| ceined by OCD: 8/25/2023-6:07:0. | State of New Mex | rico | Form <i>Eage 1 of 30</i> | | | | |
|--|---|--|--|--|--|--|--|
| Office <u>District I</u> – (575) 393-6161 | Energy, Minerals and Natura | al Resources | Revised July 18, 2013 | | | | |
| 1625 N. French Dr., Hobbs, NM 88240 District II – (575) 748-1283 | | | L API NO. 30-015-53794 | | | | |
| 811 S. First St., Artesia, NM 88210 | OIL CONSERVATION I | 5 Inc | licate Type of Lease | | | | |
| <u>District III</u> – (505) 334-6178 1000 Rio Brazos Rd., Aztec, NM 87410 | 1220 South St. France | cis Dr. | STATE X FEE | | | | |
| <u>District IV</u> – (505) 476-3460 | Santa Fe, NM 875 | 6. Sta | te Oil & Gas Lease No. | | | | |
| 1220 S. St. Francis Dr., Santa Fe, NM 87505 | | | E101670008 | | | | |
| | TICES AND REPORTS ON WELLS | | ase Name or Unit Agreement Name | | | | |
| | DSALS TO DRILL OR TO DEEPEN OR PLUC ICATION FOR PERMIT" (FORM C-101) FOR | ~~ | REASEWOOD 5 STATE COM | | | | |
| PROPOSALS.) | | | ell Number 104H | | | | |
| Type of Well: Oil Well Name of Operator SH VEDE | Gas Well Other | | GRID Number | | | | |
| 2. Name of Operator SILVERE | BACK OPERATING II, LLC | 9. 00 | 330968 | | | | |
| 3. Address of Operator 19707 W | Vest IH 10, Suite 201 | 10. Pe | ool name or Wildcat | | | | |
| | onio, TX 78257 | PEN | NASCO DRAW, SA-YESO (ASSOC) | | | | |
| 4. Well Location | | | | | | | |
| Unit Letter: | feet from theNORTH | | feet from theWESTline | | | | |
| Section 4 | Township 19S Ran | | M County EDDY | | | | |
| | 11. Elevation (Show whether DR, 13568) | RKB, RT, GR, etc.) | | | | | |
| | 3308 | | | | | | |
| 12 Check | Appropriate Box to Indicate Na | ture of Notice Report | t or Other Data | | | | |
| | | • | | | | | |
| | NTENTION TO: | | IENT REPORT OF: | | | | |
| PERFORM REMEDIAL WORK | | REMEDIAL WORK | ☐ ALTERING CASING ☐ DPNS.☐ P AND A ☐ | | | | |
| TEMPORARILY ABANDON ☐ PULL OR ALTER CASING ☐ | . = 1 | COMMENCE DRILLING (CASING/CEMENT JOB | DPNS.∐ P AND A ∐ | | | | |
| DOWNHOLE COMMINGLE | MOETH LE GOIMLE | O/IOINO/OLIVILINI OOD | | | | | |
| CLOSED-LOOP SYSTEM | | | | | | | |
| OTHER: | | OTHER: | | | | | |
| | | | ertinent dates, including estimated date | | | | |
| proposed completion or re | ork). SEE RULE 19.15.7.14 NMAC. | For Multiple Completion | is: Attach wellbore diagram of | | | | |
| proposed completion of re- | Joint Parising | | | | | | |
| Silverback Operating II, I | LLC. has changed the well number and | the target depth of the su | bject well. SHL has not changed. | | | | |
| | | | | | | | |
| | inally permitted with well number 151 2241'. Please see the new C-102 plat | | | | | | |
| NGMP. | 2241. Please see the new C-102 plat | attached as well as a new | directional plan and updated | | | | |
| TOWN. | | | | | | | |
| Please note the lease type | should be STATE. | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Spud Date: | Rig Release Date | , | | | | | |
| Spud Date. | Kig Kelease Date | J | | | | | |
| | | | | | | | |
| I hereby certify that the information | a above is true and complete to the bes | at of my knowledge and be | elief. | | | | |
| , , | 1 | , . | | | | | |
| CICNIATING F.L 111 | M. 6 | M | DATE 08/25/2023 | | | | |
| SIGNATURE Fatma Abda | zllah TITLE Regulate | ory Manager | DATE08/25/2023 | | | | |
| Type or print name <u>Fatma Abdalla</u> | h E-mail address: | fabdallah@silverbackex | p.com PHONE: (210) 585-3316 | | | | |
| For State Use Only | | | · · · · · · · · · · · · · · · · · · · | | | | |
| ADDROVED BY MA I DO | | | D. A. W | | | | |
| APPROVED BY: Ward Rikal Conditions of Approval (if any): | aTITLE_Petro | oleum Specialist A | DATE <u>9/29/2023</u> | | | | |
| conditions of rippional (ii ally). | | | | | | | |

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 <u>District IV</u> 1220 S. St. Francis Dr. Santa Fe. NM 87505

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 Numbe | er | ² Pool Code | ³ Pool Name | | | |
|--------------------------------------|----|------------------------|-------------------------------------|----------------------------------|--|--|
| 30-015-537 | 94 | 50270 | PENASCO DRAW, SA-YESO (ASSOC) | | | |
| ⁴ Property Code 333974 | | | roperty Name DOD 5 STATE COM | ⁶ Well Number 104H | | |
| ⁷ OGRID №. 330968 | | | perator Name EXPLORATION II, LLC | ⁹ Elevation 3,568' | | |

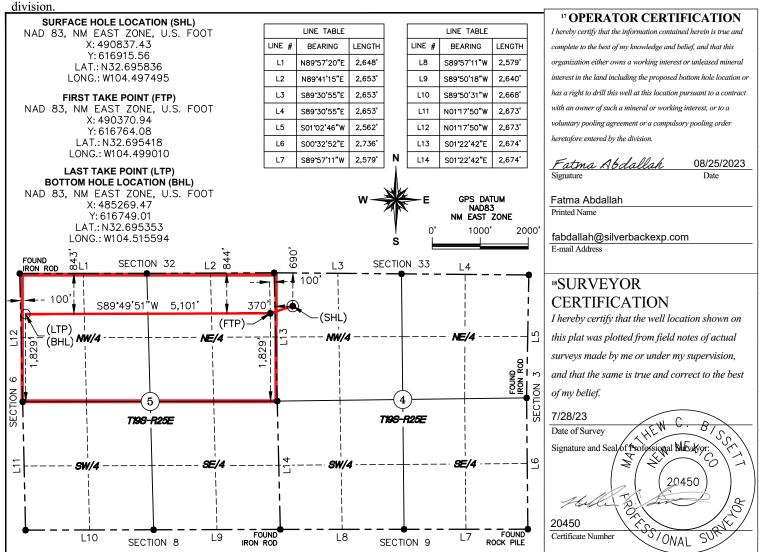
¹⁰ Surface Location

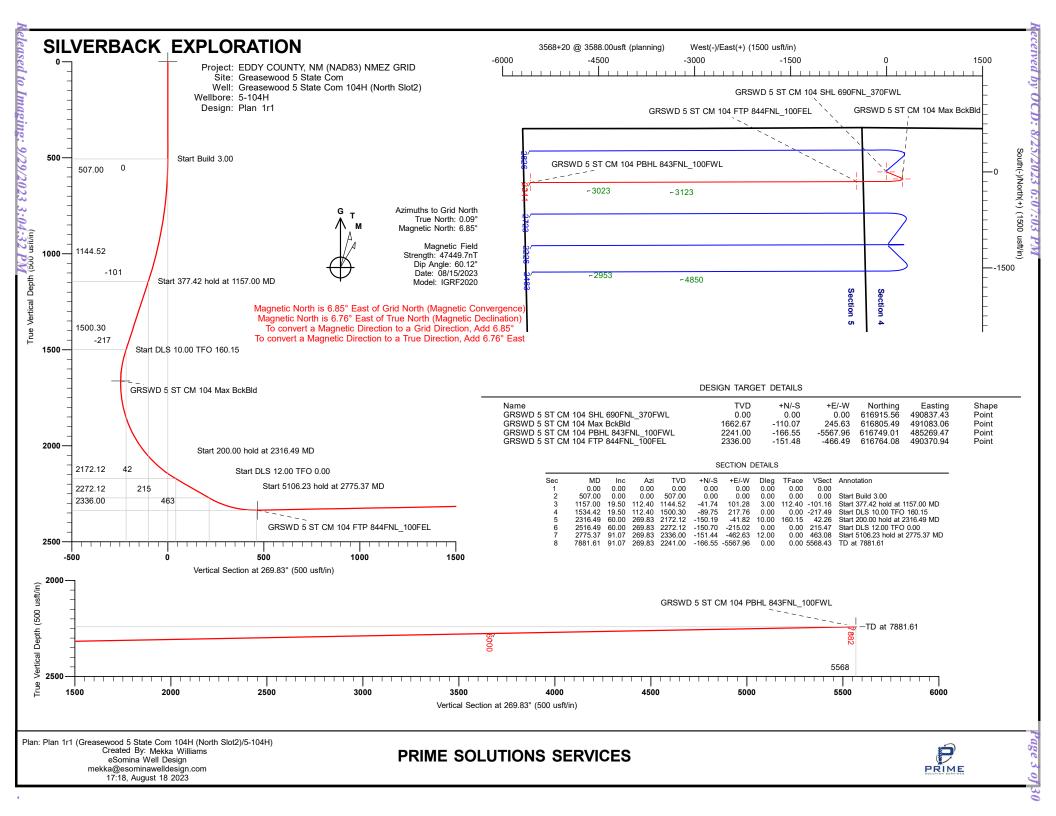
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| D | 4 | 19-S | 25-E | | 690' | NORTH | 370' | WEST | EDDY |

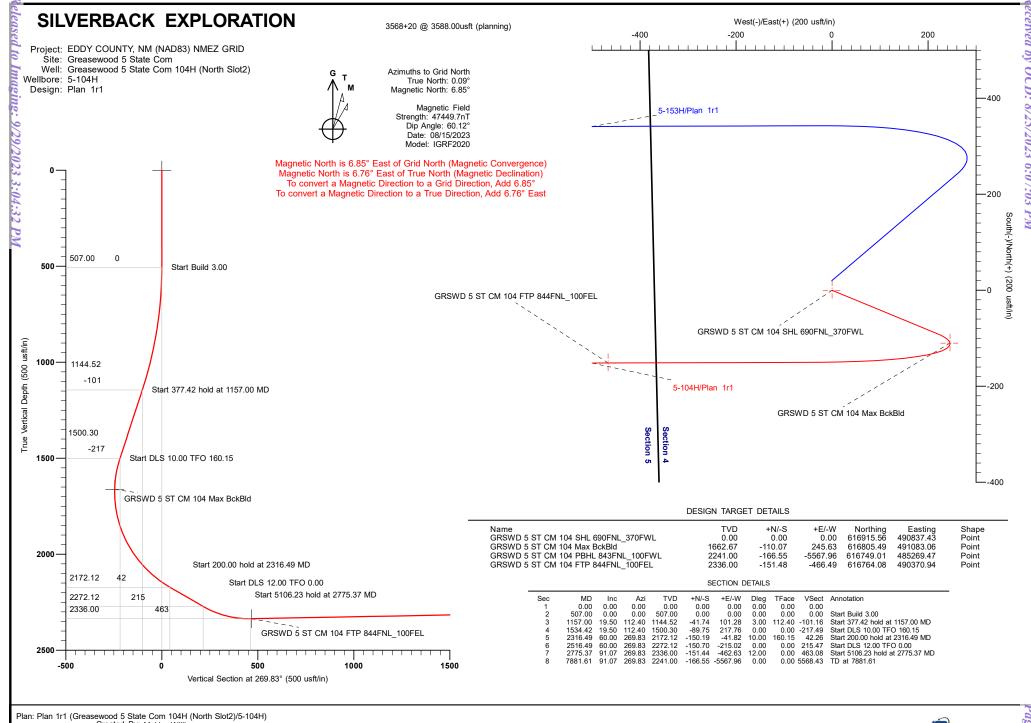
¹¹ Bottom Hole Location If Different From Surface

| UL or lot no. | Section 5 | Township 19-S | Range 25-E | Lot Idn | Feet from the 843' | North/South line NORTH | Feet from the 100' | East/West line WEST | County EDDY |
|--------------------|--------------|------------------|---------------|------------|-----------------------|---------------------------|-----------------------|------------------------|----------------|
| 12 Dedicated Acres | 13 Joint or | Infill 14 C | Consolidation | Code 15 Or | der 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







Plan: Plan 1r1 (Greasewood 5 State Com 104H (North Slot2)/5-104h Created By: Mekka Williams eSomina Well Design mekka@esominawelldesign.com

17:17, August 18 2023





SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID Greasewood 5 State Com Greasewood 5 State Com 104H (North Slot2)

5-104H

Plan: Plan 1r1

Standard Planning Report

18 August, 2023

TVD Reference:

MD Reference:

North Reference:

PRIME_EDM Database:

Company: SILVERBACK EXPLORATION

Local Co-ordinate Reference:

Well Greasewood 5 State Com 104H (North

Project: EDDY COUNTY, NM (NAD83) NMEZ GRID Site:

Greasewood 5 State Com

Wellbore: 5-104H Plan 1r1 Design:

Well:

Greasewood 5 State Com 104H (North Slot2) **Survey Calculation Method:** 3568+20 @ 3588.00usft (planning) 3568+20 @ 3588.00usft (planning)

269.83

Grid

Minimum Curvature

EDDY COUNTY, NM (NAD83) NMEZ GRID **Project**

Map System: US State Plane 1983 North American Datum 1983 Geo Datum:

New Mexico Eastern Zone Map Zone:

Mean Sea Level System Datum:

0.00

Greasewood 5 State Com Site

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

Well Greasewood 5 State Com 104H (North Slot2) **Well Position** +N/-S 0.00 usft 616,915.56 usft 32.6958362 Northing: Latitude:

+E/-W 0.00 usft 490,837.43 usft -104.4974948 Easting: Longitude: 0.00 usft Ground Level: **Position Uncertainty** Wellhead Elevation: 3,568.00 usft

Wellbore 5-104H

Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (°) (°) (nT) IGRF2020 08/15/23 6.76 60.12 47,449.73234417

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

0.00

Plan Survey Tool Program 08/18/23

Depth From Depth To

(usft) (usft) Remarks Survey (Wellbore) **Tool Name**

0.00

0.00 7,881.61 Plan 1r1 (5-104H) MWD

OWSG MWD - Standard

Plan Sections Measured Vertical Dogleg Build Turn Inclination Azimuth Depth +N/-S +E/-W Rate Depth Rate Rate **TFO** (usft) (°/100usft) (°/100usft) (°) (usft) (usft) (usft) (°/100usft) 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 1.157.00 19.50 112.40 1,144.52 -41.74 101.28 3.00 3.00 0.00 112.40 1,534.42 19.50 112.40 1,500.30 -89.75 217.76 0.00 0.00 0.00 0.00 2,316.49 60.00 269.83 2,172.12 -150.19 -41.82 10.00 5.18 20.13 160.15 2,516.49 60.00 269.83 2,272.12 -150.70 -215.02 0.00 0.00 0.00 0.00 269.83 -151.44 2,775.37 91.07 2,336.00 -462.63 12.00 12.00 0.00 0.00 0.00 GRSWD 5 ST CM 104 7 881 61 91.07 269.83 2.241.00 -166.55 -5.567.96 0.00 0.00 0.00

Database: PRIME_EDM

Company: SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID

Site: Greasewood 5 State Com

Well: Greasewood 5 State Com 104H (North Slot2)

Wellbore: 5-104H
Design: Plan 1r1

Project:

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Greasewood 5 State Com 104H (North

Slot2

3568+20 @ 3588.00usft (planning) 3568+20 @ 3588.00usft (planning)

Grid

Minimum Curvature

| nned 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 |
| | | 0.00 | 307.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Start Build 600.00 | | 112.40 | 599.96 | -0.86 | 2.09 | -2.09 | 3.00 | 3.00 | 0.00 |
| | | | | | | | | | |
| 700.00 | | 112.40 | 699.67 | -3.71 | 9.01 | -9.00 | 3.00 | 3.00 | 0.00 |
| 800.00 | | 112.40 | 798.85 | -8.55 | 20.74 | -20.71 | 3.00 | 3.00 | 0.00 |
| 900.00 | 11.79 | 112.40 | 897.23 | -15.35 | 37.25 | -37.21 | 3.00 | 3.00 | 0.00 |
| 1,000.00 | 14.79 | 112.40 | 994.54 | -24.11 | 58.50 | -58.43 | 3.00 | 3.00 | 0.00 |
| 1,100.00 | 17.79 | 112.40 | 1,090.52 | -34.80 | 84.43 | -84.33 | 3.00 | 3.00 | 0.00 |
| 1,157.00 | 19.50 | 112.40 | 1,144.52 | -41.74 | 101.28 | -101.16 | 3.00 | 3.00 | 0.00 |
| | | | 1,144.52 | | 101.20 | -101.10 | 3.00 | 3.00 | 0.00 |
| | 2 hold at 1157.00 | | 1 105 06 | 47.04 | 111 55 | 11111 | 0.00 | 0.00 | 0.00 |
| 1,200.00 | | 112.40 | 1,185.06 | -47.21 50.04 | 114.55 | -114.41 | 0.00 | 0.00 | 0.00 |
| 1,300.00 | 19.50 | 112.40 | 1,279.32 | -59.94 | 145.41 | -145.24 | 0.00 | 0.00 | 0.00 |
| 1,400.00 | 19.50 | 112.40 | 1,373.59 | -72.66 | 176.28 | -176.06 | 0.00 | 0.00 | 0.00 |
| 1,500.00 | | 112.40 | 1,467.85 | -85.38 | 207.14 | -206.88 | 0.00 | 0.00 | 0.00 |
| 1,534.42 | | 112.40 | 1,500.30 | -89.75 | 217.76 | -217.49 | 0.00 | 0.00 | 0.00 |
| | 10.00 TFO 160.15 | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | | |
| 1,550.00 | | 114.11 | 1,515.05 | -91.73 | 222.37 | -222.09 | 10.00 | -9.36 | 10.96 |
| 1,600.00 | | 121.96 | 1,563.16 | -97.99 | 234.40 | -234.11 | 10.00 | -9.07 | 15.70 |
| 1,000.00 | 13.31 | 121.90 | 1,303.10 | -97.99 | 234.40 | -234.11 | 10.00 | -9.07 | 15.70 |
| 1,650.00 | 9.45 | 136.88 | 1,612.16 | -104.08 | 242.16 | -241.85 | 10.00 | -8.12 | 29.86 |
| 1,700.00 | 6.77 | 167.59 | 1,661.67 | -109.96 | 245.60 | -245.27 | 10.00 | -5.36 | 61.41 |
| 1,750.00 | 7.22 | 209.41 | 1,711.33 | -115.58 | 244.69 | -244.35 | 10.00 | 0.91 | 83.63 |
| 1,800.00 | | 235.20 | 1,760.76 | -120.89 | 239.44 | -239.08 | 10.00 | 6.37 | 51.59 |
| 1,850.00 | | 247.70 | 1,809.56 | -125.87 | 229.88 | -229.51 | 10.00 | 8.46 | 25.01 |
| | | | | | | | | | |
| 1,900.00 | | 254.52 | 1,857.39 | -130.47 | 216.09 | -215.70 | 10.00 | 9.19 | 13.63 |
| 1,950.00 | | 258.75 | 1,903.86 | -134.65 | 198.18 | -197.78 | 10.00 | 9.51 | 8.46 |
| 2,000.00 | | 261.64 | 1,948.64 | -138.39 | 176.27 | -175.86 | 10.00 | 9.67 | 5.78 |
| 2,050.00 | | 263.76 | 1,991.37 | -141.65 | 150.55 | -150.12 | 10.00 | 9.76 | 4.23 |
| 2,100.00 | 38.60 | 265.39 | 2,031.73 | -144.41 | 121.19 | -120.76 | 10.00 | 9.81 | 3.27 |
| 2,150.00 | 43.53 | 266.71 | 2,069.42 | -146.66 | 88.43 | -88.00 | 10.00 | 9.85 | 2.63 |
| 2,200.00 | | 267.81 | 2,104.14 | -148.36 | 52.52 | -52.08 | 10.00 | 9.87 | 2.20 |
| 2,250.00 | | 268.75 | 2,135.64 | -149.52 | 13.73 | -13.28 | 10.00 | 9.89 | 1.88 |
| 2,300.00 | | 269.58 | 2,163.67 | -149.52 | -27.65 | 28.10 | 10.00 | 9.91 | 1.66 |
| 2,316.49 | 60.00 | 269.83 | 2,172.12 | -150.12 | -27.65 -41.82 | 42.26 | 10.00 | 9.91 | 1.54 |
| | | | ۷,۱۱۷.۱۷ | -130.13 | -41.02 | +∠.∠0 | 10.00 | ا د.و | 1.04 |
| Start 200.0 | 0 hold at 2316.49 | INID | | | | | | | |
| 2,400.00 | | 269.83 | 2,213.87 | -150.40 | -114.14 | 114.58 | 0.00 | 0.00 | 0.00 |
| 2,500.00 | 60.00 | 269.83 | 2,263.87 | -150.66 | -200.74 | 201.18 | 0.00 | 0.00 | 0.00 |
| 2,516.49 | 60.00 | 269.83 | 2,272.12 | -150.70 | -215.02 | 215.47 | 0.00 | 0.00 | 0.00 |
| Start DLS 1 | 12.00 TFO 0.00 | | | | | | | | |
| 2,525.00 | | 269.83 | 2,276.31 | -150.72 | -222.43 | 222.87 | 12.00 | 12.00 | 0.00 |
| 2,550.00 | | 269.83 | 2,287.84 | -150.79 | -244.60 | 245.05 | 12.00 | 12.00 | 0.00 |
| | | | | | | | | | |
| 2,575.00 | | 269.83 | 2,298.20 | -150.86 | -267.35 | 267.80 | 12.00 | 12.00 | 0.00 |
| 2,600.00 | 70.02 | 269.83 | 2,307.35 | -150.93 | -290.62 | 291.06 | 12.00 | 12.00 | 0.00 |
| 2,625.00 | 73.02 | 269.83 | 2,315.27 | -151.00 | -314.32 | 314.77 | 12.00 | 12.00 | 0.00 |
| 2,650.00 | 76.02 | 269.83 | 2,321.95 | -151.07 | -338.41 | 338.86 | 12.00 | 12.00 | 0.00 |
| 2,675.00 | | 269.83 | 2,327.35 | -151.14 | -362.82 | 363.27 | 12.00 | 12.00 | 0.00 |
| | | | | | | | | | |
| 2,700.00 | | 269.83 | 2,331.46 | -151.21 | -387.48 | 387.92 | 12.00 | 12.00 | 0.00 |
| 2,725.00 | 85.02 | 269.83 | 2,334.28 | -151.29 | -412.31 | 412.76 | 12.00 | 12.00 | 0.00 |

Database: PRIME_EDM

Company: SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID

Site: Greasewood 5 State Com

Well: Greasewood 5 State Com 104H (North Slot2)

Wellbore: 5-104H Design: Plan 1r1

Project:

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Greasewood 5 State Com 104H (North

Slot2

3568+20 @ 3588.00usft (planning) 3568+20 @ 3588.00usft (planning)

Grid

Minimum Curvature

| gn: | | | | | | | | | |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|------------------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| nned 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) |
| 2,750.00 | 88.02 | 269.83 | 2,335.80 | -151.36 | -437.26 | 437.71 | 12.00 | 12.00 | 0.00 |
| 2,775.37 | 91.07 | 269.83 | 2,336.00 | -151.44 | -462.63 | 463.08 | 12.00 | 12.00 | 0.00 |
| Start 5106.2 | 23 hold at 2775.3 | | | | | | | | |
| 2,800.00 | 91.07 | 269.83 | 2,335.54 | -151.51 | -487.26 | 487.70 | 0.00 | 0.00 | 0.00 |
| 2,900.00 | 91.07 | 269.83 | 2,333.68 | -151.80 | -587.24 | 587.69 | 0.00 | 0.00 | 0.00 |
| 3,000.00 | 91.07 | 269.83 | 2,331.82 | -152.10 | -687.22 | 687.67 | 0.00 | 0.00 | 0.00 |
| 3,100.00 | 91.07 | 269.83 | 2,329.96 | -152.40 | -787.20 | 787.65 | 0.00 | 0.00 | 0.00 |
| 3,200.00 | 91.07 | 269.83 | 2,328.10 | -152.69 | -887.18 | 887.63 | 0.00 | 0.00 | 0.00 |
| 3,300.00 | 91.07 | 269.83 | 2,326.24 | -152.99 | -987.17 | 987.62 | 0.00 | 0.00 | 0.00 |
| 3,400.00 | 91.07 | 269.83 | 2,324.38 | -153.28 | -1,087.15 | 1,087.60 | 0.00 | 0.00 | 0.00 |
| 3,500.00 | 91.07 | 269.83 | 2,322.52 | -153.58 | -1,187.13 | 1,187.58 | 0.00 | 0.00 | 0.00 |
| 3,600.00 | 91.07 | 269.83 | 2,320.66 | -153.88 | -1,287.11 | 1,287.56 | 0.00 | 0.00 | 0.00 |
| 3,700.00 | 91.07 | 269.83 | 2,318.80 | -154.17 | -1,387.10 | 1,387.55 | 0.00 | 0.00 | 0.00 |
| 3,800.00 | 91.07 | 269.83 | 2,316.94 | -154.47 | -1,487.08 | 1,487.53 | 0.00 | 0.00 | 0.00 |
| 3,900.00 | 91.07 | 269.83 | 2.315.08 | -154.76 | -1,587.06 | 1,587.51 | 0.00 | 0.00 | 0.00 |
| 4,000.00 | 91.07 | 269.83 | 2,313.22 | -155.06 | -1,687.04 | 1,687.50 | 0.00 | 0.00 | 0.00 |
| 4,100.00 | 91.07 | 269.83 | 2.311.36 | -155.36 | -1,787.03 | 1,787.48 | 0.00 | 0.00 | 0.00 |
| 4,200.00 | 91.07 | 269.83 | 2,309.50 | -155.65 | -1,887.01 | 1,887.46 | 0.00 | 0.00 | 0.00 |
| 4,300.00 | 91.07 | 269.83 | 2,307.64 | -155.95 | -1,986.99 | 1,987.44 | 0.00 | 0.00 | 0.00 |
| 4,400.00 | 91.07 | 269.83 | 2,305.78 | -156.24 | -2,086.97 | 2,087.43 | 0.00 | 0.00 | 0.00 |
| 4,500.00 | 91.07 | 269.83 | 2,303.92 | -156.54 | -2,186.95 | 2,187.41 | 0.00 | 0.00 | 0.00 |
| 4,600.00 | 91.07 | 269.83 | 2,302.06 | -156.84 | -2,286.94 | 2.287.39 | 0.00 | 0.00 | 0.00 |
| 4,700.00 | 91.07 | 269.83 | 2,300.19 | -157.13 | -2,386.92 | 2,387.37 | 0.00 | 0.00 | 0.00 |
| 4,800.00 | 91.07 | 269.83 | 2,298.33 | -157.43 | -2,486.90 | 2,487.36 | 0.00 | 0.00 | 0.00 |
| 4,900.00 | 91.07 | 269.83 | 2,296.47 | -157.72 | -2,586.88 | 2,587.34 | 0.00 | 0.00 | 0.00 |
| 5,000.00 | 91.07 | 269.83 | 2,294.61 | -158.02 | -2,686.87 | 2,687.32 | 0.00 | 0.00 | 0.00 |
| 5,100.00 | 91.07 | 269.83 | 2,292.75 | -158.32 | -2,786.85 | 2,787.31 | 0.00 | 0.00 | 0.00 |
| 5,200.00 | 91.07 | 269.83 | 2,290.89 | -158.61 | -2,886.83 | 2,887.29 | 0.00 | 0.00 | 0.00 |
| 5,300.00 | 91.07 | 269.83 | 2,289.03 | -158.91 | -2,986.81 | 2,987.27 | 0.00 | 0.00 | 0.00 |
| 5,400.00 | 91.07 | 269.83 | 2,287.17 | -159.20 | -3,086.79 | 3,087.25 | 0.00 | 0.00 | 0.00 |
| 5,500.00 | 91.07 | 269.83 | 2,285.31 | -159.50 | -3,186.78 | 3,187.24 | 0.00 | 0.00 | 0.00 |
| 5,600.00 | 91.07 | 269.83 | 2,283.45 | -159.80 | -3,286.76 | 3,287.22 | 0.00 | 0.00 | 0.00 |
| 5,700.00 | 91.07 | 269.83 | 2,281.59 | -160.09 | -3,386.74 | 3,387.20 | 0.00 | 0.00 | 0.00 |
| 5,800.00 | 91.07 | 269.83 | 2,279.73 | -160.39 | -3,486.72 | 3,487.18 | 0.00 | 0.00 | 0.00 |
| 5,900.00 | 91.07 | 269.83 | 2,277.87 | -160.68 | -3,586.71 | 3,587.17 | 0.00 | 0.00 | 0.00 |
| 6,000.00 | 91.07 | 269.83 | 2,276.01 | -160.98 | -3,686.69 | 3,687.17 | 0.00 | 0.00 | 0.00 |
| 6,100.00 | 91.07 | 269.83 | 2,274.15 | -161.28 | -3,786.67 | 3,787.13 | 0.00 | 0.00 | 0.00 |
| 6,200.00 | 91.07 | 269.83 | 2,272.29 | -161.57 | -3,886.65 | 3,887.11 | 0.00 | 0.00 | 0.00 |
| 6,300.00 | 91.07 | 269.83 | 2,270.43 | -161.87 | -3,986.63 | 3,987.10 | 0.00 | 0.00 | 0.00 |
| 6,400.00 | 91.07 | 269.83 | 2,268.57 | -162.16 | -4,086.62 | 4,087.08 | 0.00 | 0.00 | 0.00 |
| 6,500.00 | 91.07 | 269.83 | 2,266.71 | -162.46 | -4,186.60 | 4,187.06 | 0.00 | 0.00 | 0.00 |
| 6,600.00 | 91.07 | 269.83 | 2,264.84 | -162.76 | -4,286.58 | 4,287.05 | 0.00 | 0.00 | 0.00 |
| 6,700.00 | 91.07 | 269.83 | 2,262.98 | -163.05 | -4,386.56 | 4,387.03 | 0.00 | 0.00 | 0.00 |
| 6,800.00 | 91.07 | 269.83 | 2,261.12 | -163.35 | -4,486.55 | 4,487.01 | 0.00 | 0.00 | 0.00 |
| 6,900.00 | 91.07 | 269.83 | 2,259.26 | -163.64 | -4,586.53 | 4,586.99 | 0.00 | 0.00 | 0.00 |
| 7,000.00 | 91.07 | 269.83 | 2,257.40 | -163.94 | -4,686.51 | 4,686.98 | 0.00 | 0.00 | 0.00 |
| 7,100.00 | 91.07 | 269.83 | 2,255.54 | -164.24 | -4,786.49 | 4,786.96 | 0.00 | 0.00 | 0.00 |
| 7,200.00 | 91.07 | 269.83 | 2,253.68 | -164.53 | -4,886.48 | 4,886.94 | 0.00 | 0.00 | 0.00 |
| 7,300.00 | 91.07 | 269.83 | 2,251.82 | -164.83 | -4,986.46 | 4,986.92 | 0.00 | 0.00 | 0.00 |
| 7,400.00 | 91.07 | 269.83 | 2,249.96 | -165.12 | -5,086.44 | 5,086.91 | 0.00 | 0.00 | 0.00 |
| 7,500.00 | 91.07 | 269.83 | 2,249.90 | -165.12 | -5,066.44 -5,186.42 | 5,186.89 | 0.00 | 0.00 | 0.00 |
| 7,600.00 | 91.07 | 269.83 | 2,246.24 | -165.72 | -5,286.40 | 5,286.87 | 0.00 | 0.00 | 0.00 |
| 7,700.00 | 91.07 | 269.83 | 2,244.38 | -166.01 | -5,386.39 | 5,386.86 | 0.00 | 0.00 | 0.00 |

Database: PRIME_EDM

Company: SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID

Site: Greasewood 5 State Com

Well: Greasewood 5 State Com 104H (North Slot2)

Wellbore: 5-104H
Design: Plan 1r1

Project:

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Greasewood 5 State Com 104H (North

Slot2

3568+20 @ 3588.00usft (planning) 3568+20 @ 3588.00usft (planning)

Grid

Minimum Curvature

| 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) |
| 7,800.00 | 91.07 | 269.83 | 2,242.52 | -166.31 | -5,486.37 | 5,486.84 | 0.00 | 0.00 | 0.00 |
| 7,881.61 TD at 7881.6 ² | 91.07 1 | 269.83 | 2,241.00 | -166.55 | -5,567.96 | 5,568.43 | 0.00 | 0.00 | 0.00 |

| 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 104 S - plan hits target cer - Point | | 360.00 | 0.00 | 0.00 | 0.00 | 616,915.56 | 490,837.43 | 32.6958362 | -104.4974948 |
| GRSWD 5 ST CM 104 N - plan hits target cer - Point | | 360.00 | 1,662.67 | -110.07 | 245.63 | 616,805.49 | 491,083.06 | 32.6955347 | -104.4966958 |
| GRSWD 5 ST CM 104 F - plan hits target cer - Point | | 360.00 | 2,241.00 | -166.55 | -5,567.96 | 616,749.01 | 485,269.47 | 32.6953534 | -104.5155937 |
| GRSWD 5 ST CM 104 F - plan misses target - Point | | 0.00 Busft at 2779 | 2,336.00 0.23usft MD (2 | -151.48 2335.93 TVD, | -466.49 -151.45 N, -4 | 616,764.08 66.49 E) | 490,370.94 | 32.6954179 | -104.4990105 |

| Plan Annotations | | | | |
|------------------|----------|------------|-----------|----------------------------------|
| Measured | Vertical | Local Coor | dinates | |
| Depth | Depth | +N/-S | +E/-W | |
| (usft) | (usft) | (usft) | (usft) | Comment |
| 507.00 | 507.00 | 0.00 | 0.00 | Start Build 3.00 |
| 1,157.00 | 1,144.52 | -41.74 | 101.28 | Start 377.42 hold at 1157.00 MD |
| 1,534.42 | 1,500.30 | -89.75 | 217.76 | Start DLS 10.00 TFO 160.15 |
| 2,316.49 | 2,172.12 | -150.19 | -41.82 | Start 200.00 hold at 2316.49 MD |
| 2,516.49 | 2,272.12 | -150.70 | -215.02 | Start DLS 12.00 TFO 0.00 |
| 2,775.37 | 2,336.00 | -151.44 | -462.63 | Start 5106.23 hold at 2775.37 MD |
| 7,881.61 | 2,241.00 | -166.55 | -5,567.96 | TD at 7881.61 |

SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID Greasewood 5 State Com Greasewood 5 State Com 104H (North Slot2)

5-104H Plan 1r1

Anticollision Report

18 August, 2023

Well Greasewood 5 State Com 104H (North

Anticollision Report

Company: SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID

Greasewood 5 State Com Reference Site:

0.00 usft Site Error:

Project:

Filter type:

Reference Well: Greasewood 5 State Com 104H (North Slot2)

Well Error: 0.00 usft Reference Wellbore 5-104H Plan 1r1 Reference Design:

TVD Reference:

3568+20 @ 3588.00usft (planning) MD Reference: 3568+20 @ 3588.00usft (planning)

Local Co-ordinate Reference:

North Reference:

Minimum Curvature **Survey Calculation Method:** Output errors are at 2.00 sigma Database: PRIME_EDM Reference Datum

Offset TVD Reference:

Reference Plan 1r1

NO GLOBAL FILTER: Using user defined selection & filtering criteria

ISCWSA Interpolation Method: Stations Error Model: Unlimited Closest Approach 3D Depth Range: Scan Method:

Maximum ellipse separation of 0.00 usft Pedal Curve Results Limited by: **Error Surface:** Not applied Warning Levels Evaluated at: 2.00 Sigma Casing Method:

Survey Tool Program 08/18/23 Date

> То From (usft)

(usft) Survey (Wellbore) **Tool Name** Description

MWD 0.00 7,881.61 Plan 1r1 (5-104H) OWSG MWD - Standard

| Summary | | | | | | |
|--|--------------------------------|-----------------------------|-----------------------------|----------------------------|----------------|------------------|
| Site Name | Reference Measured Depth | Offset Measured Depth | Dista Between Centres | nce Between Ellipses | Separatio n | Warning |
| Offset Well - Wellbore - Design | (usft) | (usft) | (usft) | (usft) | | |
| Greasewood 5 State Com | | | | | | |
| Greasewood 5 State Com 105H (South Slot2) - 5-105H - | 5,212.38 | 5,229.48 | 986.03 | 836.28 | 6.584 CC | |
| Greasewood 5 State Com 105H (South Slot2) - 5-105H - | 7,881.61 | 7,879.60 | 986.30 | 707.34 | 3.536 ES | |
| Greasewood 5 State Com 105H (South Slot2) - 5-105H - | 7,882.38 | 7,879.60 | 986.31 | 707.34 | 3.536 SF | |
| Greasewood 5 State Com 153H (North Slot1) - 5-153H - | 414.95 | 415.95 | 20.01 | 16.73 | 6.110 CC | |
| Greasewood 5 State Com 153H (North Slot1) - 5-153H - | 507.00 | 507.95 | 20.02 | 16.01 | 5.001 ES | |
| Greasewood 5 State Com 153H (North Slot1) - 5-153H - | 7,882.38 | 8,199.03 | 569.01 | 322.96 | 2.313 SF | |
| Greasewood 5 State Com 154H (South Slot3) - 5-154H - | | | | | Ou | t of range |
| Greasewood 5 State Com 201H (South Slot1) - 5-201H - | 2,168.38 | 2,354.67 | 614.29 | 591.78 | 27.287 CC | |
| Greasewood 5 State Com 201H (South Slot1) - 5-201H - | 7,881.61 | 8,419.34 | 689.53 | 477.27 | 3.249 ES | , SF |
| Greasewood BD State 1 (Offset) PA - GW BD ST 1 - GW | | | | | Ou | t of range |
| Greasewood BD State 10 (Offset) Active - GW BD ST 1 | 5,689.85 | 2,308.85 | 159.10 | 21.78 | 1.159 Lev | el 2, CC, ES, SF |
| Greasewood BD State 8 (Offset) PA - GW BD ST 8 - GW | | | | | Ou | t of range |
| Greasewood BD State 9 (Offset) PA - GW BD ST 9 - GW | 6,988.98 | 2,284.47 | 130.46 | -41.52 | 0.759 Lev | el 1, CC, ES, SF |

| Offset De | sign | Grease | wood 5 St | ate Com - (| Greasewo | od 5 State | Com 105H (So | uth Slot2) - | 5-105H - I | Plan 1r1 | | | Offset Site Error: | 0.00 usft |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------|------------------|-----------------------------|-----------------------------------|-----------------|------------------------------|-------------------------------|---------------------------------|----------------------|--------------------|-----------|
| Survey Prog Refer | | WD Offse | et | Semi Major | Axis | | · | ĺ | Dista | ınce | | | Offset Well Error: | 0.00 usft |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbor +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor | Warning | |
| 2,000.00 | 1,948.64 | 1,999.91 | 1,960.42 | 12.82 | 12.58 | -84.08 | -1,135.77 | 197.86 | 997.68 | 978.52 | 19.16 | 52.075 | | |
| 2,050.00 | 1,991.37 | 2,051.57 | 2,004.54 | 13.13 | 12.89 | -86.20 | -1,135.78 | 171.02 | 994.43 | 975.09 | 19.34 | 51.417 | | |
| 2,100.00 | 2,031.73 | 2,103.24 | 2,046.07 | 13.41 | 13.17 | -87.78 | -1,135.82 | 140.31 | 991.69 | 972.10 | 19.59 | 50.627 | | |
| 2,150.00 | 2,069.42 | 2,154.89 | 2,084.65 | 13.67 | 13.41 | -88.96 | -1,135.88 | 105.99 | 989.49 | 969.56 | 19.93 | 49.644 | | |
| 2,200.00 | 2,104.14 | 2,206.50 | 2,119.96 | 13.91 | 13.61 | -89.84 | -1,135.96 | 68.37 | 987.85 | 967.44 | 20.40 | 48.418 | | |
| 2,250.00 | 2,135.64 | 2,258.04 | 2,151.70 | 14.14 | 13.78 | -90.49 | -1,136.06 | 27.79 | 986.77 | 965.74 | 21.03 | 46.930 | | |
| 2,300.00 | 2,163.67 | 2,309.50 | 2,179.63 | 14.35 | 13.92 | -90.94 | -1,136.18 | -15.42 | 986.27 | 964.45 | 21.82 | 45.206 | | |
| 2,316.49 | 2,172.12 | 2,326.08 | 2,187.92 | 14.40 | 13.93 | -91.06 | -1,136.22 | -29.77 | 986.23 | 964.10 | 22.13 | 44.568 | | |
| 2,400.00 | 2,213.87 | 2,409.59 | 2,229.68 | 14.68 | 14.02 | -91.06 | -1,136.44 | -102.09 | 986.23 | 962.36 | 23.88 | 41.306 | | |
| 2,500.00 | 2,263.87 | 2,509.59 | 2,279.68 | 15.18 | 14.20 | -91.06 | -1,136.69 | -188.69 | 986.23 | 959.85 | 26.39 | 37.376 | | |
| 2,516.49 | 2,272.12 | 2,526.61 | 2,288.01 | 15.29 | 14.26 | -91.05 | -1,136.74 | -203.53 | 986.23 | 959.39 | 26.84 | 36.749 | | |
| 2,525.00 | 2,276.31 | 2,535.45 | 2,292.13 | 15.35 | 14.30 | -91.03 | -1,136.76 | -211.35 | 986.22 | 959.15 | 27.08 | 36.422 | | |
| 2,550.00 | 2,287.84 | 2,561.38 | 2,303.37 | 15.54 | 14.44 | -90.99 | -1,136.83 | -234.72 | 986.21 | 958.40 | 27.81 | 35.465 | | |

TVD Reference:

MD Reference:

Company: SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID Project:

Greasewood 5 State Com Reference Site:

0.00 usft Site Error:

Reference Well: Greasewood 5 State Com 104H (North Slot2)

Well Error: 0.00 usft 5-104H Reference Wellbore Plan 1r1 Reference Design:

Local Co-ordinate Reference:

Well Greasewood 5 State Com 104H (North

Slot2)

3568+20 @ 3588.00usft (planning) 3568+20 @ 3588.00usft (planning)

North Reference: **Survey Calculation Method:** Minimum Curvature 2.00 sigma

Output errors are at Database:

Offset TVD Reference:

PRIME_EDM Reference Datum

| urvey Prog | ram: 0-M | WD | | | | | | | | | | | Offset Well Error: | 0.00 us |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------|------------------|-----------------------------|-----------------------------------|------------------------|------------------------------|-------------------------------|---------------------------------|----------------------|--------------------|---------|
| | rence | Offse | | Semi Major | | III ale atala | 0#41#-111 | 0 | Dista | | | 0 | | |
| leasured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbor +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor | Warning | |
| 2,575.00 | 2,298.20 | 2,587.27 | 2,313.32 | 15.76 | 14.64 | -90.94 | -1,136.90 | -258.62 | 986.20 | 957.62 | 28.58 | 34.507 | | |
| 2,600.00 | 2,307.35 | 2,613.11 | 2,321.93 | 16.01 | 14.92 | -90.89 | -1,136.97 | -282.98 | 986.18 | 956.79 | 29.39 | 33.556 | | |
| 2,625.00 | 2,315.27 | 2,638.90 | 2,329.21 | 16.28 | 15.27 | -90.84 | -1,137.05 | -307.72 | 986.17 | 955.94 | 30.23 | 32.618 | | |
| 2,650.00 | 2,321.95 | 2,664.64 | 2,335.12 | 16.58 | 15.67 | -90.78 | -1,137.12 | -332.76 | 986.16 | 955.05 | 31.11 | 31.699 | | |
| 2,675.00 | 2,327.35 | 2,690.32 | 2,339.67 | 16.91 | 16.09 | -90.72 | -1,137.19 | -358.03 | 986.14 | 954.13 | 32.01 | 30.805 | | |
| 2,700.00 | 2,331.46 | 2,715.94 | 2,342.85 | 17.27 | 16.55 | -90.66 | -1,137.27 | -383.45 | 986.13 | 953.19 | 32.94 | 29.939 | | |
| 2,725.00 | 2,334.28 | 2,741.50 | 2,344.66 | 17.65 | 17.01 | -90.60 | -1,137.34 | -408.95 | 986.12 | 952.24 | 33.88 | 29.105 | | |
| 2,750.00 | 2,335.80 | 2,767.01 | 2,345.11 | 18.04 | 17.49 | -90.54 | -1,137.42 | -434.45 | 986.11 | 951.27 | 34.84 | 28.305 | | |
| 2,775.37 | 2,336.00 | 2,792.50 | 2,344.56 | 18.46 | 17.98 | -90.50 | -1,137.49 | -459.93 | 986.10 | 950.28 | 35.82 | 27.532 | | |
| 2,800.00 | 2,335.54 | 2,817.12 | 2,343.99 | 18.88 | 18.46 | -90.49 | -1,137.57 | -484.55 | 986.10 | 949.31 | 36.79 | 26.807 | | |
| 2,900.00 | 2,333.68 | 2,917.12 | 2,341.66 | 20.73 | 20.49 | -90.46 | -1,137.86 | -584.52 | 986.09 | 945.25 | 40.84 | 24.145 | | |
| 3,000.00 | 2,331.82 | 3,017.12 | 2,339.33 | 22.73 | 22.62 | -90.44 | -1,138.16 | -684.49 | 986.09 | 941.01 | 45.08 | 21.876 | | |
| 3,100.00 | 2,329.96 | 3,117.12 | 2,336.99 | 24.84 | 24.81 | -90.41 | -1,138.45 | -784.46 | 986.08 | 936.65 | 49.44 | 19.946 | | |
| 3,200.00 | 2,328.10 | 3,217.12 | 2,334.66 | 27.01 | 27.05 | -90.38 | -1,138.75 | -884.43 | 986.08 | 932.19 | 53.89 | 18.297 | | |
| 3,300.00 | 2,326.24 | 3,317.12 | 2,332.33 | 29.23 | 29.32 | -90.35 | -1,139.04 | -984.40 | 986.07 | 927.65 | 58.42 | 16.879 | | |
| 3,400.00 | 2,324.38 | 3,417.12 | 2,330.00 | 31.50 | 31.62 | -90.33 | -1,139.33 | -1,084.38 | 986.07 | 923.06 | 63.01 | 15.650 | | |
| 3,500.00 | 2,322.52 | 3,517.12 | 2,327.67 | 33.79 | 33.95 | -90.30 | -1,139.63 | -1,184.35 | 986.07 | 918.43 | 67.64 | 14.578 | | |
| 3,600.00 | 2,320.66 | 3,617.11 | 2,325.34 | 36.10 | 36.29 | -90.27 | -1,139.92 | -1,284.32 | 986.06 | 913.75 | 72.31 | 13.637 | | |
| 3,700.00 | 2,318.80 | 3,717.11 | 2,323.01 | 38.44 | 38.64 | -90.24 | -1,140.22 | -1,384.29 | 986.06 | 909.05 | 77.01 | 12.804 | | |
| 3,800.00 | 2,316.94 | 3,817.11 | 2,320.68 | 40.78 | 41.01 | -90.22 | -1,140.51 | -1,484.26 | 986.06 | 904.32 | 81.73 | 12.064 | | |
| 3,900.00 | 2,315.08 | 3,917.11 | 2,318.35 | 43.15 | 43.39 | -90.19 | -1,140.81 | -1,584.23 | 986.05 | 899.57 | 86.48 | 11.402 | | |
| 4,000.00 | 2,313.22 | 4,017.11 | 2,316.02 | 45.52 | 45.77 | -90.16 | -1,141.10 | -1,684.20 | 986.05 | 894.81 | 91.24 | 10.807 | | |
| 4,100.00 | 2,311.36 | 4,117.11 | 2,313.69 | 47.90 | 48.17 | -90.14 | -1,141.40 | -1,784.17 | 986.05 | 890.03 | 96.02 | 10.269 | | |
| 4,200.00 | 2,309.50 | 4,217.11 | 2,311.36 | 50.29 | 50.56 | -90.11 | -1,141.69 | -1,884.15 | 986.04 | 885.23 | 100.81 | 9.781 | | |
| 4,300.00 | 2,307.64 | 4,317.11 | 2,309.03 | 52.68 | 52.97 | -90.08 | -1,141.99 | -1,984.12 | 986.04 | 880.43 | 105.61 | 9.336 | | |
| 4,400.00 | 2,305.78 | 4,417.11 | 2,306.70 | 55.08 | 55.38 | -90.05 | -1,142.28 | -2,084.09 | 986.04 | 875.62 | 110.42 | 8.930 | | |
| 4 500 00 | 0.000.00 | 4 547 44 | 0.004.07 | 57.40 | F7 70 | 00.00 | 4 4 4 0 5 7 | 0.404.00 | 000.04 | 070.70 | 445.04 | 0.550 | | |
| 4,500.00 | 2,303.92 2,302.06 | 4,517.11 4,617.10 | 2,304.37 2,302.04 | 57.49 59.90 | 57.79 | -90.03 | -1,142.57 -1,142.87 | -2,184.06 | 986.04 | 870.79 865.97 | 115.24 120.07 | 8.556 | | |
| 4,600.00 | | | | | 60.20 | -90.00 | | -2,284.03 | 986.04 | | | 8.212 | | |
| 4,700.00 | 2,300.19 | 4,717.10 | 2,299.71 | 62.31 | 62.62 | -89.97 | -1,143.16 | -2,384.00 | 986.04 | 861.13 | 124.90 | 7.894 | | |
| 4,800.00 | 2,298.33 | 4,817.10 | 2,297.37 | 64.73 | 65.04 | -89.94 | -1,143.46 | -2,483.97 | 986.03 | 856.29 | 129.74 | 7.600 | | |
| 4,900.00 | 2,296.47 | 4,917.10 | 2,295.04 | 67.14 | 67.47 | -89.92 | -1,143.75 | -2,583.94 | 986.03 | 851.44 | 134.59 | 7.326 | | |
| 5,000.00 | 2,294.61 | 5,017.10 | 2,292.71 | 69.57 | 69.89 | -89.89 | -1,144.05 | -2,683.92 | 986.03 | 846.59 | 139.44 | 7.071 | | |
| 5,100.00 | 2,292.75 | 5,117.10 | 2,290.38 | 71.99 | 72.32 | -89.86 | -1,144.34 | -2,783.89 | 986.03 | 841.74 | 144.29 | 6.834 | | |
| 5,200.00 | 2,290.89 | 5,217.10 | 2,288.05 | 74.42 | 74.75 | -89.83 | -1,144.64 | -2,883.86 | 986.03 | 836.88 | 149.15 | 6.611 | | |
| 5,212.38 5,300.00 | 2,290.66 2,289.03 | 5,229.48 5,317.10 | 2,287.76 2,285.72 | 74.72 76.85 | 75.05 77.19 | -89.83 -89.81 | -1,144.67 -1,144.93 | -2,896.24 -2,983.83 | 986.03 986.03 | 836.28 832.02 | 149.75 154.01 | 6.584 CC 6.402 | ; | |
| 5,500.00 | ۷,205.03 | 0,017.10 | 2,200.12 | 70.00 | 11.19 | -03.01 | -1,144.33 | -2,303.03 | 300.03 | 032.02 | 104.UT | 0.402 | | |
| 5,400.00 | 2,287.17 | 5,417.10 | 2,283.39 | 79.28 | 79.62 | -89.78 | -1,145.23 | -3,083.80 | 986.03 | 827.16 | 158.87 | 6.206 | | |
| 5,500.00 | 2,285.31 | 5,517.09 | 2,281.06 | 81.71 | 82.05 | -89.75 | -1,145.52 | -3,183.77 | 986.03 | 822.29 | 163.74 | 6.022 | | |
| 5,600.00 | 2,283.45 | 5,617.09 | 2,278.73 | 84.14 | 84.49 | -89.73 | -1,145.82 | -3,283.74 | 986.03 | 817.42 | 168.61 | 5.848 | | |
| 5,700.00 | 2,281.59 | 5,717.09 | 2,276.40 | 86.57 | 86.93 | -89.70 | -1,146.11 | -3,383.71 | 986.04 | 812.55 | 173.48 | 5.684 | | |
| 5,800.00 | 2,279.73 | 5,817.09 | 2,274.07 | 89.01 | 89.36 | -89.67 | -1,146.40 | -3,483.69 | 986.04 | 807.68 | 178.36 | 5.528 | | |
| 5,900.00 | 2,277.87 | 5,917.09 | 2,271.74 | 91.45 | 91.80 | -89.64 | -1,146.70 | -3,583.66 | 986.04 | 802.81 | 183.23 | 5.381 | | |
| 6,000.00 | | 6,017.09 | 2,269.41 | 93.88 | 94.24 | -89.62 | -1,146.99 | -3,683.63 | 986.04 | 797.93 | 188.11 | 5.242 | | |
| 6,100.00 | 2,274.15 | 6,117.09 | 2,267.08 | 96.32 | 96.68 | -89.59 | -1,147.29 | -3,783.60 | 986.04 | 793.05 | 192.99 | 5.109 | | |
| 6,200.00 | 2,272.29 | 6,217.09 | 2,264.75 | 98.76 | 99.12 | -89.56 | -1,147.58 | -3,883.57 | 986.04 | 788.18 | 197.87 | 4.983 | | |
| 6,300.00 | 2,270.43 | 6,317.09 | 2,262.42 | 101.20 | 101.57 | -89.53 | -1,147.88 | -3,983.54 | 986.05 | 783.30 | 202.75 | 4.863 | | |
| 6,400.00 | 2,268.57 | 6,417.08 | 2,260.09 | 103.64 | 104.01 | -89.51 | -1,148.17 | -4,083.51 | 986.05 | 778.42 | 207.63 | 4.749 | | |
| 6,500.00 | 2,266.71 | 6,517.08 | 2,257.75 | 106.09 | 106.45 | -89.48 | -1,148.47 | -4,183.49 | 986.05 | 773.53 | 212.52 | 4.640 | | |
| 6,600.00 | 2,264.84 | 6,617.08 | 2,255.42 | 108.53 | 108.90 | -89.45 | -1,148.76 | -4,283.46 | 986.05 | 768.65 | 217.40 | 4.536 | | |
| 6,700.00 | 2,262.98 | 6,717.08 | 2,253.09 | 110.97 | 111.34 | -89.43 | -1,149.06 | -4,383.43 | 986.06 | 763.77 | 222.29 | 4.436 | | |
| 6,800.00 | 2,261.12 | 6,817.08 | 2,250.76 | 113.42 | 113.79 | -89.40 | -1,149.35 | -4,483.40 | 986.06 | 758.88 | 227.18 | 4.341 | | |

TVD Reference:

MD Reference:

North Reference:

Company: SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID Project:

Greasewood 5 State Com Reference Site:

0.00 usft Site Error:

Reference Well: Greasewood 5 State Com 104H (North Slot2)

Well Error: 0.00 usft 5-104H Reference Wellbore Plan 1r1 Reference Design:

Local Co-ordinate Reference:

Well Greasewood 5 State Com 104H (North

Slot2)

3568+20 @ 3588.00usft (planning) 3568+20 @ 3588.00usft (planning)

Minimum Curvature

Survey Calculation Method: Output errors are at

2.00 sigma Database:

Offset TVD Reference:

PRIME_EDM Reference Datum

| Offset Des | sign | Grease | wood 5 St | ate Com - (| Greasewo | od 5 State | Com 105H (So | uth Slot2) - | 5-105H - F | Plan 1r1 | | | Offset Site Error: | 0.00 usft |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------|------------------|-----------------------------|-----------------------------------|-----------------|------------------------------|-------------------------------|---------------------------------|----------------------|--------------------|-----------|
| Survey Progr | ram: 0-M | | | | | | | | | | | | Offset Well Error: | 0.00 usft |
| Refere | ence | Offse | et | Semi Major | Axis | | | | Dista | ince | | | | |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbor +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor | Warning | |
| 6,900.00 | 2,259.26 | 6,917.08 | 2,248.43 | 115.86 | 116.23 | -89.37 | -1,149.64 | -4,583.37 | 986.06 | 754.00 | 232.06 | 4.249 | | |
| 7,000.00 | 2,257.40 | 7,017.08 | 2,246.10 | 118.30 | 118.68 | -89.34 | -1,149.94 | -4,683.34 | 986.07 | 749.12 | 236.95 | 4.161 | | |
| 7,100.00 | 2,255.54 | 7,117.08 | 2,243.77 | 120.75 | 121.12 | -89.32 | -1,150.23 | -4,783.31 | 986.07 | 744.23 | 241.84 | 4.077 | | |
| 7,200.00 | 2,253.68 | 7,217.08 | 2,241.44 | 123.19 | 123.57 | -89.29 | -1,150.53 | -4,883.28 | 986.08 | 739.34 | 246.73 | 3.997 | | |
| 7,300.00 | 2,251.82 | 7,317.07 | 2,239.11 | 125.64 | 126.02 | -89.26 | -1,150.82 | -4,983.26 | 986.08 | 734.46 | 251.62 | 3.919 | | |
| 7,400.00 | 2,249.96 | 7,417.07 | 2,236.78 | 128.09 | 128.46 | -89.23 | -1,151.12 | -5,083.23 | 986.09 | 729.57 | 256.52 | 3.844 | | |
| 7,500.00 | 2,248.10 | 7,517.07 | 2,234.45 | 130.53 | 130.91 | -89.21 | -1,151.41 | -5,183.20 | 986.09 | 724.68 | 261.41 | 3.772 | | |
| 7,600.00 | 2,246.24 | 7,617.07 | 2,232.12 | 132.98 | 133.36 | -89.18 | -1,151.71 | -5,283.17 | 986.10 | 719.80 | 266.30 | 3.703 | | |
| 7,700.00 | 2,244.38 | 7,717.07 | 2,229.79 | 135.43 | 135.81 | -89.15 | -1,152.00 | -5,383.14 | 986.10 | 714.91 | 271.19 | 3.636 | | |
| 7,800.00 | 2,242.52 | 7,817.07 | 2,227.46 | 137.88 | 138.12 | -89.12 | -1,152.30 | -5,483.11 | 986.11 | 710.16 | 275.95 | 3.573 | | |
| 7,800.62 | 2,242.51 | 7,817.69 | 2,227.44 | 137.89 | 138.13 | -89.12 | -1,152.30 | -5,483.74 | 986.11 | 710.13 | 275.98 | 3.573 | | |
| 7,881.61 | 2,241.00 | 7,879.60 | 2,226.00 | 139.87 | 139.15 | -89.11 | -1,152.48 | -5,545.63 | 986.30 | 707.34 | 278.96 | 3.536 ES | 3 | |
| 7,882.38 | 2,240.99 | 7,879.60 | 2,226.00 | 139.89 | 139.15 | -89.11 | -1,152.48 | -5,545.63 | 986.31 | 707.34 | 278.97 | 3.536 SF | = | |

TVD Reference:

MD Reference:

North Reference:

Offset TVD Reference:

Company: SILVERBACK EXPLORATION

Project: EDDY COUNTY, NM (NAD83) NMEZ GRID

Reference Site: Greasewood 5 State Com

Site Error: 0.00 usft

Reference Well: Greasewood 5 State Com 104H (North Slot2)

Well Error: 0.00 usft
Reference Wellbore 5-104H
Reference Design: Plan 1r1

Local Co-ordinate Reference:

Well Greasewood 5 State Com 104H (North

Slot2)

Reference Datum

3568+20 @ 3588.00usft (planning) 3568+20 @ 3588.00usft (planning)

Grid

Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma

Output errors are at 2.00 sigma

Database: PRIME_EDM

0.00 usft Offset Site Error: Offset Design Greasewood 5 State Com - Greasewood 5 State Com 153H (North Slot1) - 5-153H - Plan 1r1 0-MWD Survey Program: Offset Well Error: 0.00 usft Reference Offset Semi Major Axis Vertical Offset Wellbore Centre Measured Vertical Measured Reference Offset Highside Between Between Minimum Separation Depth Depth Depth Toolface Centres Separation Depth +N/-S +E/-W Factor (usft) (usft) (usft) (usft) (usft) (usft) (°) (usft) (usft) (usft) (usft) (usft) 0.00 0.00 0.00 0.00 -1.37 20.00 -0.48 20.01 0.00 1.00 100.00 100.00 101.00 100.00 0.31 0.31 -1.37 20.00 -0.48 20.01 19.53 0.48 41.889 200.00 200.00 18.50 1.51 13.260 200.00 201.00 0.95 0.96 -1.37 20.00 -0.48 20.01 300.00 300.00 301.00 300.00 1 46 1 46 -1 37 20.00 -0 48 20.01 17 64 2 37 8 445 400.00 400.00 401.00 400.00 1.89 1.90 -1.37 20.00 -0 48 20.01 16.85 3.16 6 334 414.95 414.95 415.95 414.95 1.96 1.96 -1.37 20.00 -0.48 20.01 16.73 3.27 6.110 CC 507.00 507.00 507.95 506.95 2.36 2.39 -1.34 20.01 -0.47 20.02 16.01 4.00 5.001 ES 600.00 599.96 600.00 598.95 2.82 3.36 -113.72 21.69 1.52 22.58 17.72 4.86 4.643 700.00 699.67 699.10 697.74 4.45 5.01 26.69 7.44 30.51 24.02 6.49 4.702 -114.91 800.00 798.85 797.08 794.89 5.82 6.24 -116.16 34.88 17.13 43.76 35.90 7.86 5.564 900.00 897.23 893.81 890.02 6.93 7.26 -117.01 46.11 30.42 9.09 6.850 62.26 53.17 1,000.00 994.54 988.91 982.59 7.89 8.14 -117.46 60.17 47.06 85.89 75.67 10.23 8.398 1.100.00 1.090.52 1.082.07 1.072.11 8.75 8.92 -117.61 76.81 66.75 114.49 103.18 11.32 10.115 1,144.52 1,157.00 1.134.20 1.121.61 9.26 -117.58 87.34 79.21 132.95 121.16 11.80 11.272 8.97 1,200.00 1,185.06 1,173.09 1,158.24 9.06 9.48 -117.77 95.77 89.18 147.67 135.56 12.11 12.194 1.300.00 1.279.32 1.266.52 1.245.81 9.24 9.67 -117.74 116.78 114.04 182.58 169.71 12.87 14.185 1,400.00 1,373.59 1,360.22 1,333.64 9.46 9.85 -117.71 137.86 138.99 217.49 203.79 13.70 15.871 1,500.00 1,467.85 1,453.93 1,421.47 10.05 -117.70 158.95 163.94 252.41 237.82 17.308 9.68 14.58 1.534.42 1.500.30 1.486.18 1.451.70 9.76 10.12 -117.69 166.20 172.53 264.43 249.54 14.88 17.767 1,515.05 1.550.00 1.500.79 1.465.40 9 79 10 16 -119 83 169 49 176.42 269 84 254 82 15.02 17 969 1,600.00 1,563.16 1,547.68 1,509.34 10.04 10.26 -128.43 180.04 188.90 286.82 271.25 15.57 18.423 1.650.00 1.612.16 1.594.30 1.553.04 10.41 10.37 -143.28 190.53 201.31 303.24 286.95 16.29 18.616 1,640.31 1,596.16 200.88 1,700.00 1,661.67 10.56 10.49 -173.26 213.56 319.28 302.40 16.88 18.917 1,750.00 1,711.33 1,685.35 1.638.38 10.75 10.60 146.13 211.01 225.55 335.18 318.01 17.17 19.516 220.85 1.800.00 1.760.76 1.729.07 1.679.36 11.26 10.71 121.88 237.19 351.31 333.77 17.54 20.031 1,850.00 1,809.56 1,771.16 1,718.80 11.73 10.82 111.09 230.32 248.40 368.04 350.23 17.81 20.666 1,857.39 1,811.28 239.34 385.75 367.74 18.01 21.415 1,900.00 1,756.41 12.13 10.92 106.02 259.08 1.950.00 1.903.86 1.854.88 1.797.45 12.49 11.05 103.88 249.11 270.07 404.68 386.42 18.27 22.152 1,845.63 2,000.00 1,948.64 1,905.11 12.82 11.36 103.37 260.10 279.01 424.22 405 57 18.65 22.741 2,050.00 1,991.37 1,959.72 1,898.77 13.13 11.84 103.65 271.61 283.82 443.98 424.82 19.17 23.166 283.61 443.83 2.100.00 2.031.73 2.019.77 1.957.58 13.41 12.37 104.47 283.15 463.61 19.79 23,432 23.396 296.01 2,150.00 2,069.42 2,086.56 2,022.67 13.67 12.87 105.72 275.09 482.68 462.05 20.63 2,200.00 2,104.14 2,161.64 2,094.39 308.54 500.66 479.20 23.337 13.91 13.14 107.30 256.97 21.45 2.250.00 2.135.64 2.246.66 2.172.25 14.14 13.34 109.14 320.69 225.25 516.89 494.98 21.91 23.593 2 300 00 2 163 67 2 343 09 2 254 17 14 35 13 64 111.14 331 50 175 77 530 59 508 49 22 10 24 004 2,316.49 2,172.12 2,377.53 2,281.36 14.40 13.77 111.80 334.55 154.86 534.40 512.25 22.15 24.131 2.400.00 2.213.87 2.571.92 2.408.81 14.68 14.46 115.14 343.07 9.57 544.81 522.15 22.67 24.037 2,464.53 2,500.00 2,263.87 2,682.86 15.18 14.85 115.16 342.85 -86.35 544.89 520.29 24.60 22.153 2,516.49 2,272.12 2,699.35 2,472.77 15.29 14.93 115.16 342.81 -100.64 544.89 519.95 24.94 21.851 2.525.00 2.276.31 2.707.85 2.477.03 342.79 544.92 25.13 21.685 15.35 14.98 115.17 -108.00519.79 2,550.00 2,287.84 2,732.83 2,489.51 15.54 15.14 115.22 342.72 -129.63 545.39 519.69 25.70 21.224 2,575.00 2,298.20 2,757.71 2,501.95 15.76 15.32 115.34 342.66 -151.18 546.42 520.15 26.27 20.803 2.600.00 2.307.35 2.782.43 2.514.31 16.01 15.52 115.51 342.60 -172.59548.02 521.19 26.83 20.426 2.532.05 2.625.00 2.315.27 2.819.16 16.28 15.87 115.93 342 50 -204.75 550.03 522 57 27.47 20.025 2,650.00 2,321.95 2,862.33 2,550.26 16.58 16.35 116.39 342.39 -243.88 551.87 523.66 28.21 19.563 2,675.00 2,327.35 2,906.17 2,565.69 16.91 16.91 116.80 342.26 -284.90 553.47 524.42 29.05 19.051 18.498 2,700.00 2,331.46 2,950.60 2,578.09 17.27 17.55 117.14 342.14 -327.55 554.80 524.81 29.99 2,725.00 2,334.28 2,995.51 2.587.22 342.01 555.86 17.925 17.65 18.25 117.40 -371.51 524.85 31.01 2.335.80 2.750.00 3.040.79 2.592.91 18.04 19.01 117.59 341.87 -416.42556.61 524.51 32.10 17.339 2 775 37 2 336 00 3 087 01 2 595 05 18 46 19 81 117 70 341 73 -462 58 557.06 523 79 33 27 16 743 2,800.00 2,335.54 3,116.72 2,594.75 18.88 20.35 117.73 341.64 -492.29 557.15 522.95 34.20 16.292

TVD Reference:

MD Reference:

Company: SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID Project:

Greasewood 5 State Com Reference Site:

0.00 usft Site Error:

Reference Well: Greasewood 5 State Com 104H (North Slot2)

Well Error: 0.00 usft 5-104H Reference Wellbore Plan 1r1 Reference Design:

Local Co-ordinate Reference:

Well Greasewood 5 State Com 104H (North

Slot2)

3568+20 @ 3588.00usft (planning) 3568+20 @ 3588.00usft (planning)

North Reference: **Survey Calculation Method:** Minimum Curvature

Output errors are at Database:

Offset TVD Reference:

2.00 sigma

PRIME_EDM Reference Datum

| Offset De | sign | Grease | wood 5 St | ate Com - 0 | Greasewo | ood 5 State 0 | Com 153H (No | orth Slot1) - | 5-153H - F | Plan 1r1 | | | Offset Site Error: | 0.00 usft |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------|------------------|-----------------------------|-----------------------------------|-----------------|------------------------------|-------------------------------|---------------------------------|----------------------|--------------------|-----------|
| Survey Prog | ram: 0-M | WD | | | | | , | , | | | | | Offset Well Error: | 0.00 usft |
| Refer | | Offse | | Semi Major | | III.ab.atata | 06434-111 | . 0 | Dista | | | 0 | | |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbor +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor | Warning | |
| 2,900.00 | 2,333.68 | 3,216.72 | 2,593.38 | 20.73 | 22.23 | 117.77 | 341.35 | -592.28 | 557.37 | 519.66 | 37.71 | 14.780 | | |
| 3,000.00 | 2,331.82 | 3,316.72 | 2,592.01 | 22.73 | 24.22 | 117.82 | 341.05 | -692.26 | 557.60 | 516.20 | 41.39 | 13.470 | | |
| 3,100.00 | 2,329.96 | 3,416.71 | 2,590.64 | 24.84 | 26.30 | 117.86 | 340.75 | -792.25 | 557.82 | 512.62 | 45.20 | 12.341 | | |
| 3,200.00 | 2,328.10 | 3,516.71 | 2,589.27 | 27.01 | 28.44 | 117.91 | 340.45 | -892.24 | 558.05 | 508.95 | 49.10 | 11.365 | | |
| 3,300.00 | 2,326.24 | 3,616.71 | 2,587.89 | 29.23 | 30.62 | 117.95 | 340.15 | -992.23 | 558.28 | 505.20 | 53.07 | 10.519 | | |
| 3,400.00 | 2,324.38 | 3,716.71 | 2,586.52 | 31.50 | 32.85 | 118.00 | 339.85 | -1,092.22 | 558.50 | 501.40 | 57.10 | 9.780 | | |
| 3,500.00 | 2,322.52 | 3,816.71 | 2,585.15 | 33.79 | 35.10 | 118.04 | 339.55 | -1,192.21 | 558.73 | 497.55 | 61.18 | 9.133 | | |
| 3,600.00 | 2,320.66 | 3,916.71 | 2,583.78 | 36.10 | 37.39 | 118.08 | 339.25 | -1,292.20 | 558.96 | 493.67 | 65.29 | 8.561 | | |
| 3,700.00 | 2,318.80 | 4,016.71 | 2,582.41 | 38.44 | 39.69 | 118.13 | 338.95 | -1,392.19 | 559.18 | 489.76 | 69.43 | 8.054 | | |
| 3,800.00 | 2,316.94 | 4,116.71 | 2,581.04 | 40.78 | 42.01 | 118.17 | 338.65 | -1,492.18 | 559.41 | 485.82 | 73.59 | 7.602 | | |
| 3,900.00 | 2,315.08 | 4,216.71 | 2,579.67 | 43.15 | 44.35 | 118.22 | 338.35 | -1,592.16 | 559.64 | 481.87 | 77.77 | 7.196 | | |
| 4,000.00 | 2,313.22 | 4,316.70 | 2,578.30 | 45.52 | 46.69 | 118.26 | 338.05 | -1,692.15 | 559.87 | 477.90 | 81.97 | 6.830 | | |
| 4,100.00 | 2,311.36 | 4,416.70 | 2,576.93 | 47.90 | 49.05 | 118.31 | 337.75 | -1,792.14 | 560.10 | 473.92 | 86.18 | 6.499 | | |
| 4,200.00 | 2,309.50 | 4,516.70 | 2,575.56 | 50.29 | 51.42 | 118.35 | 337.45 | -1,892.13 | 560.33 | 469.93 | 90.40 | 6.198 | | |
| 4,300.00 | 2,307.64 | 4,616.70 | 2,574.18 | 52.68 | 53.79 | 118.39 | 337.16 | -1,992.12 | 560.56 | 465.93 | 94.63 | 5.923 | | |
| 4,400.00 | 2,305.78 | 4,716.70 | 2,572.81 | 55.08 | 56.18 | 118.44 | 336.86 | -2,092.11 | 560.79 | 461.92 | 98.87 | 5.672 | | |
| 4,500.00 | 2,303.92 | 4,816.70 | 2,571.44 | 57.49 | 58.57 | 118.48 | 336.56 | -2,192.10 | 561.02 | 457.91 | 103.11 | 5.441 | | |
| 4,600.00 | 2,302.06 | 4,916.70 | 2,570.07 | 59.90 | 60.96 | 118.53 | 336.26 | -2,292.09 | 561.25 | 453.89 | 107.36 | 5.228 | | |
| 4,700.00 | 2,300.19 | 5,016.70 | 2,568.70 | 62.31 | 63.36 | 118.57 | 335.96 | -2,392.08 | 561.48 | 449.87 | 111.61 | 5.031 | | |
| 4,800.00 | 2,298.33 | 5,116.69 | 2,567.33 | 64.73 | 65.76 | 118.62 | 335.66 | -2,492.07 | 561.71 | 445.85 | 115.87 | 4.848 | | |
| 4,900.00 | 2,296.47 | 5,216.69 | 2,565.96 | 67.14 | 68.17 | 118.66 | 335.36 | -2,592.05 | 561.94 | 441.82 | 120.12 | 4.678 | | |
| 5,000.00 | 2,294.61 | 5,316.69 | 2,564.59 | 69.57 | 70.58 | 118.70 | 335.06 | -2,692.04 | 562.18 | 437.79 | 124.38 | 4.520 | | |
| 5,100.00 | 2,292.75 | 5,416.69 | 2,563.22 | 71.99 | 72.99 | 118.75 | 334.76 | -2,792.03 | 562.41 | 433.77 | 128.64 | 4.372 | | |
| 5,200.00 | 2,290.89 | 5,516.69 | 2,561.85 | 74.42 | 75.41 | 118.79 | 334.46 | -2,892.02 | 562.64 | 429.74 | 132.90 | 4.233 | | |
| 5,300.00 | 2,289.03 | 5,616.69 | 2,560.47 | 76.85 | 77.83 | 118.83 | 334.16 | -2,992.01 | 562.87 | 425.71 | 137.17 | 4.104 | | |
| 5,400.00 | 2,287.17 | 5,716.69 | 2,559.10 | 79.28 | 80.25 | 118.88 | 333.86 | -3,092.00 | 563.11 | 421.68 | 141.43 | 3.982 | | |
| 5,500.00 | 2,285.31 | 5,816.69 | 2,557.73 | 81.71 | 82.67 | 118.92 | 333.56 | -3,191.99 | 563.34 | 417.65 | 145.69 | 3.867 | | |
| 5,600.00 | 2,283.45 | 5,916.69 | 2,556.36 | 84.14 | 85.10 | 118.97 | 333.27 | -3,291.98 | 563.58 | 413.63 | 149.95 | 3.758 | | |
| 5,700.00 | 2,281.59 | 6,016.68 | 2,554.99 | 86.57 | 87.52 | 119.01 | 332.97 | -3,391.97 | 563.81 | 409.60 | 154.21 | 3.656 | | |
| 5,800.00 | 2,279.73 | 6,116.68 | 2,553.62 | 89.01 | 89.95 | 119.05 | 332.67 | -3,491.95 | 564.04 | 405.57 | 158.47 | 3.559 | | |
| 5,900.00 | 2,277.87 | 6,216.68 | 2,552.25 | 91.45 | 92.38 | 119.10 | 332.37 | -3,591.94 | 564.28 | 401.55 | 162.73 | 3.468 | | |
| 6,000.00 | 2,276.01 | 6,316.68 | 2,550.88 | 93.88 | 94.81 | 119.14 | 332.07 | -3,691.93 | 564.52 | 397.53 | 166.99 | 3.381 | | |
| 6,100.00 | 2,274.15 | 6,416.68 | 2,549.51 | 96.32 | 97.25 | 119.18 | 331.77 | -3,791.92 | 564.75 | 393.51 | 171.24 | 3.298 | | |
| 6,200.00 | 2,272.29 | 6,516.68 | 2,548.13 | 98.76 | 99.68 | 119.23 | 331.47 | -3,891.91 | 564.99 | 389.49 | 175.50 | 3.219 | | |
| 6,300.00 | 2,270.43 | 6,616.68 | 2,546.76 | 101.20 | 102.11 | 119.27 | 331.17 | -3,991.90 | 565.22 | 385.47 | 179.75 | 3.145 | | |
| 6,400.00 | 2,268.57 | 6,716.68 | 2,545.39 | 103.64 | 104.55 | 119.31 | 330.87 | -4,091.89 | 565.46 | 381.46 | 184.00 | 3.073 | | |
| 6,500.00 | 2,266.71 | 6,816.67 | 2,544.02 | 106.09 | 106.99 | 119.36 | 330.57 | -4,191.88 | 565.70 | 377.45 | 188.25 | 3.005 | | |
| 6,600.00 | 2,264.84 | 6,916.67 | 2,542.65 | 108.53 | 109.42 | 119.40 | 330.27 | -4,291.87 | 565.93 | 373.44 | 192.50 | 2.940 | | |
| 6,700.00 | 2,262.98 | 7,016.67 | 2,541.28 | 110.97 | 111.86 | 119.44 | 329.97 | -4,391.86 | 566.17 | 369.43 | 196.74 | 2.878 | | |
| 6,800.00 | 2,261.12 | 7,116.67 | 2,539.91 | 113.42 | 114.30 | 119.49 | 329.67 | -4,491.84 | 566.41 | 365.43 | 200.98 | 2.818 | | |
| 6,900.00 | 2,259.26 | 7,216.67 | 2,538.54 | 115.86 | 116.74 | 119.53 | 329.37 | -4,591.83 | 566.65 | 361.42 | 205.22 | 2.761 | | |
| 7,000.00 | 2,257.40 | 7,316.67 | 2,537.17 | 118.30 | 119.18 | 119.57 | 329.08 | -4,691.82 | 566.89 | 357.42 | 209.46 | 2.706 | | |
| 7,100.00 | 2,255.54 | 7,416.67 | 2,535.80 | 120.75 | 121.62 | 119.62 | 328.78 | -4,791.81 | 567.13 | 353.43 | 213.70 | 2.654 | | |
| 7,200.00 | 2,253.68 | 7,516.67 | 2,534.42 | 123.19 | 124.06 | 119.66 | 328.48 | -4,891.80 | 567.37 | 349.43 | 217.93 | 2.603 | | |
| 7,300.00 | 2,251.82 | 7,616.66 | 2,533.05 | 125.64 | 126.51 | 119.70 | 328.18 | -4,991.79 | 567.60 | 345.44 | 222.16 | 2.555 | | |
| 7,400.00 | 2,249.96 | 7,716.66 | 2,531.68 | 128.09 | 128.95 | 119.75 | 327.88 | -5,091.78 | 567.84 | 341.45 | 226.39 | 2.508 | | |
| 7,500.00 | 2,248.10 | 7,816.66 | 2,530.31 | 130.53 | 131.39 | 119.79 | 327.58 | -5,191.77 | 568.09 | 337.47 | 230.62 | 2.463 | | |
| 7,600.00 | 2,246.24 | 7,916.66 | 2,528.94 | 132.98 | 133.84 | 119.83 | 327.28 | -5,291.76 | 568.33 | 333.48 | 234.84 | 2.420 | | |
| 7,700.00 | 2,244.38 | 8,016.66 | 2,527.57 | 135.43 | 136.28 | 119.88 | 326.98 | -5,391.74 | 568.57 | 329.50 | 239.06 | 2.378 | | |
| 7,800.00 | 2,242.52 | 8,116.66 | 2,526.20 | 137.88 | 138.59 | 119.92 | 326.68 | -5,491.73 | 568.81 | 325.65 | 243.16 | 2.339 | | |
| 7,881.61 | 2,241.00 | 8,198.26 | 2,525.08 | 139.87 | 139.94 | 119.95 | 326.44 | -5,573.33 | 569.00 | 322.98 | 246.02 | 2.313 | | |
| | | | | | | | | | | | | | | |

TVD Reference:

MD Reference:

North Reference:

Company: SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID

Project: EDDY COUNTY, NM (NAD8 Reference Site: Greasewood 5 State Com

Site Error: 0.00 usft

Reference Well: Greasewood 5 State Com 104H (North Slot2)

Well Error: 0.00 usft
Reference Wellbore 5-104H
Reference Design: Plan 1r1

Local Co-ordinate Reference:

Well Greasewood 5 State Com 104H (North

Slot2)

3568+20 @ 3588.00usft (planning) 3568+20 @ 3588.00usft (planning)

Grid

Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma

Database: PRIME_EDM
Offset TVD Reference: Reference Datum

| n | Greasew | ood 5 Sta | ate Com - (| Greasewo | od 5 State C | Com 153H (No | orth Slot1) - | 5-153H - F | Plan 1r1 | | | Offset Site Error: | 0.00 usft |
|-----------|----------------------------------|--|---|--|--|---|---|--|--|--|--|---|---|
| 0-MWD | | | | | | | | | | | | Offset Well Error: | 0.00 usft |
| • | Offset | t | Semi Major | Axis | | | | Dista | ınce | | | | |
| rtical Me | easured | Vertical | Reference | Offset | Highside | Offset Wellbor | e Centre | Between | Between | Minimum | Separation | Warning | |
| | | Depth | | , , | Toolface | +N/-S | +E/-W | Centres | Ellipses | Separation | Factor | | |
| istt) | (ustt) | (ustt) | (ustt) | (usft) | (°) | (usft) | (usft) | (ustt) | (ustt) | (ustt) | | | |
| ,240.99 | 8,199.03 | 2,525.07 | 139.89 | 139.95 | 119.95 | 326.44 | -5,574.10 | 569.01 | 322.96 | 246.04 | 2.313 SF | | |
| r | 0-MWD tical Me pth sft) | 0-MWD Offset tical Measured pth Depth sft) (usft) | 0-MWD Offset tical Measured Vertical pth Depth Depth sft) (usft) (usft) | 0-MWD Offset Semi Major tical Measured Vertical Reference pth Depth Depth sft) (usft) (usft) (usft) | 0-MWD Offset Semi Major Axis tical Measured Vertical Reference Offset pth Depth Depth sft) (usft) (usft) (usft) (usft) | 0-MWD Offset Semi Major Axis tical Measured Vertical Reference Offset Highside pth Depth Toolface sft) (usft) (usft) (usft) | 0-MWD Offset Semi Major Axis tical Measured Vertical Reference Offset Highside Offset Wellbor Toolface +N/-S sft) (usft) (usft) (usft) (°) (usft) | 0-MWVD Offset Semi Major Axis tical Measured Vertical Reference Offset Highside Offset Wellbore Centre pth Depth Toolface +N/-S +E/-W sft) (usft) (usft) (usft) (sft) (sft) (usft) | O-MWD Offset Semi Major Axis Dista tical Measured Vertical Reference Offset Highside Offset Wellbore Centre Between pth Depth Toolface +N/-S +E/-W Centres sft) (usft) (usft) (usft) (usft) (usft) (usft) | O-MW/D Offset Semi Major Axis Distance Unitial Measured Vertical Reference Offset Highside Offset Wellbore Centre Between Between Peth Depth Toolface +N/-S +E/-W Centres Ellipses Stt) (usft) (usft) (usft) (usft) (usft) (usft) | O-MWD Offset Semi Major Axis Distance tical Measured Vertical Reference Offset Highside Offset Wellbore Centre Between Between Minimum Toolface +N/-S +E/-W Centres Ellipses Separation sft) (usft) (usft) (usft) (usft) (usft) (usft) (usft) | O-MWD Offset Semi Major Axis Distance tical Measured Vertical Reference Offset Highside Offset Wellbore Centre Between Between Minimum Separation pth Depth Depth Toolface +N/-S +E/-W Centres Ellipses Separation Factor sft) (usft) (usft) (usft) (usft) (usft) (usft) | O-MWD Offset Well Error: Offset Well Error: Offset Wellbore Centre Distance tical Measured Vertical Reference Offset Highside Offset Wellbore Centre Depth Depth Toolface +N/-S +E/-W Centres Ellipses Separation Factor Sft) (usft) (usft) (usft) (usft) (usft) (usft) |

TVD Reference:

MD Reference:

Company: SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID Project:

Greasewood 5 State Com Reference Site:

0.00 usft Site Error:

Reference Well: Greasewood 5 State Com 104H (North Slot2)

Well Error: 0.00 usft 5-104H Reference Wellbore Reference Design: Plan 1r1

Local Co-ordinate Reference:

Well Greasewood 5 State Com 104H (North

Slot2)

3568+20 @ 3588.00usft (planning) 3568+20 @ 3588.00usft (planning)

North Reference: **Survey Calculation Method:** Minimum Curvature 2.00 sigma Output errors are at

PRIME_EDM Database:

Offset TVD Reference: Reference Datum

| Offset Des | _ | | vood 5 St | tate Com - 0 | Greasewo | ood 5 State (| Com 201H (Sc | outh Slot1) - | 5-201H - I | Plan 1r1 | | | Offset Site Error: | 0.00 us |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------|------------------|-----------------------------|-----------------------------------|-----------------------------|------------------------------|-------------------------------|---------------------------------|----------------------|--------------------|---------|
| Survey Progr Refere | | WD Offse | t | Semi Major | Axis | | | | Dista | ance | | | Offset Well Error: | 0.00 us |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbor +N/-S (usft) | e Centre +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor | Warning | |
| 1,100.00 | 1,090.52 | 1,393.69 | 1,367.15 | 8.75 | 10.14 | 69.89 | -963.96 | 145.22 | 971.37 | 957.93 | 13.44 | 72.277 | | |
| 1,157.00 | 1,144.52 | 1,445.65 | 1,415.50 | 8.97 | 10.25 | 70.86 | -948.81 | 156.76 | 948.30 | 934.46 | 13.85 | 68.490 | | |
| 1,200.00 | 1,185.06 | 1,484.72 | 1,451.85 | 9.06 | 10.33 | 71.11 | -937.42 | 165.44 | 930.72 | 916.58 | 14.13 | 65.857 | | |
| 1,300.00 | 1,279.32 | 1,575.57 | 1,536.38 | 9.24 | 10.54 | 71.71 | -910.93 | 185.62 | 889.88 | 875.04 | 14.85 | 59.938 | | |
| 1,400.00 | 1,373.59 | 1,666.42 | 1,620.91 | 9.46 | 10.76 | 72.38 | -884.45 | 205.79 | 849.14 | 833.52 | 15.63 | 54.345 | | |
| 1,500.00 | 1,467.85 | 1,757.27 | 1,705.44 | 9.68 | 10.99 | 73.12 | -857.96 | 225.97 | 808.51 | 792.07 | 16.44 | 49.176 | | |
| 1,534.42 | 1,500.30 | 1,788.54 | 1,734.53 | 9.76 | 11.07 | 73.39 | -848.84 | 232.92 | 794.55 | 777.83 | 16.72 | 47.525 | | |
| 1,550.00 | 1,515.05 | 1,802.71 | 1,747.72 | 9.79 | 11.11 | 71.19 | -844.71 | 236.06 | 788.23 | 771.38 | 16.84 | 46.796 | | |
| 1,600.00 | 1,563.16 | 1,848.32 | 1,790.16 | 10.04 | 11.23 | 61.52 | -831.41 | 246.19 | 767.84 | 750.51 | 17.33 | 44.295 | | |
| 1,650.00 | 1,612.16 | 1,893.86 | 1,832.53 | 10.41 | 11.36 | 44.42 | -818.14 | 256.31 | 747.42 | 729.43 | 18.00 | 41.529 | | |
| 1,700.00 | 1,661.67 | 1,938.98 | 1,874.51 | 10.56 | 11.49 | 11.18 | -804.98 | 266.33 | 727.18 | 708.59 | 18.58 | 39.128 | | |
| 1,750.00 | 1,711.33 | 1,983.35 | 1,915.79 | 10.75 | 11.62 | -33.48 | -792.05 | 276.18 | 707.40 | 688.52 | 18.88 | 37.476 | | |
| 1,800.00 | 1,760.76 | 2,026.61 | 1,956.04 | 11.26 | 11.75 | -62.37 | -779.43 | 285.79 | 688.45 | 669.18 | 19.27 | 35.719 | | |
| 1,850.00 | 1,809.56 | 2,068.20 | 1,994.74 | 11.73 | 11.87 | -78.09 | -767.31 | 295.02 | 670.80 | 651.14 | 19.66 | 34.114 | | |
| 1,900.00 | 1,857.39 | 2,107.46 | 2,031.64 | 12.13 | 12.04 | -87.99 | -756.01 | 302.19 | 655.04 | 635.00 | 20.04 | 32.681 | | |
| 1,950.00 | 1,903.86 | 2,148.36 | 2,070.61 | 12.49 | 12.34 | -95.21 | -744.55 | 306.87 | 641.56 | 621.13 | 20.43 | 31.408 | | |
| 2,000.00 | 1,948.64 | 2,191.20 | 2,111.79 | 12.82 | 12.73 | -100.96 | -732.94 | 308.70 | 630.59 | 609.77 | 20.82 | 30.294 | | |
| 2,050.00 | 1,991.37 | 2,236.32 | 2,155.32 | 13.13 | 13.16 | -105.82 | -721.22 | 307.20 | 622.35 | 601.13 | 21.22 | 29.324 | | |
| 2,100.00 | 2,031.73 | 2,284.12 | 2,201.32 | 13.41 | 13.58 | -110.06 | -709.45 | 301.79 | 616.97 | 595.28 | 21.68 | 28.457 | | |
| 2,150.00 | 2,069.42 | 2,335.05 | 2,249.85 | 13.67 | 13.93 | -113.86 | -697.74 | 291.75 | 614.48 | 592.21 | 22.27 | 27.591 | | |
| 2,168.38 | 2,082.54 | 2,354.67 | 2,268.32 | 13.76 | 14.06 | -115.16 | -693.48 | 286.72 | 614.29 | 591.78 | 22.51 | 27.287 C | С | |
| 2,200.00 | 2,104.14 | 2,389.64 | 2,300.86 | 13.91 | 14.19 | -117.30 | -686.24 | 276.17 | 614.85 | 591.84 | 23.00 | 26.728 | | |
| 2,250.00 | 2,135.64 | 2,448.43 | 2,354.15 | 14.14 | 14.38 | -120.43 | -675.19 | 253.99 | 617.90 | 594.10 | 23.80 | 25.967 | | |
| 2,300.00 | 2,163.67 | 2,512.03 | 2,409.21 | 14.35 | 14.57 | -123.27 | -664.91 | 223.95 | 623.39 | 598.82 | 24.57 | 25.376 | | |
| 2,316.49 | 2,172.12 | 2,534.15 | 2,427.62 | 14.40 | 14.64 | -124.15 | -661.77 | 212.09 | 625.67 | 600.90 | 24.77 | 25.261 | | |
| 2,400.00 | 2,213.87 | 2,658.61 | 2,522.39 | 14.68 | 15.08 | -128.01 | -648.53 | 132.88 | 635.87 | 610.17 | 25.70 | 24.746 | | |
| 2,500.00 | 2,263.87 | 2,818.64 | 2,617.28 | 15.18 | 15.75 | -129.61 | -643.16 | 4.76 | 640.07 | 613.10 | 26.97 | 23.735 | | |
| 2,516.49 | 2,272.12 | 2,835.13 | 2,625.52 | 15.29 | 15.83 | -129.61 | -643.21 | -9.52 | 640.07 | 612.86 | 27.20 | 23.529 | | |
| 2,525.00 | 2,276.31 | 2,843.64 | 2,629.78 | 15.35 | 15.87 | -129.61 | -643.23 | -16.89 | 640.12 | 612.79 | 27.33 | 23.425 | | |
| 2,550.00 | 2,287.84 | 2,868.61 | 2,642.27 | 15.54 | 16.00 | -129.62 | -643.29 | -38.51 | 640.82 | 613.12 | 27.70 | 23.137 | | |
| 2,575.00 | 2,298.20 | 2,893.49 | 2,654.71 | 15.76 | 16.14 | -129.64 | -643.36 | -60.06 | 642.36 | 614.28 | 28.08 | 22.878 | | |
| 2,600.00 | 2,307.35 | 2,918.21 | 2,667.07 | 16.01 | 16.30 | -129.68 | -643.42 | -81.47 | 644.74 | 616.25 | 28.49 | 22.634 | | |
| 2,625.00 | 2,315.27 | 2,942.71 | 2,679.31 | 16.28 | 16.48 | -129.71 | -643.48 | -102.68 | 647.96 | 619.06 | 28.90 | 22.421 | | |
| 2,650.00 | 2,321.95 | 2,966.90 | 2,691.41 | 16.58 | 16.67 | -129.75 | -643.54 | -123.64 | 652.05 | 622.74 | 29.31 | 22.250 | | |
| 2,675.00 | 2,327.35 | 2,990.74 | 2,703.33 | 16.91 | 16.86 | -129.77 | -643.61 | -144.28 | 657.00 | 627.30 | 29.70 | 22.120 | | |
| 2,700.00 | 2,331.46 | 3,039.67 | 2,726.96 | 17.27 | 17.31 | -130.37 | -643.73 | -187.11 | 662.68 | 632.59 | 30.09 | 22.025 | | |
| 2,725.00 | 2,334.28 | 3,148.85 | 2,766.46 | 17.65 | 18.59 | -131.82 | -644.03 | -288.73 | 666.97 | 636.07 | 30.90 | 21.584 | | |
| 2,750.00 | 2,335.80 | 3,233.51 | 2,782.91 | 18.04 | 19.82 | -132.32 | -644.28 | -371.66 | 668.71 | 636.77 | 31.95 | 20.933 | | |
| 2,775.37 | 2,336.00 | 3,329.05 | 2,787.81 | 18.46 | 21.38 | -132.50 | -644.56 | -466.94 | 668.82 | 635.54 | 33.27 | 20.101 | | |
| 2,800.00 | 2,335.54 | 3,353.68 | 2,787.50 | 18.88 | 21.81 | -132.51 | -644.63 | -491.56 | 668.91 | 634.97 | 33.94 | 19.707 | | |
| 2,900.00 | 2,333.68 | 3,453.68 | 2,786.22 | 20.73 | 23.62 | -132.55 | -644.92 | -591.55 | 669.31 | 632.54 | 36.77 | 18.205 | | |
| 3,000.00 | 2,331.82 | 3,553.67 | 2,784.95 | 22.73 | 25.54 | -132.58 | -645.22 | -691.54 | 669.71 | 629.96 | 39.75 | 16.848 | | |
| 3,100.00 | 2,329.96 | 3,653.67 | 2,783.68 | 24.84 | 27.55 | -132.62 | -645.51 | -791.53 | 670.10 | 627.25 | 42.85 | 15.637 | | |
| 3,200.00 | 2,328.10 | 3,753.67 | 2,782.40 | 27.01 | 29.63 | -132.66 | -645.80 | -891.52 | 670.50 | 624.45 | 46.05 | 14.561 | | |
| 3,300.00 | 2,326.24 | 3,853.67 | 2,781.13 | 29.23 | 31.76 | -132.69 | -646.10 | -991.51 | 670.89 | 621.58 | 49.32 | 13.603 | | |
| 3,400.00 | 2,324.38 | 3,953.67 | 2,779.86 | 31.50 | 33.94 | -132.73 | -646.39 | -1,091.50 | 671.29 | 618.64 | 52.65 | 12.750 | | |
| 3,500.00 | 2,322.52 | 4,053.67 | 2,778.58 | 33.79 | 36.16 | -132.77 | -646.69 | -1,191.49 | 671.69 | 615.66 | 56.03 | 11.989 | | |
| 3,600.00 | 2,320.66 | 4,153.66 | 2,777.31 | 36.10 | 38.40 | -132.80 | -646.98 | -1,291.48 | 672.09 | 612.64 | 59.45 | 11.306 | | |
| 3,700.00 | 2,318.80 | 4,253.66 | 2,776.04 | 38.44 | 40.67 | -132.84 | -647.27 | -1,391.47 | 672.48 | 609.59 | 62.90 | 10.692 | | |
| 3,800.00 | 2,316.94 | 4,353.66 | 2,774.76 | 40.78 | 42.96 | -132.88 | -647.57 | -1,491.46 | 672.88 | 606.51 | 66.37 | 10.138 | | |
| 3,900.00 | 2,315.08 | 4,453.66 | 2,773.49 | 43.15 | 45.27 | -132.92 | -647.86 | -1,591.45 | 673.28 | 603.41 | 69.87 | 9.636 | | |

TVD Reference:

MD Reference:

North Reference:

Company: SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID Project:

Greasewood 5 State Com Reference Site:

0.00 usft Site Error:

Reference Well: Greasewood 5 State Com 104H (North Slot2)

Well Error: 0.00 usft 5-104H Reference Wellbore Plan 1r1 Reference Design:

Local Co-ordinate Reference:

Well Greasewood 5 State Com 104H (North

Slot2)

3568+20 @ 3588.00usft (planning) 3568+20 @ 3588.00usft (planning)

Survey Calculation Method: Minimum Curvature 2.00 sigma

Output errors are at

PRIME_EDM Database: Offset TVD Reference: Reference Datum

| Survey Prog | esign pram: 0-M\ | | | ato com | J. 000011 | ou o otato t | 20111 (00 | uth Slot1) - | 0-20111-1 | idii ii i | | | Offset Well Error: | 0.00 us |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------|------------------|-----------------------------|-----------------------------------|------------------------|------------------------------|-------------------------------|---------------------------------|----------------------|--------------------|---------|
| Refer | | Offs | et | Semi Major | Axis | | | | Dista | ince | | | Offset Well Error: | 0.00 us |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbor +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor | Warning | |
| 4,000.00 | 2,313.22 | 4,553.66 | 2,772.22 | 45.52 | 47.60 | -132.95 | -648.15 | -1,691.44 | 673.68 | 600.28 | 73.39 | 9.179 | | |
| 4,100.00 | 2,311.36 | 4,653.66 | 2,770.95 | 47.90 | 49.93 | -132.99 | -648.45 | -1,791.43 | 674.08 | 597.15 | 76.93 | 8.762 | | |
| 4,200.00 | 2,309.50 | 4,753.65 | 2,769.67 | 50.29 | 52.28 | -133.03 | -648.74 | -1,891.42 | 674.48 | 594.00 | 80.48 | 8.381 | | |
| 4,300.00 | 2,307.64 | 4,853.65 | 2,768.40 | 52.68 | 54.64 | -133.06 | -649.04 | -1,991.41 | 674.87 | 590.84 | 84.04 | 8.031 | | |
| 4,400.00 | 2,305.78 | 4,953.65 | 2,767.13 | 55.08 | 57.00 | -133.10 | -649.33 | -2,091.40 | 675.27 | 587.67 | 87.60 | 7.708 | | |
| 4,500.00 | 2,303.92 | 5,053.65 | 2,765.85 | 57.49 | 59.37 | -133.13 | -649.62 | -2,191.39 | 675.67 | 584.49 | 91.18 | 7.410 | | |
| 4,600.00 | 2,302.06 | 5,153.65 | 2,764.58 | 59.90 | 61.75 | -133.17 | -649.92 | -2,291.38 | 676.07 | 581.31 | 94.76 | 7.134 | | |
| 4,700.00 | 2,300.19 | 5,253.65 | 2,763.31 | 62.31 | 64.14 | -133.21 | -650.21 | -2,391.37 | 676.47 | 578.12 | 98.35 | 6.878 | | |
| 4,800.00 | 2,298.33 | 5,353.64 | 2,762.03 | 64.73 | 66.53 | -133.24 | -650.50 | -2,491.36 | 676.88 | 574.93 | 101.94 | 6.640 | | |
| 4,900.00 | 2,296.47 | 5,453.64 | 2,760.76 | 67.14 | 68.92 | -133.28 | -650.80 | -2,591.35 | 677.28 | 571.74 | 105.54 | 6.417 | | |
| 5,000.00 | 2,294.61 | 5,553.64 | 2,759.49 | 69.57 | 71.32 | -133.32 | -651.09 | -2,691.34 | 677.68 | 568.54 | 109.14 | 6.209 | | |
| 5,100.00 | 2,292.75 | 5,653.64 | 2,758.21 | 71.99 | 73.73 | -133.35 | -651.39 | -2,791.33 | 678.08 | 565.34 | 112.74 | 6.015 | | |
| 5,200.00 | 2,290.89 | 5,753.64 | 2,756.94 | 74.42 | 76.13 | -133.39 | -651.68 | -2,891.32 | 678.48 | 562.14 | 116.34 | 5.832 | | |
| 5,300.00 | 2,289.03 | 5,853.63 | 2,755.67 | 76.85 | 78.54 | -133.43 | -651.97 | -2,991.31 | 678.88 | 558.93 | 119.95 | 5.660 | | |
| 5,400.00 | 2,287.17 | 5,953.63 | 2,754.39 | 79.28 | 80.95 | -133.46 | -652.27 | -3,091.30 | 679.28 | 555.73 | 123.55 | 5.498 | | |
| 5,500.00 | 2,285.31 | 6,053.63 | 2,753.12 | 81.71 | 83.37 | -133.50 | -652.56 | -3,191.29 | 679.69 | 552.53 | 127.16 | 5.345 | | |
| 5,600.00 | 2,283.45 | 6,153.63 | 2,751.85 | 84.14 | 85.79 | -133.53 | -652.85 | -3,291.27 | 680.09 | 549.33 | 130.76 | 5.201 | | |
| 5,700.00 | 2,281.59 | 6,253.63 | 2,750.57 | 86.57 | 88.21 | -133.57 | -653.15 | -3,391.26 | 680.49 | 546.12 | 134.37 | 5.064 | | |
| 5,800.00 | 2,279.73 | 6,353.63 | 2,749.30 | 89.01 | 90.63 | -133.61 | -653.44 | -3,491.25 | 680.90 | 542.92 | 137.98 | 4.935 | | |
| 5,900.00 | 2,277.87 | 6,453.62 | 2,748.03 | 91.45 | 93.05 | -133.64 | -653.74 | -3,591.24 | 681.30 | 539.72 | 141.58 | 4.812 | | |
| 6,000.00 | 2,276.01 | 6,553.62 | 2,746.75 | 93.88 | 95.48 | -133.68 | -654.03 | -3,691.23 | 681.70 | 536.52 | 145.18 | 4.695 | | |
| 6,100.00 | 2,274.15 | 6,653.62 | 2,745.48 | 96.32 | 97.90 | -133.71 | -654.32 | -3,791.22 | 682.11 | 533.32 | 148.79 | 4.584 | | |
| 6,200.00 | 2,274.13 | 6,753.62 | 2,744.21 | 98.76 | 100.33 | -133.71 | -654.62 | -3,891.21 | 682.51 | 530.13 | 152.39 | 4.479 | | |
| 6,300.00 | 2,272.29 | 6,853.62 | 2,744.21 | 101.20 | 100.33 | -133.73 | -654.91 | -3,991.20 | 682.92 | 526.93 | 155.99 | 4.479 | | |
| 6,400.00 | 2,270.43 | 6,953.62 | 2,742.93 | 101.20 | 102.76 | -133.76 | -655.20 | -3,991.20 -4,091.19 | 683.32 | 523.74 | 159.58 | 4.282 | | |
| 6,500.00 | 2,266.71 | 7,053.61 | 2,741.00 | 106.09 | 103.19 | -133.82 | -655.50 | -4,191.18 | 683.73 | 520.55 | 163.18 | 4.202 | | |
| | | | | | | | | | | | | | | |
| 6,600.00 | 2,264.84 | 7,153.61 | 2,739.12 | 108.53 | 110.05 | -133.89 | -655.79 | -4,291.17 | 684.13 | 517.36 | 166.78 | 4.102 | | |
| 6,700.00 | 2,262.98 | 7,253.61 | 2,737.84 | 110.97 | 112.49 | -133.93 | -656.09 | -4,391.16 | 684.54 | 514.17 | 170.37 | 4.018 | | |
| 6,800.00 | 2,261.12 | 7,353.61 | 2,736.57 | 113.42 | 114.92 | -133.96 | -656.38 | -4,491.15 | 684.94 | 510.99 | 173.96 | 3.937 | | |
| 6,900.00 7,000.00 | 2,259.26 2,257.40 | 7,453.61 7,553.61 | 2,735.30 2,734.02 | 115.86 118.30 | 117.36 119.80 | -134.00 -134.03 | -656.67 -656.97 | -4,591.14 -4,691.13 | 685.35 685.76 | 507.80 504.62 | 177.55 181.13 | 3.860 3.786 | | |
| | | | | | | | | | | | | | | |
| 7,100.00 | 2,255.54 | 7,653.60 | 2,732.75 | 120.75 | 122.23 | -134.07 | -657.26 | -4,791.12 | 686.16 | 501.45 | 184.72 | 3.715 | | |
| 7,200.00 | 2,253.68 | 7,753.60 | 2,731.48 | 123.19 | 124.67 | -134.10 | -657.55 | -4,891.11 | 686.57 | 498.27 | 188.30 | 3.646 | | |
| 7,300.00 | 2,251.82 | 7,853.60 | 2,730.20 | 125.64 | 127.11 | -134.14 | -657.85 | -4,991.10 | 686.98 | 495.10 | 191.88 | 3.580 | | |
| 7,400.00 | 2,249.96 | 7,953.60 | 2,728.93 | 128.09 | 129.55 | -134.17 | -658.14 | -5,091.09 | 687.39 | 491.93 | 195.46 | 3.517 | | |
| 7,500.00 | 2,248.10 | 8,053.60 | 2,727.66 | 130.53 | 131.99 | -134.21 | -658.44 | -5,191.08 | 687.79 | 488.76 | 199.03 | 3.456 | | |
| 7,600.00 | 2,246.24 | 8,153.60 | 2,726.38 | 132.98 | 134.43 | -134.25 | -658.73 | -5,291.07 | 688.20 | 485.60 | 202.60 | 3.397 | | |
| 7,700.00 | 2,244.38 | 8,253.59 | 2,725.11 | 135.43 | 136.87 | -134.28 | -659.02 | -5,391.06 | 688.61 | 482.44 | 206.17 | 3.340 | | |
| 7,800.00 | 2,242.52 | 8,353.59 | 2,723.84 | 137.88 | 139.31 | -134.32 | -659.32 | -5,491.05 | 689.02 | 479.28 | 209.74 | 3.285 | | |
| 7,881.61 | 2,241.00 | 8,419.34 | 2,723.00 | 139.87 | 140.92 | -134.34 | -659.51 | -5,556.79 | 689.53 | 477.27 | 212.26 | 3.249 ES | S, SF | |
| 7,882.38 | 2,240.99 | 8,419.34 | 2,723.00 | 139.89 | 140.92 | -134.34 | -659.51 | -5,556.79 | 689.56 | 477.29 | 212.27 | 3.249 | | |

TVD Reference:

MD Reference:

Company: SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID Project:

Greasewood 5 State Com Reference Site:

0.00 usft Site Error:

Reference Well: Greasewood 5 State Com 104H (North Slot2)

Well Error: 0.00 usft 5-104H Reference Wellbore Reference Design: Plan 1r1

Local Co-ordinate Reference:

Well Greasewood 5 State Com 104H (North

Slot2)

3568+20 @ 3588.00usft (planning) 3568+20 @ 3588.00usft (planning)

North Reference: **Survey Calculation Method:** Minimum Curvature 2.00 sigma Output errors are at

Database:

Offset TVD Reference:

PRIME_EDM Reference Datum

| Offset De | sign | Grease | wood 5 St | ate Com - (| Greasewo | od BD State | e 10 (Offset) A | ctive - GW | BD ST 10 | - GW BD | ST 10 A | | Offset Site Error: | 0.00 usft |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------|------------------|-----------------------------|-----------------------------------|-----------------------------|------------------------------|-------------------------------|---------------------------------|----------------------|--------------------|-----------|
| Survey Prog | | -INC-ONLY | | | | | , | | | | | | Offset Well Error: | 0.00 usf |
| Refer | | Offse | | Semi Major | | | | | Dista | | | | | |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbor +N/-S (usft) | e Centre +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor | Warning | |
| 4,800.00 | 2,298.33 | 2,325.40 | 2,298.33 | 64.73 | 61.11 | -95.94 | -319.16 | -3,376.13 | 903.82 | 832.01 | 71.81 | 12.586 | | |
| 4,900.00 | 2,296.47 | 2,323.54 | 2,296.47 | 67.14 | 61.07 | -95.28 | -319.16 | -3,376.13 | 805.59 | 732.28 | 73.31 | 10.989 | | |
| 5,000.00 | 2,294.61 | 2,321.68 | 2,294.61 | 69.57 | 61.03 | -94.61 | -319.16 | -3,376.13 | 707.85 | 632.48 | 75.37 | 9.392 | | |
| 5,100.00 | 2,292.75 | 2,319.82 | 2,292.75 | 71.99 | 60.99 | -93.95 | -319.16 | -3,376.13 | 610.84 | 532.58 | 78.26 | 7.805 | | |
| 5,200.00 | 2,290.89 | 2,317.96 | 2,290.89 | 74.42 | 60.95 | -93.28 | -319.16 | -3,376.13 | 514.97 | 432.53 | 82.43 | 6.247 | | |
| 5,300.00 | 2,289.03 | 2,316.10 | 2,289.03 | 76.85 | 60.91 | -92.61 | -319.16 | -3,376.13 | 421.01 | 332.36 | 88.65 | 4.749 | | |
| 5,400.00 | 2,287.17 | 2,314.24 | 2,287.17 | 79.28 | 60.87 | -91.94 | -319.16 | -3,376.13 | 330.61 | 232.38 | 98.23 | 3.366 | | |
| 5,500.00 | 2,285.31 | 2,312.38 | 2,285.31 | 81.71 | 60.83 | -91.27 | -319.16 | -3,376.13 | 247.68 | 134.61 | 113.07 | 2.191 | | |
| 5,600.00 | 2,283.45 | 2,310.52 | 2,283.45 | 84.14 | 60.79 | -90.60 | -319.16 | -3,376.13 | 182.71 | 50.45 | 132.26 | 1.381 L | evel 3 | |
| 5,689.85 | 2,281.78 | 2,308.85 | 2,281.78 | 86.33 | 60.75 | -90.00 | -319.16 | -3,376.13 | 159.10 | 21.78 | 137.32 | 1.159 L | evel 2, CC, ES, SF | |
| 5,700.00 | 2,281.59 | 2,308.66 | 2,281.59 | 86.57 | 60.74 | -89.93 | -319.16 | -3,376.13 | 159.42 | 23.29 | 136.13 | 1.171 L | evel 2 | |
| 5,800.00 | 2,279.73 | 2,306.80 | 2,279.73 | 89.01 | 60.70 | -89.26 | -319.16 | -3,376.13 | 193.49 | 79.10 | 114.39 | 1.692 | | |
| 5,900.00 | 2,277.87 | 2,304.94 | 2,277.87 | 91.45 | 60.66 | -88.59 | -319.16 | -3,376.13 | 263.55 | 166.44 | 97.10 | 2.714 | | |
| 6,000.00 | 2,276.01 | 2,303.08 | 2,276.01 | 93.88 | 60.62 | -87.92 | -319.16 | -3,376.13 | 348.52 | 260.98 | 87.54 | 3.981 | | |
| 6,100.00 | 2,274.15 | 2,301.22 | 2,274.15 | 96.32 | 60.58 | -87.25 | -319.16 | -3,376.13 | 439.85 | 357.95 | 81.90 | 5.371 | | |
| 6,200.00 | 2,272.29 | 2,299.36 | 2,272.29 | 98.76 | 60.54 | -86.59 | -319.16 | -3,376.13 | 534.29 | 456.00 | 78.29 | 6.824 | | |
| 6,300.00 | 2,270.43 | 2,297.50 | 2,270.43 | 101.20 | 60.50 | -85.92 | -319.16 | -3,376.13 | 630.44 | 554.61 | 75.83 | 8.314 | | |
| 6,400.00 | 2,268.57 | 2,295.64 | 2,268.57 | 103.64 | 60.46 | -85.25 | -319.16 | -3,376.13 | 727.63 | 653.55 | 74.08 | 9.823 | | |
| 6,500.00 | 2,266.71 | 2,293.77 | 2,266.71 | 106.09 | 60.42 | -84.59 | -319.16 | -3,376.13 | 825.48 | 752.70 | 72.78 | 11.343 | | |
| 6,600.00 | 2,264.84 | 2,291.91 | 2,264.84 | 108.53 | 60.37 | -83.93 | -319.16 | -3,376.13 | 923.79 | 852.00 | 71.78 | 12.869 | | |

TVD Reference:

MD Reference:

Company: SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID Project:

Greasewood 5 State Com Reference Site:

0.00 usft Site Error:

Reference Well: Greasewood 5 State Com 104H (North Slot2)

Well Error: 0.00 usft 5-104H Reference Wellbore Reference Design: Plan 1r1

Local Co-ordinate Reference:

Well Greasewood 5 State Com 104H (North

Slot2)

3568+20 @ 3588.00usft (planning) 3568+20 @ 3588.00usft (planning)

North Reference: **Survey Calculation Method:** Minimum Curvature 2.00 sigma Output errors are at

PRIME_EDM Database: Offset TVD Reference: Reference Datum

| Offset De | sign | Grease | wood 5 St | ate Com - 0 | Greasewo | od BD State | e 9 (Offset) PA | - GW BD S | T 9 - GW | BD ST 9 A | AsDrille | | Offset Site Error: | 0.00 us |
|-----------------------------|-----------------------------|-----------------------|-----------------------------|---------------------|------------------|-----------------------------|-----------------------------------|-----------------------------|------------------------------|-------------------------------|---------------------------------|----------------------|--------------------|---------|
| urvey Progi Refer | | -INC-ONLY Offse | -4 | Semi Major | Aula | | | | Dista | | | | Offset Well Error: | 0.00 us |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbor +N/-S (usft) | e Centre +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor | Warning | |
| 6,000.00 | 2,276.01 | 2,302.78 | 2,275.51 | 93.88 | 62.41 | -97.81 | -294.43 | -4,675.10 | 997.38 | 922.94 | 74.44 | 13.399 | | |
| 6,100.00 | 2,274.15 | 2,300.93 | 2,273.66 | 96.32 | 62.37 | -97.01 | -294.42 | -4,675.10 | 898.35 | 822.63 | 75.72 | 11.864 | | |
| 6,200.00 | 2,272.29 | 2,299.08 | 2,271.81 | 98.76 | 62.33 | -96.21 | -294.42 | -4,675.10 | 799.56 | 722.12 | 77.44 | 10.325 | | |
| 6,300.00 | 2,270.43 | 2,297.23 | 2,269.96 | 101.20 | 62.28 | -95.40 | -294.41 | -4,675.10 | 701.11 | 621.33 | 79.78 | 8.788 | | |
| 6,400.00 | 2,268.57 | 2,295.38 | 2,268.11 | 103.64 | 62.24 | -94.60 | -294.40 | -4,675.10 | 603.16 | 520.10 | 83.06 | 7.262 | | |
| 6,500.00 | 2,266.71 | 2,293.52 | 2,266.25 | 106.09 | 62.20 | -93.79 | -294.40 | -4,675.10 | 506.00 | 418.19 | 87.81 | 5.762 | | |
| 6,600.00 | 2,264.84 | 2,291.67 | 2,264.40 | 108.53 | 62.15 | -92.98 | -294.39 | -4,675.10 | 410.21 | 315.21 | 95.01 | 4.318 | | |
| 6,700.00 | 2,262.98 | 2,289.82 | 2,262.55 | 110.97 | 62.11 | -92.17 | -294.38 | -4,675.10 | 317.02 | 210.51 | 106.51 | 2.976 | | |
| 6,800.00 | 2,261.12 | 2,287.97 | 2,260.70 | 113.42 | 62.07 | -91.36 | -294.38 | -4,675.10 | 229.61 | 103.66 | 125.95 | 1.823 | | |
| 6,900.00 | 2,259.26 | 2,286.12 | 2,258.85 | 115.86 | 62.02 | -90.54 | -294.37 | -4,675.10 | 157.91 | 1.17 | 156.74 | 1.007 Le | vel 2 | |
| 6,988.98 | 2,257.61 | 2,284.47 | 2,257.20 | 118.03 | 61.98 | -89.82 | -294.37 | -4,675.10 | 130.46 | -41.52 | 171.98 | 0.759 Le | vel 1, CC, ES, SF | |
| 7,000.00 | 2,257.40 | 2,284.26 | 2,257.00 | 118.30 | 61.98 | -89.73 | -294.37 | -4,675.10 | 130.92 | -39.58 | 170.50 | 0.768 Le | vel 1 | |
| 7,100.00 | 2,255.54 | 2,282.41 | 2,255.14 | 120.75 | 61.94 | -88.92 | -294.36 | -4,675.10 | 171.29 | 33.19 | 138.10 | 1.240 Le | vel 2 | |
| 7,200.00 | 2,253.68 | 2,280.56 | 2,253.29 | 123.19 | 61.89 | -88.11 | -294.35 | -4,675.10 | 248.06 | 135.21 | 112.85 | 2.198 | | |
| 7,300.00 | 2,251.82 | 2,278.71 | 2,251.44 | 125.64 | 61.85 | -87.29 | -294.35 | -4,675.10 | 337.22 | 238.03 | 99.19 | 3.400 | | |
| 7,400.00 | 2,249.96 | 2,276.86 | 2,249.59 | 128.09 | 61.81 | -86.48 | -294.34 | -4,675.10 | 431.16 | 339.91 | 91.25 | 4.725 | | |
| 7,500.00 | 2,248.10 | 2,275.00 | 2,247.74 | 130.53 | 61.76 | -85.67 | -294.34 | -4,675.10 | 527.32 | 441.10 | 86.23 | 6.116 | | |
| 7,600.00 | 2,246.24 | 2,273.15 | 2,245.88 | 132.98 | 61.72 | -84.86 | -294.33 | -4,675.10 | 624.69 | 541.86 | 82.82 | 7.542 | | |
| 7,700.00 | 2,244.38 | 2,271.30 | 2,244.03 | 135.43 | 61.68 | -84.06 | -294.33 | -4,675.10 | 722.77 | 642.36 | 80.40 | 8.989 | | |
| 7,800.00 | 2,242.52 | 2,269.45 | 2,242.18 | 137.88 | 61.63 | -83.25 | -294.32 | -4,675.10 | 821.31 | 742.69 | 78.62 | 10.447 | | |
| 7,881.61 | 2,241.00 | 2,267.94 | 2,240.67 | 139.87 | 61.60 | -82.60 | -294.32 | -4,675.10 | 901.96 | 824.48 | 77.48 | 11.641 | | |
| 7,882.38 | 2,240.99 | 2,267.92 | 2,240.65 | 139.89 | 61.60 | -82.59 | -294.32 | -4,675.10 | 902.72 | 824.40 | 78.32 | 11.527 | | |

TVD Reference:

MD Reference:

Company: SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID Project:

Greasewood 5 State Com Reference Site:

0.00 usft Site Error:

Reference Well: Greasewood 5 State Com 104H (North Slot2)

Well Error: 0.00 usft Reference Wellbore 5-104H Plan 1r1 Reference Design:

Local Co-ordinate Reference:

Well Greasewood 5 State Com 104H (North

3568+20 @ 3588.00usft (planning) 3568+20 @ 3588.00usft (planning)

North Reference: **Survey Calculation Method:** Minimum Curvature Output errors are at 2.00 sigma Database: PRIME_EDM

Reference Datum Offset TVD Reference:

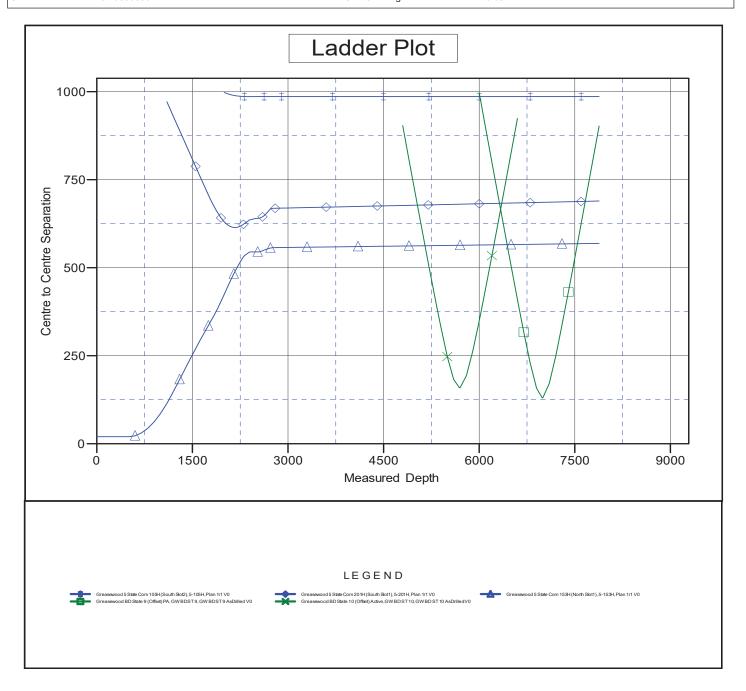
Reference Depths are relative to 3568+20 @ 3588.00usft (planning)

Offset Depths are relative to Offset Datum

Central Meridian is -104.3333333

Coordinates are relative to: Greasewood 5 State Com 104H (North Slot2) Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Grid Convergence at Surface is: -0.09°



TVD Reference:

MD Reference:

Database:

North Reference:

Company: SILVERBACK EXPLORATION

EDDY COUNTY, NM (NAD83) NMEZ GRID Project:

Greasewood 5 State Com Reference Site:

0.00 usft Site Error:

Greasewood 5 State Com 104H (North Slot2) Reference Well:

Well Error: 0.00 usft Reference Wellbore 5-104H Plan 1r1 Reference Design:

Local Co-ordinate Reference:

Well Greasewood 5 State Com 104H (North

3568+20 @ 3588.00usft (planning) 3568+20 @ 3588.00usft (planning)

Minimum Curvature **Survey Calculation Method:** Output errors are at 2.00 sigma PRIME_EDM Reference Datum Offset TVD Reference:

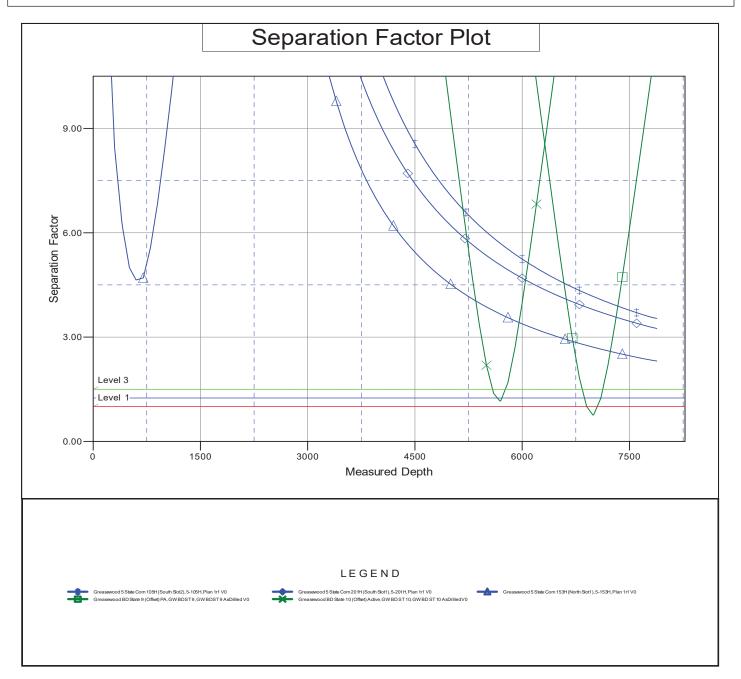
Reference Depths are relative to 3568+20 @ 3588.00usft (planning)

Offset Depths are relative to Offset Datum

Central Meridian is -104.3333333

Coordinates are relative to: Greasewood 5 State Com 104H (North Slot2) 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: Silverbac | k Operating II | , LLC | OGRID: _ | 330968 | Date: | 08 / 25 / 2023 |
|---|---|--|-------------------------------------|---------------------------------|---------------------------------|--|
| II. Type: ☒ Original ☐ | Amendment | due to □ 19.15.27. | 9.D(6)(a) NMA | C □ 19.15.27.9.D(| 6)(b) NMAC □ C | Other. |
| If Other, please describe | : | | | | | |
| III. Well(s): Provide the be recompleted from a si | following infingle well pad | Formation for each to a connected to | new or recomple central delivery | eted well or set of v point. | vells proposed to | be drilled or proposed to |
| Well Name | API | ULSTR | Footages | Anticipated Oil BBL/D | Anticipated Gas MCF/D | Anticipated Produced Water BBL/D |
| See attached table | | | | | | |
| | | | | | | |
| proposed to be recomple Well Name | e: Provide the | | tion for each ne | w or recompleted w | vell or set of wells Initial F | |
| See attached table | | | | | | |
| | | | | | | |
| VI. Separation Equipm VII. Operational Pract Subsection A through F VIII. Best Managemen during active and planne | ices: Attacof 19.15.27.8 t Practices: | h a complete descr NMAC. | iption of the act | ions Operator will t | take to comply wi | ith the requirements of |

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 | n: |
|--|----|
|--|----|

| 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 o |
| 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 gatherin | ng system 🗆 | will □ | will not | have capacity | to gather | 100% of th | e anticipated | l natural gas |
|------------|-------------|-------------|--------------|---------------|------------|----------|---------------|-----------|------------|---------------|---------------|
| production | ı volume fr | om the well | prior to the | date of first | production | on. | | | | | |

| XIII. Line Pressure. | Operator □ does □ d | loes not anticipate th | at its existing well(s) | connected to the sa | ame segment, | or portion, | of the |
|-----------------------|------------------------|------------------------|-------------------------|----------------------|-----------------|-------------|---------|
| natural gas gathering | system(s) described ab | ove will continue to | meet anticipated incr | eases in line pressu | ire caused by t | he new we | ell(s). |

| Attach (| Operator | 'e nlan | to manage | production | in response | to the in | ncreased 1 | ine pressure |
|------------|----------|---------|-----------|------------|---------------|-----------|------------|--------------|
| Attach | Oberator | s bran | to manage | production | i in response | to the n | ncreased | ime bressure |

| XIV. Co | onfidentiality: [| ☐ Operator as | sserts confiden | tiality pursuant | to Section | 71-2-8 | NMSA | 1978 f | or the | information | provided in |
|-----------|-------------------|----------------|-----------------|------------------|------------|------------|-----------|---------|---------|----------------|-------------|
| Section 2 | 2 as provided in | Paragraph (2) | of Subsection I | O of 19.15.27.9 | NMAC, ar | nd attache | es a full | descrip | tion of | f the specific | information |
| for which | h confidentiality | is asserted an | d the basis for | such 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 | e 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. **Dox, 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 5; or |
| 8 | Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential sees 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: 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 | <u>API</u> | <u>ULSTR</u> | <u>Footages</u> | 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 | <u>API</u> | 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

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 257937

CONDITIONS

| Operator: | OGRID: |
|------------------------------|--------------------------------------|
| Silverback Operating II, LLC | 330968 |
| 19707 IH10 West, Suite 201 | Action Number: |
| San Antonio, TX 78256 | 257937 |
| | Action Type: |
| | [C-103] NOI Change of Plans (C-103A) |

CONDITIONS

| Create | d By | | Condition Date |
|--------|----------|-----------------------------|-------------------|
| ward | l.rikala | Original COA's still apply. | 9/29/2023 |