA - GW BD ST 9 - GW BD ST 9 AsDrille — **Offset Site Error:** 0.00 usft

Survey Program: 377-INC-ONLY — **Offset Well Error:** 0.00 usft

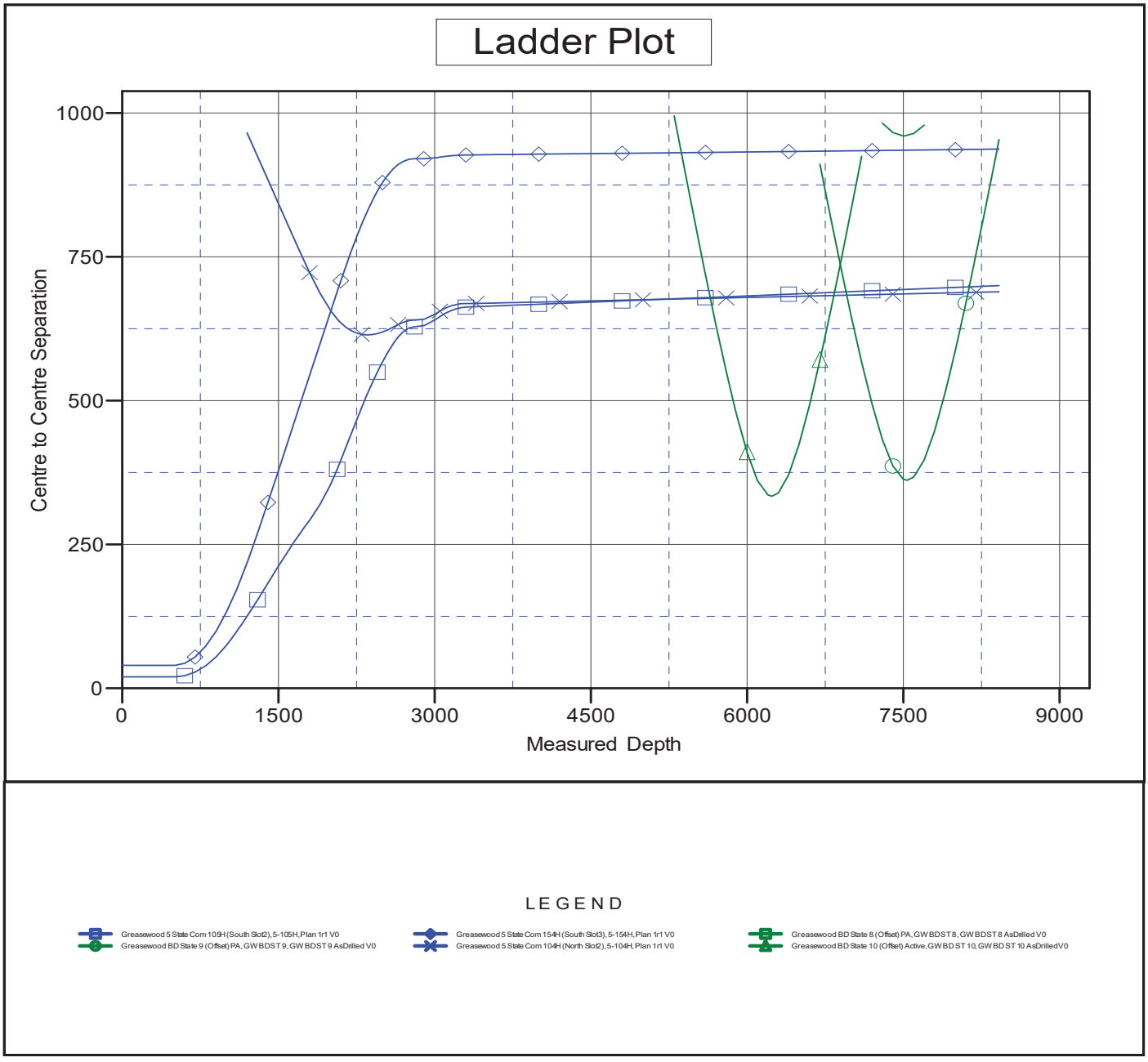
Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,700.00	2,742.89	2,772.26	2,742.89	99.03	71.54	91.69	823.88	-4,702.03	911.24	815.20	96.04	9.488	
6,800.00	2,741.62	2,770.98	2,741.62	101.46	71.52	91.49	823.88	-4,702.03	820.42	719.93	100.49	8.164	
6,900.00	2,740.34	2,769.71	2,740.34	103.89	71.49	91.28	823.88	-4,702.03	731.99	625.87	106.12	6.898	
7,000.00	2,739.07	2,768.44	2,739.07	106.32	71.47	91.08	823.88	-4,702.03	646.93	533.64	113.30	5.710	
7,100.00	2,737.80	2,767.16	2,737.80	108.75	71.45	90.88	823.88	-4,702.03	566.78	444.26	122.52	4.626	
7,200.00	2,736.52	2,765.89	2,736.52	111.18	71.42	90.68	823.88	-4,702.03	493.91	359.58	134.33	3.677	
7,300.00	2,735.25	2,764.62	2,735.25	113.62	71.40	90.48	823.88	-4,702.03	432.03	283.11	148.93	2.901	
7,400.00	2,733.98	2,763.34	2,733.98	116.05	71.38	90.28	823.88	-4,702.03	386.47	221.26	165.21	2.339	
7,500.00	2,732.71	2,762.07	2,732.71	118.49	71.35	90.07	823.88	-4,702.03	363.40	184.05	179.35	2.026	
7,536.51	2,732.24	2,761.61	2,732.24	119.38	71.34	90.00	823.88	-4,702.03	361.56	178.68	182.87	1.977	CC, ES
7,600.00	2,731.43	2,760.80	2,731.43	120.93	71.33	89.87	823.88	-4,702.03	367.09	181.06	186.03	1.973	SF
7,700.00	2,730.16	2,759.52	2,730.16	123.36	71.31	89.67	823.88	-4,702.03	396.80	213.23	183.57	2.162	
7,800.00	2,728.89	2,758.25	2,728.89	125.80	71.28	89.47	823.88	-4,702.03	447.37	272.11	175.26	2.553	
7,900.00	2,727.61	2,756.98	2,727.61	128.24	71.26	89.27	823.88	-4,702.03	512.67	347.56	165.11	3.105	
8,000.00	2,726.34	2,755.70	2,726.34	130.68	71.24	89.07	823.88	-4,702.03	587.80	432.40	155.40	3.782	
8,100.00	2,725.07	2,754.43	2,725.07	133.12	71.21	88.86	823.88	-4,702.03	669.47	522.55	146.92	4.557	
8,200.00	2,723.79	2,753.16	2,723.79	135.56	71.19	88.66	823.88	-4,702.03	755.56	615.80	139.76	5.406	
8,300.00	2,722.52	2,751.88	2,722.52	138.00	71.17	88.46	823.88	-4,702.03	844.72	710.94	133.78	6.314	
8,400.00	2,721.25	2,750.61	2,721.25	140.45	71.14	88.26	823.88	-4,702.03	936.06	807.29	128.78	7.269	
8,419.34	2,721.00	2,750.37	2,721.00	140.92	71.14	88.22	823.88	-4,702.03	953.93	826.03	127.90	7.458	

Anticollision Report

Company:	SILVERBACK EXPLORATION	**Local Co-ordinate Reference:**	Well Greasewood 5 State Com 201H (South Slot1)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	**TVD Reference:**	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	**MD Reference:**	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Greasewood 5 State Com 201H (South Slot1)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	5-201H	**Database:**	PRIME_EDM
Reference Design:	Plan 1r1	**Offset TVD Reference:**	Reference Datum

Reference Depths are relative to 3566+20 @ 3586.00usft (planning)
Offset Depths are relative to Offset Datum
Central Meridian is -104.3333333

Coordinates are relative to: Greasewood 5 State Com 201H (South Slot1)
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: -0.09°

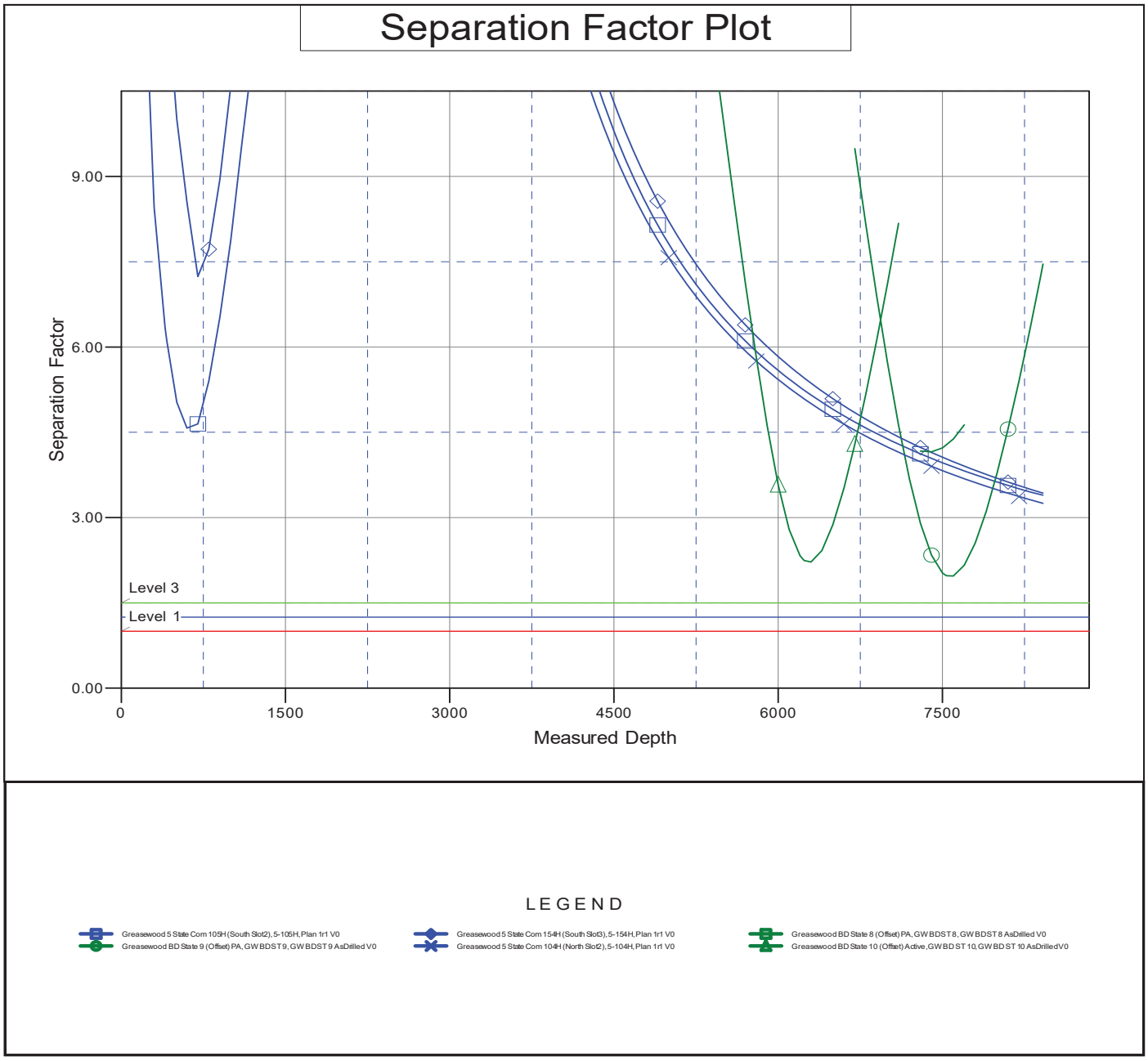


Anticollision Report

Company:	SILVERBACK EXPLORATION	**Local Co-ordinate Reference:**	Well Greasewood 5 State Com 201H (South Slot1)
Project:	EDDY COUNTY, NM (NAD83) NMEZ GRID	**TVD Reference:**	3566+20 @ 3586.00usft (planning)
Reference Site:	Greasewood 5 State Com	**MD Reference:**	3566+20 @ 3586.00usft (planning)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Greasewood 5 State Com 201H (South Slot1)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	5-201H	**Database:**	PRIME_EDM
Reference Design:	Plan 1r1	**Offset TVD Reference:**	Reference Datum

Reference Depths are relative to 3566+20 @ 3586.00usft (planning)
Offset Depths are relative to Offset Datum
Central Meridian is -104.3333333

Coordinates are relative to: Greasewood 5 State Com 201H (South Slot1)
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: -0.09°



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: Silverback Operating II, LLC **OGRID:** 330968 **Date:** 08 / 25 / 2023

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

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
See attached table						

IV. Central Delivery Point Name: GREASEWOOD 5 STATE COM CDP [See 19.15.27.9(D)(1) NMAC]

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

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
See attached table						

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

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

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

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature: Fatma Abdallah
Printed Name: Fatma Abdallah
Title: Regulatory Manager
E-mail Address: fabdallah@silverbackexp.com
Date: 08/25/2023
Phone: 210-585-3316

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

III. Wells

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
GREASEWOOD 5 STATE COM 153H	30-15-53756	D-4-19S-25E	670' N 370' W	515	800	3000
GREASEWOOD 5 STATE COM 201H	30-15-53757	E-4-19S-25E	1809' N 370' W	515	800	3000
GREASEWOOD 5 STATE COM 154H	30-15-53758	E-4-19S-25E	1849' N 370' W	515	800	3000
GREASEWOOD 5 STATE COM 104H	30-15-53794	D-4-19S-25E	690' N 370' W	515	800	3000
GREASEWOOD 5 STATE COM 105H	30-15-53755	E-4-19S-25E	1829' N 370' E	515	800	3000

V. Anticipated Schedule

Well Name	API	Spud date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
GREASEWOOD 5 STATE COM 153H	30-15-53756	2/29/24	3/10/24	4/25/24	5/30/24	5/30/24
GREASEWOOD 5 STATE COM 104H	30-15-53794	3/11/24	3/21/24	4/25/24	5/30/24	5/30/24
GREASEWOOD 5 STATE COM 201H	30-15-53757	3/23/24	4/1/24	5/4/24	6/1/24	6/1/24
GREASEWOOD 5 STATE COM 105H	30-15-53755	4/2/24	4/12/24	5/4/24	6/1/24	6/1/24
GREASEWOOD 5 STATE COM 154H	30-15-53758	4/13/24	4/23/24	5/4/24	6/1/24	6/1/24

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 1st 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

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 257939

CONDITIONS

Operator: Silverback Operating II, LLC 19707 IH10 West, Suite 201 San Antonio, TX 78256	OGRID: 330968
	Action Number: 257939
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Original COA's still apply.	9/29/2023