

Form 3160-3  
(June 2015)FORM APPROVED  
OMB No. 1004-0137  
Expires: January 31, 2018UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**APPLICATION FOR PERMIT TO DRILL OR REENTER**

|                                                                                                                                                   |                                   |                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------------------|
| 1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER                                                                 |                                   | 5. Lease Serial No.                           |
| 1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other                              |                                   | 6. If Indian, Allottee or Tribe Name          |
| 1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone |                                   | 7. If Unit or CA Agreement, Name and No.      |
| 2. Name of Operator                                                                                                                               |                                   | 8. Lease Name and Well No.                    |
| 3a. Address                                                                                                                                       | 3b. Phone No. (include area code) | 9. API Well No.                               |
| 4. Location of Well (Report location clearly and in accordance with any State requirements. *)<br>At surface<br>At proposed prod. zone            |                                   | 10. Field and Pool, or Exploratory            |
| 14. Distance in miles and direction from nearest town or post office*                                                                             |                                   | 11. Sec., T. R. M. or Blk. and Survey or Area |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)                             |                                   | 12. County or Parish                          |
| 16. No of acres in lease                                                                                                                          |                                   | 13. State                                     |
| 17. Spacing Unit dedicated to this well                                                                                                           |                                   |                                               |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.                                        |                                   |                                               |
| 19. Proposed Depth                                                                                                                                |                                   |                                               |
| 20. BLM/BIA Bond No. in file                                                                                                                      |                                   |                                               |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.)                                                                                               |                                   |                                               |
| 22. Approximate date work will start*                                                                                                             |                                   | 23. Estimated duration                        |
| 24. Attachments                                                                                                                                   |                                   |                                               |

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- |                                                                                                                                                |                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| 1. Well plat certified by a registered surveyor.                                                                                               | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan.                                                                                                                            | 5. Operator certification.                                                                      |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be requested by the BLM.            |

|                         |                      |      |
|-------------------------|----------------------|------|
| 25. Signature           | Name (Printed/Typed) | Date |
| Title                   |                      |      |
| Approved by (Signature) | Name (Printed/Typed) | Date |
| Title                   |                      |      |
| Office                  |                      |      |

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

\*(Instructions on page 2)



Approval Date: 03/19/2024

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                     |  |                                                     |  |                                                      |                             |
|-------------------------------------|--|-----------------------------------------------------|--|------------------------------------------------------|-----------------------------|
| 1 API Number<br><b>30-015 54925</b> |  | 2 Pool Code<br><b>97565</b>                         |  | 3 Pool Name<br><b>N. SEVEN RIVERS; GLORIETA-YESO</b> |                             |
| 4 Property Code<br><b>335375</b>    |  | 5 Property Name<br><b>LIVE OAK 27-28 STATE COM</b>  |  |                                                      | 6 Well Number<br><b>21H</b> |
| 7 OGRID NO.<br><b>328947</b>        |  | 8 Operator Name<br><b>SPUR ENERGY PARTNERS LLC.</b> |  |                                                      | 9 Elevation<br><b>3497'</b> |

10 Surface Location

|                           |                      |                        |                     |         |                             |                                  |                              |                               |                       |
|---------------------------|----------------------|------------------------|---------------------|---------|-----------------------------|----------------------------------|------------------------------|-------------------------------|-----------------------|
| UL or lot no.<br><b>0</b> | Section<br><b>27</b> | Township<br><b>19S</b> | Range<br><b>25E</b> | Lot Idn | Feet from the<br><b>752</b> | North/South line<br><b>SOUTH</b> | Feet From the<br><b>2019</b> | East/West line<br><b>EAST</b> | County<br><b>EDDY</b> |
|---------------------------|----------------------|------------------------|---------------------|---------|-----------------------------|----------------------------------|------------------------------|-------------------------------|-----------------------|

11 Bottom Hole Location If Different From Surface

|                           |                      |                        |                     |         |                             |                                  |                              |                               |                       |
|---------------------------|----------------------|------------------------|---------------------|---------|-----------------------------|----------------------------------|------------------------------|-------------------------------|-----------------------|
| UL or lot no.<br><b>0</b> | Section<br><b>28</b> | Township<br><b>19S</b> | Range<br><b>25E</b> | Lot Idn | Feet from the<br><b>330</b> | North/South line<br><b>SOUTH</b> | Feet from the<br><b>2613</b> | East/West line<br><b>EAST</b> | County<br><b>EDDY</b> |
|---------------------------|----------------------|------------------------|---------------------|---------|-----------------------------|----------------------------------|------------------------------|-------------------------------|-----------------------|

|                                  |                    |                       |              |
|----------------------------------|--------------------|-----------------------|--------------|
| 12 Dedicated Acres<br><b>320</b> | 13 Joint or Infill | 14 Consolidation Code | 15 Order No. |
|----------------------------------|--------------------|-----------------------|--------------|

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

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                    |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p>16 <u>GEODETIC DATA</u><br/>NAD 83 GRID - NM EAST</p> <p><u>SURFACE LOCATION (SL)</u><br/>N: 591663.1 - E: 499076.2<br/>LAT: 32.6264567° N<br/>LONG: 104.4706069° W</p> <p><u>KICK OFF POINT (KOP)</u><br/>473' FSL &amp; 1831' FEL - SEC 27<br/>N: 591378.4 - E: 499264.5<br/>LAT: 32.6256750° N<br/>LONG: 104.4699941° W</p> <p><u>FIRST TAKE POINT (FTP)</u><br/>330' FSL &amp; 2548' FWL - SEC 27<br/>N: 591259.9 - E: 498387.0<br/>LAT: 32.6253460° N<br/>LONG: 104.4728438° W</p> <p><u>LAST TAKE POINT (LTP)</u><br/>330' FSL &amp; 2563' FEL - SEC 28<br/>N: 591276.9 - E: 493276.6<br/>LAT: 32.6253731° N<br/>LONG: 104.4894433° W</p>                                                                  |  | <p><u>BOTTOM HOLE (BH)</u><br/>N: 591276.9 - E: 493226.6<br/>LAT: 32.6253730° N<br/>LONG: 104.4896056° W</p> <p><u>CORNER DATA</u><br/>NAD 83 GRID - NM EAST</p> <p>A: FOUND 1/2" REBAR<br/>N: 590950.1 - E: 490511.8</p> <p>B: 10'X8"X2.5" LIMESTONE ROCK<br/>N: 596289.2 - E: 490540.3</p> <p>C: FOUND 1/2" REBAR<br/>N: 596283.3 - E: 493191.2</p> <p>D: FOUND 1" PIPE<br/>N: 596277.3 - E: 495841.8</p> <p>E: FOUND 1/2" REBAR<br/>N: 596183.6 - E: 498448.0</p>                                                            |  | <p>F: FOUND 1/2" REBAR<br/>N: 596091.2 - E: 501054.3</p> <p>G: FOUND 1/2" REBAR<br/>N: 590847.7 - E: 501100.1</p> <p>H: FOUND LIMESTONE ROCK<br/>N: 590929.4 - E: 498489.6</p> <p>I: FOUND 1/2" REBAR<br/>N: 590944.6 - E: 495839.1</p> <p>J: FOUND 1/2" REBAR<br/>N: 590947.0 - E: 493175.7</p> <p>K: FOUND 60D<br/>N: 593638.2 - E: 495840.9</p> |  |
| <p>17 <u>OPERATOR CERTIFICATION</u><br/>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Sarah Chapman</i> 06/08/2023<br/>Signature Date</p> <p><b>SARAH CHAPMAN</b><br/>Printed Name</p> <p><b>SCHAPMAN@SPURENERGY.COM</b><br/>E-mail Address</p> |  | <p>18 <u>SURVEYOR CERTIFICATION</u><br/>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p><b>02/28/2023</b><br/>Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p><b>DALE E. BELL</b><br/>NEW MEXICO<br/>14400<br/>05/22/2023<br/>PROFESSIONAL SURVEYOR</p> <p><b>14400</b><br/>Certificate Number</p> <p>REV: ADD KOP-05/18/2023</p> |  |                                                                                                                                                                                                                                                                                                                                                    |  |

State of New Mexico  
Energy, Minerals and Natural Resources DepartmentSubmit Electronically  
Via E-permittingOil 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:** SPUR ENERGY PARTNERS LLC **OGRID:** 328947 **Date:** 06 / 28 / 2023**II. Type:** ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: \_\_\_\_\_

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

| Well Name                    | API     | ULSTR        | Footages           | Anticipated Oil BBL/D | Anticipated Gas MCF/D | Anticipated Produced Water BBL/D |
|------------------------------|---------|--------------|--------------------|-----------------------|-----------------------|----------------------------------|
| LIVE OAK 27-28 STATE COM 21H | 30-015- | O-27-19S-25E | 752' FSL 2019' FEL | 454 BBL/D             | 636 MCF/D             | 909 BBL/D                        |
| LIVE OAK 27-28 STATE COM 30H | 30-015- | O-27-19S-25E | 785' FSL 1995' FEL | 454 BBL/D             | 636 MCF/D             | 909 BBL/D                        |
| LIVE OAK 27-28 STATE COM 70H | 30-015- | O-27-19S-25E | 769' FSL 2007' FEL | 271 BBL/D             | 406 MCF/D             | 2166 BBL/D                       |

**IV. Central Delivery Point Name:** LIVE OAK 27-28 STATE COM TANK BATTERY [See 19.15.27.9(D)(1) NMAC]**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

| Well Name                    | API     | Spud Date  | TD Reached Date | Completion Commencement Date | Initial Flow Back Date | First Production Date |
|------------------------------|---------|------------|-----------------|------------------------------|------------------------|-----------------------|
| LIVE OAK 27-28 STATE COM 21H | 30-015- | 01/01/2025 | 01/09/2025      | 02/07/2025                   | 02/27/2025             | 03/14/2025            |
| LIVE OAK 27-28 STATE COM 30H | 30-015- | 01/10/2025 | 01/19/2025      | 02/07/2025                   | 02/27/2025             | 03/14/2025            |
| LIVE OAK 27-28 STATE COM 70H | 30-015- | 01/20/2025 | 01/29/2025      | 02/07/2025                   | 02/27/2025             | 03/14/2025            |

**VI. Separation Equipment:** ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.**VII. Operational Practices:** ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.**VIII. Best Management Practices:** ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

**Section 2 – Enhanced Plan**  
**EFFECTIVE APRIL 1, 2022**

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

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

**IX. Anticipated Natural Gas Production:**

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

**X. Natural Gas Gathering System (NGGS):**

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

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

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

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

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

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

### **Section 3 - Certifications**

**Effective May 25, 2021**

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

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

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

***If Operator checks this box, Operator will select one of the following:***

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

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

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

### **Section 4 - Notices**

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

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

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

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

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

|                                                                                                  |                          |
|--------------------------------------------------------------------------------------------------|--------------------------|
| Signature:                                                                                       | <i>Sarah Chapman</i>     |
| Printed Name:                                                                                    | SARAH CHAPMAN            |
| Title:                                                                                           | REGULATORY DIRECTOR      |
| E-mail Address:                                                                                  | SCHAPMAN@SPUREENERGY.COM |
| Date:                                                                                            | 06/28/2023               |
| Phone:                                                                                           | 832-930-8613             |
| <b>OIL CONSERVATION DIVISION</b><br><b>(Only applicable when submitted as a standalone form)</b> |                          |
| Approved By:                                                                                     |                          |
| Title:                                                                                           |                          |
| Approval Date:                                                                                   |                          |
| Conditions of Approval:                                                                          |                          |

## Spur Energy Partners LLC – Live Oak 27-28 State Com 21H

### 1. Geologic Formations

|               |        |
|---------------|--------|
| TVD of Target | 2,850' |
| MD at TD      | 8,648' |

| Formation        | Depth | Lithology                           | Expected Fluids  |
|------------------|-------|-------------------------------------|------------------|
| Quaternary       | 0'    | Dolomite, other: Caliche            | Useable Water    |
| Grayburg         | 443'  | Dolomite w/ Sandstone and Anhydrite | Natural Gas, Oil |
| San Andres       | 808'  | Dolomite, Limestone                 | Natural Gas, Oil |
| Lower San Andres | 1830' | Dolomite, Limestone                 | Natural Gas, Oil |
| Glorieta         | 2385' | Dolomite, Siltstone                 | Natural Gas, Oil |
| Paddock          | 2540' | Dolomite, Limestone                 | Natural Gas, Oil |
| Blinberry        | 3180' | Dolomite, Limestone                 | Natural Gas, Oil |
| Base Yeso        | 4010' | Limestone                           | Natural Gas, Oil |

\*H<sub>2</sub>S, water flows, loss of circulation, abnormal pressures, etc.

### 2. Casing Program

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

| Casing<br>Formation Set<br>Interval | Hole Size (in) | Casing Interval |         | Csg. Size<br>(in) | Weight<br>(lbs) | Grade | Conn. | SF       | SF Burst | Body SF | Joint SF |
|-------------------------------------|----------------|-----------------|---------|-------------------|-----------------|-------|-------|----------|----------|---------|----------|
|                                     |                | From (ft)       | To (ft) |                   |                 |       |       | Collapse |          | Tension | Tension  |
| San Andres                          | 12.25          | 0               | 1200    | 9.625             | 36              | J-55  | BTC   | 1.125    | 1.2      | 1.4     | 1.4      |
| N/A                                 | 8.75           | 0               | 3250    | 7                 | 32              | L-80  | BK-HT | 1.125    | 1.2      | 1.4     | 1.4      |
| Yeso                                | 8.75           | 3250            | 8648    | 5.5               | 20              | L-80  | BK-HT | 1.125    | 1.2      | 1.4     | 1.4      |
| SF Values will meet or Exceed       |                |                 |         |                   |                 |       |       |          |          |         |          |

## Spur Energy Partners LLC – Live Oak 27-28 State Com 21H

|                                                                                                                                                  | Y or N |
|--------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Is casing new? If used, attach certification as required in Onshore Order #1                                                                     | Y      |
| Does casing meet API specifications? If no, attach casing specification sheet.                                                                   | Y      |
| Is premium or uncommon casing planned? If yes attach casing specification sheet.                                                                 | N      |
| Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria). | Y      |
| Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?                | Y      |
| Is well located within Capitan Reef?                                                                                                             | N      |
| If yes, does production casing cement tie back a minimum of 50' above the Reef?                                                                  |        |
| Is well within the designated 4 string boundary.                                                                                                 |        |
| Is well located in SOPA but not in R-111-P?                                                                                                      | N      |
| If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?                       |        |
| Is well located in R-111-P and SOPA?                                                                                                             | N      |
| If yes, are the first three strings cemented to surface?                                                                                         |        |
| Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?                                                                               |        |
| Is well located in high Cave/Karst?                                                                                                              | Y      |
| If yes, are there two strings cemented to surface?                                                                                               | Y      |
| Is well located in critical Cave/Karst?                                                                                                          | N      |
| If yes, are there three strings cemented to surface?                                                                                             |        |

## 3. Cementing Program

| Casing String     | Top (ft) | Bottom (ft) | % Excess |
|-------------------|----------|-------------|----------|
| Surface (Lead)    | 0        | 950         | 100%     |
| Surface (Tail)    | 950      | 1200        | 100%     |
| Production (Lead) | 0        | 2250        | 100%     |
| Production (Tail) | 2250     | 8648        | 25%      |

| Casing String     | # Sks | Wt.<br>(lb/gal) | Yld<br>(ft3/sack) | H2O<br>(gal/sk) | 500#<br>Comp.<br>Strength<br>(hours) | Slurry Description         |
|-------------------|-------|-----------------|-------------------|-----------------|--------------------------------------|----------------------------|
| Surface (Lead)    | 259   | 12              | 2.4               | 13.48           | 8:12                                 | Clas C Premium Plus Cement |
| Surface (Tail)    | 94    | 13.2            | 1.87              | 9.92            | 6:59                                 | Clas C Premium Plus Cement |
| Production (Lead) | 214   | 11.4            | 2.42              | 15.29           | N/A                                  | Clas C Premium Plus Cement |
| Production (Tail) | 1217  | 13.2            | 1.56              | 9.81            | N/A                                  | Clas C Premium Plus Cement |



**Spur Energy Partners LLC – Live Oak 27-28 State Com 21H****4. Pressure Control Equipment****\*Spur Energy Partners LLC variance for flex hose\***

Spur requests a variance to use a flex line from the BOP to the choke manifold. Documentation will be attached in the APD and be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no bends).

| BOP installed and tested before drilling which hole? | Size?   | Min. Required WP | Type       | ✓ | Tested to:              |
|------------------------------------------------------|---------|------------------|------------|---|-------------------------|
| 12.25" Hole                                          | 13-5/8" | 5M               | Annular    | ✓ | 70% of working pressure |
|                                                      |         | 5M               | Blind Ram  | ✓ | 250 psi / 3000 psi      |
|                                                      |         |                  | Pipe Ram   | ✓ |                         |
|                                                      |         |                  | Double Ram |   |                         |
|                                                      |         |                  | Other*     |   |                         |
| 8.75" Hole                                           | 13-5/8" | 5M               | Annular    | ✓ | 70% of working pressure |
|                                                      |         | 5M               | Blind Ram  | ✓ | 250 psi / 3000 psi      |
|                                                      |         |                  | Pipe Ram   | ✓ |                         |
|                                                      |         |                  | Double Ram |   |                         |
|                                                      |         |                  | Other*     |   |                         |

**\*Spur Energy Partners LLC will be utilizing a 5M BOP\***

| Condition                     | Specify what type and where? |
|-------------------------------|------------------------------|
| BH Pressure at deepest TVD    | 1366 psi                     |
| Abnormal Temperature          | No                           |
| BH Temperature at deepest TVD | 104°F                        |

\*Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

|                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i. |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Spur Energy Partners LLC – Live Oak 27-28 State Com 21H**

|   |                                                                                                                                                                                                                                                                                                              |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Y | Are anchors required by manufacturer?                                                                                                                                                                                                                                                                        |
|   | A conventional wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days.<br>See attached schematics. |

**5. BOP Break Testing Request**

Spur Energy Partners LLC requests permission to adjust the BOP break testing requirements as follows:

BOP break test under the following conditions:

- After a full BOP test is conducted
- When skidding to drill the production section, where the surface casing point is shallower than the 3 Bone Spring or 10,000 TVD.
- When skidding to drill a production section that does not penetrate the 3<sup>rd</sup> Bone Spring or deeper.

If the kill line is broken prior to skid, four tests will be performed.

- 1) The void between the wellhead and the spool (this consists of two tests)
- 2) The spool between the kill lines and the choke manifold (this consists of two tests)

If the kill line is not broken prior to skid, two tests will be performed.

- 1) The void between the wellhead and the pipe rams

**6. Mud Program**

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Spur will use a closed mud system.

| Depth     |         | Type            | Weight (ppg) | Viscosity | Water Loss |
|-----------|---------|-----------------|--------------|-----------|------------|
| From (ft) | To (ft) |                 |              |           |            |
| 0         | 1200    | Water-Based Mud | 8.6-8.9      | 32-36     | N/C        |
| 1200      | 8648    | Water-Based Mud | 8.6-8.9      | 32-36     | N/C        |

|                                                         |                             |
|---------------------------------------------------------|-----------------------------|
| What will be used to monitor the loss or gain of fluid? | PVT/PASON/Visual Monitoring |
|---------------------------------------------------------|-----------------------------|

## Spur Energy Partners LLC – Live Oak 27-28 State Com 21H

### 7. Logging and Testing Procedures

| Logging, Coring and Testing. |                                                                                                                                                         |          |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Yes                          | Will run GR from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM. |          |
| No                           | Logs are planned based on well control or offset log information.                                                                                       |          |
| No                           | Drill stem test? If yes, explain                                                                                                                        |          |
| No                           | Coring? If yes, explain                                                                                                                                 |          |
| Additional logs planned      |                                                                                                                                                         | Interval |
| No                           | Resistivity                                                                                                                                             |          |
| No                           | Density                                                                                                                                                 |          |
| No                           | CBL                                                                                                                                                     |          |
| Yes                          | Mud log                                                                                                                                                 | SCP - TD |
| No                           | PEX                                                                                                                                                     |          |

### 8. Drilling Conditions

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.

|                                                                                                                                                                                                                                                                                                                                                              |                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| Hydrogen Sulfide (H <sub>2</sub> S) monitors will be installed prior to drilling out the surface shoe. If H <sub>2</sub> S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM. |                                |
| N                                                                                                                                                                                                                                                                                                                                                            | H <sub>2</sub> S is present    |
| Y                                                                                                                                                                                                                                                                                                                                                            | H <sub>2</sub> S Plan attached |

**Total estimated cuttings volume:** 818.1 bbls.

**Spur Energy Partners LLC – Live Oak 27-28 State Com 21H****9. Other facets of operation**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Yes/No</b> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Will more than one drilling rig be used for drilling operations? If yes, describe. Spur Energy Partners LLC. requests the option to contract a Surface Rig to drill, set surface casing, and cement for this well. If the timing between rigs is such that Spur Energy Partners LLC. would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the spudder rig. | Yes           |

## Attachments

- ☒ Directional Plan  
☒ H2S Contingency Plan  
☒ Akita 57 Attachments  
☒ BOP Schematics  
☒ Transcend Spudder Rig Attachments

**10. Company Personnel**

| <b>Name</b>        | <b>Title</b>                     | <b>Office Phone</b> | <b>Mobile Phone</b> |
|--------------------|----------------------------------|---------------------|---------------------|
| Christopher Hollis | Drilling Manager                 | 832-930-8629        | 713-380-7754        |
| Johnny Nabors      | Senior Vice President Operations | 832-930-8502        | 281-904-8811        |



# **SPUR ENERGY PARTNERS, LLC**

**EDDY COUNTY, NM (NAD 83 - NME)  
LIVE OAK 27-28 STATE COM  
21H**

**Wellbore #1  
PERMIT**

## **Anticollision Report**

**15 May, 2023**



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

|                                     |                                                                     |
|-------------------------------------|---------------------------------------------------------------------|
| <b>Reference</b>                    | PERMIT                                                              |
| <b>Filter type:</b>                 | NO GLOBAL FILTER: Using user defined selection & filtering criteria |
| <b>Interpolation Method:</b>        | MD + Stations Interval 50.00usft                                    |
| <b>Depth Range:</b>                 | 0.00 to 8,647.68usft                                                |
| <b>Results Limited by:</b>          | Maximum center-center distance of 3,000.00 us                       |
| <b>Warning Levels Evaluated at:</b> | 2.00 Sigma                                                          |
| <b>Error Model:</b>                 | ISCWSA                                                              |
| <b>Scan Method:</b>                 | Closest Approach 3D                                                 |
| <b>Error Surface:</b>               | Elliptical Conic                                                    |
| <b>Casing Method:</b>               | Not applied                                                         |

| Survey Tool Program |              | Date                 | 05/15/23  |                        |  |
|---------------------|--------------|----------------------|-----------|------------------------|--|
| From<br>(usft)      | To<br>(usft) | Survey (Wellbore)    | Tool Name | Description            |  |
| 0.00                | 8,647.68     | PERMIT (Wellbore #1) | MWD+IGRF  | OWSG MWD + IGRF or WMM |  |

| Summary                                             |                                 |                              |                                 |                                  |                   |                 |
|-----------------------------------------------------|---------------------------------|------------------------------|---------------------------------|----------------------------------|-------------------|-----------------|
| Site Name                                           | Reference Measured Depth (usft) | Offset Measured Depth (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Separation Factor | Warning         |
| Offset Well - Wellbore - Design                     |                                 |                              |                                 |                                  |                   |                 |
| LAKEWOOD FED COM                                    |                                 |                              |                                 |                                  |                   |                 |
| #10H - Wellbore #1 - Wellbore #1                    | 3,870.38                        | 2,969.40                     | 280.94                          | 257.07                           | 11.770            | CC, ES          |
| #10H - Wellbore #1 - Wellbore #1                    | 3,900.00                        | 2,969.17                     | 282.50                          | 258.25                           | 11.650            | SF              |
| #4H - Wellbore #1 - Wellbore #1                     | 2,500.00                        | 2,755.84                     | 232.06                          | 210.49                           | 10.761            | SF              |
| #4H - Wellbore #1 - Wellbore #1                     | 2,565.01                        | 2,809.95                     | 225.94                          | 205.52                           | 11.066            | CC, ES          |
| #8H - Wellbore #1 - Wellbore #1                     | 2,918.77                        | 2,744.76                     | 318.86                          | 301.63                           | 18.506            | CC, ES          |
| #8H - Wellbore #1 - Wellbore #1                     | 3,050.00                        | 2,773.11                     | 338.22                          | 319.90                           | 18.465            | SF              |
| LIVE OAK 27-28 STATE COM                            |                                 |                              |                                 |                                  |                   |                 |
| 30H - Wellbore #1 - PERMIT                          | 282.99                          | 283.99                       | 39.94                           | 38.34                            | 24.926            | CC              |
| 30H - Wellbore #1 - PERMIT                          | 300.00                          | 300.99                       | 39.94                           | 38.22                            | 23.165            | ES              |
| 30H - Wellbore #1 - PERMIT                          | 8,647.68                        | 8,822.99                     | 789.00                          | 541.14                           | 3.183             | SF              |
| 70H - Wellbore #1 - PERMIT                          | 300.00                          | 300.00                       | 20.00                           | 18.28                            | 11.623            | CC              |
| 70H - Wellbore #1 - PERMIT                          | 350.00                          | 349.88                       | 20.29                           | 18.23                            | 9.816             | ES              |
| 70H - Wellbore #1 - PERMIT                          | 8,647.68                        | 9,537.04                     | 943.67                          | 814.65                           | 7.314             | SF              |
| OFFSET: AIKMAN 1 - Wellbore #1 - Wellbore #1        | 4,013.50                        | 2,900.85                     | 268.43                          | 177.30                           | 2.945             | CC, ES          |
| OFFSET: AIKMAN 1 - Wellbore #1 - Wellbore #1        | 4,050.00                        | 2,900.14                     | 270.90                          | 178.68                           | 2.938             | SF              |
| OFFSET: HAWK 27 FEDERAL 1 - Wellbore #1 - Wellbor   | 300.00                          | 249.00                       | 1,176.29                        | 1,173.33                         | 397.458           | CC              |
| OFFSET: HAWK 27 FEDERAL 1 - Wellbore #1 - Wellbor   | 350.00                          | 299.00                       | 1,176.64                        | 1,173.08                         | 330.504           | ES              |
| OFFSET: HAWK 27 FEDERAL 1 - Wellbore #1 - Wellbor   | 4,150.00                        | 2,886.20                     | 2,137.81                        | 2,042.86                         | 22.514            | SF              |
| OFFSET: SOUTH BOYD 27 04 - Wellbore #1 - Wellbore   | 5,348.57                        | 2,870.99                     | 1,599.63                        | 1,464.26                         | 11.816            | CC              |
| OFFSET: SOUTH BOYD 27 04 - Wellbore #1 - Wellbore   | 5,400.00                        | 2,869.99                     | 1,600.46                        | 1,463.51                         | 11.686            | ES              |
| OFFSET: SOUTH BOYD 27 04 - Wellbore #1 - Wellbore   | 5,950.00                        | 2,859.33                     | 1,708.92                        | 1,555.08                         | 11.108            | SF              |
| OFFSET: SOUTH BOYD 27 05 - Wellbore #1 - Wellbore   | 5,005.86                        | 2,874.71                     | 436.49                          | 307.22                           | 3.377             | CC, ES          |
| OFFSET: SOUTH BOYD 27 05 - Wellbore #1 - Wellbore   | 5,050.00                        | 2,873.85                     | 438.71                          | 308.10                           | 3.359             | SF              |
| OFFSET: SOUTH BOYD 27 07 - Wellbore #1 - Wellbore   | 4,027.71                        | 2,875.56                     | 1,588.95                        | 1,495.93                         | 17.082            | CC              |
| OFFSET: SOUTH BOYD 27 07 - Wellbore #1 - Wellbore   | 4,100.00                        | 2,874.16                     | 1,590.59                        | 1,495.41                         | 16.712            | ES              |
| OFFSET: SOUTH BOYD 27 07 - Wellbore #1 - Wellbore   | 4,850.00                        | 2,859.63                     | 1,789.04                        | 1,671.16                         | 15.177            | SF              |
| OFFSET: SOUTH BOYD 27 12 - Wellbore #1 - Wellbore   | 4,001.26                        | 2,894.46                     | 627.50                          | 577.46                           | 12.539            | CC, ES          |
| OFFSET: SOUTH BOYD 27 12 - Wellbore #1 - Wellbore   | 4,250.00                        | 2,887.60                     | 674.97                          | 617.43                           | 11.730            | SF              |
| OFFSET: STATE 'K' 2 - Wellbore #1 - Wellbore #1     | 7,990.27                        | 2,833.80                     | 1,617.90                        | 1,400.26                         | 7.434             | CC              |
| OFFSET: STATE 'K' 2 - Wellbore #1 - Wellbore #1     | 8,050.00                        | 2,832.64                     | 1,619.01                        | 1,399.52                         | 7.376             | ES              |
| OFFSET: STATE 'K' 2 - Wellbore #1 - Wellbore #1     | 8,350.00                        | 2,826.83                     | 1,657.40                        | 1,428.65                         | 7.246             | SF              |
| OFFSET: TACKITT 'AOT' 1 - Wellbore #1 - Wellbore #1 | 6,996.10                        | 2,855.06                     | 1,281.28                        | 1,094.26                         | 6.851             | CC              |
| OFFSET: TACKITT 'AOT' 1 - Wellbore #1 - Wellbore #1 | 7,050.00                        | 2,854.02                     | 1,282.41                        | 1,093.73                         | 6.797             | ES              |
| OFFSET: TACKITT 'AOT' 1 - Wellbore #1 - Wellbore #1 | 7,250.00                        | 2,850.14                     | 1,306.18                        | 1,111.34                         | 6.704             | SF              |
| OFFSET: TACKITT 'AOT' 3 - Wellbore #1 - Wellbore #1 | 7,976.07                        | 2,845.17                     | 297.38                          | 76.24                            | 1.345             | Level 3, CC, ES |
| OFFSET: TACKITT 'AOT' 3 - Wellbore #1 - Wellbore #1 | 8,000.00                        | 2,844.71                     | 298.34                          | 76.47                            | 1.345             | Level 3, SF     |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

## Summary

| Site Name                       | Reference Measured Depth (usft) | Offset Measured Depth (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Separation Factor | Warning |
|---------------------------------|---------------------------------|------------------------------|---------------------------------|----------------------------------|-------------------|---------|
| Offset Well - Wellbore - Design |                                 |                              |                                 |                                  |                   |         |
| South Boyd                      |                                 |                              |                                 |                                  |                   |         |
| South Boyd 20H - OH - OH        | 3,175.18                        | 4,227.76                     | 815.80                          | 794.38                           | 38.095            | SF      |
| South Boyd 20H - OH - OH        | 3,250.00                        | 4,228.91                     | 805.97                          | 787.03                           | 42.557            | ES      |
| South Boyd 20H - OH - OH        | 3,256.99                        | 4,229.00                     | 805.90                          | 787.18                           | 43.059            | CC      |

| Offset Design LAKEWOOD FED COM - #10H - Wellbore #1 - Wellbore #1 |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 167-Reference                                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Well Error: | 0.00 usft |
| Reference                                                         |                       | Offset                |                       | Semi Major Axis  |               |                       | Distance                            |              |                        |                         |                           |                   |                    |           |
| Measured Depth (usft)                                             | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor | Warning            |           |
| 0.00                                                              | 0.00                  | 0.00                  | 20.00                 | 0.00             | 0.00          | -105.97               | -266.80                             | -932.50      | 970.12                 |                         |                           |                   |                    |           |
| 50.00                                                             | 50.00                 | 32.60                 | 52.60                 | 0.05             | 0.05          | -105.96               | -266.73                             | -932.48      | 969.88                 | 969.77                  | 0.11                      | 9,189.537         |                    |           |
| 100.00                                                            | 100.00                | 86.92                 | 106.92                | 0.14             | 0.14          | -105.94               | -266.27                             | -932.33      | 969.63                 | 969.35                  | 0.28                      | 3,445.284         |                    |           |
| 150.00                                                            | 150.00                | 141.24                | 161.23                | 0.32             | 0.23          | -105.89               | -265.40                             | -932.05      | 969.16                 | 968.62                  | 0.55                      | 1,771.995         |                    |           |
| 200.00                                                            | 200.00                | 193.59                | 213.56                | 0.50             | 0.36          | -105.83               | -264.17                             | -931.68      | 968.50                 | 967.64                  | 0.86                      | 1,121.123         |                    |           |
| 250.00                                                            | 250.00                | 244.16                | 264.11                | 0.68             | 0.55          | -105.74               | -262.56                             | -931.38      | 967.78                 | 966.56                  | 1.23                      | 789.220           |                    |           |
| 300.00                                                            | 300.00                | 294.55                | 314.46                | 0.86             | 0.73          | -105.63               | -260.55                             | -931.17      | 967.04                 | 965.45                  | 1.59                      | 608.719           |                    |           |
| 350.00                                                            | 350.00                | 344.06                | 363.90                | 1.03             | 0.91          | 108.02                | -258.10                             | -931.10      | 966.44                 | 964.50                  | 1.94                      | 497.607           |                    |           |
| 400.00                                                            | 399.98                | 393.43                | 413.19                | 1.21             | 1.09          | 108.27                | -255.17                             | -931.18      | 966.15                 | 963.85                  | 2.30                      | 420.755           |                    |           |
| 419.71                                                            | 419.67                | 412.54                | 432.26                | 1.27             | 1.16          | 108.39                | -253.90                             | -931.26      | 966.12                 | 963.69                  | 2.44                      | 396.739           |                    |           |
| 450.00                                                            | 449.93                | 440.46                | 460.10                | 1.38             | 1.27          | 108.58                | -251.89                             | -931.46      | 966.22                 | 963.57                  | 2.65                      | 365.136           |                    |           |
| 500.00                                                            | 499.84                | 486.33                | 505.81                | 1.55             | 1.45          | 108.95                | -248.13                             | -932.05      | 966.78                 | 963.79                  | 2.99                      | 322.932           |                    |           |
| 550.00                                                            | 549.68                | 531.98                | 551.25                | 1.73             | 1.62          | 109.38                | -243.85                             | -932.96      | 967.88                 | 964.53                  | 3.35                      | 288.923           |                    |           |
| 600.00                                                            | 599.45                | 579.58                | 598.55                | 1.91             | 1.81          | 109.92                | -238.67                             | -934.21      | 969.48                 | 965.75                  | 3.73                      | 260.242           |                    |           |
| 650.00                                                            | 649.13                | 626.60                | 645.18                | 2.10             | 2.01          | 110.53                | -232.74                             | -935.71      | 971.57                 | 967.46                  | 4.11                      | 236.411           |                    |           |
| 700.00                                                            | 698.70                | 673.81                | 691.87                | 2.30             | 2.20          | 111.23                | -226.02                             | -937.46      | 974.20                 | 969.70                  | 4.50                      | 216.427           |                    |           |
| 750.00                                                            | 748.15                | 721.53                | 739.02                | 2.51             | 2.41          | 111.98                | -218.87                             | -939.32      | 977.36                 | 972.44                  | 4.91                      | 198.891           |                    |           |
| 800.00                                                            | 797.47                | 768.81                | 785.67                | 2.72             | 2.62          | 112.77                | -211.49                             | -941.22      | 981.07                 | 975.75                  | 5.32                      | 184.245           |                    |           |
| 850.00                                                            | 846.63                | 815.68                | 831.90                | 2.94             | 2.83          | 113.59                | -203.99                             | -943.15      | 985.39                 | 979.64                  | 5.75                      | 171.254           |                    |           |
| 900.00                                                            | 895.62                | 862.21                | 877.79                | 3.17             | 3.04          | 114.42                | -196.49                             | -945.09      | 990.35                 | 984.17                  | 6.18                      | 160.223           |                    |           |
| 950.00                                                            | 944.44                | 907.94                | 922.86                | 3.42             | 3.24          | 115.27                | -189.04                             | -947.01      | 995.99                 | 989.36                  | 6.62                      | 150.387           |                    |           |
| 1,000.00                                                          | 993.06                | 951.95                | 966.17                | 3.67             | 3.45          | 116.12                | -181.48                             | -948.98      | 1,002.39               | 995.33                  | 7.06                      | 141.948           |                    |           |
| 1,050.00                                                          | 1,041.46              | 995.14                | 1,008.58              | 3.93             | 3.66          | 116.99                | -173.56                             | -951.04      | 1,009.65               | 1,002.14                | 7.51                      | 134.470           |                    |           |
| 1,051.64                                                          | 1,043.05              | 996.55                | 1,009.96              | 3.94             | 3.66          | 117.02                | -173.30                             | -951.11      | 1,009.90               | 1,002.38                | 7.52                      | 134.243           |                    |           |
| 1,100.00                                                          | 1,089.75              | 1,035.57              | 1,048.18              | 4.21             | 3.85          | 117.95                | -165.70                             | -953.12      | 1,017.63               | 1,009.68                | 7.95                      | 127.936           |                    |           |
| 1,150.00                                                          | 1,138.04              | 1,073.46              | 1,085.19              | 4.49             | 4.05          | 118.87                | -157.87                             | -955.33      | 1,026.32               | 1,017.92                | 8.40                      | 122.212           |                    |           |
| 1,200.00                                                          | 1,186.33              | 1,110.81              | 1,121.56              | 4.77             | 4.24          | 119.80                | -149.72                             | -957.76      | 1,035.73               | 1,026.89                | 8.84                      | 117.210           |                    |           |
| 1,250.00                                                          | 1,234.62              | 1,148.67              | 1,158.30              | 5.06             | 4.44          | 120.74                | -141.03                             | -960.49      | 1,045.88               | 1,036.59                | 9.28                      | 112.679           |                    |           |
| 1,300.00                                                          | 1,282.91              | 1,188.32              | 1,196.70              | 5.34             | 4.65          | 121.73                | -131.58                             | -963.52      | 1,056.67               | 1,046.93                | 9.74                      | 108.489           |                    |           |
| 1,350.00                                                          | 1,331.20              | 1,228.52              | 1,235.50              | 5.64             | 4.88          | 122.75                | -121.60                             | -966.72      | 1,068.08               | 1,057.87                | 10.21                     | 104.611           |                    |           |
| 1,400.00                                                          | 1,379.48              | 1,268.23              | 1,273.69              | 5.93             | 5.11          | 123.76                | -111.21                             | -969.98      | 1,080.08               | 1,069.41                | 10.67                     | 101.194           |                    |           |
| 1,450.00                                                          | 1,427.77              | 1,311.00              | 1,314.65              | 6.22             | 5.36          | 124.85                | -99.45                              | -973.58      | 1,092.70               | 1,081.55                | 11.15                     | 98.019            |                    |           |
| 1,500.00                                                          | 1,476.06              | 1,343.55              | 1,345.70              | 6.51             | 5.57          | 125.69                | -90.12                              | -976.44      | 1,105.97               | 1,094.38                | 11.58                     | 95.469            |                    |           |
| 1,550.00                                                          | 1,524.35              | 1,379.01              | 1,379.41              | 6.81             | 5.79          | 126.61                | -79.61                              | -979.70      | 1,119.97               | 1,107.94                | 12.03                     | 93.073            |                    |           |
| 1,600.00                                                          | 1,572.64              | 1,413.93              | 1,412.48              | 7.11             | 6.01          | 127.52                | -68.90                              | -983.08      | 1,134.71               | 1,122.24                | 12.47                     | 90.969            |                    |           |
| 1,650.00                                                          | 1,620.93              | 1,452.27              | 1,448.64              | 7.41             | 6.26          | 128.51                | -56.77                              | -986.94      | 1,150.16               | 1,137.23                | 12.93                     | 88.940            |                    |           |
| 1,700.00                                                          | 1,669.22              | 1,498.39              | 1,492.09              | 7.70             | 6.57          | 129.69                | -41.97                              | -991.46      | 1,166.00               | 1,152.57                | 13.43                     | 86.811            |                    |           |
| 1,750.00                                                          | 1,717.51              | 1,544.46              | 1,535.46              | 8.00             | 6.88          | 130.85                | -27.06                              | -995.75      | 1,182.14               | 1,168.21                | 13.92                     | 84.902            |                    |           |
| 1,800.00                                                          | 1,765.79              | 1,581.14              | 1,569.97              | 8.30             | 7.13          | 131.76                | -15.05                              | -999.07      | 1,198.65               | 1,184.28                | 14.37                     | 83.438            |                    |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design LAKEWOOD FED COM - #10H - Wellbore #1 - Wellbore #1 |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|-------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 167-                                              |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Measured Depth (usft)                                             | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Tooface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  | Warning   |
| 1,850.00                                                          | 1,814.08              | 1,610.54              | 1,597.51              | 8.60             | 7.34          | 132.49               | -5.16                               | -1,001.91    | 1,215.94               | 1,201.17                | 14.77                     | 82.317             |           |
| 1,900.00                                                          | 1,862.37              | 1,646.19              | 1,630.82              | 8.90             | 7.58          | 133.36               | 6.99                                | -1,005.63    | 1,234.00               | 1,218.80                | 15.20                     | 81.185             |           |
| 1,950.00                                                          | 1,910.66              | 1,693.41              | 1,675.40              | 9.20             | 7.91          | 134.42               | 21.61                               | -1,010.92    | 1,252.41               | 1,236.74                | 15.68                     | 79.893             |           |
| 1,989.45                                                          | 1,948.77              | 1,756.49              | 1,735.92              | 9.44             | 8.29          | 135.65               | 37.88                               | -1,018.01    | 1,266.67               | 1,250.54                | 16.13                     | 78.535             |           |
| 2,000.00                                                          | 1,958.96              | 1,770.23              | 1,749.23              | 9.51             | 8.37          | 133.67               | 40.89                               | -1,019.53    | 1,270.33               | 1,254.08                | 16.25                     | 78.189             |           |
| 2,050.00                                                          | 2,007.55              | 1,835.34              | 1,812.87              | 9.79             | 8.70          | 122.18               | 52.51                               | -1,026.86    | 1,285.58               | 1,268.81                | 16.77                     | 76.665             |           |
| 2,100.00                                                          | 2,056.43              | 1,893.09              | 1,869.82              | 10.04            | 8.95          | 107.29               | 59.02                               | -1,033.76    | 1,297.50               | 1,280.32                | 17.18                     | 75.528             |           |
| 2,150.00                                                          | 2,105.41              | 1,942.01              | 1,918.23              | 10.27            | 9.14          | 90.67                | 61.61                               | -1,040.32    | 1,306.40               | 1,288.92                | 17.48                     | 74.725             |           |
| 2,200.00                                                          | 2,154.31              | 2,371.26              | 2,324.94              | 10.47            | 9.36          | 73.65                | -49.73                              | -1,067.93    | 1,301.02               | 1,283.03                | 17.99                     | 72.300             |           |
| 2,250.00                                                          | 2,202.95              | 2,461.80              | 2,398.45              | 10.64            | 9.29          | 59.44                | -102.46                             | -1,067.79    | 1,288.91               | 1,270.73                | 18.19                     | 70.867             |           |
| 2,300.00                                                          | 2,251.14              | 2,526.09              | 2,446.33              | 10.79            | 9.27          | 48.51                | -145.34                             | -1,067.70    | 1,273.19               | 1,254.85                | 18.33                     | 69.441             |           |
| 2,350.00                                                          | 2,298.70              | 2,580.19              | 2,483.51              | 10.93            | 9.28          | 40.07                | -184.63                             | -1,067.84    | 1,254.51               | 1,236.07                | 18.44                     | 68.048             |           |
| 2,400.00                                                          | 2,345.46              | 2,640.47              | 2,521.42              | 11.05            | 9.36          | 32.95                | -231.47                             | -1,067.95    | 1,233.00               | 1,214.45                | 18.55                     | 66.478             |           |
| 2,450.00                                                          | 2,391.25              | 2,702.69              | 2,556.61              | 11.16            | 9.56          | 26.64                | -282.76                             | -1,067.45    | 1,208.64               | 1,189.97                | 18.67                     | 64.753             |           |
| 2,500.00                                                          | 2,435.89              | 2,730.00              | 2,571.10              | 11.26            | 9.69          | 22.34                | -305.91                             | -1,067.14    | 1,182.16               | 1,163.61                | 18.55                     | 63.727             |           |
| 2,550.00                                                          | 2,479.22              | 2,751.45              | 2,582.31              | 11.35            | 9.80          | 18.81                | -324.19                             | -1,066.99    | 1,154.02               | 1,135.68                | 18.34                     | 62.911             |           |
| 2,600.00                                                          | 2,521.07              | 2,774.87              | 2,594.39              | 11.43            | 9.95          | 15.53                | -344.26                             | -1,066.93    | 1,124.31               | 1,106.22                | 18.09                     | 62.167             |           |
| 2,650.00                                                          | 2,561.29              | 2,796.94              | 2,605.62              | 11.52            | 10.10         | 12.51                | -363.25                             | -1,066.92    | 1,093.05               | 1,075.29                | 17.76                     | 61.550             |           |
| 2,700.00                                                          | 2,599.72              | 2,815.05              | 2,614.71              | 11.60            | 10.23         | 9.81                 | -378.91                             | -1,066.99    | 1,060.39               | 1,043.04                | 17.35                     | 61.116             |           |
| 2,750.00                                                          | 2,636.24              | 2,833.31              | 2,623.77              | 11.70            | 10.37         | 7.11                 | -394.77                             | -1,067.13    | 1,026.41               | 1,009.51                | 16.89                     | 60.768             |           |
| 2,800.00                                                          | 2,670.69              | 2,851.18              | 2,632.53              | 11.82            | 10.51         | 4.37                 | -410.34                             | -1,067.30    | 991.15                 | 974.77                  | 16.38                     | 60.495             |           |
| 2,850.00                                                          | 2,702.95              | 2,866.81              | 2,640.09              | 12.05            | 10.65         | 1.66                 | -424.02                             | -1,067.48    | 954.71                 | 938.88                  | 15.84                     | 60.274             |           |
| 2,900.00                                                          | 2,732.90              | 2,880.68              | 2,646.73              | 12.48            | 10.77         | -1.09                | -436.19                             | -1,067.66    | 917.20                 | 901.92                  | 15.28                     | 60.014             |           |
| 2,950.00                                                          | 2,760.43              | 2,893.68              | 2,652.88              | 13.15            | 10.89         | -4.01                | -447.65                             | -1,067.85    | 878.71                 | 863.94                  | 14.77                     | 59.499             |           |
| 2,975.18                                                          | 2,773.35              | 2,899.70              | 2,655.67              | 13.54            | 10.94         | -5.53                | -452.98                             | -1,067.94    | 858.98                 | 844.44                  | 14.54                     | 59.066             |           |
| 3,000.00                                                          | 2,785.76              | 2,905.27              | 2,658.23              | 13.96            | 11.00         | -6.09                | -457.93                             | -1,068.01    | 839.55                 | 824.85                  | 14.70                     | 57.105             |           |
| 3,050.00                                                          | 2,810.76              | 2,916.12              | 2,663.14              | 14.86            | 11.10         | -7.19                | -467.60                             | -1,068.15    | 801.18                 | 786.14                  | 15.04                     | 53.283             |           |
| 3,100.00                                                          | 2,835.76              | 2,926.47              | 2,667.72              | 15.79            | 11.20         | -8.26                | -476.88                             | -1,068.27    | 764.00                 | 748.61                  | 15.39                     | 49.651             |           |
| 3,150.00                                                          | 2,860.76              | 2,936.35              | 2,672.01              | 16.79            | 11.30         | -9.29                | -485.79                             | -1,068.38    | 728.19                 | 712.43                  | 15.76                     | 46.199             |           |
| 3,175.18                                                          | 2,873.35              | 2,941.16              | 2,674.07              | 17.30            | 11.35         | -9.79                | -490.14                             | -1,068.43    | 710.75                 | 694.80                  | 15.96                     | 44.538             |           |
| 3,200.00                                                          | 2,885.29              | 2,949.00              | 2,677.38              | 17.82            | 11.42         | -11.07               | -497.24                             | -1,068.51    | 693.61                 | 677.87                  | 15.74                     | 44.068             |           |
| 3,250.00                                                          | 2,906.43              | 2,954.62              | 2,679.72              | 18.94            | 11.48         | -12.77               | -502.35                             | -1,068.56    | 658.05                 | 642.73                  | 15.33                     | 42.928             |           |
| 3,300.00                                                          | 2,923.54              | 2,962.26              | 2,682.87              | 20.14            | 11.57         | -15.06               | -509.31                             | -1,068.60    | 621.27                 | 605.95                  | 15.33                     | 40.534             |           |
| 3,350.00                                                          | 2,936.49              | 2,967.72              | 2,685.10              | 21.42            | 11.63         | -17.47               | -514.29                             | -1,068.62    | 583.41                 | 567.68                  | 15.72                     | 37.102             |           |
| 3,400.00                                                          | 2,945.18              | 2,971.18              | 2,686.50              | 22.74            | 11.66         | -20.00               | -517.46                             | -1,068.63    | 544.60                 | 528.04                  | 16.56                     | 32.884             |           |
| 3,450.00                                                          | 2,949.55              | 2,972.78              | 2,687.15              | 24.11            | 11.68         | -22.64               | -518.92                             | -1,068.63    | 505.00                 | 487.17                  | 17.83                     | 28.317             |           |
| 3,486.28                                                          | 2,950.00              | 2,972.85              | 2,687.18              | 25.12            | 11.68         | -24.62               | -518.99                             | -1,068.63    | 475.86                 | 456.86                  | 19.01                     | 25.037             |           |
| 3,500.00                                                          | 2,949.73              | 2,972.71              | 2,687.12              | 25.50            | 11.68         | -24.59               | -518.86                             | -1,068.63    | 464.86                 | 445.69                  | 19.18                     | 24.243             |           |
| 3,550.00                                                          | 2,948.77              | 2,972.22              | 2,686.92              | 26.91            | 11.68         | -24.49               | -518.40                             | -1,068.63    | 426.10                 | 406.30                  | 19.80                     | 21.522             |           |
| 3,600.00                                                          | 2,947.80              | 2,971.73              | 2,686.72              | 28.33            | 11.67         | -24.39               | -517.96                             | -1,068.63    | 389.91                 | 369.49                  | 20.42                     | 19.093             |           |
| 3,650.00                                                          | 2,946.83              | 2,971.27              | 2,686.54              | 29.77            | 11.67         | -24.29               | -517.54                             | -1,068.63    | 357.06                 | 336.01                  | 21.05                     | 16.960             |           |
| 3,700.00                                                          | 2,945.86              | 2,970.82              | 2,686.36              | 31.22            | 11.66         | -24.20               | -517.13                             | -1,068.63    | 328.56                 | 306.88                  | 21.69                     | 15.151             |           |
| 3,750.00                                                          | 2,944.89              | 2,970.39              | 2,686.18              | 32.68            | 11.66         | -24.11               | -516.73                             | -1,068.62    | 305.64                 | 283.32                  | 22.32                     | 13.691             |           |
| 3,800.00                                                          | 2,943.92              | 2,969.97              | 2,686.01              | 34.15            | 11.65         | -24.03               | -516.35                             | -1,068.62    | 289.62                 | 266.66                  | 22.96                     | 12.612             |           |
| 3,850.00                                                          | 2,942.95              | 2,969.57              | 2,685.85              | 35.63            | 11.65         | -23.95               | -515.98                             | -1,068.62    | 281.68                 | 258.07                  | 23.61                     | 11.932             |           |
| 3,870.38                                                          | 2,942.56              | 2,969.40              | 2,685.78              | 36.24            | 11.65         | -23.91               | -515.83                             | -1,068.62    | 280.94                 | 257.07                  | 23.87                     | 11.770 CC, ES      |           |
| 3,900.00                                                          | 2,941.98              | 2,969.17              | 2,685.69              | 37.12            | 11.64         | -23.87               | -515.62                             | -1,068.62    | 282.50                 | 258.25                  | 24.25                     | 11.650 SF          |           |
| 3,950.00                                                          | 2,941.02              | 2,968.79              | 2,685.53              | 38.61            | 11.64         | -23.79               | -515.27                             | -1,068.62    | 292.01                 | 267.11                  | 24.90                     | 11.729             |           |
| 4,000.00                                                          | 2,940.05              | 2,968.43              | 2,685.38              | 40.11            | 11.63         | -23.71               | -514.94                             | -1,068.62    | 309.40                 | 283.86                  | 25.54                     | 12.113             |           |
| 4,050.00                                                          | 2,939.08              | 2,968.07              | 2,685.24              | 41.61            | 11.63         | -23.64               | -514.61                             | -1,068.62    | 333.45                 | 307.26                  | 26.19                     | 12.732             |           |
| 4,100.00                                                          | 2,938.11              | 2,967.73              | 2,685.10              | 43.12            | 11.63         | -23.57               | -514.30                             | -1,068.62    | 362.84                 | 336.00                  | 26.84                     | 13.519             |           |
| 4,150.00                                                          | 2,937.14              | 2,967.39              | 2,684.96              | 44.64            | 11.62         | -23.50               | -513.99                             | -1,068.62    | 396.37                 | 368.88                  | 27.49                     | 14.420             |           |

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





## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design LAKEWOOD FED COM - #10H - Wellbore #1 - Wellbore #1 |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|-------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 167-                                              |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | 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 Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor | Warning            |           |
| 4,200.00                                                          | 2,936.17              | 2,967.07              | 2,684.83              | 46.15            | 11.62         | -23.44                | -513.69                             | -1,068.62    | 433.09                 | 404.96                  | 28.14                     | 15.392            |                    |           |
| 4,250.00                                                          | 2,935.20              | 2,966.75              | 2,684.70              | 47.67            | 11.62         | -23.37                | -513.41                             | -1,068.62    | 472.26                 | 443.47                  | 28.79                     | 16.405            |                    |           |
| 4,300.00                                                          | 2,934.23              | 2,966.44              | 2,684.58              | 49.20            | 11.61         | -23.31                | -513.13                             | -1,068.62    | 513.31                 | 483.87                  | 29.44                     | 17.437            |                    |           |
| 4,350.00                                                          | 2,933.27              | 2,966.15              | 2,684.46              | 50.72            | 11.61         | -23.25                | -512.85                             | -1,068.62    | 555.83                 | 525.74                  | 30.09                     | 18.473            |                    |           |
| 4,400.00                                                          | 2,932.30              | 2,965.86              | 2,684.34              | 52.25            | 11.61         | -23.19                | -512.59                             | -1,068.62    | 599.51                 | 568.77                  | 30.74                     | 19.503            |                    |           |
| 4,450.00                                                          | 2,931.33              | 2,965.57              | 2,684.22              | 53.79            | 11.60         | -23.13                | -512.33                             | -1,068.62    | 644.10                 | 612.71                  | 31.39                     | 20.519            |                    |           |
| 4,500.00                                                          | 2,930.36              | 2,965.30              | 2,684.11              | 55.32            | 11.60         | -23.08                | -512.08                             | -1,068.61    | 689.44                 | 657.40                  | 32.04                     | 21.518            |                    |           |
| 4,550.00                                                          | 2,929.39              | 2,965.03              | 2,684.00              | 56.85            | 11.60         | -23.02                | -511.84                             | -1,068.61    | 735.38                 | 702.69                  | 32.69                     | 22.495            |                    |           |
| 4,600.00                                                          | 2,928.42              | 2,964.77              | 2,683.90              | 58.39            | 11.60         | -22.97                | -511.60                             | -1,068.61    | 781.82                 | 748.48                  | 33.34                     | 23.449            |                    |           |
| 4,650.00                                                          | 2,927.45              | 2,964.52              | 2,683.79              | 59.93            | 11.59         | -22.92                | -511.37                             | -1,068.61    | 828.67                 | 794.68                  | 33.99                     | 24.378            |                    |           |
| 4,700.00                                                          | 2,926.48              | 2,964.28              | 2,683.69              | 61.47            | 11.59         | -22.87                | -511.15                             | -1,068.61    | 875.88                 | 841.23                  | 34.64                     | 25.283            |                    |           |
| 4,750.00                                                          | 2,925.52              | 2,964.04              | 2,683.60              | 63.01            | 11.59         | -22.82                | -510.93                             | -1,068.61    | 923.37                 | 888.08                  | 35.29                     | 26.163            |                    |           |
| 4,800.00                                                          | 2,924.55              | 2,963.80              | 2,683.50              | 64.56            | 11.58         | -22.77                | -510.71                             | -1,068.61    | 971.12                 | 935.18                  | 35.94                     | 27.018            |                    |           |
| 4,850.00                                                          | 2,923.58              | 2,963.57              | 2,683.41              | 66.10            | 11.58         | -22.72                | -510.51                             | -1,068.61    | 1,019.08               | 982.49                  | 36.59                     | 27.849            |                    |           |
| 4,900.00                                                          | 2,922.61              | 2,963.35              | 2,683.32              | 67.65            | 11.58         | -22.68                | -510.30                             | -1,068.61    | 1,067.23               | 1,029.99                | 37.24                     | 28.656            |                    |           |
| 4,950.00                                                          | 2,921.64              | 2,963.13              | 2,683.23              | 69.20            | 11.58         | -22.63                | -510.10                             | -1,068.61    | 1,115.55               | 1,077.65                | 37.89                     | 29.440            |                    |           |
| 5,000.00                                                          | 2,920.67              | 2,962.92              | 2,683.14              | 70.75            | 11.58         | -22.59                | -509.91                             | -1,068.61    | 1,164.00               | 1,125.46                | 38.54                     | 30.201            |                    |           |
| 5,050.00                                                          | 2,919.70              | 2,962.71              | 2,683.05              | 72.30            | 11.57         | -22.55                | -509.72                             | -1,068.60    | 1,212.58               | 1,173.39                | 39.19                     | 30.941            |                    |           |
| 5,100.00                                                          | 2,918.73              | 2,962.51              | 2,682.97              | 73.85            | 11.57         | -22.51                | -509.54                             | -1,068.60    | 1,261.28               | 1,221.44                | 39.84                     | 31.659            |                    |           |
| 5,150.00                                                          | 2,917.77              | 2,962.31              | 2,682.89              | 75.40            | 11.57         | -22.47                | -509.36                             | -1,068.60    | 1,310.07               | 1,269.58                | 40.49                     | 32.357            |                    |           |
| 5,200.00                                                          | 2,916.80              | 2,949.00              | 2,677.38              | 76.95            | 11.42         | -19.76                | -497.24                             | -1,068.51    | 1,359.05               | 1,320.76                | 38.29                     | 35.490            |                    |           |
| 5,250.00                                                          | 2,915.83              | 2,949.00              | 2,677.38              | 78.50            | 11.42         | -19.76                | -497.24                             | -1,068.51    | 1,408.00               | 1,369.07                | 38.93                     | 36.166            |                    |           |
| 5,300.00                                                          | 2,914.86              | 2,949.00              | 2,677.38              | 80.05            | 11.42         | -19.76                | -497.24                             | -1,068.51    | 1,457.03               | 1,417.46                | 39.57                     | 36.822            |                    |           |
| 5,350.00                                                          | 2,913.89              | 2,949.00              | 2,677.38              | 81.61            | 11.42         | -19.76                | -497.24                             | -1,068.51    | 1,506.11               | 1,465.91                | 40.21                     | 37.459            |                    |           |
| 5,400.00                                                          | 2,912.92              | 2,949.00              | 2,677.38              | 83.16            | 11.42         | -19.76                | -497.24                             | -1,068.51    | 1,555.26               | 1,514.41                | 40.85                     | 38.076            |                    |           |
| 5,450.00                                                          | 2,911.95              | 2,949.00              | 2,677.38              | 84.72            | 11.42         | -19.76                | -497.24                             | -1,068.51    | 1,604.46               | 1,562.97                | 41.48                     | 38.676            |                    |           |
| 5,500.00                                                          | 2,910.99              | 2,949.00              | 2,677.38              | 86.27            | 11.42         | -19.76                | -497.24                             | -1,068.51    | 1,653.70               | 1,611.58                | 42.12                     | 39.259            |                    |           |
| 5,550.00                                                          | 2,910.02              | 2,949.00              | 2,677.38              | 87.83            | 11.42         | -19.76                | -497.24                             | -1,068.51    | 1,702.99               | 1,660.23                | 42.76                     | 39.825            |                    |           |
| 5,600.00                                                          | 2,909.05              | 2,949.00              | 2,677.38              | 89.39            | 11.42         | -19.76                | -497.24                             | -1,068.51    | 1,752.32               | 1,708.92                | 43.40                     | 40.375            |                    |           |
| 5,650.00                                                          | 2,908.08              | 2,949.00              | 2,677.38              | 90.95            | 11.42         | -19.76                | -497.24                             | -1,068.51    | 1,801.69               | 1,757.65                | 44.04                     | 40.910            |                    |           |
| 5,700.00                                                          | 2,907.11              | 2,949.00              | 2,677.38              | 92.50            | 11.42         | -19.76                | -497.24                             | -1,068.51    | 1,851.09               | 1,806.41                | 44.68                     | 41.430            |                    |           |
| 5,750.00                                                          | 2,906.14              | 2,949.00              | 2,677.38              | 94.06            | 11.42         | -19.76                | -497.24                             | -1,068.51    | 1,900.52               | 1,855.20                | 45.32                     | 41.936            |                    |           |
| 5,800.00                                                          | 2,905.17              | 2,949.00              | 2,677.38              | 95.62            | 11.42         | -19.76                | -497.24                             | -1,068.51    | 1,949.98               | 1,904.02                | 45.96                     | 42.428            |                    |           |
| 5,850.00                                                          | 2,904.20              | 2,949.00              | 2,677.38              | 97.18            | 11.42         | -19.76                | -497.24                             | -1,068.51    | 1,999.47               | 1,952.87                | 46.60                     | 42.907            |                    |           |
| 5,900.00                                                          | 2,903.24              | 2,949.00              | 2,677.38              | 98.74            | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,048.98               | 2,001.74                | 47.24                     | 43.374            |                    |           |
| 5,950.00                                                          | 2,902.27              | 2,949.00              | 2,677.38              | 100.30           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,098.52               | 2,050.64                | 47.88                     | 43.828            |                    |           |
| 6,000.00                                                          | 2,901.30              | 2,949.00              | 2,677.38              | 101.86           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,148.08               | 2,099.56                | 48.52                     | 44.271            |                    |           |
| 6,050.00                                                          | 2,900.33              | 2,949.00              | 2,677.38              | 103.42           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,197.66               | 2,148.49                | 49.16                     | 44.702            |                    |           |
| 6,100.00                                                          | 2,899.36              | 2,949.00              | 2,677.38              | 104.98           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,247.25               | 2,197.45                | 49.80                     | 45.123            |                    |           |
| 6,150.00                                                          | 2,898.39              | 2,949.00              | 2,677.38              | 106.54           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,296.87               | 2,246.42                | 50.44                     | 45.533            |                    |           |
| 6,200.00                                                          | 2,897.42              | 2,949.00              | 2,677.38              | 108.10           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,346.50               | 2,295.41                | 51.09                     | 45.933            |                    |           |
| 6,250.00                                                          | 2,896.45              | 2,949.00              | 2,677.38              | 109.66           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,396.14               | 2,344.42                | 51.73                     | 46.323            |                    |           |
| 6,300.00                                                          | 2,895.49              | 2,949.00              | 2,677.38              | 111.23           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,445.80               | 2,393.43                | 52.37                     | 46.704            |                    |           |
| 6,350.00                                                          | 2,894.52              | 2,949.00              | 2,677.38              | 112.79           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,495.48               | 2,442.47                | 53.01                     | 47.076            |                    |           |
| 6,400.00                                                          | 2,893.55              | 2,949.00              | 2,677.38              | 114.35           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,545.16               | 2,491.51                | 53.65                     | 47.439            |                    |           |
| 6,450.00                                                          | 2,892.58              | 2,949.00              | 2,677.38              | 115.91           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,594.86               | 2,540.57                | 54.29                     | 47.794            |                    |           |
| 6,500.00                                                          | 2,891.61              | 2,949.00              | 2,677.38              | 117.48           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,644.57               | 2,589.64                | 54.93                     | 48.140            |                    |           |
| 6,550.00                                                          | 2,890.64              | 2,949.00              | 2,677.38              | 119.04           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,694.29               | 2,638.71                | 55.58                     | 48.479            |                    |           |
| 6,600.00                                                          | 2,889.67              | 2,949.00              | 2,677.38              | 120.60           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,744.02               | 2,687.80                | 56.22                     | 48.810            |                    |           |
| 6,650.00                                                          | 2,888.70              | 2,949.00              | 2,677.38              | 122.17           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,793.76               | 2,736.90                | 56.86                     | 49.134            |                    |           |
| 6,700.00                                                          | 2,887.74              | 2,949.00              | 2,677.38              | 123.73           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,843.51               | 2,786.01                | 57.50                     | 49.450            |                    |           |
| 6,750.00                                                          | 2,886.77              | 2,949.00              | 2,677.38              | 125.29           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,893.27               | 2,835.12                | 58.14                     | 49.760            |                    |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| <b>Offset Design</b> LAKEWOOD FED COM - #10H - Wellbore #1 - Wellbore #1 |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | <b>Offset Site Error:</b> | 0.00 usft |
|--------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|---------------------------|-----------|
| Survey Program: 167-                                                     |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | <b>Offset Well Error:</b> | 0.00 usft |
| Reference                                                                | Offset                | Semi Major Axis       |                       | Distance         |               |                       |                                     |              |                        |                         |                           |                           |           |
| Measured Depth (usft)                                                    | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor         | Warning   |
| 6,800.00                                                                 | 2,885.80              | 2,949.00              | 2,677.38              | 126.86           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,943.04               | 2,884.25                | 58.79                     | 50.062                    |           |
| 6,850.00                                                                 | 2,884.83              | 2,949.00              | 2,677.38              | 128.42           | 11.42         | -19.76                | -497.24                             | -1,068.51    | 2,992.81               | 2,933.38                | 59.43                     | 50.359                    |           |



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design LAKEWOOD FED COM - #4H - Wellbore #1 - Wellbore #1 |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 165-                                             |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                                                        | Offset                | Semi Major Axis       |                       | Distance         |               |                      |                                     |              |                        |                         |                           |                    |           |
| Measured Depth (usft)                                            | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Tooface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  | Warning   |
| 0.00                                                             | 0.00                  | 0.00                  | 14.00                 | 0.00             | 0.00          | -105.09              | -90.00                              | -333.90      | 346.10                 |                         |                           |                    |           |
| 50.00                                                            | 50.00                 | 35.61                 | 49.61                 | 0.05             | 0.06          | -105.08              | -89.98                              | -333.93      | 345.84                 | 345.73                  | 0.11                      | 3,143.360          |           |
| 100.00                                                           | 100.00                | 85.07                 | 99.07                 | 0.14             | 0.13          | -105.06              | -89.87                              | -334.05      | 345.93                 | 345.65                  | 0.28                      | 1,245.415          |           |
| 150.00                                                           | 150.00                | 134.53                | 148.53                | 0.32             | 0.21          | -105.02              | -89.67                              | -334.29      | 346.11                 | 345.57                  | 0.54                      | 646.778            |           |
| 200.00                                                           | 200.00                | 185.07                | 199.07                | 0.50             | 0.33          | -104.95              | -89.36                              | -334.60      | 346.33                 | 345.49                  | 0.83                      | 415.503            |           |
| 250.00                                                           | 250.00                | 237.37                | 251.36                | 0.68             | 0.52          | -104.86              | -88.82                              | -334.71      | 346.30                 | 345.10                  | 1.20                      | 289.043            |           |
| 300.00                                                           | 300.00                | 289.86                | 303.84                | 0.86             | 0.70          | -104.74              | -88.02                              | -334.53      | 345.93                 | 344.37                  | 1.56                      | 221.274            |           |
| 350.00                                                           | 350.00                | 345.04                | 359.01                | 1.03             | 0.90          | 109.00               | -86.79                              | -333.79      | 345.15                 | 343.21                  | 1.93                      | 178.593            |           |
| 400.00                                                           | 399.98                | 400.14                | 414.06                | 1.21             | 1.10          | 109.46               | -85.07                              | -332.32      | 343.90                 | 341.60                  | 2.30                      | 149.472            |           |
| 450.00                                                           | 449.93                | 454.80                | 468.64                | 1.38             | 1.29          | 110.13               | -82.93                              | -330.15      | 342.24                 | 339.57                  | 2.67                      | 128.180            |           |
| 500.00                                                           | 499.84                | 509.27                | 522.97                | 1.55             | 1.49          | 110.99               | -80.42                              | -327.31      | 340.24                 | 337.20                  | 3.04                      | 111.986            |           |
| 550.00                                                           | 549.68                | 562.26                | 575.79                | 1.73             | 1.69          | 112.02               | -77.70                              | -323.93      | 338.01                 | 334.60                  | 3.41                      | 99.101             |           |
| 600.00                                                           | 599.45                | 614.53                | 627.85                | 1.91             | 1.89          | 113.16               | -75.06                              | -320.15      | 335.79                 | 332.01                  | 3.78                      | 88.792             |           |
| 650.00                                                           | 649.13                | 668.28                | 681.36                | 2.10             | 2.10          | 114.48               | -72.38                              | -315.76      | 333.61                 | 329.44                  | 4.17                      | 80.024             |           |
| 700.00                                                           | 698.70                | 724.70                | 737.42                | 2.30             | 2.32          | 116.02               | -69.50                              | -310.11      | 331.03                 | 326.46                  | 4.57                      | 72.482             |           |
| 750.00                                                           | 748.15                | 781.21                | 793.42                | 2.51             | 2.55          | 117.75               | -66.50                              | -303.25      | 327.97                 | 322.99                  | 4.98                      | 65.874             |           |
| 800.00                                                           | 797.47                | 838.33                | 849.84                | 2.72             | 2.79          | 119.75               | -62.97                              | -295.01      | 324.39                 | 318.99                  | 5.40                      | 60.108             |           |
| 850.00                                                           | 846.63                | 894.89                | 905.44                | 2.94             | 3.04          | 122.04               | -58.81                              | -285.52      | 320.35                 | 314.53                  | 5.83                      | 54.976             |           |
| 900.00                                                           | 895.62                | 950.97                | 960.26                | 3.17             | 3.31          | 124.65               | -53.89                              | -274.79      | 316.01                 | 309.75                  | 6.26                      | 50.453             |           |
| 950.00                                                           | 944.44                | 1,006.15              | 1,013.85              | 3.42             | 3.58          | 127.59               | -48.20                              | -262.94      | 311.56                 | 304.85                  | 6.71                      | 46.431             |           |
| 1,000.00                                                         | 993.06                | 1,061.86              | 1,067.52              | 3.67             | 3.90          | 130.95               | -41.54                              | -249.59      | 307.16                 | 299.98                  | 7.18                      | 42.792             |           |
| 1,050.00                                                         | 1,041.46              | 1,116.44              | 1,119.59              | 3.93             | 4.21          | 134.66               | -34.08                              | -235.02      | 302.97                 | 295.32                  | 7.65                      | 39.603             |           |
| 1,051.64                                                         | 1,043.05              | 1,118.21              | 1,121.27              | 3.94             | 4.22          | 134.79               | -33.82                              | -234.52      | 302.84                 | 295.18                  | 7.67                      | 39.507             |           |
| 1,100.00                                                         | 1,089.75              | 1,177.17              | 1,176.59              | 4.21             | 4.60          | 139.24               | -24.31                              | -216.56      | 298.65                 | 290.47                  | 8.19                      | 36.482             |           |
| 1,150.00                                                         | 1,138.04              | 1,226.35              | 1,221.85              | 4.49             | 4.96          | 143.38               | -15.07                              | -199.69      | 294.12                 | 285.42                  | 8.70                      | 33.799             |           |
| 1,200.00                                                         | 1,186.33              | 1,274.03              | 1,265.35              | 4.77             | 5.32          | 147.64               | -5.53                               | -182.63      | 290.72                 | 281.49                  | 9.23                      | 31.508             |           |
| 1,250.00                                                         | 1,234.62              | 1,320.21              | 1,307.10              | 5.06             | 5.68          | 151.96               | 4.24                                | -165.49      | 288.72                 | 278.96                  | 9.76                      | 29.574             |           |
| 1,279.16                                                         | 1,262.78              | 1,345.84              | 1,330.23              | 5.22             | 5.89          | 154.39               | 9.71                                | -155.89      | 288.38                 | 278.31                  | 10.08                     | 28.620             |           |
| 1,300.00                                                         | 1,282.91              | 1,364.19              | 1,346.80              | 5.34             | 6.04          | 156.12               | 13.59                               | -149.02      | 288.55                 | 278.25                  | 10.30                     | 28.008             |           |
| 1,350.00                                                         | 1,331.20              | 1,408.35              | 1,386.71              | 5.64             | 6.40          | 160.25               | 22.85                               | -132.55      | 290.33                 | 279.47                  | 10.85                     | 26.748             |           |
| 1,400.00                                                         | 1,379.48              | 1,453.28              | 1,427.38              | 5.93             | 6.77          | 164.37               | 32.11                               | -115.84      | 293.95                 | 282.53                  | 11.42                     | 25.744             |           |
| 1,450.00                                                         | 1,427.77              | 1,499.40              | 1,469.12              | 6.22             | 7.16          | 168.47               | 41.38                               | -98.57       | 299.13                 | 287.14                  | 12.00                     | 24.931             |           |
| 1,500.00                                                         | 1,476.06              | 1,545.68              | 1,511.00              | 6.51             | 7.55          | 172.44               | 50.41                               | -81.08       | 305.73                 | 293.14                  | 12.58                     | 24.297             |           |
| 1,550.00                                                         | 1,524.35              | 1,590.40              | 1,551.47              | 6.81             | 7.93          | 176.12               | 58.95                               | -64.05       | 313.68                 | 300.52                  | 13.16                     | 23.834             |           |
| 1,600.00                                                         | 1,572.64              | 1,634.22              | 1,591.09              | 7.11             | 8.31          | 179.58               | 67.40                               | -47.34       | 323.14                 | 309.41                  | 13.73                     | 23.528             |           |
| 1,650.00                                                         | 1,620.93              | 1,677.93              | 1,630.58              | 7.41             | 8.69          | -177.12              | 75.93                               | -30.66       | 334.02                 | 319.72                  | 14.31                     | 23.346             |           |
| 1,700.00                                                         | 1,669.22              | 1,723.44              | 1,671.77              | 7.70             | 9.08          | -173.91              | 84.72                               | -13.43       | 346.12                 | 331.22                  | 14.89                     | 23.240             |           |
| 1,750.00                                                         | 1,717.51              | 1,773.40              | 1,717.41              | 8.00             | 9.50          | -170.77              | 93.62                               | 4.82         | 358.94                 | 343.44                  | 15.50                     | 23.155             |           |
| 1,800.00                                                         | 1,765.79              | 1,833.84              | 1,773.70              | 8.30             | 9.97          | -167.66              | 101.84                              | 25.20        | 371.38                 | 355.22                  | 16.16                     | 22.985             |           |
| 1,850.00                                                         | 1,814.08              | 1,913.60              | 1,849.35              | 8.60             | 10.51         | -164.54              | 106.46                              | 49.95        | 381.50                 | 364.60                  | 16.90                     | 22.577             |           |
| 1,900.00                                                         | 1,862.37              | 2,004.49              | 1,935.44              | 8.90             | 11.08         | -161.60              | 102.14                              | 78.61        | 386.95                 | 369.27                  | 17.68                     | 21.884             |           |
| 1,950.00                                                         | 1,910.66              | 2,090.92              | 2,016.22              | 9.20             | 11.55         | -159.19              | 88.82                               | 106.22       | 387.51                 | 369.09                  | 18.42                     | 21.037             |           |
| 1,989.45                                                         | 1,948.77              | 2,153.24              | 2,073.70              | 9.44             | 11.87         | -157.72              | 74.18                               | 125.32       | 385.14                 | 366.19                  | 18.95                     | 20.323             |           |
| 2,000.00                                                         | 1,958.96              | 2,169.67              | 2,088.73              | 9.51             | 11.94         | -159.48              | 69.65                               | 130.13       | 384.11                 | 365.01                  | 19.10                     | 20.109             |           |
| 2,050.00                                                         | 2,007.55              | 2,244.38              | 2,156.42              | 9.79             | 12.27         | -169.54              | 45.69                               | 150.72       | 376.71                 | 356.95                  | 19.76                     | 19.060             |           |
| 2,100.00                                                         | 2,056.43              | 2,320.71              | 2,223.92              | 10.04            | 12.57         | 178.10               | 15.70                               | 169.88       | 365.32                 | 344.93                  | 20.40                     | 17.911             |           |
| 2,150.00                                                         | 2,105.41              | 2,389.82              | 2,283.16              | 10.27            | 12.83         | 164.92               | -16.16                              | 185.69       | 350.27                 | 329.30                  | 20.97                     | 16.707             |           |
| 2,200.00                                                         | 2,154.31              | 2,450.40              | 2,333.60              | 10.47            | 13.06         | 153.63               | -47.17                              | 198.45       | 332.73                 | 311.27                  | 21.47                     | 15.499             |           |
| 2,250.00                                                         | 2,202.95              | 2,500.53              | 2,374.68              | 10.64            | 13.24         | 145.67               | -74.28                              | 207.95       | 314.35                 | 292.48                  | 21.87                     | 14.373             |           |
| 2,300.00                                                         | 2,251.14              | 2,554.13              | 2,418.03              | 10.79            | 13.43         | 141.98               | -104.57                             | 216.63       | 295.89                 | 273.69                  | 22.20                     | 13.330             |           |
| 2,350.00                                                         | 2,298.70              | 2,609.38              | 2,461.69              | 10.93            | 13.63         | 141.95               | -137.68                             | 223.71       | 277.47                 | 255.06                  | 22.42                     | 12.379             |           |
| 2,400.00                                                         | 2,345.46              | 2,663.64              | 2,503.14              | 11.05            | 13.82         | 144.69               | -172.32                             | 228.61       | 259.63                 | 237.21                  | 22.42                     | 11.580             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design LAKEWOOD FED COM - #4H - Wellbore #1 - Wellbore #1 |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 165-                                             |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                                                        | Offset                | Semi Major Axis       |                       | Distance         |               |                      |                                     |              |                        |                         |                           |                    |           |
| Measured Depth (usft)                                            | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Tooface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  | Warning   |
| 2,450.00                                                         | 2,391.25              | 2,712.44              | 2,538.92              | 11.16            | 14.00         | 149.01               | -205.34                             | 231.95       | 243.74                 | 221.61                  | 22.13                     | 11.013             |           |
| 2,500.00                                                         | 2,435.89              | 2,755.84              | 2,569.85              | 11.26            | 14.17         | 153.97               | -235.71                             | 233.92       | 232.06                 | 210.49                  | 21.56                     | 10.761 SF          |           |
| 2,550.00                                                         | 2,479.22              | 2,797.99              | 2,598.97              | 11.35            | 14.34         | 159.66               | -266.17                             | 235.07       | 226.29                 | 205.57                  | 20.72                     | 10.924             |           |
| 2,565.01                                                         | 2,491.95              | 2,809.95              | 2,607.01              | 11.37            | 14.40         | 161.36               | -275.01                             | 235.31       | 225.94                 | 205.52                  | 20.42                     | 11.066 CC, ES      |           |
| 2,600.00                                                         | 2,521.07              | 2,836.64              | 2,624.59              | 11.43            | 14.52         | 165.25               | -295.10                             | 235.71       | 227.92                 | 208.24                  | 19.67                     | 11.584             |           |
| 2,650.00                                                         | 2,561.29              | 2,871.19              | 2,646.41              | 11.52            | 14.69         | 170.33               | -321.87                             | 236.09       | 237.92                 | 219.39                  | 18.54                     | 12.835             |           |
| 2,700.00                                                         | 2,599.72              | 2,901.34              | 2,664.54              | 11.60            | 14.86         | 174.66               | -345.96                             | 236.32       | 256.34                 | 238.95                  | 17.39                     | 14.740             |           |
| 2,750.00                                                         | 2,636.24              | 2,927.28              | 2,679.38              | 11.70            | 15.01         | 178.23               | -367.23                             | 236.48       | 282.33                 | 266.05                  | 16.29                     | 17.337             |           |
| 2,800.00                                                         | 2,670.69              | 2,949.39              | 2,691.46              | 11.82            | 15.16         | -178.85              | -385.76                             | 236.60       | 314.59                 | 299.35                  | 15.24                     | 20.644             |           |
| 2,850.00                                                         | 2,702.95              | 2,967.55              | 2,701.05              | 12.05            | 15.28         | -176.59              | -401.17                             | 236.71       | 351.80                 | 337.50                  | 14.30                     | 24.610             |           |
| 2,900.00                                                         | 2,732.90              | 2,983.08              | 2,709.05              | 12.48            | 15.39         | -174.67              | -414.48                             | 236.83       | 392.77                 | 379.33                  | 13.44                     | 29.231             |           |
| 2,950.00                                                         | 2,760.43              | 2,996.17              | 2,715.66              | 13.15            | 15.49         | -173.02              | -425.78                             | 236.95       | 436.57                 | 423.88                  | 12.69                     | 34.402             |           |
| 2,975.18                                                         | 2,773.35              | 3,001.90              | 2,718.51              | 13.54            | 15.53         | -172.26              | -430.75                             | 237.01       | 459.45                 | 447.08                  | 12.37                     | 37.152             |           |
| 3,000.00                                                         | 2,785.76              | 3,007.20              | 2,721.12              | 13.96            | 15.57         | -170.94              | -435.37                             | 237.06       | 482.31                 | 469.80                  | 12.51                     | 38.551             |           |
| 3,050.00                                                         | 2,810.76              | 3,018.24              | 2,726.51              | 14.86            | 15.66         | -168.31              | -445.00                             | 237.18       | 528.72                 | 515.79                  | 12.93                     | 40.896             |           |
| 3,100.00                                                         | 2,835.76              | 3,029.48              | 2,731.96              | 15.79            | 15.75         | -165.81              | -454.82                             | 237.30       | 575.50                 | 562.00                  | 13.51                     | 42.613             |           |
| 3,150.00                                                         | 2,860.76              | 3,040.59              | 2,737.33              | 16.79            | 15.84         | -163.50              | -464.56                             | 237.42       | 622.58                 | 608.38                  | 14.21                     | 43.824             |           |
| 3,175.18                                                         | 2,873.35              | 3,046.15              | 2,740.00              | 17.30            | 15.89         | -162.40              | -469.43                             | 237.48       | 646.38                 | 631.78                  | 14.60                     | 44.274             |           |
| 3,200.00                                                         | 2,885.29              | 3,051.38              | 2,742.51              | 17.82            | 15.93         | -158.75              | -474.01                             | 237.54       | 670.05                 | 654.92                  | 15.13                     | 44.284             |           |
| 3,250.00                                                         | 2,906.43              | 3,060.47              | 2,746.86              | 18.94            | 16.01         | -147.60              | -482.00                             | 237.64       | 718.61                 | 700.04                  | 18.57                     | 38.690             |           |
| 3,300.00                                                         | 2,923.54              | 3,067.64              | 2,750.27              | 20.14            | 16.07         | -125.54              | -488.31                             | 237.72       | 767.94                 | 740.70                  | 27.24                     | 28.193             |           |
| 3,350.00                                                         | 2,936.49              | 3,073.00              | 2,752.82              | 21.42            | 16.12         | -84.97               | -493.02                             | 237.77       | 817.61                 | 781.92                  | 35.69                     | 22.907             |           |
| 3,400.00                                                         | 2,945.18              | 3,076.22              | 2,754.35              | 22.74            | 16.15         | -48.55               | -495.86                             | 237.81       | 867.26                 | 836.96                  | 30.30                     | 28.624             |           |
| 3,450.00                                                         | 2,949.55              | 3,077.59              | 2,754.99              | 24.11            | 16.16         | -30.33               | -497.06                             | 237.82       | 916.56                 | 892.80                  | 23.76                     | 38.575             |           |
| 3,486.28                                                         | 2,950.00              | 3,077.31              | 2,754.86              | 25.12            | 16.16         | -23.03               | -496.82                             | 237.82       | 951.95                 | 931.01                  | 20.94                     | 45.469             |           |
| 3,500.00                                                         | 2,949.73              | 3,077.01              | 2,754.72              | 25.50            | 16.15         | -22.95               | -496.55                             | 237.82       | 965.26                 | 944.19                  | 21.07                     | 45.806             |           |
| 3,550.00                                                         | 2,948.77              | 3,075.89              | 2,754.19              | 26.91            | 16.14         | -22.68               | -495.56                             | 237.81       | 1,013.87               | 992.30                  | 21.57                     | 47.002             |           |
| 3,600.00                                                         | 2,947.80              | 3,074.77              | 2,753.66              | 28.33            | 16.13         | -22.40               | -494.57                             | 237.79       | 1,062.61               | 1,040.55                | 22.06                     | 48.169             |           |
| 3,650.00                                                         | 2,946.83              | 3,073.63              | 2,753.12              | 29.77            | 16.12         | -22.12               | -493.58                             | 237.78       | 1,111.46               | 1,088.91                | 22.55                     | 49.289             |           |
| 3,700.00                                                         | 2,945.86              | 3,073.00              | 2,752.82              | 31.22            | 16.12         | -21.97               | -493.02                             | 237.77       | 1,160.41               | 1,137.31                | 23.10                     | 50.236             |           |
| 3,750.00                                                         | 2,944.89              | 3,073.00              | 2,752.82              | 32.68            | 16.12         | -21.97               | -493.02                             | 237.77       | 1,209.44               | 1,185.70                | 23.74                     | 50.943             |           |
| 3,800.00                                                         | 2,943.92              | 3,070.33              | 2,751.55              | 34.15            | 16.10         | -21.31               | -490.67                             | 237.75       | 1,258.55               | 1,234.55                | 24.00                     | 52.449             |           |
| 3,850.00                                                         | 2,942.95              | 3,069.24              | 2,751.04              | 35.63            | 16.09         | -21.05               | -489.71                             | 237.73       | 1,307.72               | 1,283.25                | 24.47                     | 53.444             |           |
| 3,900.00                                                         | 2,941.98              | 3,068.15              | 2,750.52              | 37.12            | 16.08         | -20.78               | -488.75                             | 237.72       | 1,356.95               | 1,332.02                | 24.93                     | 54.421             |           |
| 3,950.00                                                         | 2,941.02              | 3,067.06              | 2,750.00              | 38.61            | 16.07         | -20.51               | -487.79                             | 237.71       | 1,406.24               | 1,380.84                | 25.39                     | 55.376             |           |
| 4,000.00                                                         | 2,940.05              | 3,065.97              | 2,749.48              | 40.11            | 16.06         | -20.25               | -486.83                             | 237.70       | 1,455.57               | 1,429.73                | 25.85                     | 56.317             |           |
| 4,050.00                                                         | 2,939.08              | 3,064.88              | 2,748.96              | 41.61            | 16.05         | -19.98               | -485.87                             | 237.69       | 1,504.95               | 1,478.66                | 26.29                     | 57.241             |           |
| 4,100.00                                                         | 2,938.11              | 3,063.78              | 2,748.44              | 43.12            | 16.04         | -19.72               | -484.91                             | 237.67       | 1,554.36               | 1,527.64                | 26.73                     | 58.154             |           |
| 4,150.00                                                         | 2,937.14              | 3,062.69              | 2,747.92              | 44.64            | 16.03         | -19.45               | -483.95                             | 237.66       | 1,603.82               | 1,576.66                | 27.16                     | 59.053             |           |
| 4,200.00                                                         | 2,936.17              | 3,061.60              | 2,747.39              | 46.15            | 16.02         | -19.19               | -482.99                             | 237.65       | 1,653.30               | 1,625.72                | 27.58                     | 59.943             |           |
| 4,250.00                                                         | 2,935.20              | 3,060.50              | 2,746.87              | 47.67            | 16.01         | -18.92               | -482.03                             | 237.64       | 1,702.81               | 1,674.82                | 28.00                     | 60.823             |           |
| 4,300.00                                                         | 2,934.23              | 3,059.41              | 2,746.35              | 49.20            | 16.00         | -18.66               | -481.07                             | 237.63       | 1,752.35               | 1,723.95                | 28.40                     | 61.697             |           |
| 4,350.00                                                         | 2,933.27              | 3,058.32              | 2,745.83              | 50.72            | 15.99         | -18.39               | -480.11                             | 237.61       | 1,801.92               | 1,773.12                | 28.80                     | 62.563             |           |
| 4,400.00                                                         | 2,932.30              | 3,057.22              | 2,745.31              | 52.25            | 15.98         | -18.13               | -479.15                             | 237.60       | 1,851.50               | 1,822.31                | 29.19                     | 63.424             |           |
| 4,450.00                                                         | 2,931.33              | 3,056.13              | 2,744.78              | 53.79            | 15.97         | -17.87               | -478.19                             | 237.59       | 1,901.11               | 1,871.54                | 29.58                     | 64.278             |           |
| 4,500.00                                                         | 2,930.36              | 3,055.03              | 2,744.26              | 55.32            | 15.96         | -17.61               | -477.23                             | 237.58       | 1,950.74               | 1,920.79                | 29.95                     | 65.130             |           |
| 4,550.00                                                         | 2,929.39              | 3,053.94              | 2,743.74              | 56.85            | 15.95         | -17.34               | -476.26                             | 237.57       | 2,000.39               | 1,970.07                | 30.32                     | 65.977             |           |
| 4,600.00                                                         | 2,928.42              | 3,052.85              | 2,743.21              | 58.39            | 15.94         | -17.08               | -475.30                             | 237.55       | 2,050.05               | 2,019.37                | 30.68                     | 66.822             |           |
| 4,650.00                                                         | 2,927.45              | 3,051.75              | 2,742.69              | 59.93            | 15.93         | -16.82               | -474.34                             | 237.54       | 2,099.73               | 2,068.69                | 31.03                     | 67.664             |           |
| 4,700.00                                                         | 2,926.48              | 3,050.65              | 2,742.16              | 61.47            | 15.92         | -16.56               | -473.38                             | 237.53       | 2,149.42               | 2,118.04                | 31.38                     | 68.504             |           |
| 4,750.00                                                         | 2,925.52              | 3,049.56              | 2,741.64              | 63.01            | 15.92         | -16.30               | -472.42                             | 237.52       | 2,199.12               | 2,167.41                | 31.71                     | 69.342             |           |
| 4,800.00                                                         | 2,924.55              | 3,048.46              | 2,741.11              | 64.56            | 15.91         | -16.04               | -471.46                             | 237.51       | 2,248.84               | 2,216.80                | 32.04                     | 70.180             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| <b>Offset Design</b> LAKEWOOD FED COM - #4H - Wellbore #1 - Wellbore #1 |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | <b>Offset Site Error:</b> | 0.00 usft |
|-------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|---------------------------|-----------|
| Survey Program: 165-                                                    |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | <b>Offset Well Error:</b> | 0.00 usft |
| Reference                                                               | Offset                | Semi Major Axis       |                       | Distance         |               |                       |                                     |              |                        |                         |                           |                           |           |
| Measured Depth (usft)                                                   | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor         | Warning   |
| 4,850.00                                                                | 2,923.58              | 3,047.37              | 2,740.58              | 66.10            | 15.90         | -15.78                | -470.50                             | 237.49       | 2,298.57               | 2,266.20                | 32.37                     | 71.016                    |           |
| 4,900.00                                                                | 2,922.61              | 3,046.27              | 2,740.06              | 67.65            | 15.89         | -15.52                | -469.53                             | 237.48       | 2,348.31               | 2,315.63                | 32.68                     | 71.853                    |           |
| 4,950.00                                                                | 2,921.64              | 3,045.17              | 2,739.53              | 69.20            | 15.88         | -15.26                | -468.57                             | 237.47       | 2,398.06               | 2,365.07                | 32.99                     | 72.688                    |           |
| 5,000.00                                                                | 2,920.67              | 3,044.08              | 2,739.00              | 70.75            | 15.87         | -15.00                | -467.61                             | 237.46       | 2,447.82               | 2,414.53                | 33.29                     | 73.524                    |           |
| 5,050.00                                                                | 2,919.70              | 3,042.98              | 2,738.48              | 72.30            | 15.86         | -14.75                | -466.65                             | 237.45       | 2,497.59               | 2,464.01                | 33.59                     | 74.360                    |           |
| 5,100.00                                                                | 2,918.73              | 3,041.88              | 2,737.95              | 73.85            | 15.85         | -14.49                | -465.69                             | 237.44       | 2,547.37               | 2,513.49                | 33.88                     | 75.196                    |           |
| 5,150.00                                                                | 2,917.77              | 3,040.78              | 2,737.42              | 75.40            | 15.84         | -14.23                | -464.73                             | 237.42       | 2,597.16               | 2,563.00                | 34.16                     | 76.033                    |           |
| 5,200.00                                                                | 2,916.80              | 3,039.69              | 2,736.89              | 76.95            | 15.83         | -13.98                | -463.76                             | 237.41       | 2,646.95               | 2,612.52                | 34.43                     | 76.869                    |           |
| 5,250.00                                                                | 2,915.83              | 3,038.59              | 2,736.36              | 78.50            | 15.82         | -13.72                | -462.80                             | 237.40       | 2,696.75               | 2,662.05                | 34.70                     | 77.707                    |           |
| 5,300.00                                                                | 2,914.86              | 3,037.49              | 2,735.83              | 80.05            | 15.81         | -13.47                | -461.84                             | 237.39       | 2,746.56               | 2,711.59                | 34.97                     | 78.544                    |           |
| 5,350.00                                                                | 2,913.89              | 3,036.39              | 2,735.30              | 81.61            | 15.81         | -13.22                | -460.88                             | 237.38       | 2,796.37               | 2,761.15                | 35.23                     | 79.382                    |           |
| 5,400.00                                                                | 2,912.92              | 3,035.29              | 2,734.77              | 83.16            | 15.80         | -12.96                | -459.91                             | 237.36       | 2,846.19               | 2,810.71                | 35.48                     | 80.221                    |           |
| 5,450.00                                                                | 2,911.95              | 3,034.19              | 2,734.24              | 84.72            | 15.79         | -12.71                | -458.95                             | 237.35       | 2,896.02               | 2,860.29                | 35.73                     | 81.059                    |           |
| 5,500.00                                                                | 2,910.99              | 3,033.09              | 2,733.71              | 86.27            | 15.78         | -12.46                | -457.99                             | 237.34       | 2,945.85               | 2,909.88                | 35.97                     | 81.898                    |           |
| 5,550.00                                                                | 2,910.02              | 3,031.99              | 2,733.18              | 87.83            | 15.77         | -12.21                | -457.03                             | 237.33       | 2,995.69               | 2,959.48                | 36.21                     | 82.737                    |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design LAKEWOOD FED COM - #8H - Wellbore #1 - Wellbore #1 |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 165-                                             |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                                                        | Offset                | Semi Major Axis       |                       | Distance         |               |                       |                                     |              |                        |                         |                           |                    |           |
| Measured Depth (usft)                                            | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  | Warning   |
| 0.00                                                             | 0.00                  | 0.00                  | 15.00                 | 0.00             | 0.00          | -105.40               | -97.10                              | -352.60      | 366.03                 |                         |                           |                    |           |
| 50.00                                                            | 50.00                 | 34.80                 | 49.80                 | 0.05             | 0.05          | -105.40               | -97.12                              | -352.60      | 365.74                 | 365.63                  | 0.11                      | 3,366.417          |           |
| 100.00                                                           | 100.00                | 84.51                 | 99.51                 | 0.14             | 0.13          | -105.42               | -97.23                              | -352.62      | 365.78                 | 365.51                  | 0.28                      | 1,322.196          |           |
| 150.00                                                           | 150.00                | 134.22                | 149.22                | 0.32             | 0.21          | -105.44               | -97.43                              | -352.66      | 365.87                 | 365.33                  | 0.53                      | 684.802            |           |
| 200.00                                                           | 200.00                | 184.23                | 199.23                | 0.50             | 0.33          | -105.48               | -97.70                              | -352.70      | 365.99                 | 365.16                  | 0.83                      | 441.180            |           |
| 250.00                                                           | 250.00                | 234.74                | 249.73                | 0.68             | 0.50          | -105.51               | -97.90                              | -352.73      | 366.06                 | 364.87                  | 1.19                      | 308.622            |           |
| 300.00                                                           | 300.00                | 285.24                | 300.24                | 0.86             | 0.68          | -105.52               | -97.96                              | -352.71      | 366.06                 | 364.52                  | 1.54                      | 237.293            |           |
| 350.00                                                           | 350.00                | 337.42                | 352.42                | 1.03             | 0.86          | 108.06                | -97.73                              | -352.58      | 366.02                 | 364.12                  | 1.90                      | 193.043            |           |
| 400.00                                                           | 399.98                | 389.59                | 404.58                | 1.21             | 1.04          | 108.35                | -97.03                              | -352.25      | 365.94                 | 363.69                  | 2.25                      | 162.692            |           |
| 450.00                                                           | 449.93                | 441.95                | 456.92                | 1.38             | 1.23          | 108.87                | -95.74                              | -351.74      | 365.85                 | 363.25                  | 2.60                      | 140.457            |           |
| 500.00                                                           | 499.84                | 494.24                | 509.17                | 1.55             | 1.41          | 109.65                | -93.54                              | -351.09      | 365.74                 | 362.78                  | 2.96                      | 123.536            |           |
| 550.00                                                           | 549.68                | 546.53                | 561.35                | 1.73             | 1.60          | 110.71                | -90.36                              | -350.32      | 365.67                 | 362.34                  | 3.33                      | 109.872            |           |
| 583.66                                                           | 583.20                | 581.80                | 596.50                | 1.85             | 1.73          | 111.60                | -87.54                              | -349.71      | 365.65                 | 362.07                  | 3.58                      | 102.137            |           |
| 600.00                                                           | 599.45                | 598.83                | 613.46                | 1.91             | 1.79          | 112.08                | -85.96                              | -349.39      | 365.65                 | 361.95                  | 3.70                      | 98.774             |           |
| 650.00                                                           | 649.13                | 650.41                | 664.72                | 2.10             | 1.98          | 113.74                | -80.36                              | -348.32      | 365.82                 | 361.74                  | 4.08                      | 89.593             |           |
| 700.00                                                           | 698.70                | 699.58                | 713.50                | 2.30             | 2.17          | 115.53                | -74.36                              | -347.21      | 366.47                 | 362.00                  | 4.47                      | 82.053             |           |
| 750.00                                                           | 748.15                | 748.44                | 761.96                | 2.51             | 2.37          | 117.44                | -68.19                              | -346.06      | 367.83                 | 362.97                  | 4.86                      | 75.687             |           |
| 800.00                                                           | 797.47                | 797.53                | 810.62                | 2.72             | 2.56          | 119.47                | -61.75                              | -344.85      | 369.97                 | 364.71                  | 5.26                      | 70.355             |           |
| 850.00                                                           | 846.63                | 846.56                | 859.15                | 2.94             | 2.77          | 121.62                | -54.95                              | -343.50      | 372.91                 | 367.24                  | 5.67                      | 65.731             |           |
| 900.00                                                           | 895.62                | 895.04                | 907.08                | 3.17             | 2.97          | 123.86                | -47.85                              | -342.02      | 376.76                 | 370.68                  | 6.08                      | 61.942             |           |
| 950.00                                                           | 944.44                | 942.54                | 954.01                | 3.42             | 3.17          | 126.12                | -40.68                              | -340.48      | 381.66                 | 375.16                  | 6.51                      | 58.667             |           |
| 1,000.00                                                         | 993.06                | 989.69                | 1,000.58              | 3.67             | 3.37          | 128.40                | -33.47                              | -338.90      | 387.73                 | 380.81                  | 6.92                      | 56.021             |           |
| 1,050.00                                                         | 1,041.46              | 1,036.46              | 1,046.75              | 3.93             | 3.58          | 130.69                | -26.18                              | -337.26      | 395.03                 | 387.69                  | 7.34                      | 53.794             |           |
| 1,051.64                                                         | 1,043.05              | 1,037.99              | 1,048.26              | 3.94             | 3.59          | 130.76                | -25.93                              | -337.21      | 395.29                 | 387.94                  | 7.36                      | 53.728             |           |
| 1,100.00                                                         | 1,089.75              | 1,082.80              | 1,092.44              | 4.21             | 3.79          | 133.08                | -18.59                              | -335.56      | 403.35                 | 395.58                  | 7.77                      | 51.936             |           |
| 1,150.00                                                         | 1,138.04              | 1,128.86              | 1,137.77              | 4.49             | 3.99          | 135.42                | -10.68                              | -333.77      | 412.41                 | 404.22                  | 8.18                      | 50.390             |           |
| 1,200.00                                                         | 1,186.33              | 1,174.94              | 1,183.08              | 4.77             | 4.20          | 137.71                | -2.48                               | -331.90      | 422.19                 | 413.59                  | 8.60                      | 49.091             |           |
| 1,250.00                                                         | 1,234.62              | 1,221.40              | 1,228.74              | 5.06             | 4.42          | 139.94                | 5.88                                | -329.95      | 432.63                 | 423.61                  | 9.02                      | 47.988             |           |
| 1,300.00                                                         | 1,282.91              | 1,268.09              | 1,274.63              | 5.34             | 4.64          | 142.07                | 14.24                               | -327.91      | 443.65                 | 434.22                  | 9.42                      | 47.072             |           |
| 1,350.00                                                         | 1,331.20              | 1,314.68              | 1,320.43              | 5.64             | 4.86          | 144.11                | 22.52                               | -325.80      | 455.18                 | 445.35                  | 9.83                      | 46.307             |           |
| 1,400.00                                                         | 1,379.48              | 1,360.36              | 1,365.33              | 5.93             | 5.07          | 146.02                | 30.66                               | -323.70      | 467.26                 | 457.04                  | 10.23                     | 45.691             |           |
| 1,450.00                                                         | 1,427.77              | 1,405.98              | 1,410.16              | 6.22             | 5.29          | 147.84                | 38.85                               | -321.60      | 479.89                 | 469.27                  | 10.62                     | 45.191             |           |
| 1,500.00                                                         | 1,476.06              | 1,450.12              | 1,453.53              | 6.51             | 5.50          | 149.52                | 46.78                               | -319.61      | 493.05                 | 482.05                  | 11.00                     | 44.825             |           |
| 1,550.00                                                         | 1,524.35              | 1,492.23              | 1,495.03              | 6.81             | 5.69          | 150.97                | 53.81                               | -318.32      | 506.94                 | 495.57                  | 11.37                     | 44.585             |           |
| 1,600.00                                                         | 1,572.64              | 1,542.96              | 1,545.33              | 7.11             | 5.90          | 152.36                | 60.28                               | -317.92      | 521.18                 | 509.43                  | 11.75                     | 44.365             |           |
| 1,650.00                                                         | 1,620.93              | 1,626.34              | 1,628.60              | 7.41             | 6.17          | 153.58                | 62.20                               | -319.15      | 534.19                 | 522.01                  | 12.18                     | 43.858             |           |
| 1,700.00                                                         | 1,669.22              | 1,713.46              | 1,715.28              | 7.70             | 6.37          | 153.92                | 53.77                               | -318.37      | 542.80                 | 530.22                  | 12.58                     | 43.153             |           |
| 1,750.00                                                         | 1,717.51              | 1,769.49              | 1,770.51              | 8.00             | 6.48          | 153.77                | 44.39                               | -318.01      | 549.98                 | 537.06                  | 12.92                     | 42.577             |           |
| 1,800.00                                                         | 1,765.79              | 1,823.69              | 1,823.50              | 8.30             | 6.58          | 153.37                | 33.07                               | -318.48      | 556.76                 | 543.50                  | 13.26                     | 41.999             |           |
| 1,850.00                                                         | 1,814.08              | 1,883.25              | 1,881.12              | 8.60             | 6.68          | 152.68                | 18.02                               | -319.63      | 562.89                 | 549.28                  | 13.62                     | 41.341             |           |
| 1,900.00                                                         | 1,862.37              | 1,948.03              | 1,942.80              | 8.90             | 6.80          | 151.64                | -1.66                               | -321.13      | 567.97                 | 553.97                  | 14.00                     | 40.558             |           |
| 1,950.00                                                         | 1,910.66              | 2,015.56              | 2,005.65              | 9.20             | 6.94          | 150.19                | -26.30                              | -322.73      | 571.68                 | 557.25                  | 14.43                     | 39.619             |           |
| 1,989.45                                                         | 1,948.77              | 2,067.23              | 2,052.45              | 9.44             | 7.06          | 148.81                | -48.13                              | -324.02      | 573.71                 | 558.92                  | 14.79                     | 38.795             |           |
| 2,000.00                                                         | 1,958.96              | 2,081.62              | 2,065.25              | 9.51             | 7.10          | 146.19                | -54.68                              | -324.40      | 574.06                 | 559.15                  | 14.91                     | 38.494             |           |
| 2,050.00                                                         | 2,007.55              | 2,149.10              | 2,123.71              | 9.79             | 7.31          | 131.66                | -88.31                              | -326.16      | 573.24                 | 557.74                  | 15.50                     | 36.983             |           |
| 2,100.00                                                         | 2,056.43              | 2,215.22              | 2,178.26              | 10.04            | 7.57          | 113.77                | -125.64                             | -327.69      | 568.37                 | 552.27                  | 16.10                     | 35.304             |           |
| 2,150.00                                                         | 2,105.41              | 2,276.97              | 2,226.48              | 10.27            | 7.88          | 94.18                 | -164.17                             | -328.80      | 559.77                 | 543.08                  | 16.69                     | 33.539             |           |
| 2,200.00                                                         | 2,154.31              | 2,333.24              | 2,267.93              | 10.47            | 8.23          | 75.69                 | -202.21                             | -329.60      | 547.93                 | 530.69                  | 17.25                     | 31.769             |           |
| 2,250.00                                                         | 2,202.95              | 2,384.30              | 2,303.35              | 10.64            | 8.59          | 60.07                 | -238.96                             | -330.13      | 533.36                 | 515.60                  | 17.76                     | 30.040             |           |
| 2,300.00                                                         | 2,251.14              | 2,428.65              | 2,332.42              | 10.79            | 8.95          | 47.60                 | -272.44                             | -330.51      | 516.62                 | 498.44                  | 18.18                     | 28.424             |           |
| 2,350.00                                                         | 2,298.70              | 2,469.47              | 2,357.77              | 10.93            | 9.32          | 37.44                 | -304.44                             | -330.83      | 498.21                 | 479.70                  | 18.52                     | 26.905             |           |
| 2,400.00                                                         | 2,345.46              | 2,506.68              | 2,379.68              | 11.05            | 9.68          | 28.92                 | -334.51                             | -331.04      | 478.53                 | 459.78                  | 18.75                     | 25.521             |           |

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





## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design LAKEWOOD FED COM - #8H - Wellbore #1 - Wellbore #1 |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 165-                                             |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Measured Depth (usft)                                            | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toelface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  | Warning   |
| 2,450.00                                                         | 2,391.25              | 2,541.80              | 2,399.31              | 11.16            | 10.05         | 21.39                 | -363.63                             | -331.10      | 457.96                 | 439.06                  | 18.91                     | 24.220             |           |
| 2,500.00                                                         | 2,435.89              | 2,572.82              | 2,415.82              | 11.26            | 10.39         | 14.71                 | -389.89                             | -330.99      | 436.95                 | 418.02                  | 18.93                     | 23.081             |           |
| 2,550.00                                                         | 2,479.22              | 2,600.34              | 2,430.07              | 11.35            | 10.71         | 8.68                  | -413.42                             | -330.83      | 416.05                 | 397.21                  | 18.85                     | 22.077             |           |
| 2,600.00                                                         | 2,521.07              | 2,625.88              | 2,443.11              | 11.43            | 11.01         | 3.04                  | -435.39                             | -330.64      | 395.74                 | 377.08                  | 18.66                     | 21.208             |           |
| 2,650.00                                                         | 2,561.29              | 2,649.08              | 2,454.81              | 11.52            | 11.30         | -2.22                 | -455.42                             | -330.47      | 376.55                 | 358.14                  | 18.40                     | 20.460             |           |
| 2,700.00                                                         | 2,599.72              | 2,670.68              | 2,465.65              | 11.60            | 11.57         | -7.20                 | -474.10                             | -330.35      | 359.06                 | 340.96                  | 18.10                     | 19.832             |           |
| 2,750.00                                                         | 2,636.24              | 2,690.73              | 2,475.67              | 11.70            | 11.82         | -11.88                | -491.48                             | -330.28      | 343.91                 | 326.11                  | 17.80                     | 19.322             |           |
| 2,800.00                                                         | 2,670.69              | 2,708.88              | 2,484.67              | 11.82            | 12.06         | -16.15                | -507.23                             | -330.23      | 331.77                 | 314.24                  | 17.53                     | 18.925             |           |
| 2,850.00                                                         | 2,702.95              | 2,725.21              | 2,492.71              | 12.05            | 12.28         | -19.96                | -521.45                             | -330.21      | 323.33                 | 305.99                  | 17.33                     | 18.654             |           |
| 2,900.00                                                         | 2,732.90              | 2,739.76              | 2,499.82              | 12.48            | 12.47         | -23.26                | -534.14                             | -330.19      | 319.20                 | 301.96                  | 17.24                     | 18.520             |           |
| 2,918.77                                                         | 2,743.53              | 2,744.76              | 2,502.25              | 12.71            | 12.54         | -24.36                | -538.51                             | -330.19      | 318.86                 | 301.63                  | 17.23                     | 18.506 CC, ES      |           |
| 2,950.00                                                         | 2,760.43              | 2,752.52              | 2,506.01              | 13.15            | 12.64         | -25.99                | -545.30                             | -330.19      | 319.82                 | 302.57                  | 17.25                     | 18.541             |           |
| 2,975.18                                                         | 2,773.35              | 2,756.00              | 2,507.69              | 13.54            | 12.68         | -26.74                | -548.35                             | -330.19      | 322.00                 | 304.78                  | 17.23                     | 18.691             |           |
| 3,000.00                                                         | 2,785.76              | 2,763.13              | 2,511.12              | 13.96            | 12.78         | -27.98                | -554.60                             | -330.19      | 325.66                 | 308.04                  | 17.61                     | 18.490             |           |
| 3,050.00                                                         | 2,810.76              | 2,773.11              | 2,515.87              | 14.86            | 12.92         | -29.71                | -563.37                             | -330.19      | 338.22                 | 319.90                  | 18.32                     | 18.465 SF          |           |
| 3,100.00                                                         | 2,835.76              | 2,782.90              | 2,520.49              | 15.79            | 13.06         | -31.40                | -572.00                             | -330.19      | 357.07                 | 338.01                  | 19.06                     | 18.732             |           |
| 3,150.00                                                         | 2,860.76              | 2,792.51              | 2,524.98              | 16.79            | 13.19         | -33.05                | -580.50                             | -330.20      | 381.28                 | 361.40                  | 19.88                     | 19.175             |           |
| 3,175.18                                                         | 2,873.35              | 2,797.27              | 2,527.19              | 17.30            | 13.26         | -33.86                | -584.72                             | -330.20      | 395.21                 | 374.90                  | 20.31                     | 19.455             |           |
| 3,200.00                                                         | 2,885.29              | 2,801.75              | 2,529.26              | 17.82            | 13.32         | -33.64                | -588.70                             | -330.21      | 409.57                 | 389.29                  | 20.28                     | 20.192             |           |
| 3,250.00                                                         | 2,906.43              | 2,809.58              | 2,532.84              | 18.94            | 13.43         | -32.90                | -595.65                             | -330.22      | 439.10                 | 418.88                  | 20.23                     | 21.709             |           |
| 3,300.00                                                         | 2,923.54              | 2,819.00              | 2,537.12              | 20.14            | 13.56         | -32.33                | -604.05                             | -330.23      | 469.24                 | 448.92                  | 20.32                     | 23.090             |           |
| 3,350.00                                                         | 2,936.49              | 2,819.00              | 2,537.12              | 21.42            | 13.56         | -30.33                | -604.05                             | -330.23      | 499.69                 | 479.64                  | 20.05                     | 24.921             |           |
| 3,400.00                                                         | 2,945.18              | 2,819.00              | 2,537.12              | 22.74            | 13.56         | -28.43                | -604.05                             | -330.23      | 530.30                 | 510.44                  | 19.86                     | 26.697             |           |
| 3,450.00                                                         | 2,949.55              | 2,819.00              | 2,537.12              | 24.11            | 13.56         | -26.65                | -604.05                             | -330.23      | 560.83                 | 541.03                  | 19.80                     | 28.320             |           |
| 3,486.28                                                         | 2,950.00              | 2,819.00              | 2,537.12              | 25.12            | 13.56         | -25.44                | -604.05                             | -330.23      | 582.81                 | 562.95                  | 19.86                     | 29.345             |           |
| 3,500.00                                                         | 2,949.73              | 2,819.00              | 2,537.12              | 25.50            | 13.56         | -25.44                | -604.05                             | -330.23      | 591.19                 | 571.14                  | 20.05                     | 29.492             |           |
| 3,550.00                                                         | 2,948.77              | 2,819.00              | 2,537.12              | 26.91            | 13.56         | -25.44                | -604.05                             | -330.23      | 623.33                 | 602.60                  | 20.73                     | 30.072             |           |
| 3,600.00                                                         | 2,947.80              | 2,819.00              | 2,537.12              | 28.33            | 13.56         | -25.44                | -604.05                             | -330.23      | 657.69                 | 636.28                  | 21.41                     | 30.717             |           |
| 3,650.00                                                         | 2,946.83              | 2,819.00              | 2,537.12              | 29.77            | 13.56         | -25.44                | -604.05                             | -330.23      | 693.97                 | 671.86                  | 22.11                     | 31.390             |           |
| 3,700.00                                                         | 2,945.86              | 2,819.00              | 2,537.12              | 31.22            | 13.56         | -25.44                | -604.05                             | -330.23      | 731.86                 | 709.05                  | 22.81                     | 32.091             |           |
| 3,750.00                                                         | 2,944.89              | 2,819.00              | 2,537.12              | 32.68            | 13.56         | -25.44                | -604.05                             | -330.23      | 771.13                 | 747.62                  | 23.51                     | 32.797             |           |
| 3,800.00                                                         | 2,943.92              | 2,819.00              | 2,537.12              | 34.15            | 13.56         | -25.44                | -604.05                             | -330.23      | 811.59                 | 787.37                  | 24.22                     | 33.508             |           |
| 3,850.00                                                         | 2,942.95              | 2,819.00              | 2,537.12              | 35.63            | 13.56         | -25.44                | -604.05                             | -330.23      | 853.06                 | 828.12                  | 24.94                     | 34.210             |           |
| 3,900.00                                                         | 2,941.98              | 2,819.00              | 2,537.12              | 37.12            | 13.56         | -25.44                | -604.05                             | -330.23      | 895.39                 | 869.74                  | 25.65                     | 34.906             |           |
| 3,950.00                                                         | 2,941.02              | 2,819.00              | 2,537.12              | 38.61            | 13.56         | -25.44                | -604.05                             | -330.23      | 938.49                 | 912.11                  | 26.37                     | 35.584             |           |
| 4,000.00                                                         | 2,940.05              | 2,819.00              | 2,537.12              | 40.11            | 13.56         | -25.44                | -604.05                             | -330.23      | 982.24                 | 955.14                  | 27.10                     | 36.250             |           |
| 4,050.00                                                         | 2,939.08              | 2,819.00              | 2,537.12              | 41.61            | 13.56         | -25.44                | -604.05                             | -330.23      | 1,026.56               | 998.73                  | 27.82                     | 36.896             |           |
| 4,100.00                                                         | 2,938.11              | 2,819.00              | 2,537.12              | 43.12            | 13.56         | -25.44                | -604.05                             | -330.23      | 1,071.38               | 1,042.82                | 28.55                     | 37.525             |           |
| 4,150.00                                                         | 2,937.14              | 2,819.00              | 2,537.12              | 44.64            | 13.56         | -25.44                | -604.05                             | -330.23      | 1,116.63               | 1,087.35                | 29.28                     | 38.133             |           |
| 4,200.00                                                         | 2,936.17              | 2,819.00              | 2,537.12              | 46.15            | 13.56         | -25.44                | -604.05                             | -330.23      | 1,162.28               | 1,132.27                | 30.01                     | 38.724             |           |
| 4,250.00                                                         | 2,935.20              | 2,819.00              | 2,537.12              | 47.67            | 13.56         | -25.44                | -604.05                             | -330.23      | 1,208.28               | 1,177.53                | 30.75                     | 39.294             |           |
| 4,300.00                                                         | 2,934.23              | 2,819.00              | 2,537.12              | 49.20            | 13.56         | -25.44                | -604.05                             | -330.23      | 1,254.57               | 1,223.09                | 31.48                     | 39.847             |           |
| 4,350.00                                                         | 2,933.27              | 2,819.00              | 2,537.12              | 50.72            | 13.56         | -25.44                | -604.05                             | -330.23      | 1,301.15               | 1,268.93                | 32.22                     | 40.380             |           |
| 4,400.00                                                         | 2,932.30              | 2,819.00              | 2,537.12              | 52.25            | 13.56         | -25.44                | -604.05                             | -330.23      | 1,347.97               | 1,315.01                | 32.96                     | 40.896             |           |
| 4,450.00                                                         | 2,931.33              | 2,819.00              | 2,537.12              | 53.79            | 13.56         | -25.44                | -604.05                             | -330.23      | 1,395.01               | 1,361.30                | 33.70                     | 41.393             |           |
| 4,500.00                                                         | 2,930.36              | 2,819.00              | 2,537.12              | 55.32            | 13.56         | -25.44                | -604.05                             | -330.23      | 1,442.24               | 1,407.80                | 34.44                     | 41.874             |           |
| 4,550.00                                                         | 2,929.39              | 2,819.00              | 2,537.12              | 56.85            | 13.56         | -25.44                | -604.05                             | -330.23      | 1,489.66               | 1,454.48                | 35.18                     | 42.339             |           |
| 4,600.00                                                         | 2,928.42              | 2,819.00              | 2,537.12              | 58.39            | 13.56         | -25.44                | -604.05                             | -330.23      | 1,537.25               | 1,501.32                | 35.93                     | 42.788             |           |
| 4,650.00                                                         | 2,927.45              | 2,819.00              | 2,537.12              | 59.93            | 13.56         | -25.44                | -604.05                             | -330.23      | 1,584.98               | 1,548.31                | 36.67                     | 43.221             |           |
| 4,700.00                                                         | 2,926.48              | 2,819.00              | 2,537.12              | 61.47            | 13.56         | -25.44                | -604.05                             | -330.23      | 1,632.85               | 1,595.43                | 37.42                     | 43.640             |           |
| 4,750.00                                                         | 2,925.52              | 2,819.00              | 2,537.12              | 63.01            | 13.56         | -25.44                | -604.05                             | -330.23      | 1,680.84               | 1,642.67                | 38.16                     | 44.045             |           |
| 4,800.00                                                         | 2,924.55              | 2,819.00              | 2,537.12              | 64.56            | 13.56         | -25.44                | -604.05                             | -330.23      | 1,728.94               | 1,690.03                | 38.91                     | 44.437             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design LAKEWOOD FED COM - #8H - Wellbore #1 - Wellbore #1 |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: 0.00 usft |                   |
|------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|------------------------------|-------------------|
| Survey Program: 165-Reference                                    |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: 0.00 usft |                   |
| Offset                                                           |                       | Semi Major Axis       |                       | Distance         |               |                       |                                     |              |                        |                         |                           | Warning                      |                   |
| Measured Depth (usft)                                            | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) |                              | Separation Factor |
| 4,850.00                                                         | 2,923.58              | 2,819.00              | 2,537.12              | 66.10            | 13.56         | -25.44                | -604.05                             | -330.23      | 1,777.15               | 1,737.50                | 39.66                     | 44.815                       |                   |
| 4,900.00                                                         | 2,922.61              | 2,813.33              | 2,534.55              | 67.65            | 13.48         | -24.74                | -598.99                             | -330.22      | 1,825.45               | 1,785.74                | 39.71                     | 45.968                       |                   |
| 4,950.00                                                         | 2,921.64              | 2,812.90              | 2,534.35              | 69.20            | 13.47         | -24.69                | -598.61                             | -330.22      | 1,873.84               | 1,833.45                | 40.39                     | 46.392                       |                   |
| 5,000.00                                                         | 2,920.67              | 2,812.46              | 2,534.15              | 70.75            | 13.47         | -24.63                | -598.22                             | -330.22      | 1,922.32               | 1,881.25                | 41.07                     | 46.806                       |                   |
| 5,050.00                                                         | 2,919.70              | 2,812.02              | 2,533.96              | 72.30            | 13.46         | -24.58                | -597.83                             | -330.22      | 1,970.87               | 1,929.12                | 41.75                     | 47.211                       |                   |
| 5,100.00                                                         | 2,918.73              | 2,811.59              | 2,533.76              | 73.85            | 13.45         | -24.52                | -597.44                             | -330.22      | 2,019.49               | 1,977.07                | 42.42                     | 47.606                       |                   |
| 5,150.00                                                         | 2,917.77              | 2,811.15              | 2,533.56              | 75.40            | 13.45         | -24.47                | -597.05                             | -330.22      | 2,068.18               | 2,025.09                | 43.09                     | 47.993                       |                   |
| 5,200.00                                                         | 2,916.80              | 2,810.71              | 2,533.36              | 76.95            | 13.44         | -24.42                | -596.66                             | -330.22      | 2,116.93               | 2,073.16                | 43.76                     | 48.371                       |                   |
| 5,250.00                                                         | 2,915.83              | 2,810.27              | 2,533.15              | 78.50            | 13.44         | -24.36                | -596.26                             | -330.22      | 2,165.73               | 2,121.30                | 44.43                     | 48.741                       |                   |
| 5,300.00                                                         | 2,914.86              | 2,809.82              | 2,532.95              | 80.05            | 13.43         | -24.31                | -595.87                             | -330.22      | 2,214.59               | 2,169.49                | 45.10                     | 49.104                       |                   |
| 5,350.00                                                         | 2,913.89              | 2,809.38              | 2,532.75              | 81.61            | 13.42         | -24.25                | -595.47                             | -330.22      | 2,263.50               | 2,217.74                | 45.76                     | 49.459                       |                   |
| 5,400.00                                                         | 2,912.92              | 2,808.93              | 2,532.55              | 83.16            | 13.42         | -24.20                | -595.08                             | -330.22      | 2,312.46               | 2,266.03                | 46.43                     | 49.808                       |                   |
| 5,450.00                                                         | 2,911.95              | 2,808.49              | 2,532.34              | 84.72            | 13.41         | -24.14                | -594.68                             | -330.22      | 2,361.46               | 2,314.37                | 47.09                     | 50.150                       |                   |
| 5,500.00                                                         | 2,910.99              | 2,808.04              | 2,532.14              | 86.27            | 13.40         | -24.09                | -594.28                             | -330.22      | 2,410.50               | 2,362.75                | 47.75                     | 50.485                       |                   |
| 5,550.00                                                         | 2,910.02              | 2,807.59              | 2,531.93              | 87.83            | 13.40         | -24.03                | -593.89                             | -330.22      | 2,459.57               | 2,411.17                | 48.40                     | 50.814                       |                   |
| 5,600.00                                                         | 2,909.05              | 2,807.14              | 2,531.73              | 89.39            | 13.39         | -23.98                | -593.49                             | -330.21      | 2,508.69               | 2,459.63                | 49.06                     | 51.137                       |                   |
| 5,650.00                                                         | 2,908.08              | 2,806.69              | 2,531.52              | 90.95            | 13.39         | -23.92                | -593.08                             | -330.21      | 2,557.84               | 2,508.13                | 49.71                     | 51.455                       |                   |
| 5,700.00                                                         | 2,907.11              | 2,806.24              | 2,531.32              | 92.50            | 13.38         | -23.87                | -592.68                             | -330.21      | 2,607.02               | 2,556.66                | 50.36                     | 51.768                       |                   |
| 5,750.00                                                         | 2,906.14              | 2,805.79              | 2,531.11              | 94.06            | 13.37         | -23.81                | -592.28                             | -330.21      | 2,656.23               | 2,605.22                | 51.01                     | 52.075                       |                   |
| 5,800.00                                                         | 2,905.17              | 2,805.33              | 2,530.90              | 95.62            | 13.37         | -23.76                | -591.88                             | -330.21      | 2,705.47               | 2,653.82                | 51.65                     | 52.378                       |                   |
| 5,850.00                                                         | 2,904.20              | 2,804.88              | 2,530.69              | 97.18            | 13.36         | -23.70                | -591.47                             | -330.21      | 2,754.74               | 2,702.44                | 52.30                     | 52.675                       |                   |
| 5,900.00                                                         | 2,903.24              | 2,804.42              | 2,530.48              | 98.74            | 13.35         | -23.64                | -591.07                             | -330.21      | 2,804.03               | 2,751.10                | 52.94                     | 52.969                       |                   |
| 5,950.00                                                         | 2,902.27              | 2,803.96              | 2,530.27              | 100.30           | 13.35         | -23.59                | -590.66                             | -330.21      | 2,853.35               | 2,799.78                | 53.58                     | 53.257                       |                   |
| 6,000.00                                                         | 2,901.30              | 2,803.50              | 2,530.06              | 101.86           | 13.34         | -23.53                | -590.25                             | -330.21      | 2,902.69               | 2,848.48                | 54.21                     | 53.542                       |                   |
| 6,050.00                                                         | 2,900.33              | 2,803.04              | 2,529.85              | 103.42           | 13.34         | -23.47                | -589.84                             | -330.21      | 2,952.06               | 2,897.21                | 54.85                     | 53.823                       |                   |

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





## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                       |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|-------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 0-MWD+IFR1+SAG+FDIR |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                           | Offset                | Semi Major Axis       |                       | Distance         |               | Warning               |                                     |              |                        |                         |                           |                    |           |
| Measured Depth (usft)               | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 0.00                                | 0.00                  | 1.00                  | 0.00                  | 0.00             | 0.00          | 36.76                 | 32.00                               | 23.90        | 39.94                  |                         |                           |                    |           |
| 50.00                               | 50.00                 | 51.00                 | 50.00                 | 0.05             | 0.07          | 36.76                 | 32.00                               | 23.90        | 39.94                  | 39.81                   | 0.13                      | 314.739            |           |
| 100.00                              | 100.00                | 101.00                | 100.00                | 0.14             | 0.15          | 36.76                 | 32.00                               | 23.90        | 39.94                  | 39.65                   | 0.29                      | 137.553            |           |
| 150.00                              | 150.00                | 151.00                | 150.00                | 0.32             | 0.33          | 36.76                 | 32.00                               | 23.90        | 39.94                  | 39.29                   | 0.65                      | 61.557             |           |
| 200.00                              | 200.00                | 201.00                | 200.00                | 0.50             | 0.51          | 36.76                 | 32.00                               | 23.90        | 39.94                  | 38.93                   | 1.01                      | 39.650             |           |
| 250.00                              | 250.00                | 251.00                | 250.00                | 0.68             | 0.68          | 36.76                 | 32.00                               | 23.90        | 39.94                  | 38.57                   | 1.37                      | 29.243             |           |
| 282.99                              | 282.99                | 283.99                | 282.99                | 0.80             | 0.80          | 36.76                 | 32.00                               | 23.90        | 39.94                  | 38.34                   | 1.60                      | 24.926             | CC        |
| 300.00                              | 300.00                | 300.99                | 299.99                | 0.86             | 0.86          | 36.76                 | 32.00                               | 23.90        | 39.94                  | 38.22                   | 1.72                      | 23.165             | ES        |
| 350.00                              | 350.00                | 350.30                | 349.30                | 1.03             | 1.04          | -110.20               | 32.29                               | 24.23        | 40.53                  | 38.45                   | 2.07                      | 19.550             |           |
| 400.00                              | 399.98                | 400.00                | 398.98                | 1.21             | 1.22          | -111.45               | 33.15                               | 25.21        | 42.27                  | 39.84                   | 2.42                      | 17.433             |           |
| 450.00                              | 449.93                | 448.74                | 447.67                | 1.38             | 1.39          | -113.28               | 34.55                               | 26.80        | 45.20                  | 42.42                   | 2.78                      | 16.285             |           |
| 500.00                              | 499.84                | 497.75                | 496.60                | 1.55             | 1.57          | -115.49               | 36.51                               | 29.02        | 49.36                  | 46.23                   | 3.13                      | 15.776             |           |
| 550.00                              | 549.68                | 546.57                | 545.27                | 1.73             | 1.75          | -117.83               | 39.01                               | 31.86        | 54.78                  | 51.29                   | 3.49                      | 15.698             |           |
| 600.00                              | 599.45                | 595.14                | 593.62                | 1.91             | 1.92          | -120.10               | 42.04                               | 35.30        | 61.51                  | 57.66                   | 3.85                      | 15.967             |           |
| 650.00                              | 649.13                | 643.41                | 641.59                | 2.10             | 2.10          | -122.20               | 45.59                               | 39.32        | 69.54                  | 65.32                   | 4.22                      | 16.474             |           |
| 700.00                              | 698.70                | 691.35                | 689.13                | 2.30             | 2.27          | -124.06               | 49.65                               | 43.92        | 78.87                  | 74.28                   | 4.59                      | 17.190             |           |
| 750.00                              | 748.15                | 738.90                | 736.19                | 2.51             | 2.44          | -125.68               | 54.19                               | 49.07        | 89.50                  | 84.54                   | 4.96                      | 18.039             |           |
| 800.00                              | 797.47                | 786.03                | 782.70                | 2.72             | 2.61          | -127.07               | 59.19                               | 54.76        | 101.40                 | 96.07                   | 5.33                      | 19.018             |           |
| 850.00                              | 846.63                | 832.69                | 828.62                | 2.94             | 2.78          | -128.24               | 64.65                               | 60.95        | 114.57                 | 108.86                  | 5.71                      | 20.069             |           |
| 900.00                              | 895.62                | 878.84                | 873.91                | 3.17             | 2.95          | -129.21               | 70.53                               | 67.62        | 128.97                 | 122.89                  | 6.08                      | 21.207             |           |
| 950.00                              | 944.44                | 925.02                | 919.08                | 3.42             | 3.12          | -130.05               | 76.88                               | 74.82        | 144.56                 | 138.09                  | 6.47                      | 22.352             |           |
| 1,000.00                            | 993.06                | 972.20                | 965.19                | 3.67             | 3.29          | -130.89               | 83.48                               | 82.32        | 160.89                 | 154.04                  | 6.85                      | 23.493             |           |
| 1,050.00                            | 1,041.46              | 1,019.14              | 1,011.07              | 3.93             | 3.46          | -131.74               | 90.05                               | 89.77        | 177.81                 | 170.58                  | 7.23                      | 24.595             |           |
| 1,051.64                            | 1,043.05              | 1,020.68              | 1,012.58              | 3.94             | 3.47          | -131.77               | 90.27                               | 90.02        | 178.38                 | 171.13                  | 7.24                      | 24.631             |           |
| 1,100.00                            | 1,089.75              | 1,065.96              | 1,056.83              | 4.21             | 3.64          | -132.77               | 96.60                               | 97.21        | 195.08                 | 187.46                  | 7.61                      | 25.626             |           |
| 1,150.00                            | 1,138.04              | 1,112.78              | 1,102.58              | 4.49             | 3.81          | -133.63               | 103.16                              | 104.64       | 212.39                 | 204.39                  | 8.00                      | 26.560             |           |
| 1,200.00                            | 1,186.33              | 1,159.59              | 1,148.34              | 4.77             | 3.99          | -134.37               | 109.71                              | 112.08       | 229.74                 | 221.36                  | 8.38                      | 27.403             |           |
| 1,250.00                            | 1,234.62              | 1,206.41              | 1,194.09              | 5.06             | 4.16          | -135.00               | 116.26                              | 119.51       | 247.12                 | 238.35                  | 8.77                      | 28.170             |           |
| 1,300.00                            | 1,282.91              | 1,253.23              | 1,239.85              | 5.34             | 4.34          | -135.55               | 122.81                              | 126.95       | 264.53                 | 255.36                  | 9.16                      | 28.869             |           |
| 1,350.00                            | 1,331.20              | 1,300.04              | 1,285.61              | 5.64             | 4.52          | -136.04               | 129.37                              | 134.38       | 281.95                 | 272.39                  | 9.56                      | 29.508             |           |
| 1,400.00                            | 1,379.48              | 1,346.86              | 1,331.36              | 5.93             | 4.69          | -136.46               | 135.92                              | 141.82       | 299.39                 | 289.44                  | 9.95                      | 30.094             |           |
| 1,450.00                            | 1,427.77              | 1,393.68              | 1,377.12              | 6.22             | 4.87          | -136.84               | 142.47                              | 149.25       | 316.84                 | 306.49                  | 10.34                     | 30.633             |           |
| 1,500.00                            | 1,476.06              | 1,440.49              | 1,422.87              | 6.51             | 5.05          | -137.18               | 149.02                              | 156.69       | 334.30                 | 323.56                  | 10.74                     | 31.131             |           |
| 1,550.00                            | 1,524.35              | 1,487.31              | 1,468.63              | 6.81             | 5.22          | -137.49               | 155.58                              | 164.12       | 351.77                 | 340.63                  | 11.13                     | 31.591             |           |
| 1,600.00                            | 1,572.64              | 1,534.13              | 1,514.38              | 7.11             | 5.40          | -137.77               | 162.13                              | 171.56       | 369.25                 | 357.72                  | 11.53                     | 32.019             |           |
| 1,650.00                            | 1,620.93              | 1,580.94              | 1,560.14              | 7.41             | 5.58          | -138.02               | 168.68                              | 178.99       | 386.73                 | 374.80                  | 11.93                     | 32.416             |           |
| 1,700.00                            | 1,669.22              | 1,627.76              | 1,605.90              | 7.70             | 5.76          | -138.25               | 175.23                              | 186.43       | 404.23                 | 391.90                  | 12.33                     | 32.786             |           |
| 1,750.00                            | 1,717.51              | 1,674.58              | 1,651.65              | 8.00             | 5.93          | -138.46               | 181.79                              | 193.86       | 421.72                 | 408.99                  | 12.73                     | 33.131             |           |
| 1,800.00                            | 1,765.79              | 1,721.40              | 1,697.41              | 8.30             | 6.11          | -138.65               | 188.34                              | 201.30       | 439.22                 | 426.09                  | 13.13                     | 33.455             |           |
| 1,850.00                            | 1,814.08              | 1,768.21              | 1,743.16              | 8.60             | 6.29          | -138.83               | 194.89                              | 208.73       | 456.73                 | 443.20                  | 13.53                     | 33.758             |           |
| 1,900.00                            | 1,862.37              | 1,815.03              | 1,788.92              | 8.90             | 6.47          | -139.00               | 201.44                              | 216.17       | 474.24                 | 460.31                  | 13.93                     | 34.043             |           |
| 1,950.00                            | 1,910.66              | 1,861.85              | 1,834.68              | 9.20             | 6.65          | -139.15               | 207.99                              | 223.60       | 491.75                 | 477.42                  | 14.33                     | 34.311             |           |
| 1,989.45                            | 1,948.77              | 1,898.79              | 1,870.78              | 9.44             | 6.79          | -139.27               | 213.17                              | 229.47       | 505.57                 | 490.92                  | 14.65                     | 34.512             |           |
| 2,000.00                            | 1,958.96              | 1,908.66              | 1,880.43              | 9.51             | 6.82          | -141.76               | 214.55                              | 231.04       | 509.27                 | 494.55                  | 14.72                     | 34.590             |           |
| 2,050.00                            | 2,007.55              | 1,955.47              | 1,926.17              | 9.79             | 7.00          | -155.30               | 221.10                              | 238.47       | 526.81                 | 511.75                  | 15.06                     | 34.974             |           |
| 2,100.00                            | 2,056.43              | 2,002.16              | 1,971.81              | 10.04            | 7.18          | -171.64               | 227.63                              | 245.89       | 544.36                 | 528.97                  | 15.39                     | 35.376             |           |
| 2,150.00                            | 2,105.41              | 2,053.53              | 2,022.23              | 10.27            | 7.37          | 170.75                | 234.76                              | 252.65       | 561.70                 | 545.99                  | 15.71                     | 35.754             |           |
| 2,200.00                            | 2,154.31              | 2,105.55              | 2,073.59              | 10.47            | 7.56          | 154.44                | 241.83                              | 256.71       | 578.59                 | 562.58                  | 16.01                     | 36.138             |           |
| 2,250.00                            | 2,202.95              | 2,158.26              | 2,125.82              | 10.64            | 7.75          | 141.22                | 248.84                              | 257.94       | 594.98                 | 578.68                  | 16.29                     | 36.517             |           |
| 2,300.00                            | 2,251.14              | 2,211.74              | 2,178.82              | 10.79            | 7.94          | 131.22                | 255.75                              | 256.22       | 610.81                 | 594.25                  | 16.56                     | 36.878             |           |
| 2,350.00                            | 2,298.70              | 2,266.03              | 2,232.46              | 10.93            | 8.12          | 123.80                | 262.55                              | 251.42       | 626.03                 | 609.20                  | 16.82                     | 37.209             |           |
| 2,400.00                            | 2,345.46              | 2,321.19              | 2,286.62              | 11.05            | 8.30          | 118.23                | 269.20                              | 243.42       | 640.58                 | 623.50                  | 17.08                     | 37.495             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                       |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|-------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 0-MWD+IFR1+SAG+FDIR |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                           | Offset                | Semi Major Axis       |                       | Distance         |               | Warning              |                                     |              |                        |                         |                           |                    |           |
| Measured Depth (usft)               | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Tooface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 2,450.00                            | 2,391.25              | 2,377.26              | 2,341.13              | 11.16            | 8.47          | 114.01               | 275.69                              | 232.07       | 654.41                 | 637.06                  | 17.35                     | 37.717             |           |
| 2,500.00                            | 2,435.89              | 2,434.28              | 2,395.83              | 11.26            | 8.64          | 110.74               | 281.97                              | 217.26       | 667.47                 | 649.83                  | 17.63                     | 37.856             |           |
| 2,550.00                            | 2,479.22              | 2,492.29              | 2,450.50              | 11.35            | 8.81          | 108.20               | 288.01                              | 198.85       | 679.69                 | 661.75                  | 17.94                     | 37.889             |           |
| 2,600.00                            | 2,521.07              | 2,551.32              | 2,504.92              | 11.43            | 8.98          | 106.20               | 293.78                              | 176.74       | 691.03                 | 672.75                  | 18.28                     | 37.795             |           |
| 2,650.00                            | 2,561.29              | 2,611.39              | 2,558.82              | 11.52            | 9.15          | 104.62               | 299.22                              | 150.82       | 701.44                 | 682.76                  | 18.68                     | 37.550             |           |
| 2,700.00                            | 2,599.72              | 2,672.50              | 2,611.91              | 11.60            | 9.32          | 103.40               | 304.31                              | 121.01       | 710.86                 | 691.72                  | 19.14                     | 37.136             |           |
| 2,750.00                            | 2,636.24              | 2,734.65              | 2,663.88              | 11.70            | 9.50          | 102.46               | 308.99                              | 87.27        | 719.25                 | 699.56                  | 19.68                     | 36.542             |           |
| 2,800.00                            | 2,670.69              | 2,797.82              | 2,714.40              | 11.82            | 9.69          | 101.76               | 313.22                              | 49.59        | 726.56                 | 706.24                  | 20.32                     | 35.764             |           |
| 2,850.00                            | 2,702.95              | 2,862.00              | 2,763.09              | 12.05            | 9.91          | 101.27               | 316.95                              | 7.97         | 732.74                 | 711.69                  | 21.05                     | 34.806             |           |
| 2,900.00                            | 2,732.90              | 2,927.13              | 2,809.58              | 12.48            | 10.16         | 100.96               | 320.13                              | -37.51       | 737.77                 | 715.87                  | 21.90                     | 33.692             |           |
| 2,950.00                            | 2,760.43              | 2,993.15              | 2,853.49              | 13.15            | 10.43         | 100.82               | 322.73                              | -86.74       | 741.60                 | 718.75                  | 22.86                     | 32.443             |           |
| 2,975.18                            | 2,773.35              | 3,026.72              | 2,874.49              | 13.54            | 10.57         | 100.81               | 323.80                              | -112.89      | 743.07                 | 719.69                  | 23.39                     | 31.772             |           |
| 3,000.00                            | 2,785.76              | 3,060.05              | 2,894.45              | 13.96            | 10.72         | 101.09               | 324.70                              | -139.58      | 744.23                 | 720.30                  | 23.93                     | 31.102             |           |
| 3,050.00                            | 2,810.76              | 3,127.86              | 2,932.13              | 14.86            | 11.04         | 101.42               | 326.01                              | -195.91      | 745.69                 | 720.57                  | 25.12                     | 29.685             |           |
| 3,100.00                            | 2,835.76              | 3,185.78              | 2,961.49              | 15.79            | 11.34         | 101.44               | 326.63                              | -245.83      | 746.13                 | 719.83                  | 26.30                     | 28.366             |           |
| 3,150.00                            | 2,860.76              | 3,235.77              | 2,986.49              | 16.79            | 11.61         | 101.44               | 327.11                              | -289.13      | 746.46                 | 718.92                  | 27.55                     | 27.098             |           |
| 3,175.18                            | 2,873.35              | 3,260.95              | 2,999.07              | 17.30            | 11.75         | 101.44               | 327.35                              | -310.94      | 746.63                 | 718.45                  | 28.18                     | 26.498             |           |
| 3,200.00                            | 2,885.29              | 3,285.77              | 3,011.48              | 17.82            | 11.89         | 101.45               | 327.59                              | -332.42      | 746.90                 | 718.08                  | 28.82                     | 25.913             |           |
| 3,250.00                            | 2,906.43              | 3,335.56              | 3,036.38              | 18.94            | 12.19         | 101.65               | 328.07                              | -375.54      | 748.10                 | 717.91                  | 30.19                     | 24.777             |           |
| 3,300.00                            | 2,923.54              | 3,395.14              | 3,065.09              | 20.14            | 12.55         | 102.15               | 328.64                              | -427.73      | 750.06                 | 718.37                  | 31.69                     | 23.672             |           |
| 3,350.00                            | 2,936.49              | 3,464.10              | 3,091.80              | 21.42            | 12.99         | 102.66               | 329.35                              | -491.25      | 751.88                 | 718.56                  | 33.32                     | 22.564             |           |
| 3,400.00                            | 2,945.18              | 3,534.35              | 3,110.96              | 22.74            | 13.45         | 103.03               | 330.09                              | -558.79      | 753.38                 | 718.33                  | 35.05                     | 21.496             |           |
| 3,450.00                            | 2,949.55              | 3,605.54              | 3,121.80              | 24.11            | 13.93         | 103.26               | 330.87                              | -629.11      | 754.50                 | 717.66                  | 36.84                     | 20.478             |           |
| 3,486.28                            | 2,950.00              | 3,657.57              | 3,124.17              | 25.12            | 14.27         | 103.33               | 331.45                              | -681.06      | 755.05                 | 716.87                  | 38.18                     | 19.777             |           |
| 3,500.00                            | 2,949.73              | 3,675.53              | 3,123.90              | 25.50            | 14.39         | 103.33               | 331.64                              | -699.01      | 755.17                 | 716.50                  | 38.67                     | 19.530             |           |
| 3,550.00                            | 2,948.77              | 3,725.53              | 3,122.69              | 26.91            | 14.74         | 103.31               | 332.20                              | -748.99      | 755.49                 | 715.10                  | 40.39                     | 18.704             |           |
| 3,600.00                            | 2,947.80              | 3,775.52              | 3,121.48              | 28.33            | 15.09         | 103.28               | 332.75                              | -798.97      | 755.81                 | 713.69                  | 42.13                     | 17.942             |           |
| 3,650.00                            | 2,946.83              | 3,825.52              | 3,120.27              | 29.77            | 15.46         | 103.26               | 333.30                              | -848.95      | 756.13                 | 712.23                  | 43.90                     | 17.224             |           |
| 3,700.00                            | 2,945.86              | 3,875.52              | 3,119.05              | 31.22            | 15.84         | 103.23               | 333.86                              | -898.93      | 756.46                 | 710.77                  | 45.69                     | 16.557             |           |
| 3,750.00                            | 2,944.89              | 3,925.52              | 3,117.84              | 32.68            | 16.23         | 103.21               | 334.41                              | -948.91      | 756.78                 | 709.27                  | 47.51                     | 15.930             |           |
| 3,800.00                            | 2,943.92              | 3,975.52              | 3,116.63              | 34.15            | 16.63         | 103.18               | 334.96                              | -998.89      | 757.10                 | 707.77                  | 49.34                     | 15.346             |           |
| 3,850.00                            | 2,942.95              | 4,025.51              | 3,115.41              | 35.63            | 17.04         | 103.16               | 335.51                              | -1,048.87    | 757.42                 | 706.23                  | 51.19                     | 14.796             |           |
| 3,900.00                            | 2,941.98              | 4,075.51              | 3,114.20              | 37.12            | 17.46         | 103.13               | 336.07                              | -1,098.85    | 757.75                 | 704.69                  | 53.05                     | 14.283             |           |
| 3,950.00                            | 2,941.02              | 4,125.51              | 3,112.99              | 38.61            | 17.88         | 103.11               | 336.62                              | -1,148.83    | 758.07                 | 703.13                  | 54.94                     | 13.799             |           |
| 4,000.00                            | 2,940.05              | 4,175.51              | 3,111.78              | 40.11            | 18.31         | 103.08               | 337.17                              | -1,198.81    | 758.39                 | 701.56                  | 56.83                     | 13.345             |           |
| 4,050.00                            | 2,939.08              | 4,225.51              | 3,110.56              | 41.61            | 18.75         | 103.06               | 337.73                              | -1,248.79    | 758.71                 | 699.98                  | 58.74                     | 12.917             |           |
| 4,100.00                            | 2,938.11              | 4,275.50              | 3,109.35              | 43.12            | 19.20         | 103.03               | 338.28                              | -1,298.77    | 759.04                 | 698.39                  | 60.65                     | 12.515             |           |
| 4,150.00                            | 2,937.14              | 4,325.50              | 3,108.14              | 44.64            | 19.65         | 103.01               | 338.83                              | -1,348.75    | 759.36                 | 696.78                  | 62.58                     | 12.134             |           |
| 4,200.00                            | 2,936.17              | 4,375.50              | 3,106.93              | 46.15            | 20.11         | 102.98               | 339.39                              | -1,398.73    | 759.68                 | 695.17                  | 64.52                     | 11.775             |           |
| 4,250.00                            | 2,935.20              | 4,425.50              | 3,105.71              | 47.67            | 20.57         | 102.96               | 339.94                              | -1,448.71    | 760.01                 | 693.54                  | 66.46                     | 11.435             |           |
| 4,300.00                            | 2,934.23              | 4,475.50              | 3,104.50              | 49.20            | 21.04         | 102.94               | 340.49                              | -1,498.69    | 760.33                 | 691.92                  | 68.42                     | 11.113             |           |
| 4,350.00                            | 2,933.27              | 4,525.49              | 3,103.29              | 50.72            | 21.51         | 102.91               | 341.04                              | -1,548.68    | 760.66                 | 690.28                  | 70.38                     | 10.808             |           |
| 4,400.00                            | 2,932.30              | 4,575.49              | 3,102.08              | 52.25            | 21.98         | 102.89               | 341.60                              | -1,598.66    | 760.98                 | 688.64                  | 72.35                     | 10.519             |           |
| 4,450.00                            | 2,931.33              | 4,625.49              | 3,100.86              | 53.79            | 22.46         | 102.86               | 342.15                              | -1,648.64    | 761.30                 | 686.98                  | 74.32                     | 10.244             |           |
| 4,500.00                            | 2,930.36              | 4,675.49              | 3,099.65              | 55.32            | 22.95         | 102.84               | 342.70                              | -1,698.62    | 761.63                 | 685.33                  | 76.30                     | 9.982              |           |
| 4,550.00                            | 2,929.39              | 4,725.49              | 3,098.44              | 56.85            | 23.43         | 102.81               | 343.26                              | -1,748.60    | 761.95                 | 683.67                  | 78.29                     | 9.733              |           |
| 4,600.00                            | 2,928.42              | 4,775.48              | 3,097.23              | 58.39            | 23.92         | 102.79               | 343.81                              | -1,798.58    | 762.28                 | 682.00                  | 80.28                     | 9.496              |           |
| 4,650.00                            | 2,927.45              | 4,825.48              | 3,096.01              | 59.93            | 24.42         | 102.77               | 344.36                              | -1,848.56    | 762.60                 | 680.33                  | 82.27                     | 9.269              |           |
| 4,700.00                            | 2,926.48              | 4,875.48              | 3,094.80              | 61.47            | 24.91         | 102.74               | 344.91                              | -1,898.54    | 762.93                 | 678.65                  | 84.27                     | 9.053              |           |
| 4,750.00                            | 2,925.52              | 4,925.48              | 3,093.59              | 63.01            | 25.41         | 102.72               | 345.47                              | -1,948.52    | 763.25                 | 676.97                  | 86.28                     | 8.846              |           |
| 4,800.00                            | 2,924.55              | 4,975.47              | 3,092.38              | 64.56            | 25.92         | 102.69               | 346.02                              | -1,998.50    | 763.58                 | 675.29                  | 88.29                     | 8.649              |           |
| 4,850.00                            | 2,923.58              | 5,025.47              | 3,091.16              | 66.10            | 26.42         | 102.67               | 346.57                              | -2,048.48    | 763.90                 | 673.60                  | 90.30                     | 8.460              |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                       |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|-------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 0-MWD+IFR1+SAG+FDIR |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                           |                       | Offset                |                       | Semi Major Axis  |               |                       | Distance                            |              |                        |                         |                           |                    | Warning   |
| Measured Depth (usft)               | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 4,900.00                            | 2,922.61              | 5,075.47              | 3,089.95              | 67.65            | 26.93         | 102.64                | 347.13                              | -2,098.46    | 764.23                 | 671.91                  | 92.32                     | 8.278              |           |
| 4,950.00                            | 2,921.64              | 5,125.47              | 3,088.74              | 69.20            | 27.43         | 102.62                | 347.68                              | -2,148.44    | 764.55                 | 670.22                  | 94.34                     | 8.104              |           |
| 5,000.00                            | 2,920.67              | 5,175.47              | 3,087.53              | 70.75            | 27.94         | 102.60                | 348.23                              | -2,198.42    | 764.88                 | 668.52                  | 96.36                     | 7.938              |           |
| 5,050.00                            | 2,919.70              | 5,225.46              | 3,086.31              | 72.30            | 28.46         | 102.57                | 348.79                              | -2,248.40    | 765.21                 | 666.82                  | 98.39                     | 7.778              |           |
| 5,100.00                            | 2,918.73              | 5,275.46              | 3,085.10              | 73.85            | 28.97         | 102.55                | 349.34                              | -2,298.38    | 765.53                 | 665.12                  | 100.42                    | 7.624              |           |
| 5,150.00                            | 2,917.77              | 5,325.46              | 3,083.89              | 75.40            | 29.49         | 102.52                | 349.89                              | -2,348.36    | 765.86                 | 663.41                  | 102.45                    | 7.476              |           |
| 5,200.00                            | 2,916.80              | 5,375.46              | 3,082.68              | 76.95            | 30.00         | 102.50                | 350.44                              | -2,398.34    | 766.18                 | 661.70                  | 104.48                    | 7.333              |           |
| 5,250.00                            | 2,915.83              | 5,425.46              | 3,081.46              | 78.50            | 30.52         | 102.47                | 351.00                              | -2,448.32    | 766.51                 | 659.99                  | 106.52                    | 7.196              |           |
| 5,300.00                            | 2,914.86              | 5,475.45              | 3,080.25              | 80.05            | 31.04         | 102.45                | 351.55                              | -2,498.30    | 766.84                 | 658.28                  | 108.56                    | 7.064              |           |
| 5,350.00                            | 2,913.89              | 5,525.45              | 3,079.04              | 81.61            | 31.57         | 102.43                | 352.10                              | -2,548.28    | 767.16                 | 656.56                  | 110.60                    | 6.936              |           |
| 5,400.00                            | 2,912.92              | 5,575.45              | 3,077.83              | 83.16            | 32.09         | 102.40                | 352.66                              | -2,598.26    | 767.49                 | 654.85                  | 112.64                    | 6.813              |           |
| 5,450.00                            | 2,911.95              | 5,625.45              | 3,076.61              | 84.72            | 32.61         | 102.38                | 353.21                              | -2,648.24    | 767.82                 | 653.13                  | 114.69                    | 6.695              |           |
| 5,500.00                            | 2,910.99              | 5,675.45              | 3,075.40              | 86.27            | 33.14         | 102.35                | 353.76                              | -2,698.22    | 768.14                 | 651.40                  | 116.74                    | 6.580              |           |
| 5,550.00                            | 2,910.02              | 5,725.44              | 3,074.19              | 87.83            | 33.67         | 102.33                | 354.31                              | -2,748.20    | 768.47                 | 649.68                  | 118.79                    | 6.469              |           |
| 5,600.00                            | 2,909.05              | 5,775.44              | 3,072.97              | 89.39            | 34.19         | 102.31                | 354.87                              | -2,798.18    | 768.80                 | 647.96                  | 120.84                    | 6.362              |           |
| 5,650.00                            | 2,908.08              | 5,825.44              | 3,071.76              | 90.95            | 34.72         | 102.28                | 355.42                              | -2,848.16    | 769.13                 | 646.23                  | 122.89                    | 6.258              |           |
| 5,700.00                            | 2,907.11              | 5,875.44              | 3,070.55              | 92.50            | 35.25         | 102.26                | 355.97                              | -2,898.14    | 769.45                 | 644.50                  | 124.95                    | 6.158              |           |
| 5,750.00                            | 2,906.14              | 5,925.43              | 3,069.34              | 94.06            | 35.79         | 102.23                | 356.53                              | -2,948.12    | 769.78                 | 642.77                  | 127.01                    | 6.061              |           |
| 5,800.00                            | 2,905.17              | 5,975.43              | 3,068.12              | 95.62            | 36.32         | 102.21                | 357.08                              | -2,998.10    | 770.11                 | 641.04                  | 129.07                    | 5.967              |           |
| 5,850.00                            | 2,904.20              | 6,025.43              | 3,066.91              | 97.18            | 36.85         | 102.19                | 357.63                              | -3,048.08    | 770.44                 | 639.31                  | 131.13                    | 5.876              |           |
| 5,900.00                            | 2,903.24              | 6,075.43              | 3,065.70              | 98.74            | 37.38         | 102.16                | 358.19                              | -3,098.06    | 770.76                 | 637.58                  | 133.19                    | 5.787              |           |
| 5,950.00                            | 2,902.27              | 6,125.43              | 3,064.49              | 100.30           | 37.92         | 102.14                | 358.74                              | -3,148.04    | 771.09                 | 635.84                  | 135.25                    | 5.701              |           |
| 6,000.00                            | 2,901.30              | 6,175.42              | 3,063.27              | 101.86           | 38.45         | 102.12                | 359.29                              | -3,198.02    | 771.42                 | 634.11                  | 137.31                    | 5.618              |           |
| 6,050.00                            | 2,900.33              | 6,225.42              | 3,062.06              | 103.42           | 38.99         | 102.09                | 359.84                              | -3,248.00    | 771.75                 | 632.37                  | 139.38                    | 5.537              |           |
| 6,100.00                            | 2,899.36              | 6,275.42              | 3,060.85              | 104.98           | 39.53         | 102.07                | 360.40                              | -3,297.98    | 772.08                 | 630.63                  | 141.45                    | 5.458              |           |
| 6,150.00                            | 2,898.39              | 6,325.42              | 3,059.64              | 106.54           | 40.06         | 102.04                | 360.95                              | -3,347.96    | 772.41                 | 628.89                  | 143.51                    | 5.382              |           |
| 6,200.00                            | 2,897.42              | 6,375.42              | 3,058.42              | 108.10           | 40.60         | 102.02                | 361.50                              | -3,397.94    | 772.74                 | 627.15                  | 145.58                    | 5.308              |           |
| 6,250.00                            | 2,896.45              | 6,425.41              | 3,057.21              | 109.66           | 41.14         | 102.00                | 362.06                              | -3,447.92    | 773.07                 | 625.41                  | 147.65                    | 5.236              |           |
| 6,300.00                            | 2,895.49              | 6,475.41              | 3,056.00              | 111.23           | 41.68         | 101.97                | 362.61                              | -3,497.90    | 773.39                 | 623.67                  | 149.73                    | 5.165              |           |
| 6,350.00                            | 2,894.52              | 6,525.41              | 3,054.79              | 112.79           | 42.22         | 101.95                | 363.16                              | -3,547.88    | 773.72                 | 621.93                  | 151.80                    | 5.097              |           |
| 6,400.00                            | 2,893.55              | 6,575.41              | 3,053.57              | 114.35           | 42.76         | 101.93                | 363.71                              | -3,597.86    | 774.05                 | 620.18                  | 153.87                    | 5.031              |           |
| 6,450.00                            | 2,892.58              | 6,625.41              | 3,052.36              | 115.91           | 43.30         | 101.90                | 364.27                              | -3,647.84    | 774.38                 | 618.44                  | 155.95                    | 4.966              |           |
| 6,500.00                            | 2,891.61              | 6,675.40              | 3,051.15              | 117.48           | 43.84         | 101.88                | 364.82                              | -3,697.82    | 774.71                 | 616.69                  | 158.02                    | 4.903              |           |
| 6,550.00                            | 2,890.64              | 6,725.40              | 3,049.94              | 119.04           | 44.39         | 101.86                | 365.37                              | -3,747.80    | 775.04                 | 614.94                  | 160.10                    | 4.841              |           |
| 6,600.00                            | 2,889.67              | 6,775.40              | 3,048.72              | 120.60           | 44.93         | 101.83                | 365.93                              | -3,797.78    | 775.37                 | 613.20                  | 162.18                    | 4.781              |           |
| 6,650.00                            | 2,888.70              | 6,825.40              | 3,047.51              | 122.17           | 45.47         | 101.81                | 366.48                              | -3,847.76    | 775.70                 | 611.45                  | 164.26                    | 4.723              |           |
| 6,700.00                            | 2,887.74              | 6,875.39              | 3,046.30              | 123.73           | 46.01         | 101.78                | 367.03                              | -3,897.74    | 776.03                 | 609.70                  | 166.33                    | 4.665              |           |
| 6,750.00                            | 2,886.77              | 6,925.39              | 3,045.09              | 125.29           | 46.56         | 101.76                | 367.58                              | -3,947.72    | 776.36                 | 607.95                  | 168.41                    | 4.610              |           |
| 6,800.00                            | 2,885.80              | 6,975.39              | 3,043.87              | 126.86           | 47.10         | 101.74                | 368.14                              | -3,997.70    | 776.69                 | 606.20                  | 170.50                    | 4.555              |           |
| 6,850.00                            | 2,884.83              | 7,025.39              | 3,042.66              | 128.42           | 47.65         | 101.71                | 368.69                              | -4,047.68    | 777.02                 | 604.45                  | 172.58                    | 4.502              |           |
| 6,900.00                            | 2,883.86              | 7,075.39              | 3,041.45              | 129.99           | 48.19         | 101.69                | 369.24                              | -4,097.66    | 777.35                 | 602.69                  | 174.66                    | 4.451              |           |
| 6,950.00                            | 2,882.89              | 7,125.38              | 3,040.24              | 131.55           | 48.74         | 101.67                | 369.80                              | -4,147.64    | 777.69                 | 600.94                  | 176.74                    | 4.400              |           |
| 7,000.00                            | 2,881.92              | 7,175.38              | 3,039.02              | 133.12           | 49.28         | 101.64                | 370.35                              | -4,197.62    | 778.02                 | 599.19                  | 178.83                    | 4.351              |           |
| 7,050.00                            | 2,880.95              | 7,225.38              | 3,037.81              | 134.68           | 49.83         | 101.62                | 370.90                              | -4,247.60    | 778.35                 | 597.43                  | 180.91                    | 4.302              |           |
| 7,100.00                            | 2,879.99              | 7,275.38              | 3,036.60              | 136.25           | 50.38         | 101.60                | 371.46                              | -4,297.58    | 778.68                 | 595.68                  | 183.00                    | 4.255              |           |
| 7,150.00                            | 2,879.02              | 7,325.38              | 3,035.39              | 137.81           | 50.92         | 101.57                | 372.01                              | -4,347.56    | 779.01                 | 593.92                  | 185.09                    | 4.209              |           |
| 7,200.00                            | 2,878.05              | 7,375.37              | 3,034.17              | 139.38           | 51.47         | 101.55                | 372.56                              | -4,397.54    | 779.34                 | 592.17                  | 187.17                    | 4.164              |           |
| 7,250.00                            | 2,877.08              | 7,425.37              | 3,032.96              | 140.94           | 52.02         | 101.53                | 373.11                              | -4,447.52    | 779.67                 | 590.41                  | 189.26                    | 4.120              |           |
| 7,300.00                            | 2,876.11              | 7,475.37              | 3,031.75              | 142.51           | 52.57         | 101.50                | 373.67                              | -4,497.50    | 780.01                 | 588.66                  | 191.35                    | 4.076              |           |
| 7,350.00                            | 2,875.14              | 7,525.37              | 3,030.53              | 144.07           | 53.11         | 101.48                | 374.22                              | -4,547.48    | 780.34                 | 586.90                  | 193.44                    | 4.034              |           |
| 7,400.00                            | 2,874.17              | 7,575.37              | 3,029.32              | 145.64           | 53.66         | 101.46                | 374.77                              | -4,597.46    | 780.67                 | 585.14                  | 195.53                    | 3.993              |           |
| 7,450.00                            | 2,873.20              | 7,625.36              | 3,028.11              | 147.21           | 54.21         | 101.43                | 375.33                              | -4,647.44    | 781.00                 | 583.38                  | 197.62                    | 3.952              |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design LIVE OAK 27-28 STATE COM - 30H - Wellbore #1 - PERMIT |                |                |                |                 |        |                   |                        |              |                 |                  |                    |                   | Offset Site Error: | 0.00 usft |
|---------------------------------------------------------------------|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------|--------------|-----------------|------------------|--------------------|-------------------|--------------------|-----------|
| Survey Program: 0-MWD+IFR1+SAG+FDIR                                 |                |                |                |                 |        |                   |                        |              |                 |                  |                    |                   | Offset Well Error: | 0.00 usft |
| Reference                                                           |                | Offset         |                | Semi Major Axis |        |                   | Distance               |              |                 |                  |                    |                   |                    | Warning   |
| Measured Depth                                                      | Vertical Depth | Measured Depth | Vertical Depth | Reference       | Offset | Highside Toolface | Offset Wellbore Centre |              | Between Centres | Between Ellipses | Minimum Separation | Separation Factor |                    |           |
| (usft)                                                              | (usft)         | (usft)         | (usft)         | (usft)          | (usft) | (°)               | +N/-S (usft)           | +E/-W (usft) | (usft)          | (usft)           | (usft)             |                   |                    |           |
| 7,500.00                                                            | 2,872.24       | 7,675.36       | 3,026.90       | 148.77          | 54.76  | 101.41            | 375.88                 | -4,697.42    | 781.33          | 581.62           | 199.71             | 3.912             |                    |           |
| 7,550.00                                                            | 2,871.27       | 7,725.36       | 3,025.68       | 150.34          | 55.31  | 101.39            | 376.43                 | -4,747.40    | 781.67          | 579.86           | 201.80             | 3.873             |                    |           |
| 7,600.00                                                            | 2,870.30       | 7,775.36       | 3,024.47       | 151.90          | 55.86  | 101.37            | 376.98                 | -4,797.38    | 782.00          | 578.10           | 203.89             | 3.835             |                    |           |
| 7,650.00                                                            | 2,869.33       | 7,825.35       | 3,023.26       | 153.47          | 56.41  | 101.34            | 377.54                 | -4,847.36    | 782.33          | 576.34           | 205.99             | 3.798             |                    |           |
| 7,700.00                                                            | 2,868.36       | 7,875.35       | 3,022.05       | 155.04          | 56.96  | 101.32            | 378.09                 | -4,897.34    | 782.66          | 574.58           | 208.08             | 3.761             |                    |           |
| 7,750.00                                                            | 2,867.39       | 7,925.35       | 3,020.83       | 156.60          | 57.51  | 101.30            | 378.64                 | -4,947.32    | 783.00          | 572.82           | 210.18             | 3.725             |                    |           |
| 7,800.00                                                            | 2,866.42       | 7,975.35       | 3,019.62       | 158.17          | 58.06  | 101.27            | 379.20                 | -4,997.30    | 783.33          | 571.06           | 212.27             | 3.690             |                    |           |
| 7,850.00                                                            | 2,865.45       | 8,025.35       | 3,018.41       | 159.74          | 58.61  | 101.25            | 379.75                 | -5,047.28    | 783.66          | 569.30           | 214.37             | 3.656             |                    |           |
| 7,900.00                                                            | 2,864.49       | 8,075.34       | 3,017.20       | 161.30          | 59.16  | 101.23            | 380.30                 | -5,097.26    | 784.00          | 567.54           | 216.46             | 3.622             |                    |           |
| 7,950.00                                                            | 2,863.52       | 8,125.34       | 3,015.98       | 162.87          | 59.71  | 101.20            | 380.86                 | -5,147.24    | 784.33          | 565.77           | 218.56             | 3.589             |                    |           |
| 8,000.00                                                            | 2,862.55       | 8,175.34       | 3,014.77       | 164.44          | 60.26  | 101.18            | 381.41                 | -5,197.22    | 784.66          | 564.01           | 220.65             | 3.556             |                    |           |
| 8,050.00                                                            | 2,861.58       | 8,225.34       | 3,013.56       | 166.00          | 60.81  | 101.16            | 381.96                 | -5,247.20    | 785.00          | 562.25           | 222.75             | 3.524             |                    |           |
| 8,100.00                                                            | 2,860.61       | 8,275.34       | 3,012.35       | 167.57          | 61.37  | 101.14            | 382.51                 | -5,297.19    | 785.33          | 560.48           | 224.85             | 3.493             |                    |           |
| 8,150.00                                                            | 2,859.64       | 8,325.33       | 3,011.13       | 169.14          | 61.92  | 101.11            | 383.07                 | -5,347.17    | 785.67          | 558.72           | 226.95             | 3.462             |                    |           |
| 8,200.00                                                            | 2,858.67       | 8,375.33       | 3,009.92       | 170.71          | 62.47  | 101.09            | 383.62                 | -5,397.15    | 786.00          | 556.95           | 229.05             | 3.432             |                    |           |
| 8,250.00                                                            | 2,857.70       | 8,425.33       | 3,008.71       | 172.27          | 63.02  | 101.07            | 384.17                 | -5,447.13    | 786.33          | 555.19           | 231.15             | 3.402             |                    |           |
| 8,300.00                                                            | 2,856.74       | 8,475.33       | 3,007.50       | 173.84          | 63.57  | 101.04            | 384.73                 | -5,497.11    | 786.67          | 553.42           | 233.25             | 3.373             |                    |           |
| 8,350.00                                                            | 2,855.77       | 8,525.33       | 3,006.28       | 175.41          | 64.13  | 101.02            | 385.28                 | -5,547.09    | 787.00          | 551.66           | 235.35             | 3.344             |                    |           |
| 8,400.00                                                            | 2,854.80       | 8,575.32       | 3,005.07       | 176.98          | 64.68  | 101.00            | 385.83                 | -5,597.07    | 787.34          | 549.89           | 237.45             | 3.316             |                    |           |
| 8,450.00                                                            | 2,853.83       | 8,625.32       | 3,003.86       | 178.54          | 65.23  | 100.98            | 386.38                 | -5,647.05    | 787.67          | 548.12           | 239.55             | 3.288             |                    |           |
| 8,500.00                                                            | 2,852.86       | 8,675.32       | 3,002.65       | 180.11          | 65.78  | 100.95            | 386.94                 | -5,697.03    | 788.01          | 546.36           | 241.65             | 3.261             |                    |           |
| 8,550.00                                                            | 2,851.89       | 8,725.32       | 3,001.43       | 181.68          | 66.34  | 100.93            | 387.49                 | -5,747.01    | 788.34          | 544.59           | 243.75             | 3.234             |                    |           |
| 8,597.67                                                            | 2,850.97       | 8,772.98       | 3,000.28       | 183.17          | 66.86  | 100.91            | 388.02                 | -5,794.66    | 788.66          | 542.91           | 245.76             | 3.209             |                    |           |
| 8,600.00                                                            | 2,850.92       | 8,775.31       | 3,000.22       | 183.25          | 66.89  | 100.91            | 388.04                 | -5,796.99    | 788.68          | 542.82           | 245.85             | 3.208             |                    |           |
| 8,647.68                                                            | 2,850.00       | 8,822.99       | 2,999.06       | 184.74          | 67.42  | 100.89            | 388.57                 | -5,844.65    | 789.00          | 541.14           | 247.86             | 3.183 SF          |                    |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                       |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|-------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 0-MWD+IFR1+SAG+FDIR |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                           | Offset                | Semi Major Axis       |                       | Distance         |               | Warning              |                                     |              |                        |                         |                           |                    |           |
| Measured Depth (usft)               | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Tooface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 0.00                                | 0.00                  | 0.00                  | 0.00                  | 0.00             | 0.00          | 36.87                | 16.00                               | 12.00        | 20.00                  |                         |                           |                    |           |
| 50.00                               | 50.00                 | 50.00                 | 50.00                 | 0.05             | 0.07          | 36.87                | 16.00                               | 12.00        | 20.00                  | 19.87                   | 0.13                      | 159.407            |           |
| 100.00                              | 100.00                | 100.00                | 100.00                | 0.14             | 0.14          | 36.87                | 16.00                               | 12.00        | 20.00                  | 19.71                   | 0.29                      | 69.740             |           |
| 150.00                              | 150.00                | 150.00                | 150.00                | 0.32             | 0.32          | 36.87                | 16.00                               | 12.00        | 20.00                  | 19.35                   | 0.65                      | 30.996             |           |
| 200.00                              | 200.00                | 200.00                | 200.00                | 0.50             | 0.50          | 36.87                | 16.00                               | 12.00        | 20.00                  | 19.00                   | 1.00                      | 19.926             |           |
| 250.00                              | 250.00                | 250.00                | 250.00                | 0.68             | 0.68          | 36.87                | 16.00                               | 12.00        | 20.00                  | 18.64                   | 1.36                      | 14.682             |           |
| 300.00                              | 300.00                | 300.00                | 300.00                | 0.86             | 0.86          | 36.87                | 16.00                               | 12.00        | 20.00                  | 18.28                   | 1.72                      | 11.623             | CC        |
| 350.00                              | 350.00                | 349.88                | 349.88                | 1.03             | 1.03          | -109.65              | 15.87                               | 12.41        | 20.29                  | 18.23                   | 2.07                      | 9.816              | ES        |
| 400.00                              | 399.98                | 399.75                | 399.73                | 1.21             | 1.21          | -109.64              | 15.49                               | 13.66        | 21.17                  | 18.76                   | 2.41                      | 8.768              |           |
| 450.00                              | 449.93                | 449.60                | 449.53                | 1.38             | 1.38          | -109.62              | 14.84                               | 15.73        | 22.64                  | 19.88                   | 2.76                      | 8.198              |           |
| 500.00                              | 499.84                | 499.42                | 499.26                | 1.55             | 1.56          | -109.60              | 13.95                               | 18.63        | 24.69                  | 21.58                   | 3.11                      | 7.943              |           |
| 550.00                              | 549.68                | 549.20                | 548.89                | 1.73             | 1.73          | -109.58              | 12.79                               | 22.35        | 27.32                  | 23.85                   | 3.47                      | 7.883              |           |
| 600.00                              | 599.45                | 598.93                | 598.39                | 1.91             | 1.91          | -109.55              | 11.39                               | 26.88        | 30.53                  | 26.71                   | 3.83                      | 7.982              |           |
| 650.00                              | 649.13                | 648.71                | 647.87                | 2.10             | 2.09          | -109.74              | 9.76                                | 32.11        | 34.28                  | 30.09                   | 4.20                      | 8.168              |           |
| 700.00                              | 698.70                | 698.54                | 697.38                | 2.30             | 2.26          | -110.99              | 8.12                                | 37.42        | 38.36                  | 33.79                   | 4.57                      | 8.398              |           |
| 750.00                              | 748.15                | 748.32                | 746.85                | 2.51             | 2.44          | -113.07              | 6.48                                | 42.72        | 42.79                  | 37.84                   | 4.95                      | 8.642              |           |
| 800.00                              | 797.47                | 798.04                | 796.26                | 2.72             | 2.62          | -115.68              | 4.83                                | 48.01        | 47.64                  | 42.31                   | 5.34                      | 8.929              |           |
| 850.00                              | 846.63                | 847.68                | 845.59                | 2.94             | 2.80          | -118.63              | 3.20                                | 53.30        | 52.99                  | 47.26                   | 5.73                      | 9.247              |           |
| 900.00                              | 895.62                | 897.23                | 894.83                | 3.17             | 2.98          | -121.73              | 1.56                                | 58.57        | 58.91                  | 52.79                   | 6.12                      | 9.624              |           |
| 950.00                              | 944.44                | 946.67                | 943.97                | 3.42             | 3.16          | -124.86              | -0.07                               | 63.84        | 65.47                  | 58.95                   | 6.52                      | 10.042             |           |
| 1,000.00                            | 993.06                | 995.99                | 992.98                | 3.67             | 3.34          | -127.94              | -1.70                               | 69.09        | 72.73                  | 65.82                   | 6.91                      | 10.524             |           |
| 1,050.00                            | 1,041.46              | 1,045.18              | 1,041.86              | 3.93             | 3.52          | -130.90              | -3.32                               | 74.33        | 80.73                  | 73.43                   | 7.30                      | 11.052             |           |
| 1,051.64                            | 1,043.05              | 1,046.79              | 1,043.47              | 3.94             | 3.53          | -130.99              | -3.38                               | 74.50        | 81.01                  | 73.69                   | 7.32                      | 11.071             |           |
| 1,100.00                            | 1,089.75              | 1,094.28              | 1,090.66              | 4.21             | 3.70          | -133.63              | -4.95                               | 79.56        | 89.24                  | 81.55                   | 7.69                      | 11.599             |           |
| 1,150.00                            | 1,138.04              | 1,143.39              | 1,139.46              | 4.49             | 3.88          | -135.90              | -6.57                               | 84.79        | 97.92                  | 89.83                   | 8.08                      | 12.114             |           |
| 1,200.00                            | 1,186.33              | 1,192.50              | 1,188.26              | 4.77             | 4.06          | -137.79              | -8.19                               | 90.02        | 106.71                 | 98.24                   | 8.47                      | 12.600             |           |
| 1,250.00                            | 1,234.62              | 1,241.61              | 1,237.06              | 5.06             | 4.24          | -139.40              | -9.81                               | 95.24        | 115.61                 | 106.75                  | 8.86                      | 13.053             |           |
| 1,300.00                            | 1,282.91              | 1,290.71              | 1,285.87              | 5.34             | 4.42          | -140.77              | -11.43                              | 100.47       | 124.58                 | 115.34                  | 9.24                      | 13.478             |           |
| 1,350.00                            | 1,331.20              | 1,339.82              | 1,334.67              | 5.64             | 4.60          | -141.96              | -13.05                              | 105.70       | 133.61                 | 123.98                  | 9.63                      | 13.875             |           |
| 1,400.00                            | 1,379.48              | 1,388.93              | 1,383.47              | 5.93             | 4.78          | -143.00              | -14.67                              | 110.93       | 142.69                 | 132.67                  | 10.02                     | 14.246             |           |
| 1,450.00                            | 1,427.77              | 1,438.03              | 1,432.27              | 6.22             | 4.96          | -143.92              | -16.30                              | 116.16       | 151.81                 | 141.40                  | 10.40                     | 14.593             |           |
| 1,500.00                            | 1,476.06              | 1,487.14              | 1,481.07              | 6.51             | 5.14          | -144.73              | -17.92                              | 121.39       | 160.96                 | 150.17                  | 10.79                     | 14.918             |           |
| 1,550.00                            | 1,524.35              | 1,536.25              | 1,529.87              | 6.81             | 5.32          | -145.46              | -19.54                              | 126.62       | 170.14                 | 158.96                  | 11.18                     | 15.222             |           |
| 1,600.00                            | 1,572.64              | 1,585.35              | 1,578.67              | 7.11             | 5.50          | -146.11              | -21.16                              | 131.85       | 179.35                 | 167.78                  | 11.56                     | 15.508             |           |
| 1,650.00                            | 1,620.93              | 1,634.46              | 1,627.47              | 7.41             | 5.68          | -146.69              | -22.78                              | 137.08       | 188.57                 | 176.62                  | 11.95                     | 15.776             |           |
| 1,700.00                            | 1,669.22              | 1,683.57              | 1,676.27              | 7.70             | 5.86          | -147.23              | -24.40                              | 142.31       | 197.81                 | 185.47                  | 12.34                     | 16.029             |           |
| 1,750.00                            | 1,717.51              | 1,732.67              | 1,725.07              | 8.00             | 6.04          | -147.71              | -26.02                              | 147.54       | 207.07                 | 194.34                  | 12.73                     | 16.266             |           |
| 1,800.00                            | 1,765.79              | 1,781.78              | 1,773.87              | 8.30             | 6.22          | -148.15              | -27.64                              | 152.77       | 216.34                 | 203.22                  | 13.12                     | 16.491             |           |
| 1,850.00                            | 1,814.08              | 1,830.89              | 1,822.67              | 8.60             | 6.40          | -148.56              | -29.27                              | 157.99       | 225.62                 | 212.11                  | 13.51                     | 16.703             |           |
| 1,900.00                            | 1,862.37              | 1,879.99              | 1,871.47              | 8.90             | 6.58          | -148.94              | -30.89                              | 163.22       | 234.91                 | 221.01                  | 13.90                     | 16.904             |           |
| 1,950.00                            | 1,910.66              | 1,929.10              | 1,920.27              | 9.20             | 6.76          | -149.28              | -32.51                              | 168.45       | 244.21                 | 229.93                  | 14.29                     | 17.094             |           |
| 1,989.45                            | 1,948.77              | 1,967.85              | 1,958.78              | 9.44             | 6.90          | -149.54              | -33.79                              | 172.58       | 251.56                 | 236.96                  | 14.59                     | 17.237             |           |
| 2,000.00                            | 1,958.96              | 1,978.21              | 1,969.08              | 9.51             | 6.94          | -151.91              | -34.13                              | 173.68       | 253.51                 | 238.84                  | 14.67                     | 17.277             |           |
| 2,050.00                            | 2,007.55              | 2,027.39              | 2,017.95              | 9.79             | 7.12          | -164.72              | -35.75                              | 178.92       | 262.48                 | 247.42                  | 15.05                     | 17.435             |           |
| 2,100.00                            | 2,056.43              | 2,076.51              | 2,066.77              | 10.04            | 7.30          | -179.98              | -37.38                              | 184.15       | 270.97                 | 255.53                  | 15.44                     | 17.553             |           |
| 2,150.00                            | 2,105.41              | 2,125.40              | 2,115.35              | 10.27            | 7.48          | 163.83               | -38.99                              | 189.36       | 279.07                 | 263.26                  | 15.82                     | 17.644             |           |
| 2,200.00                            | 2,154.31              | 2,173.88              | 2,163.53              | 10.47            | 7.66          | 149.40               | -40.59                              | 194.52       | 286.96                 | 270.77                  | 16.19                     | 17.724             |           |
| 2,250.00                            | 2,202.95              | 2,221.76              | 2,211.11              | 10.64            | 7.83          | 138.43               | -42.17                              | 199.62       | 294.86                 | 278.31                  | 16.55                     | 17.812             |           |
| 2,300.00                            | 2,251.14              | 2,268.86              | 2,257.92              | 10.79            | 8.01          | 130.98               | -43.73                              | 204.63       | 303.08                 | 286.18                  | 16.90                     | 17.929             |           |
| 2,350.00                            | 2,298.70              | 2,315.02              | 2,303.78              | 10.93            | 8.18          | 126.31               | -45.25                              | 209.55       | 311.95                 | 294.72                  | 17.24                     | 18.099             |           |
| 2,400.00                            | 2,345.46              | 2,360.05              | 2,348.54              | 11.05            | 8.34          | 123.61               | -46.74                              | 214.34       | 321.84                 | 304.29                  | 17.54                     | 18.346             |           |
| 2,450.00                            | 2,391.25              | 2,403.79              | 2,392.00              | 11.16            | 8.50          | 122.26               | -48.18                              | 219.00       | 333.09                 | 315.28                  | 17.82                     | 18.694             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design LIVE OAK 27-28 STATE COM - 70H - Wellbore #1 - PERMIT |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft |
|---------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------|
| Survey Program: 0-MWD+IFR1+SAG+FDIR                                 |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Well Error: | 0.00 usft |
| Reference                                                           | Offset                | Semi Major Axis       |                       | Distance         |               |                       |                                     |              |                        |                         |                           |                   |                    | Warning   |
| Measured Depth (usft)                                               | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor |                    |           |
| 2,500.00                                                            | 2,435.89              | 2,446.07              | 2,434.02              | 11.26            | 8.66          | 121.80                | -49.58                              | 223.50       | 346.07                 | 328.01                  | 18.06                     | 19.162            |                    |           |
| 2,550.00                                                            | 2,479.22              | 2,486.75              | 2,474.44              | 11.35            | 8.81          | 121.87                | -50.92                              | 227.83       | 361.08                 | 342.81                  | 18.27                     | 19.765            |                    |           |
| 2,600.00                                                            | 2,521.07              | 2,525.66              | 2,513.11              | 11.43            | 8.95          | 122.22                | -52.20                              | 231.98       | 378.37                 | 359.92                  | 18.45                     | 20.510            |                    |           |
| 2,650.00                                                            | 2,561.29              | 2,562.66              | 2,549.88              | 11.52            | 9.09          | 122.68                | -53.43                              | 235.92       | 398.11                 | 379.50                  | 18.61                     | 21.390            |                    |           |
| 2,700.00                                                            | 2,599.72              | 2,597.61              | 2,584.62              | 11.60            | 9.21          | 123.08                | -54.58                              | 239.64       | 420.43                 | 401.65                  | 18.78                     | 22.389            |                    |           |
| 2,750.00                                                            | 2,636.24              | 2,630.39              | 2,617.19              | 11.70            | 9.34          | 123.33                | -55.66                              | 243.13       | 445.34                 | 426.37                  | 18.97                     | 23.473            |                    |           |
| 2,800.00                                                            | 2,670.69              | 2,660.87              | 2,647.48              | 11.82            | 9.45          | 123.32                | -56.67                              | 246.38       | 472.82                 | 453.60                  | 19.22                     | 24.594            |                    |           |
| 2,850.00                                                            | 2,702.95              | 2,688.93              | 2,675.37              | 12.05            | 9.55          | 122.99                | -57.60                              | 249.36       | 502.79                 | 483.22                  | 19.57                     | 25.689            |                    |           |
| 2,900.00                                                            | 2,732.90              | 2,714.48              | 2,700.76              | 12.48            | 9.64          | 122.26                | -58.44                              | 252.08       | 535.11                 | 515.05                  | 20.05                     | 26.684            |                    |           |
| 2,950.00                                                            | 2,760.43              | 2,737.42              | 2,723.55              | 13.15            | 9.73          | 121.07                | -59.20                              | 254.53       | 569.61                 | 548.91                  | 20.70                     | 27.512            |                    |           |
| 2,975.18                                                            | 2,773.35              | 2,747.95              | 2,734.02              | 13.54            | 9.77          | 120.27                | -59.54                              | 255.65       | 587.75                 | 566.65                  | 21.11                     | 27.846            |                    |           |
| 3,000.00                                                            | 2,785.76              | 2,757.99              | 2,744.00              | 13.96            | 9.80          | 121.41                | -59.88                              | 256.72       | 606.03                 | 584.71                  | 21.32                     | 28.424            |                    |           |
| 3,050.00                                                            | 2,810.76              | 2,803.35              | 2,789.17              | 14.86            | 9.97          | 126.21                | -61.34                              | 260.49       | 643.32                 | 621.90                  | 21.42                     | 30.033            |                    |           |
| 3,100.00                                                            | 2,835.76              | 2,859.85              | 2,845.61              | 15.79            | 10.17         | 131.37                | -63.07                              | 262.18       | 680.57                 | 659.30                  | 21.27                     | 31.999            |                    |           |
| 3,150.00                                                            | 2,860.76              | 2,930.93              | 2,916.59              | 16.79            | 10.40         | 136.73                | -65.08                              | 259.57       | 717.14                 | 696.21                  | 20.93                     | 34.271            |                    |           |
| 3,175.18                                                            | 2,873.35              | 2,973.83              | 2,959.28              | 17.30            | 10.53         | 139.44                | -66.20                              | 255.44       | 735.06                 | 714.38                  | 20.67                     | 35.554            |                    |           |
| 3,200.00                                                            | 2,885.29              | 3,020.50              | 3,005.45              | 17.82            | 10.67         | 140.56                | -67.34                              | 248.78       | 752.53                 | 731.90                  | 20.63                     | 36.475            |                    |           |
| 3,250.00                                                            | 2,906.43              | 3,126.68              | 3,108.92              | 18.94            | 10.99         | 143.12                | -69.60                              | 225.28       | 787.77                 | 767.34                  | 20.43                     | 38.552            |                    |           |
| 3,300.00                                                            | 2,923.54              | 3,256.06              | 3,230.50              | 20.14            | 11.36         | 146.19                | -71.71                              | 181.37       | 822.49                 | 802.47                  | 20.02                     | 41.080            |                    |           |
| 3,350.00                                                            | 2,936.49              | 3,421.77              | 3,375.65              | 21.42            | 11.83         | 149.77                | -73.31                              | 101.89       | 855.61                 | 836.27                  | 19.34                     | 44.235            |                    |           |
| 3,400.00                                                            | 2,945.18              | 3,644.88              | 3,545.28              | 22.74            | 12.52         | 153.59                | -73.43                              | -42.26       | 885.24                 | 866.73                  | 18.51                     | 47.825            |                    |           |
| 3,450.00                                                            | 2,949.55              | 3,872.81              | 3,679.40              | 24.11            | 13.39         | 155.96                | -71.16                              | -225.88      | 908.50                 | 890.18                  | 18.32                     | 49.584            |                    |           |
| 3,486.28                                                            | 2,950.00              | 3,904.45              | 3,695.22              | 25.12            | 13.53         | 155.61                | -70.70                              | -253.28      | 925.17                 | 906.14                  | 19.03                     | 48.607            |                    |           |
| 3,500.00                                                            | 2,949.73              | 3,916.19              | 3,701.09              | 25.50            | 13.59         | 155.78                | -70.53                              | -263.45      | 931.83                 | 912.68                  | 19.16                     | 48.644            |                    |           |
| 3,550.00                                                            | 2,948.77              | 3,959.00              | 3,722.50              | 26.91            | 13.79         | 156.37                | -69.90                              | -300.51      | 956.17                 | 936.57                  | 19.61                     | 48.768            |                    |           |
| 3,600.00                                                            | 2,947.80              | 4,509.07              | 3,846.18              | 28.33            | 16.91         | 159.18                | -61.08                              | -823.26      | 961.40                 | 940.95                  | 20.45                     | 47.016            |                    |           |
| 3,650.00                                                            | 2,946.83              | 4,559.06              | 3,844.73              | 29.77            | 17.25         | 159.13                | -60.24                              | -873.23      | 961.19                 | 939.89                  | 21.30                     | 45.135            |                    |           |
| 3,700.00                                                            | 2,945.86              | 4,609.05              | 3,843.27              | 31.22            | 17.59         | 159.09                | -59.40                              | -923.19      | 960.98                 | 938.83                  | 22.15                     | 43.385            |                    |           |
| 3,750.00                                                            | 2,944.89              | 4,659.05              | 3,841.82              | 32.68            | 17.95         | 159.04                | -58.55                              | -973.16      | 960.77                 | 937.75                  | 23.02                     | 41.736            |                    |           |
| 3,800.00                                                            | 2,943.92              | 4,709.04              | 3,840.36              | 34.15            | 18.32         | 158.99                | -57.71                              | -1,023.12    | 960.56                 | 936.66                  | 23.90                     | 40.197            |                    |           |
| 3,850.00                                                            | 2,942.95              | 4,759.03              | 3,838.91              | 35.63            | 18.69         | 158.94                | -56.87                              | -1,073.09    | 960.35                 | 935.56                  | 24.79                     | 38.745            |                    |           |
| 3,900.00                                                            | 2,941.98              | 4,809.02              | 3,837.46              | 37.12            | 19.08         | 158.89                | -56.03                              | -1,123.05    | 960.14                 | 934.46                  | 25.68                     | 37.387            |                    |           |
| 3,950.00                                                            | 2,941.02              | 4,859.02              | 3,836.00              | 38.61            | 19.48         | 158.85                | -55.18                              | -1,173.02    | 959.93                 | 933.34                  | 26.59                     | 36.104            |                    |           |
| 4,000.00                                                            | 2,940.05              | 4,909.01              | 3,834.55              | 40.11            | 19.87         | 158.80                | -54.34                              | -1,222.98    | 959.72                 | 932.22                  | 27.50                     | 34.900            |                    |           |
| 4,050.00                                                            | 2,939.08              | 4,959.00              | 3,833.10              | 41.61            | 20.29         | 158.75                | -53.50                              | -1,272.95    | 959.52                 | 931.10                  | 28.42                     | 33.761            |                    |           |
| 4,100.00                                                            | 2,938.11              | 5,009.00              | 3,831.64              | 43.12            | 20.70         | 158.70                | -52.65                              | -1,322.91    | 959.31                 | 929.96                  | 29.35                     | 32.688            |                    |           |
| 4,150.00                                                            | 2,937.14              | 5,058.99              | 3,830.19              | 44.64            | 21.13         | 158.65                | -51.81                              | -1,372.88    | 959.11                 | 928.82                  | 30.28                     | 31.672            |                    |           |
| 4,200.00                                                            | 2,936.17              | 5,108.98              | 3,828.74              | 46.15            | 21.56         | 158.60                | -50.97                              | -1,422.84    | 958.90                 | 927.68                  | 31.22                     | 30.713            |                    |           |
| 4,250.00                                                            | 2,935.20              | 5,158.98              | 3,827.28              | 47.67            | 21.99         | 158.56                | -50.12                              | -1,472.81    | 958.70                 | 926.53                  | 32.17                     | 29.803            |                    |           |
| 4,300.00                                                            | 2,934.23              | 5,208.97              | 3,825.83              | 49.20            | 22.43         | 158.51                | -49.28                              | -1,522.77    | 958.49                 | 925.38                  | 33.12                     | 28.941            |                    |           |
| 4,350.00                                                            | 2,933.27              | 5,258.96              | 3,824.38              | 50.72            | 22.88         | 158.46                | -48.44                              | -1,572.74    | 958.29                 | 924.21                  | 34.08                     | 28.121            |                    |           |
| 4,400.00                                                            | 2,932.30              | 5,308.95              | 3,822.92              | 52.25            | 23.33         | 158.41                | -47.60                              | -1,622.70    | 958.09                 | 923.05                  | 35.04                     | 27.344            |                    |           |
| 4,450.00                                                            | 2,931.33              | 5,358.95              | 3,821.47              | 53.79            | 23.79         | 158.36                | -46.75                              | -1,672.67    | 957.89                 | 921.88                  | 36.01                     | 26.603            |                    |           |
| 4,500.00                                                            | 2,930.36              | 5,408.94              | 3,820.02              | 55.32            | 24.25         | 158.31                | -45.91                              | -1,722.63    | 957.69                 | 920.71                  | 36.98                     | 25.898            |                    |           |
| 4,550.00                                                            | 2,929.39              | 5,458.93              | 3,818.56              | 56.85            | 24.72         | 158.27                | -45.07                              | -1,772.60    | 957.49                 | 919.53                  | 37.96                     | 25.226            |                    |           |
| 4,600.00                                                            | 2,928.42              | 5,508.93              | 3,817.11              | 58.39            | 25.19         | 158.22                | -44.22                              | -1,822.56    | 957.29                 | 918.35                  | 38.94                     | 24.585            |                    |           |
| 4,650.00                                                            | 2,927.45              | 5,558.92              | 3,815.66              | 59.93            | 25.66         | 158.17                | -43.38                              | -1,872.53    | 957.09                 | 917.17                  | 39.92                     | 23.973            |                    |           |
| 4,700.00                                                            | 2,926.48              | 5,608.91              | 3,814.20              | 61.47            | 26.13         | 158.12                | -42.54                              | -1,922.49    | 956.89                 | 915.98                  | 40.91                     | 23.388            |                    |           |
| 4,750.00                                                            | 2,925.52              | 5,658.91              | 3,812.75              | 63.01            | 26.62         | 158.07                | -41.69                              | -1,972.46    | 956.70                 | 914.79                  | 41.91                     | 22.828            |                    |           |
| 4,800.00                                                            | 2,924.55              | 5,708.90              | 3,811.30              | 64.56            | 27.10         | 158.02                | -40.85                              | -2,022.42    | 956.50                 | 913.59                  | 42.91                     | 22.293            |                    |           |
| 4,850.00                                                            | 2,923.58              | 5,758.89              | 3,809.84              | 66.10            | 27.58         | 157.97                | -40.01                              | -2,072.38    | 956.30                 | 912.40                  | 43.91                     | 21.779            |                    |           |
| 4,900.00                                                            | 2,922.61              | 5,808.89              | 3,808.39              | 67.65            | 28.07         | 157.93                | -39.17                              | -2,122.35    | 956.11                 | 911.19                  | 44.92                     | 21.287            |                    |           |

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





## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design LIVE OAK 27-28 STATE COM - 70H - Wellbore #1 - PERMIT |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|---------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 0-MWD+IFR1+SAG+FDIR                                 |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                                                           | Offset                | Semi Major Axis       |                       | Distance         |               |                       |                                     |              |                        |                         |                           | Warning            |           |
| Measured Depth (usft)                                               | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 4,950.00                                                            | 2,921.64              | 5,858.88              | 3,806.94              | 69.20            | 28.56         | 157.88                | -38.32                              | -2,172.31    | 955.92                 | 909.99                  | 45.93                     | 20.814             |           |
| 5,000.00                                                            | 2,920.67              | 5,908.87              | 3,805.48              | 70.75            | 29.06         | 157.83                | -37.48                              | -2,222.28    | 955.72                 | 908.78                  | 46.94                     | 20.361             |           |
| 5,050.00                                                            | 2,919.70              | 5,958.86              | 3,804.03              | 72.30            | 29.55         | 157.78                | -36.64                              | -2,272.24    | 955.53                 | 907.57                  | 47.96                     | 19.924             |           |
| 5,100.00                                                            | 2,918.73              | 6,008.86              | 3,802.58              | 73.85            | 30.05         | 157.73                | -35.79                              | -2,322.21    | 955.34                 | 906.36                  | 48.98                     | 19.505             |           |
| 5,150.00                                                            | 2,917.77              | 6,058.85              | 3,801.12              | 75.40            | 30.55         | 157.68                | -34.95                              | -2,372.17    | 955.15                 | 905.14                  | 50.00                     | 19.101             |           |
| 5,200.00                                                            | 2,916.80              | 6,108.84              | 3,799.67              | 76.95            | 31.06         | 157.63                | -34.11                              | -2,422.14    | 954.95                 | 903.92                  | 51.03                     | 18.713             |           |
| 5,250.00                                                            | 2,915.83              | 6,158.84              | 3,798.21              | 78.50            | 31.56         | 157.59                | -33.26                              | -2,472.10    | 954.76                 | 902.70                  | 52.06                     | 18.338             |           |
| 5,300.00                                                            | 2,914.86              | 6,208.83              | 3,796.76              | 80.05            | 32.07         | 157.54                | -32.42                              | -2,522.07    | 954.57                 | 901.48                  | 53.10                     | 17.977             |           |
| 5,350.00                                                            | 2,913.89              | 6,258.82              | 3,795.31              | 81.61            | 32.58         | 157.49                | -31.58                              | -2,572.03    | 954.39                 | 900.25                  | 54.14                     | 17.629             |           |
| 5,400.00                                                            | 2,912.92              | 6,308.82              | 3,793.85              | 83.16            | 33.09         | 157.44                | -30.74                              | -2,622.00    | 954.20                 | 899.02                  | 55.18                     | 17.292             |           |
| 5,450.00                                                            | 2,911.95              | 6,358.81              | 3,792.40              | 84.72            | 33.60         | 157.39                | -29.89                              | -2,671.96    | 954.01                 | 897.78                  | 56.23                     | 16.967             |           |
| 5,500.00                                                            | 2,910.99              | 6,408.80              | 3,790.95              | 86.27            | 34.11         | 157.34                | -29.05                              | -2,721.93    | 953.82                 | 896.55                  | 57.27                     | 16.654             |           |
| 5,550.00                                                            | 2,910.02              | 6,458.79              | 3,789.49              | 87.83            | 34.63         | 157.29                | -28.21                              | -2,771.89    | 953.64                 | 895.31                  | 58.33                     | 16.350             |           |
| 5,600.00                                                            | 2,909.05              | 6,508.79              | 3,788.04              | 89.39            | 35.14         | 157.24                | -27.36                              | -2,821.86    | 953.45                 | 894.07                  | 59.38                     | 16.057             |           |
| 5,650.00                                                            | 2,908.08              | 6,558.78              | 3,786.59              | 90.95            | 35.66         | 157.19                | -26.52                              | -2,871.82    | 953.27                 | 892.83                  | 60.44                     | 15.772             |           |
| 5,700.00                                                            | 2,907.11              | 6,608.77              | 3,785.13              | 92.50            | 36.18         | 157.15                | -25.68                              | -2,921.79    | 953.08                 | 891.58                  | 61.50                     | 15.497             |           |
| 5,750.00                                                            | 2,906.14              | 6,658.77              | 3,783.68              | 94.06            | 36.70         | 157.10                | -24.83                              | -2,971.75    | 952.90                 | 890.34                  | 62.56                     | 15.231             |           |
| 5,800.00                                                            | 2,905.17              | 6,708.76              | 3,782.23              | 95.62            | 37.22         | 157.05                | -23.99                              | -3,021.72    | 952.72                 | 889.09                  | 63.63                     | 14.972             |           |
| 5,850.00                                                            | 2,904.20              | 6,758.75              | 3,780.77              | 97.18            | 37.74         | 157.00                | -23.15                              | -3,071.68    | 952.54                 | 887.83                  | 64.70                     | 14.722             |           |
| 5,900.00                                                            | 2,903.24              | 6,808.75              | 3,779.32              | 98.74            | 38.27         | 156.95                | -22.31                              | -3,121.65    | 952.36                 | 886.58                  | 65.78                     | 14.479             |           |
| 5,950.00                                                            | 2,902.27              | 6,858.74              | 3,777.87              | 100.30           | 38.79         | 156.90                | -21.46                              | -3,171.61    | 952.17                 | 885.32                  | 66.85                     | 14.243             |           |
| 6,000.00                                                            | 2,901.30              | 6,908.73              | 3,776.41              | 101.86           | 39.32         | 156.85                | -20.62                              | -3,221.58    | 952.00                 | 884.06                  | 67.93                     | 14.014             |           |
| 6,050.00                                                            | 2,900.33              | 6,958.73              | 3,774.96              | 103.42           | 39.85         | 156.80                | -19.78                              | -3,271.54    | 951.82                 | 882.80                  | 69.02                     | 13.791             |           |
| 6,100.00                                                            | 2,899.36              | 7,008.72              | 3,773.51              | 104.98           | 40.37         | 156.75                | -18.93                              | -3,321.50    | 951.64                 | 881.54                  | 70.10                     | 13.575             |           |
| 6,150.00                                                            | 2,898.39              | 7,058.71              | 3,772.05              | 106.54           | 40.90         | 156.70                | -18.09                              | -3,371.47    | 951.46                 | 880.27                  | 71.19                     | 13.365             |           |
| 6,200.00                                                            | 2,897.42              | 7,108.70              | 3,770.60              | 108.10           | 41.43         | 156.66                | -17.25                              | -3,421.43    | 951.28                 | 879.00                  | 72.28                     | 13.161             |           |
| 6,250.00                                                            | 2,896.45              | 7,158.70              | 3,769.15              | 109.66           | 41.96         | 156.61                | -16.40                              | -3,471.40    | 951.11                 | 877.73                  | 73.38                     | 12.962             |           |
| 6,300.00                                                            | 2,895.49              | 7,208.69              | 3,767.69              | 111.23           | 42.49         | 156.56                | -15.56                              | -3,521.36    | 950.93                 | 876.46                  | 74.47                     | 12.769             |           |
| 6,350.00                                                            | 2,894.52              | 7,258.68              | 3,766.24              | 112.79           | 43.03         | 156.51                | -14.72                              | -3,571.33    | 950.76                 | 875.18                  | 75.57                     | 12.580             |           |
| 6,400.00                                                            | 2,893.55              | 7,308.68              | 3,764.79              | 114.35           | 43.56         | 156.46                | -13.88                              | -3,621.29    | 950.58                 | 873.91                  | 76.68                     | 12.397             |           |
| 6,450.00                                                            | 2,892.58              | 7,358.67              | 3,763.33              | 115.91           | 44.09         | 156.41                | -13.03                              | -3,671.26    | 950.41                 | 872.63                  | 77.78                     | 12.219             |           |
| 6,500.00                                                            | 2,891.61              | 7,408.66              | 3,761.88              | 117.48           | 44.63         | 156.36                | -12.19                              | -3,721.22    | 950.24                 | 871.34                  | 78.89                     | 12.045             |           |
| 6,550.00                                                            | 2,890.64              | 7,458.66              | 3,760.43              | 119.04           | 45.16         | 156.31                | -11.35                              | -3,771.19    | 950.06                 | 870.06                  | 80.00                     | 11.875             |           |
| 6,600.00                                                            | 2,889.67              | 7,508.65              | 3,758.97              | 120.60           | 45.70         | 156.26                | -10.50                              | -3,821.15    | 949.89                 | 868.77                  | 81.12                     | 11.710             |           |
| 6,650.00                                                            | 2,888.70              | 7,558.64              | 3,757.52              | 122.17           | 46.23         | 156.21                | -9.66                               | -3,871.12    | 949.72                 | 867.48                  | 82.24                     | 11.548             |           |
| 6,700.00                                                            | 2,887.74              | 7,608.63              | 3,756.06              | 123.73           | 46.77         | 156.16                | -8.82                               | -3,921.08    | 949.55                 | 866.19                  | 83.36                     | 11.391             |           |
| 6,750.00                                                            | 2,886.77              | 7,658.63              | 3,754.61              | 125.29           | 47.31         | 156.11                | -7.97                               | -3,971.05    | 949.38                 | 864.90                  | 84.48                     | 11.238             |           |
| 6,800.00                                                            | 2,885.80              | 7,708.62              | 3,753.16              | 126.86           | 47.84         | 156.07                | -7.13                               | -4,021.01    | 949.21                 | 863.61                  | 85.61                     | 11.088             |           |
| 6,850.00                                                            | 2,884.83              | 7,758.61              | 3,751.70              | 128.42           | 48.38         | 156.02                | -6.29                               | -4,070.98    | 949.05                 | 862.31                  | 86.74                     | 10.942             |           |
| 6,900.00                                                            | 2,883.86              | 7,808.61              | 3,750.25              | 129.99           | 48.92         | 155.97                | -5.45                               | -4,120.94    | 948.88                 | 861.01                  | 87.87                     | 10.799             |           |
| 6,950.00                                                            | 2,882.89              | 7,858.60              | 3,748.80              | 131.55           | 49.46         | 155.92                | -4.60                               | -4,170.91    | 948.71                 | 859.71                  | 89.01                     | 10.659             |           |
| 7,000.00                                                            | 2,881.92              | 7,908.59              | 3,747.34              | 133.12           | 50.00         | 155.87                | -3.76                               | -4,220.87    | 948.55                 | 858.40                  | 90.14                     | 10.523             |           |
| 7,050.00                                                            | 2,880.95              | 7,958.59              | 3,745.89              | 134.68           | 50.54         | 155.82                | -2.92                               | -4,270.84    | 948.38                 | 857.10                  | 91.28                     | 10.389             |           |
| 7,100.00                                                            | 2,879.99              | 8,008.58              | 3,744.44              | 136.25           | 51.08         | 155.77                | -2.07                               | -4,320.80    | 948.22                 | 855.79                  | 92.43                     | 10.259             |           |
| 7,150.00                                                            | 2,879.02              | 8,058.57              | 3,742.98              | 137.81           | 51.62         | 155.72                | -1.23                               | -4,370.77    | 948.05                 | 854.48                  | 93.57                     | 10.132             |           |
| 7,200.00                                                            | 2,878.05              | 8,108.57              | 3,741.53              | 139.38           | 52.17         | 155.67                | -0.39                               | -4,420.73    | 947.89                 | 853.17                  | 94.72                     | 10.007             |           |
| 7,250.00                                                            | 2,877.08              | 8,158.56              | 3,740.08              | 140.94           | 52.71         | 155.62                | 0.46                                | -4,470.70    | 947.73                 | 851.85                  | 95.87                     | 9.885              |           |
| 7,300.00                                                            | 2,876.11              | 8,208.55              | 3,738.62              | 142.51           | 53.25         | 155.57                | 1.30                                | -4,520.66    | 947.57                 | 850.54                  | 97.03                     | 9.766              |           |
| 7,350.00                                                            | 2,875.14              | 8,258.54              | 3,737.17              | 144.07           | 53.79         | 155.52                | 2.14                                | -4,570.62    | 947.41                 | 849.22                  | 98.19                     | 9.649              |           |
| 7,400.00                                                            | 2,874.17              | 8,308.54              | 3,735.72              | 145.64           | 54.34         | 155.47                | 2.98                                | -4,620.59    | 947.25                 | 847.90                  | 99.35                     | 9.535              |           |
| 7,450.00                                                            | 2,873.20              | 8,358.53              | 3,734.26              | 147.21           | 54.88         | 155.42                | 3.83                                | -4,670.55    | 947.09                 | 846.58                  | 100.51                    | 9.423              |           |
| 7,500.00                                                            | 2,872.24              | 8,408.52              | 3,732.81              | 148.77           | 55.42         | 155.37                | 4.67                                | -4,720.52    | 946.93                 | 845.25                  | 101.68                    | 9.313              |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design LIVE OAK 27-28 STATE COM - 70H - Wellbore #1 - PERMIT |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|---------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 0-MWD+IFR1+SAG+FDIR                                 |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                                                           | Offset                | Semi Major Axis       |                       | Distance         |               |                       |                                     |              |                        |                         |                           |                    |           |
| Measured Depth (usft)                                               | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  | Warning   |
| 7,550.00                                                            | 2,871.27              | 8,458.52              | 3,731.36              | 150.34           | 55.97         | 155.32                | 5.51                                | -4,770.48    | 946.77                 | 843.93                  | 102.85                    | 9.206              |           |
| 7,600.00                                                            | 2,870.30              | 8,508.51              | 3,729.90              | 151.90           | 56.51         | 155.27                | 6.36                                | -4,820.45    | 946.61                 | 842.60                  | 104.02                    | 9.101              |           |
| 7,650.00                                                            | 2,869.33              | 8,558.50              | 3,728.45              | 153.47           | 57.06         | 155.22                | 7.20                                | -4,870.41    | 946.46                 | 841.27                  | 105.19                    | 8.997              |           |
| 7,700.00                                                            | 2,868.36              | 8,608.50              | 3,727.00              | 155.04           | 57.60         | 155.17                | 8.04                                | -4,920.38    | 946.30                 | 839.93                  | 106.37                    | 8.896              |           |
| 7,750.00                                                            | 2,867.39              | 8,658.49              | 3,725.54              | 156.60           | 58.15         | 155.13                | 8.89                                | -4,970.34    | 946.15                 | 838.60                  | 107.55                    | 8.797              |           |
| 7,800.00                                                            | 2,866.42              | 8,708.48              | 3,724.09              | 158.17           | 58.70         | 155.08                | 9.73                                | -5,020.31    | 945.99                 | 837.26                  | 108.73                    | 8.700              |           |
| 7,850.00                                                            | 2,865.45              | 8,758.47              | 3,722.64              | 159.74           | 59.24         | 155.03                | 10.57                               | -5,070.27    | 945.84                 | 835.92                  | 109.92                    | 8.605              |           |
| 7,900.00                                                            | 2,864.49              | 8,808.47              | 3,721.18              | 161.30           | 59.79         | 154.98                | 11.41                               | -5,120.24    | 945.68                 | 834.58                  | 111.10                    | 8.512              |           |
| 7,950.00                                                            | 2,863.52              | 8,858.46              | 3,719.73              | 162.87           | 60.34         | 154.93                | 12.26                               | -5,170.20    | 945.53                 | 833.24                  | 112.30                    | 8.420              |           |
| 8,000.00                                                            | 2,862.55              | 8,908.45              | 3,718.28              | 164.44           | 60.88         | 154.88                | 13.10                               | -5,220.17    | 945.38                 | 831.89                  | 113.49                    | 8.330              |           |
| 8,050.00                                                            | 2,861.58              | 8,958.45              | 3,716.82              | 166.00           | 61.43         | 154.83                | 13.94                               | -5,270.13    | 945.23                 | 830.54                  | 114.69                    | 8.242              |           |
| 8,100.00                                                            | 2,860.61              | 9,008.44              | 3,715.37              | 167.57           | 61.98         | 154.78                | 14.79                               | -5,320.10    | 945.08                 | 829.19                  | 115.89                    | 8.155              |           |
| 8,150.00                                                            | 2,859.64              | 9,058.43              | 3,713.91              | 169.14           | 62.53         | 154.73                | 15.63                               | -5,370.06    | 944.93                 | 827.84                  | 117.09                    | 8.070              |           |
| 8,200.00                                                            | 2,858.67              | 9,108.43              | 3,712.46              | 170.71           | 63.07         | 154.68                | 16.47                               | -5,420.03    | 944.78                 | 826.49                  | 118.29                    | 7.987              |           |
| 8,250.00                                                            | 2,857.70              | 9,158.42              | 3,711.01              | 172.27           | 63.62         | 154.63                | 17.32                               | -5,469.99    | 944.63                 | 825.13                  | 119.50                    | 7.905              |           |
| 8,300.00                                                            | 2,856.74              | 9,208.41              | 3,709.55              | 173.84           | 64.17         | 154.58                | 18.16                               | -5,519.96    | 944.49                 | 823.78                  | 120.71                    | 7.824              |           |
| 8,350.00                                                            | 2,855.77              | 9,258.41              | 3,708.10              | 175.41           | 64.72         | 154.53                | 19.00                               | -5,569.92    | 944.34                 | 822.42                  | 121.92                    | 7.745              |           |
| 8,400.00                                                            | 2,854.80              | 9,308.40              | 3,706.65              | 176.98           | 65.27         | 154.48                | 19.84                               | -5,619.89    | 944.19                 | 821.05                  | 123.14                    | 7.668              |           |
| 8,450.00                                                            | 2,853.83              | 9,358.39              | 3,705.19              | 178.54           | 65.82         | 154.43                | 20.69                               | -5,669.85    | 944.05                 | 819.69                  | 124.36                    | 7.591              |           |
| 8,500.00                                                            | 2,852.86              | 9,408.38              | 3,703.74              | 180.11           | 66.37         | 154.38                | 21.53                               | -5,719.82    | 943.90                 | 818.32                  | 125.58                    | 7.516              |           |
| 8,550.00                                                            | 2,851.89              | 9,458.38              | 3,702.29              | 181.68           | 66.92         | 154.33                | 22.37                               | -5,769.78    | 943.76                 | 816.96                  | 126.80                    | 7.443              |           |
| 8,597.67                                                            | 2,850.97              | 9,506.04              | 3,700.90              | 183.17           | 67.44         | 154.28                | 23.18                               | -5,817.42    | 943.62                 | 815.65                  | 127.97                    | 7.374              |           |
| 8,600.00                                                            | 2,850.92              | 9,508.37              | 3,700.83              | 183.25           | 67.47         | 154.28                | 23.22                               | -5,819.74    | 943.62                 | 815.59                  | 128.03                    | 7.370              |           |
| 8,631.36                                                            | 2,850.32              | 9,537.04              | 3,700.00              | 184.23           | 67.78         | 154.25                | 23.70                               | -5,848.40    | 943.53                 | 814.75                  | 128.78                    | 7.327              |           |
| 8,647.68                                                            | 2,850.00              | 9,537.04              | 3,700.00              | 184.74           | 67.78         | 154.25                | 23.70                               | -5,848.40    | 943.67                 | 814.65                  | 129.03                    | 7.314 SF           |           |

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





## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 310-INC-ONLY |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    | Offset                | Semi Major Axis       |                       | Distance         |               |                      |                                     |              |                        |                         |                           |                    |           |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Tooface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  | Warning   |
| 0.00                         | 0.00                  | 0.00                  | 39.00                 | 0.00             | 0.00          | -96.25               | -133.03                             | -1,215.43    | 1,223.31               |                         |                           |                    |           |
| 50.00                        | 50.00                 | 11.00                 | 50.00                 | 0.05             | 0.09          | -96.25               | -133.03                             | -1,215.43    | 1,222.69               | 1,222.54                | 0.15                      | 8,292.523          |           |
| 100.00                       | 100.00                | 61.00                 | 100.00                | 0.14             | 0.52          | -96.25               | -133.03                             | -1,215.43    | 1,222.69               | 1,222.03                | 0.66                      | 1,844.584          |           |
| 150.00                       | 150.00                | 111.00                | 150.00                | 0.32             | 0.95          | -96.25               | -133.03                             | -1,215.43    | 1,222.69               | 1,221.42                | 1.27                      | 964.357            |           |
| 200.00                       | 200.00                | 161.00                | 200.00                | 0.50             | 1.37          | -96.25               | -133.03                             | -1,215.43    | 1,222.69               | 1,220.82                | 1.87                      | 652.830            |           |
| 250.00                       | 250.00                | 211.00                | 250.00                | 0.68             | 1.80          | -96.25               | -133.03                             | -1,215.43    | 1,222.69               | 1,220.21                | 2.48                      | 493.431            |           |
| 300.00                       | 300.00                | 261.00                | 300.00                | 0.86             | 2.22          | -96.25               | -133.03                             | -1,215.43    | 1,222.69               | 1,219.61                | 3.08                      | 396.596            |           |
| 350.00                       | 350.00                | 311.00                | 350.00                | 1.03             | 2.66          | 117.25               | -133.03                             | -1,215.43    | 1,222.89               | 1,219.20                | 3.69                      | 331.226            |           |
| 400.00                       | 399.98                | 360.98                | 399.98                | 1.21             | 3.58          | 117.29               | -133.03                             | -1,215.43    | 1,223.49               | 1,218.70                | 4.79                      | 255.602            |           |
| 450.00                       | 449.93                | 410.93                | 449.93                | 1.38             | 4.50          | 117.37               | -133.03                             | -1,215.43    | 1,224.49               | 1,218.61                | 5.88                      | 208.223            |           |
| 500.00                       | 499.84                | 460.84                | 499.84                | 1.55             | 5.42          | 117.47               | -133.03                             | -1,215.43    | 1,225.90               | 1,218.92                | 6.97                      | 175.806            |           |
| 550.00                       | 549.68                | 510.68                | 549.68                | 1.73             | 6.33          | 117.60               | -133.03                             | -1,215.43    | 1,227.72               | 1,219.64                | 8.07                      | 152.096            |           |
| 600.00                       | 599.45                | 560.45                | 599.45                | 1.91             | 7.25          | 117.75               | -133.03                             | -1,215.43    | 1,229.95               | 1,220.78                | 9.17                      | 134.148            |           |
| 650.00                       | 649.13                | 610.13                | 649.13                | 2.10             | 8.16          | 117.94               | -133.03                             | -1,215.43    | 1,232.61               | 1,222.33                | 10.27                     | 119.995            |           |
| 700.00                       | 698.70                | 659.70                | 698.70                | 2.30             | 9.14          | 118.15               | -133.03                             | -1,215.43    | 1,235.70               | 1,224.26                | 11.43                     | 108.087            |           |
| 750.00                       | 748.15                | 709.15                | 748.15                | 2.51             | 10.13         | 118.39               | -133.03                             | -1,215.43    | 1,239.23               | 1,226.60                | 12.62                     | 98.164             |           |
| 800.00                       | 797.47                | 758.47                | 797.47                | 2.72             | 11.12         | 118.65               | -133.03                             | -1,215.43    | 1,243.21               | 1,229.40                | 13.81                     | 90.020             |           |
| 850.00                       | 846.63                | 807.63                | 846.63                | 2.94             | 12.11         | 118.93               | -133.03                             | -1,215.43    | 1,247.65               | 1,232.65                | 15.01                     | 83.146             |           |
| 900.00                       | 895.62                | 856.62                | 895.62                | 3.17             | 13.10         | 119.24               | -133.03                             | -1,215.43    | 1,252.58               | 1,236.38                | 16.19                     | 77.349             |           |
| 950.00                       | 944.44                | 905.44                | 944.44                | 3.42             | 14.08         | 119.57               | -133.03                             | -1,215.43    | 1,257.99               | 1,240.59                | 17.39                     | 72.335             |           |
| 1,000.00                     | 993.06                | 954.06                | 993.06                | 3.67             | 15.06         | 119.91               | -133.03                             | -1,215.43    | 1,263.90               | 1,245.32                | 18.58                     | 68.021             |           |
| 1,050.00                     | 1,041.46              | 1,002.46              | 1,041.46              | 3.93             | 16.03         | 120.28               | -133.03                             | -1,215.43    | 1,270.33               | 1,250.55                | 19.78                     | 64.238             |           |
| 1,051.64                     | 1,043.05              | 1,004.05              | 1,043.05              | 3.94             | 16.06         | 120.29               | -133.03                             | -1,215.43    | 1,270.55               | 1,250.74                | 19.81                     | 64.122             |           |
| 1,100.00                     | 1,089.75              | 1,050.75              | 1,089.75              | 4.21             | 17.00         | 120.77               | -133.03                             | -1,215.43    | 1,277.09               | 1,256.10                | 20.98                     | 60.865             |           |
| 1,150.00                     | 1,138.04              | 1,099.05              | 1,138.04              | 4.49             | 17.94         | 121.25               | -133.03                             | -1,215.43    | 1,283.94               | 1,261.78                | 22.16                     | 57.946             |           |
| 1,200.00                     | 1,186.33              | 1,147.34              | 1,186.33              | 4.77             | 18.86         | 121.73               | -133.03                             | -1,215.43    | 1,290.89               | 1,267.57                | 23.32                     | 55.363             |           |
| 1,250.00                     | 1,234.62              | 1,195.63              | 1,234.62              | 5.06             | 19.77         | 122.21               | -133.03                             | -1,215.43    | 1,297.92               | 1,273.45                | 24.48                     | 53.022             |           |
| 1,300.00                     | 1,282.91              | 1,243.92              | 1,282.91              | 5.34             | 20.69         | 122.68               | -133.03                             | -1,215.43    | 1,305.05               | 1,279.41                | 25.64                     | 50.899             |           |
| 1,350.00                     | 1,331.20              | 1,292.21              | 1,331.20              | 5.64             | 21.61         | 123.14               | -133.03                             | -1,215.43    | 1,312.27               | 1,285.47                | 26.80                     | 48.961             |           |
| 1,400.00                     | 1,379.48              | 1,340.50              | 1,379.48              | 5.93             | 22.53         | 123.60               | -133.03                             | -1,215.43    | 1,319.58               | 1,291.62                | 27.96                     | 47.189             |           |
| 1,450.00                     | 1,427.77              | 1,388.79              | 1,427.77              | 6.22             | 23.45         | 124.06               | -133.03                             | -1,215.43    | 1,326.97               | 1,297.85                | 29.13                     | 45.560             |           |
| 1,500.00                     | 1,476.06              | 1,437.08              | 1,476.06              | 6.51             | 24.37         | 124.51               | -133.03                             | -1,215.43    | 1,334.45               | 1,304.17                | 30.29                     | 44.061             |           |
| 1,550.00                     | 1,524.35              | 1,485.36              | 1,524.35              | 6.81             | 25.29         | 124.95               | -133.03                             | -1,215.43    | 1,342.02               | 1,310.57                | 31.45                     | 42.675             |           |
| 1,600.00                     | 1,572.64              | 1,533.65              | 1,572.64              | 7.11             | 26.21         | 125.39               | -133.03                             | -1,215.43    | 1,349.66               | 1,317.05                | 32.61                     | 41.392             |           |
| 1,650.00                     | 1,620.93              | 1,581.94              | 1,620.93              | 7.41             | 27.13         | 125.83               | -133.03                             | -1,215.43    | 1,357.39               | 1,323.62                | 33.77                     | 40.200             |           |
| 1,700.00                     | 1,669.22              | 1,630.23              | 1,669.22              | 7.70             | 28.05         | 126.26               | -133.03                             | -1,215.43    | 1,365.19               | 1,330.27                | 34.92                     | 39.091             |           |
| 1,750.00                     | 1,717.51              | 1,678.52              | 1,717.51              | 8.00             | 28.97         | 126.69               | -133.03                             | -1,215.43    | 1,373.07               | 1,336.99                | 36.08                     | 38.056             |           |
| 1,800.00                     | 1,765.79              | 1,726.81              | 1,765.79              | 8.30             | 29.89         | 127.11               | -133.03                             | -1,215.43    | 1,381.03               | 1,343.80                | 37.24                     | 37.089             |           |
| 1,850.00                     | 1,814.08              | 1,775.10              | 1,814.08              | 8.60             | 30.81         | 127.53               | -133.03                             | -1,215.43    | 1,389.07               | 1,350.68                | 38.39                     | 36.183             |           |
| 1,900.00                     | 1,862.37              | 1,823.39              | 1,862.37              | 8.90             | 31.73         | 127.94               | -133.03                             | -1,215.43    | 1,397.18               | 1,357.64                | 39.54                     | 35.333             |           |
| 1,950.00                     | 1,910.66              | 1,871.68              | 1,910.66              | 9.20             | 32.65         | 128.35               | -133.03                             | -1,215.43    | 1,405.36               | 1,364.67                | 40.70                     | 34.534             |           |
| 1,989.45                     | 1,948.77              | 1,909.78              | 1,948.77              | 9.44             | 33.37         | 128.67               | -133.03                             | -1,215.43    | 1,411.87               | 1,370.26                | 41.60                     | 33.936             |           |
| 2,000.00                     | 1,958.96              | 1,919.97              | 1,958.96              | 9.51             | 33.57         | 126.57               | -133.03                             | -1,215.43    | 1,413.55               | 1,371.64                | 41.91                     | 33.726             |           |
| 2,050.00                     | 2,007.55              | 1,968.57              | 2,007.55              | 9.79             | 34.49         | 114.61               | -133.03                             | -1,215.43    | 1,419.72               | 1,376.42                | 43.30                     | 32.788             |           |
| 2,100.00                     | 2,056.43              | 2,017.45              | 2,056.43              | 10.04            | 35.42         | 99.54                | -133.03                             | -1,215.43    | 1,422.93               | 1,378.38                | 44.55                     | 31.939             |           |
| 2,150.00                     | 2,105.41              | 2,066.47              | 2,105.41              | 10.27            | 36.29         | 82.94                | -133.03                             | -1,215.43    | 1,423.15               | 1,377.57                | 45.58                     | 31.222             |           |
| 2,200.00                     | 2,154.31              | 2,115.37              | 2,154.31              | 10.47            | 37.14         | 67.58                | -133.03                             | -1,215.43    | 1,420.40               | 1,373.98                | 46.42                     | 30.598             |           |
| 2,250.00                     | 2,202.95              | 2,164.01              | 2,202.95              | 10.64            | 37.98         | 55.26                | -133.03                             | -1,215.43    | 1,414.67               | 1,367.59                | 47.08                     | 30.047             |           |
| 2,300.00                     | 2,251.14              | 2,212.20              | 2,251.14              | 10.79            | 38.81         | 46.11                | -133.03                             | -1,215.43    | 1,405.99               | 1,358.44                | 47.55                     | 29.568             |           |
| 2,350.00                     | 2,298.70              | 2,259.76              | 2,298.70              | 10.93            | 39.63         | 39.48                | -133.03                             | -1,215.43    | 1,394.40               | 1,346.57                | 47.83                     | 29.155             |           |
| 2,400.00                     | 2,345.46              | 2,306.53              | 2,345.46              | 11.05            | 40.44         | 34.69                | -133.03                             | -1,215.43    | 1,379.93               | 1,332.03                | 47.90                     | 28.807             |           |
| 2,450.00                     | 2,391.25              | 2,352.31              | 2,391.25              | 11.16            | 41.23         | 31.20                | -133.03                             | -1,215.43    | 1,362.65               | 1,314.87                | 47.78                     | 28.521             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 310-INC-ONLY |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    | Offset                | Semi Major Axis       |                       | Distance         |               | Warning               |                                     |              |                        |                         |                           |                    |           |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toelface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 2,500.00                     | 2,435.89              | 2,396.95              | 2,435.89              | 11.26            | 42.00         | 28.65                 | -133.03                             | -1,215.43    | 1,342.62               | 1,295.16                | 47.45                     | 28.293             |           |
| 2,550.00                     | 2,479.22              | 2,440.28              | 2,479.22              | 11.35            | 42.75         | 26.81                 | -133.03                             | -1,215.43    | 1,319.91               | 1,272.97                | 46.94                     | 28.121             |           |
| 2,600.00                     | 2,521.07              | 2,482.13              | 2,521.07              | 11.43            | 43.48         | 25.53                 | -133.03                             | -1,215.43    | 1,294.61               | 1,248.37                | 46.24                     | 27.998             |           |
| 2,650.00                     | 2,561.29              | 2,522.35              | 2,561.29              | 11.52            | 44.18         | 24.69                 | -133.03                             | -1,215.43    | 1,266.82               | 1,221.44                | 45.38                     | 27.914             |           |
| 2,700.00                     | 2,599.72              | 2,560.79              | 2,599.72              | 11.60            | 44.85         | 24.24                 | -133.03                             | -1,215.43    | 1,236.64               | 1,192.25                | 44.39                     | 27.858             |           |
| 2,750.00                     | 2,636.24              | 2,597.30              | 2,636.24              | 11.70            | 45.48         | 24.14                 | -133.03                             | -1,215.43    | 1,204.19               | 1,160.88                | 43.30                     | 27.807             |           |
| 2,800.00                     | 2,670.69              | 2,631.75              | 2,670.69              | 11.82            | 46.08         | 24.38                 | -133.03                             | -1,215.43    | 1,169.58               | 1,127.40                | 42.18                     | 27.729             |           |
| 2,850.00                     | 2,702.95              | 2,664.01              | 2,702.95              | 12.05            | 46.65         | 24.98                 | -133.03                             | -1,215.43    | 1,132.96               | 1,091.87                | 41.10                     | 27.569             |           |
| 2,900.00                     | 2,732.90              | 2,693.97              | 2,732.90              | 12.48            | 47.17         | 25.95                 | -133.03                             | -1,215.43    | 1,094.47               | 1,054.30                | 40.17                     | 27.249             |           |
| 2,950.00                     | 2,760.43              | 2,721.50              | 2,760.43              | 13.15            | 47.65         | 27.37                 | -133.03                             | -1,215.43    | 1,054.24               | 1,014.70                | 39.54                     | 26.663             |           |
| 2,975.18                     | 2,773.35              | 2,734.41              | 2,773.35              | 13.54            | 47.87         | 28.28                 | -133.03                             | -1,215.43    | 1,033.38               | 993.97                  | 39.40                     | 26.226             |           |
| 3,000.00                     | 2,785.76              | 2,746.82              | 2,785.76              | 13.96            | 48.09         | 28.80                 | -133.03                             | -1,215.43    | 1,012.63               | 972.57                  | 40.06                     | 25.276             |           |
| 3,050.00                     | 2,810.76              | 2,771.82              | 2,810.76              | 14.86            | 48.52         | 29.91                 | -133.03                             | -1,215.43    | 970.95                 | 929.47                  | 41.48                     | 23.410             |           |
| 3,100.00                     | 2,835.76              | 2,796.82              | 2,835.76              | 15.79            | 48.96         | 31.10                 | -133.03                             | -1,215.43    | 929.41                 | 886.43                  | 42.99                     | 21.620             |           |
| 3,150.00                     | 2,860.76              | 2,821.82              | 2,860.76              | 16.79            | 49.39         | 32.38                 | -133.03                             | -1,215.43    | 888.05                 | 843.43                  | 44.62                     | 19.902             |           |
| 3,175.18                     | 2,873.35              | 2,834.41              | 2,873.35              | 17.30            | 49.61         | 33.06                 | -133.03                             | -1,215.43    | 867.28                 | 821.80                  | 45.48                     | 19.068             |           |
| 3,200.00                     | 2,885.29              | 2,846.35              | 2,885.29              | 17.82            | 49.82         | 35.89                 | -133.03                             | -1,215.43    | 846.62                 | 800.05                  | 46.57                     | 18.179             |           |
| 3,250.00                     | 2,906.43              | 2,867.49              | 2,906.43              | 18.94            | 50.19         | 42.77                 | -133.03                             | -1,215.43    | 803.79                 | 753.36                  | 50.43                     | 15.938             |           |
| 3,300.00                     | 2,923.54              | 2,884.60              | 2,923.54              | 20.14            | 50.49         | 51.45                 | -133.03                             | -1,215.43    | 759.69                 | 703.25                  | 56.44                     | 13.460             |           |
| 3,350.00                     | 2,936.49              | 2,897.55              | 2,936.49              | 21.42            | 50.71         | 61.86                 | -133.03                             | -1,215.43    | 714.73                 | 651.11                  | 63.62                     | 11.235             |           |
| 3,400.00                     | 2,945.18              | 2,906.25              | 2,945.18              | 22.74            | 50.87         | 73.36                 | -133.03                             | -1,215.43    | 669.36                 | 599.21                  | 70.16                     | 9.541              |           |
| 3,450.00                     | 2,949.55              | 2,910.62              | 2,949.55              | 24.11            | 50.94         | 84.73                 | -133.03                             | -1,215.43    | 624.07                 | 549.65                  | 74.42                     | 8.386              |           |
| 3,486.28                     | 2,950.00              | 2,911.06              | 2,950.00              | 25.12            | 50.95         | 92.18                 | -133.03                             | -1,215.43    | 591.53                 | 515.68                  | 75.85                     | 7.799              |           |
| 3,500.00                     | 2,949.73              | 2,910.80              | 2,949.73              | 25.50            | 50.94         | 92.12                 | -133.03                             | -1,215.43    | 579.34                 | 503.11                  | 76.23                     | 7.600              |           |
| 3,550.00                     | 2,948.77              | 2,909.83              | 2,948.77              | 26.91            | 50.93         | 91.92                 | -133.03                             | -1,215.43    | 535.54                 | 457.91                  | 77.64                     | 6.898              |           |
| 3,600.00                     | 2,947.80              | 2,908.86              | 2,947.80              | 28.33            | 50.91         | 91.71                 | -133.03                             | -1,215.43    | 492.92                 | 413.88                  | 79.05                     | 6.236              |           |
| 3,650.00                     | 2,946.83              | 2,907.89              | 2,946.83              | 29.77            | 50.89         | 91.50                 | -133.03                             | -1,215.43    | 451.82                 | 371.33                  | 80.48                     | 5.614              |           |
| 3,700.00                     | 2,945.86              | 2,906.92              | 2,945.86              | 31.22            | 50.88         | 91.30                 | -133.03                             | -1,215.43    | 412.68                 | 330.76                  | 81.92                     | 5.038              |           |
| 3,750.00                     | 2,944.89              | 2,905.95              | 2,944.89              | 32.68            | 50.86         | 91.09                 | -133.03                             | -1,215.43    | 376.11                 | 292.74                  | 83.37                     | 4.511              |           |
| 3,800.00                     | 2,943.92              | 2,904.99              | 2,943.92              | 34.15            | 50.84         | 90.88                 | -133.03                             | -1,215.43    | 342.96                 | 258.13                  | 84.83                     | 4.043              |           |
| 3,850.00                     | 2,942.95              | 2,904.02              | 2,942.95              | 35.63            | 50.83         | 90.68                 | -133.03                             | -1,215.43    | 314.29                 | 227.99                  | 86.30                     | 3.642              |           |
| 3,900.00                     | 2,941.98              | 2,903.05              | 2,941.98              | 37.12            | 50.81         | 90.47                 | -133.03                             | -1,215.43    | 291.43                 | 203.66                  | 87.77                     | 3.320              |           |
| 3,950.00                     | 2,941.02              | 2,902.08              | 2,941.02              | 38.61            | 50.79         | 90.26                 | -133.03                             | -1,215.43    | 275.84                 | 186.59                  | 89.25                     | 3.091              |           |
| 4,000.00                     | 2,940.05              | 2,901.11              | 2,940.05              | 40.11            | 50.78         | 90.06                 | -133.03                             | -1,215.43    | 268.77                 | 178.04                  | 90.73                     | 2.962              |           |
| 4,013.50                     | 2,939.79              | 2,900.85              | 2,939.79              | 40.51            | 50.77         | 90.00                 | -133.03                             | -1,215.43    | 268.43                 | 177.30                  | 91.13                     | 2.945 CC, ES       |           |
| 4,050.00                     | 2,939.08              | 2,900.14              | 2,939.08              | 41.61            | 50.76         | 89.85                 | -133.03                             | -1,215.43    | 270.90                 | 178.68                  | 92.22                     | 2.938 SF           |           |
| 4,100.00                     | 2,938.11              | 2,899.17              | 2,938.11              | 43.12            | 50.74         | 89.64                 | -133.03                             | -1,215.43    | 282.02                 | 188.31                  | 93.71                     | 3.009              |           |
| 4,150.00                     | 2,937.14              | 2,898.20              | 2,937.14              | 44.64            | 50.73         | 89.44                 | -133.03                             | -1,215.43    | 301.14                 | 205.93                  | 95.21                     | 3.163              |           |
| 4,200.00                     | 2,936.17              | 2,897.24              | 2,936.17              | 46.15            | 50.71         | 89.23                 | -133.03                             | -1,215.43    | 326.84                 | 230.14                  | 96.70                     | 3.380              |           |
| 4,250.00                     | 2,935.20              | 2,896.27              | 2,935.20              | 47.67            | 50.69         | 89.02                 | -133.03                             | -1,215.43    | 357.73                 | 259.53                  | 98.20                     | 3.643              |           |
| 4,300.00                     | 2,934.23              | 2,895.30              | 2,934.23              | 49.20            | 50.67         | 88.82                 | -133.03                             | -1,215.43    | 392.57                 | 292.87                  | 99.70                     | 3.938              |           |
| 4,350.00                     | 2,933.27              | 2,894.33              | 2,933.27              | 50.72            | 50.66         | 88.61                 | -133.03                             | -1,215.43    | 430.41                 | 329.20                  | 101.20                    | 4.253              |           |
| 4,400.00                     | 2,932.30              | 2,893.36              | 2,932.30              | 52.25            | 50.64         | 88.40                 | -133.03                             | -1,215.43    | 470.52                 | 367.81                  | 102.70                    | 4.581              |           |
| 4,450.00                     | 2,931.33              | 2,892.39              | 2,931.33              | 53.79            | 50.62         | 88.20                 | -133.03                             | -1,215.43    | 512.37                 | 408.16                  | 104.21                    | 4.917              |           |
| 4,500.00                     | 2,930.36              | 2,891.42              | 2,930.36              | 55.32            | 50.61         | 87.99                 | -133.03                             | -1,215.43    | 555.57                 | 449.86                  | 105.71                    | 5.256              |           |
| 4,550.00                     | 2,929.39              | 2,890.45              | 2,929.39              | 56.85            | 50.59         | 87.78                 | -133.03                             | -1,215.43    | 599.82                 | 492.61                  | 107.21                    | 5.595              |           |
| 4,600.00                     | 2,928.42              | 2,889.49              | 2,928.42              | 58.39            | 50.57         | 87.58                 | -133.03                             | -1,215.43    | 644.91                 | 536.20                  | 108.72                    | 5.932              |           |
| 4,650.00                     | 2,927.45              | 2,888.52              | 2,927.45              | 59.93            | 50.56         | 87.37                 | -133.03                             | -1,215.43    | 690.68                 | 580.46                  | 110.22                    | 6.266              |           |
| 4,700.00                     | 2,926.48              | 2,887.55              | 2,926.48              | 61.47            | 50.54         | 87.16                 | -133.03                             | -1,215.43    | 737.00                 | 625.27                  | 111.72                    | 6.597              |           |
| 4,750.00                     | 2,925.52              | 2,886.58              | 2,925.52              | 63.01            | 50.52         | 86.96                 | -133.03                             | -1,215.43    | 783.77                 | 670.54                  | 113.23                    | 6.922              |           |
| 4,800.00                     | 2,924.55              | 2,885.61              | 2,924.55              | 64.56            | 50.51         | 86.75                 | -133.03                             | -1,215.43    | 830.91                 | 716.18                  | 114.73                    | 7.242              |           |
| 4,850.00                     | 2,923.58              | 2,884.64              | 2,923.58              | 66.10            | 50.49         | 86.55                 | -133.03                             | -1,215.43    | 878.37                 | 762.14                  | 116.23                    | 7.557              |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 310-INC-ONLY |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    |                       | Offset                |                       | Semi Major Axis  |               |                       | Distance                            |              |                        |                         |                           |                    | Warning   |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 4,900.00                     | 2,922.61              | 2,883.67              | 2,922.61              | 67.65            | 50.47         | 86.34                 | -133.03                             | -1,215.43    | 926.09                 | 808.36                  | 117.73                    | 7.866              |           |
| 4,950.00                     | 2,921.64              | 2,882.71              | 2,921.64              | 69.20            | 50.46         | 86.13                 | -133.03                             | -1,215.43    | 974.05                 | 854.82                  | 119.23                    | 8.169              |           |
| 5,000.00                     | 2,920.67              | 2,881.74              | 2,920.67              | 70.75            | 50.44         | 85.93                 | -133.03                             | -1,215.43    | 1,022.19               | 901.47                  | 120.73                    | 8.467              |           |
| 5,050.00                     | 2,919.70              | 2,880.77              | 2,919.70              | 72.30            | 50.42         | 85.72                 | -133.03                             | -1,215.43    | 1,070.51               | 948.28                  | 122.23                    | 8.758              |           |
| 5,100.00                     | 2,918.73              | 2,879.80              | 2,918.73              | 73.85            | 50.40         | 85.52                 | -133.03                             | -1,215.43    | 1,118.97               | 995.25                  | 123.72                    | 9.044              |           |
| 5,150.00                     | 2,917.77              | 2,878.83              | 2,917.77              | 75.40            | 50.39         | 85.31                 | -133.03                             | -1,215.43    | 1,167.57               | 1,042.35                | 125.22                    | 9.324              |           |
| 5,200.00                     | 2,916.80              | 2,877.86              | 2,916.80              | 76.95            | 50.37         | 85.11                 | -133.03                             | -1,215.43    | 1,216.27               | 1,089.56                | 126.71                    | 9.599              |           |
| 5,250.00                     | 2,915.83              | 2,876.89              | 2,915.83              | 78.50            | 50.35         | 84.90                 | -133.03                             | -1,215.43    | 1,265.08               | 1,136.88                | 128.20                    | 9.868              |           |
| 5,300.00                     | 2,914.86              | 2,875.92              | 2,914.86              | 80.05            | 50.34         | 84.70                 | -133.03                             | -1,215.43    | 1,313.97               | 1,184.29                | 129.69                    | 10.132             |           |
| 5,350.00                     | 2,913.89              | 2,874.96              | 2,913.89              | 81.61            | 50.32         | 84.49                 | -133.03                             | -1,215.43    | 1,362.95               | 1,231.77                | 131.17                    | 10.390             |           |
| 5,400.00                     | 2,912.92              | 2,873.99              | 2,912.92              | 83.16            | 50.30         | 84.29                 | -133.03                             | -1,215.43    | 1,411.99               | 1,279.33                | 132.66                    | 10.644             |           |
| 5,450.00                     | 2,911.95              | 2,873.02              | 2,911.95              | 84.72            | 50.29         | 84.08                 | -133.03                             | -1,215.43    | 1,461.10               | 1,326.96                | 134.14                    | 10.892             |           |
| 5,500.00                     | 2,910.99              | 2,872.05              | 2,910.99              | 86.27            | 50.27         | 83.88                 | -133.03                             | -1,215.43    | 1,510.27               | 1,374.65                | 135.62                    | 11.136             |           |
| 5,550.00                     | 2,910.02              | 2,871.08              | 2,910.02              | 87.83            | 50.25         | 83.67                 | -133.03                             | -1,215.43    | 1,559.49               | 1,422.39                | 137.10                    | 11.375             |           |
| 5,600.00                     | 2,909.05              | 2,870.11              | 2,909.05              | 89.39            | 50.24         | 83.47                 | -133.03                             | -1,215.43    | 1,608.76               | 1,470.18                | 138.58                    | 11.609             |           |
| 5,650.00                     | 2,908.08              | 2,869.14              | 2,908.08              | 90.95            | 50.22         | 83.26                 | -133.03                             | -1,215.43    | 1,658.07               | 1,518.02                | 140.05                    | 11.839             |           |
| 5,700.00                     | 2,907.11              | 2,868.17              | 2,907.11              | 92.50            | 50.20         | 83.06                 | -133.03                             | -1,215.43    | 1,707.42               | 1,565.89                | 141.53                    | 12.064             |           |
| 5,750.00                     | 2,906.14              | 2,867.21              | 2,906.14              | 94.06            | 50.19         | 82.86                 | -133.03                             | -1,215.43    | 1,756.81               | 1,613.81                | 143.00                    | 12.286             |           |
| 5,800.00                     | 2,905.17              | 2,866.24              | 2,905.17              | 95.62            | 50.17         | 82.65                 | -133.03                             | -1,215.43    | 1,806.23               | 1,661.76                | 144.46                    | 12.503             |           |
| 5,850.00                     | 2,904.20              | 2,865.27              | 2,904.20              | 97.18            | 50.15         | 82.45                 | -133.03                             | -1,215.43    | 1,855.68               | 1,709.75                | 145.93                    | 12.717             |           |
| 5,900.00                     | 2,903.24              | 2,864.30              | 2,903.24              | 98.74            | 50.13         | 82.25                 | -133.03                             | -1,215.43    | 1,905.15               | 1,757.77                | 147.39                    | 12.926             |           |
| 5,950.00                     | 2,902.27              | 2,863.33              | 2,902.27              | 100.30           | 50.12         | 82.04                 | -133.03                             | -1,215.43    | 1,954.66               | 1,805.81                | 148.85                    | 13.132             |           |
| 6,000.00                     | 2,901.30              | 2,862.36              | 2,901.30              | 101.86           | 50.10         | 81.84                 | -133.03                             | -1,215.43    | 2,004.19               | 1,853.89                | 150.30                    | 13.334             |           |
| 6,050.00                     | 2,900.33              | 2,861.39              | 2,900.33              | 103.42           | 50.08         | 81.64                 | -133.03                             | -1,215.43    | 2,053.74               | 1,901.98                | 151.76                    | 13.533             |           |
| 6,100.00                     | 2,899.36              | 2,860.42              | 2,899.36              | 104.98           | 50.07         | 81.44                 | -133.03                             | -1,215.43    | 2,103.31               | 1,950.10                | 153.21                    | 13.729             |           |
| 6,150.00                     | 2,898.39              | 2,859.46              | 2,898.39              | 106.54           | 50.05         | 81.24                 | -133.03                             | -1,215.43    | 2,152.90               | 1,998.25                | 154.65                    | 13.921             |           |
| 6,200.00                     | 2,897.42              | 2,858.49              | 2,897.42              | 108.10           | 50.03         | 81.03                 | -133.03                             | -1,215.43    | 2,202.51               | 2,046.41                | 156.10                    | 14.110             |           |
| 6,250.00                     | 2,896.45              | 2,857.52              | 2,896.45              | 109.66           | 50.02         | 80.83                 | -133.03                             | -1,215.43    | 2,252.14               | 2,094.60                | 157.54                    | 14.296             |           |
| 6,300.00                     | 2,895.49              | 2,856.55              | 2,895.49              | 111.23           | 50.00         | 80.63                 | -133.03                             | -1,215.43    | 2,301.78               | 2,142.80                | 158.98                    | 14.479             |           |
| 6,350.00                     | 2,894.52              | 2,855.58              | 2,894.52              | 112.79           | 49.98         | 80.43                 | -133.03                             | -1,215.43    | 2,351.44               | 2,191.02                | 160.41                    | 14.659             |           |
| 6,400.00                     | 2,893.55              | 2,854.61              | 2,893.55              | 114.35           | 49.97         | 80.23                 | -133.03                             | -1,215.43    | 2,401.11               | 2,239.26                | 161.84                    | 14.836             |           |
| 6,450.00                     | 2,892.58              | 2,853.64              | 2,892.58              | 115.91           | 49.95         | 80.03                 | -133.03                             | -1,215.43    | 2,450.79               | 2,287.52                | 163.27                    | 15.010             |           |
| 6,500.00                     | 2,891.61              | 2,852.67              | 2,891.61              | 117.48           | 49.93         | 79.83                 | -133.03                             | -1,215.43    | 2,500.49               | 2,335.79                | 164.70                    | 15.182             |           |
| 6,550.00                     | 2,890.64              | 2,851.71              | 2,890.64              | 119.04           | 49.92         | 79.63                 | -133.03                             | -1,215.43    | 2,550.19               | 2,384.07                | 166.12                    | 15.352             |           |
| 6,600.00                     | 2,889.67              | 2,850.74              | 2,889.67              | 120.60           | 49.90         | 79.43                 | -133.03                             | -1,215.43    | 2,599.91               | 2,432.37                | 167.54                    | 15.518             |           |
| 6,650.00                     | 2,888.70              | 2,849.77              | 2,888.70              | 122.17           | 49.88         | 79.23                 | -133.03                             | -1,215.43    | 2,649.64               | 2,480.69                | 168.95                    | 15.683             |           |
| 6,700.00                     | 2,887.74              | 2,848.80              | 2,887.74              | 123.73           | 49.86         | 79.03                 | -133.03                             | -1,215.43    | 2,699.38               | 2,529.01                | 170.36                    | 15.845             |           |
| 6,750.00                     | 2,886.77              | 2,847.83              | 2,886.77              | 125.29           | 49.85         | 78.83                 | -133.03                             | -1,215.43    | 2,749.13               | 2,577.35                | 171.77                    | 16.004             |           |
| 6,800.00                     | 2,885.80              | 2,846.86              | 2,885.80              | 126.86           | 49.83         | 78.63                 | -133.03                             | -1,215.43    | 2,798.88               | 2,625.71                | 173.18                    | 16.162             |           |
| 6,850.00                     | 2,884.83              | 2,845.89              | 2,884.83              | 128.42           | 49.81         | 78.43                 | -133.03                             | -1,215.43    | 2,848.65               | 2,674.07                | 174.58                    | 16.317             |           |
| 6,900.00                     | 2,883.86              | 2,844.92              | 2,883.86              | 129.99           | 49.80         | 78.23                 | -133.03                             | -1,215.43    | 2,898.42               | 2,722.44                | 175.97                    | 16.471             |           |
| 6,950.00                     | 2,882.89              | 2,843.96              | 2,882.89              | 131.55           | 49.78         | 78.04                 | -133.03                             | -1,215.43    | 2,948.20               | 2,770.83                | 177.37                    | 16.622             |           |
| 7,000.00                     | 2,881.92              | 2,842.99              | 2,881.92              | 133.12           | 49.76         | 77.84                 | -133.03                             | -1,215.43    | 2,997.98               | 2,819.23                | 178.76                    | 16.771             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 310-INC-ONLY |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    | Offset                | Semi Major Axis       |                       | Distance         |               | Minimum               |                                     | Separation   |                        | Warning                 |                           |                    |           |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 0.00                         | 0.00                  | 0.00                  | 51.00                 | 0.00             | 0.00          | 4.60                  | 1,172.50                            | 94.38        | 1,177.40               |                         |                           |                    |           |
| 50.00                        | 50.00                 | 0.00                  | 51.00                 | 0.05             | 0.00          | 4.60                  | 1,172.50                            | 94.38        | 1,176.29               | 1,176.24                | 0.05                      | N/A                |           |
| 67.01                        | 67.01                 | 16.01                 | 67.01                 | 0.08             | 0.13          | 4.60                  | 1,172.50                            | 94.38        | 1,176.29               | 1,176.07                | 0.22                      | 5,366.320          |           |
| 100.00                       | 100.00                | 49.00                 | 100.00                | 0.14             | 0.41          | 4.60                  | 1,172.50                            | 94.38        | 1,176.29               | 1,175.74                | 0.56                      | 2,113.789          |           |
| 150.00                       | 150.00                | 99.00                 | 150.00                | 0.32             | 0.83          | 4.60                  | 1,172.50                            | 94.38        | 1,176.29               | 1,175.14                | 1.16                      | 1,016.457          |           |
| 200.00                       | 200.00                | 149.00                | 200.00                | 0.50             | 1.26          | 4.60                  | 1,172.50                            | 94.38        | 1,176.29               | 1,174.53                | 1.76                      | 669.104            |           |
| 250.00                       | 250.00                | 199.00                | 250.00                | 0.68             | 1.68          | 4.60                  | 1,172.50                            | 94.38        | 1,176.29               | 1,173.93                | 2.36                      | 498.688            |           |
| 300.00                       | 300.00                | 249.00                | 300.00                | 0.86             | 2.10          | 4.60                  | 1,172.50                            | 94.38        | 1,176.29               | 1,173.33                | 2.96                      | 397.458 CC         |           |
| 350.00                       | 350.00                | 299.00                | 350.00                | 1.03             | 2.52          | -141.93               | 1,172.50                            | 94.38        | 1,176.64               | 1,173.08                | 3.56                      | 330.504 ES         |           |
| 400.00                       | 399.98                | 348.98                | 399.98                | 1.21             | 3.33          | -141.95               | 1,172.50                            | 94.38        | 1,177.67               | 1,173.11                | 4.55                      | 258.683            |           |
| 450.00                       | 449.93                | 398.93                | 449.93                | 1.38             | 4.25          | -142.00               | 1,172.50                            | 94.38        | 1,179.39               | 1,173.73                | 5.65                      | 208.647            |           |
| 500.00                       | 499.84                | 448.84                | 499.84                | 1.55             | 5.17          | -142.06               | 1,172.50                            | 94.38        | 1,181.79               | 1,175.04                | 6.75                      | 175.105            |           |
| 550.00                       | 549.68                | 498.68                | 549.68                | 1.73             | 6.09          | -142.14               | 1,172.50                            | 94.38        | 1,184.89               | 1,177.04                | 7.85                      | 150.974            |           |
| 600.00                       | 599.45                | 548.45                | 599.45                | 1.91             | 7.00          | -142.23               | 1,172.50                            | 94.38        | 1,188.68               | 1,179.74                | 8.94                      | 132.925            |           |
| 650.00                       | 649.13                | 598.13                | 649.13                | 2.10             | 7.92          | -142.34               | 1,172.50                            | 94.38        | 1,193.17               | 1,183.14                | 10.04                     | 118.873            |           |
| 700.00                       | 698.70                | 647.70                | 698.70                | 2.30             | 8.87          | -142.47               | 1,172.50                            | 94.38        | 1,198.36               | 1,187.20                | 11.16                     | 107.333            |           |
| 750.00                       | 748.15                | 697.15                | 748.15                | 2.51             | 9.86          | -142.61               | 1,172.50                            | 94.38        | 1,204.25               | 1,191.92                | 12.34                     | 97.626             |           |
| 800.00                       | 797.47                | 746.47                | 797.47                | 2.72             | 10.86         | -142.77               | 1,172.50                            | 94.38        | 1,210.85               | 1,197.35                | 13.50                     | 89.718             |           |
| 850.00                       | 846.63                | 795.63                | 846.63                | 2.94             | 11.85         | -142.93               | 1,172.50                            | 94.38        | 1,218.15               | 1,203.50                | 14.66                     | 83.116             |           |
| 900.00                       | 895.62                | 844.62                | 895.62                | 3.17             | 12.83         | -143.12               | 1,172.50                            | 94.38        | 1,226.18               | 1,210.37                | 15.80                     | 77.588             |           |
| 950.00                       | 944.44                | 893.44                | 944.44                | 3.42             | 13.81         | -143.31               | 1,172.50                            | 94.38        | 1,234.92               | 1,217.97                | 16.95                     | 72.859             |           |
| 1,000.00                     | 993.06                | 942.06                | 993.06                | 3.67             | 14.79         | -143.51               | 1,172.50                            | 94.38        | 1,244.38               | 1,226.30                | 18.08                     | 68.819             |           |
| 1,050.00                     | 1,041.46              | 990.46                | 1,041.46              | 3.93             | 15.76         | -143.73               | 1,172.50                            | 94.38        | 1,254.57               | 1,235.36                | 19.21                     | 65.314             |           |
| 1,051.64                     | 1,043.05              | 992.05                | 1,043.05              | 3.94             | 15.80         | -143.73               | 1,172.50                            | 94.38        | 1,254.92               | 1,235.68                | 19.25                     | 65.207             |           |
| 1,100.00                     | 1,089.75              | 1,038.75              | 1,089.75              | 4.21             | 16.73         | -144.06               | 1,172.50                            | 94.38        | 1,265.17               | 1,244.81                | 20.36                     | 62.136             |           |
| 1,150.00                     | 1,138.04              | 1,065.00              | 1,115.99              | 4.49             | 17.26         | -144.25               | 1,172.50                            | 94.38        | 1,276.01               | 1,254.92                | 21.09                     | 60.501             |           |
| 1,200.00                     | 1,186.33              | 1,135.34              | 1,186.33              | 4.77             | 18.60         | -144.73               | 1,172.50                            | 94.38        | 1,286.51               | 1,263.91                | 22.60                     | 56.917             |           |
| 1,250.00                     | 1,234.62              | 1,183.63              | 1,234.62              | 5.06             | 19.52         | -145.06               | 1,172.50                            | 94.38        | 1,297.24               | 1,273.53                | 23.71                     | 54.706             |           |
| 1,300.00                     | 1,282.91              | 1,231.92              | 1,282.91              | 5.34             | 20.44         | -145.38               | 1,172.50                            | 94.38        | 1,308.01               | 1,283.19                | 24.82                     | 52.694             |           |
| 1,350.00                     | 1,331.20              | 1,280.21              | 1,331.20              | 5.64             | 21.36         | -145.70               | 1,172.50                            | 94.38        | 1,318.82               | 1,292.89                | 25.93                     | 50.853             |           |
| 1,400.00                     | 1,379.48              | 1,328.50              | 1,379.48              | 5.93             | 22.28         | -146.01               | 1,172.50                            | 94.38        | 1,329.67               | 1,302.62                | 27.04                     | 49.166             |           |
| 1,450.00                     | 1,427.77              | 1,376.79              | 1,427.77              | 6.22             | 23.20         | -146.32               | 1,172.50                            | 94.38        | 1,340.56               | 1,312.40                | 28.16                     | 47.611             |           |
| 1,500.00                     | 1,476.06              | 1,425.08              | 1,476.06              | 6.51             | 24.12         | -146.62               | 1,172.50                            | 94.38        | 1,351.48               | 1,322.21                | 29.27                     | 46.176             |           |
| 1,550.00                     | 1,524.35              | 1,473.36              | 1,524.35              | 6.81             | 25.04         | -146.92               | 1,172.50                            | 94.38        | 1,362.44               | 1,332.06                | 30.38                     | 44.847             |           |
| 1,600.00                     | 1,572.64              | 1,521.65              | 1,572.64              | 7.11             | 25.96         | -147.21               | 1,172.50                            | 94.38        | 1,373.43               | 1,341.94                | 31.49                     | 43.614             |           |
| 1,650.00                     | 1,620.93              | 1,569.94              | 1,620.93              | 7.41             | 26.88         | -147.50               | 1,172.50                            | 94.38        | 1,384.46               | 1,351.86                | 32.60                     | 42.465             |           |
| 1,700.00                     | 1,669.22              | 1,618.23              | 1,669.22              | 7.70             | 27.80         | -147.78               | 1,172.50                            | 94.38        | 1,395.52               | 1,361.81                | 33.71                     | 41.394             |           |
| 1,750.00                     | 1,717.51              | 1,666.52              | 1,717.51              | 8.00             | 28.72         | -148.06               | 1,172.50                            | 94.38        | 1,406.62               | 1,371.79                | 34.82                     | 40.392             |           |
| 1,800.00                     | 1,765.79              | 1,714.81              | 1,765.79              | 8.30             | 29.63         | -148.33               | 1,172.50                            | 94.38        | 1,417.74               | 1,381.81                | 35.93                     | 39.454             |           |
| 1,850.00                     | 1,814.08              | 1,763.10              | 1,814.08              | 8.60             | 30.55         | -148.61               | 1,172.50                            | 94.38        | 1,428.90               | 1,391.86                | 37.04                     | 38.573             |           |
| 1,900.00                     | 1,862.37              | 1,811.39              | 1,862.37              | 8.90             | 31.47         | -148.87               | 1,172.50                            | 94.38        | 1,440.09               | 1,401.93                | 38.15                     | 37.745             |           |
| 1,950.00                     | 1,910.66              | 1,859.68              | 1,910.66              | 9.20             | 32.39         | -149.13               | 1,172.50                            | 94.38        | 1,451.31               | 1,412.04                | 39.26                     | 36.964             |           |
| 1,989.45                     | 1,948.77              | 1,897.78              | 1,948.77              | 9.44             | 33.12         | -149.34               | 1,172.50                            | 94.38        | 1,460.18               | 1,420.04                | 40.14                     | 36.379             |           |
| 2,000.00                     | 1,958.96              | 1,907.97              | 1,958.96              | 9.51             | 33.31         | -151.75               | 1,172.50                            | 94.38        | 1,462.54               | 1,422.16                | 40.38                     | 36.222             |           |
| 2,050.00                     | 2,007.55              | 1,956.57              | 2,007.55              | 9.79             | 34.24         | -165.05               | 1,172.50                            | 94.38        | 1,473.47               | 1,431.95                | 41.52                     | 35.490             |           |
| 2,100.00                     | 2,056.43              | 2,005.45              | 2,056.43              | 10.04            | 35.17         | 178.70                | 1,172.50                            | 94.38        | 1,483.89               | 1,441.23                | 42.66                     | 34.783             |           |
| 2,150.00                     | 2,105.41              | 2,054.47              | 2,105.41              | 10.27            | 36.06         | 161.08                | 1,172.50                            | 94.38        | 1,493.75               | 1,449.99                | 43.76                     | 34.137             |           |
| 2,200.00                     | 2,154.31              | 2,103.37              | 2,154.31              | 10.47            | 36.90         | 144.85                | 1,172.50                            | 94.38        | 1,503.03               | 1,458.23                | 44.80                     | 33.548             |           |
| 2,250.00                     | 2,202.95              | 2,152.01              | 2,202.95              | 10.64            | 37.74         | 131.81                | 1,172.50                            | 94.38        | 1,511.72               | 1,465.89                | 45.83                     | 32.983             |           |
| 2,300.00                     | 2,251.14              | 2,200.20              | 2,251.14              | 10.79            | 38.58         | 122.07                | 1,172.50                            | 94.38        | 1,519.84               | 1,472.99                | 46.85                     | 32.444             |           |
| 2,350.00                     | 2,298.70              | 2,247.76              | 2,298.70              | 10.93            | 39.40         | 114.97                | 1,172.50                            | 94.38        | 1,527.40               | 1,479.56                | 47.84                     | 31.928             |           |
| 2,400.00                     | 2,345.46              | 2,294.53              | 2,345.46              | 11.05            | 40.21         | 109.79                | 1,172.50                            | 94.38        | 1,534.47               | 1,485.65                | 48.81                     | 31.436             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 310-INC-ONLY |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    | Offset                | Semi Major Axis       |                       |                  |               |                       | Distance                            |              |                        |                         |                           |                    | Warning   |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 2,450.00                     | 2,391.25              | 2,340.31              | 2,391.25              | 11.16            | 41.00         | 105.99                | 1,172.50                            | 94.38        | 1,541.09               | 1,491.32                | 49.77                     | 30.965             |           |
| 2,500.00                     | 2,435.89              | 2,384.95              | 2,435.89              | 11.26            | 41.77         | 103.19                | 1,172.50                            | 94.38        | 1,547.35               | 1,496.64                | 50.71                     | 30.512             |           |
| 2,550.00                     | 2,479.22              | 2,428.28              | 2,479.22              | 11.35            | 42.52         | 101.11                | 1,172.50                            | 94.38        | 1,553.33               | 1,501.68                | 51.65                     | 30.074             |           |
| 2,600.00                     | 2,521.07              | 2,470.13              | 2,521.07              | 11.43            | 43.24         | 99.58                 | 1,172.50                            | 94.38        | 1,559.13               | 1,506.54                | 52.59                     | 29.647             |           |
| 2,650.00                     | 2,561.29              | 2,510.35              | 2,561.29              | 11.52            | 43.94         | 98.45                 | 1,172.50                            | 94.38        | 1,564.86               | 1,511.31                | 53.54                     | 29.225             |           |
| 2,700.00                     | 2,599.72              | 2,548.79              | 2,599.72              | 11.60            | 44.61         | 97.63                 | 1,172.50                            | 94.38        | 1,570.62               | 1,516.09                | 54.52                     | 28.807             |           |
| 2,750.00                     | 2,636.24              | 2,585.30              | 2,636.24              | 11.70            | 45.25         | 97.03                 | 1,172.50                            | 94.38        | 1,576.53               | 1,520.99                | 55.53                     | 28.390             |           |
| 2,800.00                     | 2,670.69              | 2,619.75              | 2,670.69              | 11.82            | 45.85         | 96.58                 | 1,172.50                            | 94.38        | 1,582.70               | 1,526.12                | 56.58                     | 27.972             |           |
| 2,850.00                     | 2,702.95              | 2,652.01              | 2,702.95              | 12.05            | 46.41         | 96.24                 | 1,172.50                            | 94.38        | 1,589.25               | 1,531.56                | 57.68                     | 27.553             |           |
| 2,900.00                     | 2,732.90              | 2,681.97              | 2,732.90              | 12.48            | 46.93         | 95.96                 | 1,172.50                            | 94.38        | 1,596.27               | 1,537.44                | 58.83                     | 27.133             |           |
| 2,950.00                     | 2,760.43              | 2,709.50              | 2,760.43              | 13.15            | 47.41         | 95.70                 | 1,172.50                            | 94.38        | 1,603.89               | 1,543.84                | 60.04                     | 26.713             |           |
| 2,975.18                     | 2,773.35              | 2,722.41              | 2,773.35              | 13.54            | 47.64         | 95.57                 | 1,172.50                            | 94.38        | 1,607.97               | 1,547.30                | 60.67                     | 26.503             |           |
| 3,000.00                     | 2,785.76              | 2,734.82              | 2,785.76              | 13.96            | 47.85         | 95.95                 | 1,172.50                            | 94.38        | 1,612.22               | 1,550.93                | 61.29                     | 26.307             |           |
| 3,050.00                     | 2,810.76              | 2,759.82              | 2,810.76              | 14.86            | 48.29         | 96.73                 | 1,172.50                            | 94.38        | 1,621.61               | 1,559.03                | 62.58                     | 25.913             |           |
| 3,100.00                     | 2,835.76              | 2,784.82              | 2,835.76              | 15.79            | 48.72         | 97.50                 | 1,172.50                            | 94.38        | 1,632.10               | 1,568.24                | 63.86                     | 25.559             |           |
| 3,150.00                     | 2,860.76              | 2,809.82              | 2,860.76              | 16.79            | 49.16         | 98.27                 | 1,172.50                            | 94.38        | 1,643.66               | 1,578.47                | 65.19                     | 25.213             |           |
| 3,175.18                     | 2,873.35              | 2,822.41              | 2,873.35              | 17.30            | 49.38         | 98.66                 | 1,172.50                            | 94.38        | 1,649.88               | 1,584.03                | 65.86                     | 25.052             |           |
| 3,200.00                     | 2,885.29              | 2,834.35              | 2,885.29              | 17.82            | 49.59         | 98.37                 | 1,172.50                            | 94.38        | 1,656.36               | 1,589.75                | 66.61                     | 24.867             |           |
| 3,250.00                     | 2,906.43              | 2,855.49              | 2,906.43              | 18.94            | 49.95         | 97.57                 | 1,172.50                            | 94.38        | 1,670.66               | 1,602.48                | 68.18                     | 24.503             |           |
| 3,300.00                     | 2,923.54              | 2,872.60              | 2,923.54              | 20.14            | 50.25         | 96.47                 | 1,172.50                            | 94.38        | 1,686.64               | 1,616.83                | 69.81                     | 24.160             |           |
| 3,350.00                     | 2,936.49              | 2,885.55              | 2,936.49              | 21.42            | 50.48         | 95.05                 | 1,172.50                            | 94.38        | 1,704.27               | 1,632.80                | 71.46                     | 23.848             |           |
| 3,400.00                     | 2,945.18              | 2,894.25              | 2,945.18              | 22.74            | 50.63         | 93.28                 | 1,172.50                            | 94.38        | 1,723.44               | 1,650.36                | 73.09                     | 23.581             |           |
| 3,450.00                     | 2,949.55              | 2,898.62              | 2,949.55              | 24.11            | 50.71         | 91.18                 | 1,172.50                            | 94.38        | 1,744.04               | 1,669.43                | 74.61                     | 23.377             |           |
| 3,486.28                     | 2,950.00              | 2,899.06              | 2,950.00              | 25.12            | 50.71         | 89.45                 | 1,172.50                            | 94.38        | 1,759.78               | 1,684.18                | 75.60                     | 23.278             |           |
| 3,500.00                     | 2,949.73              | 2,898.80              | 2,949.73              | 25.50            | 50.71         | 89.44                 | 1,172.50                            | 94.38        | 1,765.89               | 1,689.91                | 75.98                     | 23.242             |           |
| 3,550.00                     | 2,948.77              | 2,897.83              | 2,948.77              | 26.91            | 50.69         | 89.41                 | 1,172.50                            | 94.38        | 1,788.87               | 1,711.49                | 77.38                     | 23.117             |           |
| 3,600.00                     | 2,947.80              | 2,896.86              | 2,947.80              | 28.33            | 50.68         | 89.37                 | 1,172.50                            | 94.38        | 1,812.94               | 1,734.15                | 78.79                     | 23.011             |           |
| 3,650.00                     | 2,946.83              | 2,895.89              | 2,946.83              | 29.77            | 50.66         | 89.34                 | 1,172.50                            | 94.38        | 1,838.06               | 1,757.83                | 80.22                     | 22.913             |           |
| 3,700.00                     | 2,945.86              | 2,894.92              | 2,945.86              | 31.22            | 50.64         | 89.30                 | 1,172.50                            | 94.38        | 1,864.17               | 1,782.52                | 81.65                     | 22.830             |           |
| 3,750.00                     | 2,944.89              | 2,893.95              | 2,944.89              | 32.68            | 50.62         | 89.27                 | 1,172.50                            | 94.38        | 1,891.25               | 1,808.14                | 83.11                     | 22.757             |           |
| 3,800.00                     | 2,943.92              | 2,892.99              | 2,943.92              | 34.15            | 50.61         | 89.23                 | 1,172.50                            | 94.38        | 1,919.25               | 1,834.69                | 84.56                     | 22.697             |           |
| 3,850.00                     | 2,942.95              | 2,892.02              | 2,942.95              | 35.63            | 50.59         | 89.20                 | 1,172.50                            | 94.38        | 1,948.12               | 1,862.09                | 86.03                     | 22.644             |           |
| 3,900.00                     | 2,941.98              | 2,891.05              | 2,941.98              | 37.12            | 50.57         | 89.16                 | 1,172.50                            | 94.38        | 1,977.85               | 1,890.34                | 87.50                     | 22.604             |           |
| 3,950.00                     | 2,941.02              | 2,890.08              | 2,941.02              | 38.61            | 50.56         | 89.13                 | 1,172.50                            | 94.38        | 2,008.37               | 1,919.39                | 88.98                     | 22.570             |           |
| 4,000.00                     | 2,940.05              | 2,889.11              | 2,940.05              | 40.11            | 50.54         | 89.09                 | 1,172.50                            | 94.38        | 2,039.66               | 1,949.20                | 90.47                     | 22.546             |           |
| 4,050.00                     | 2,939.08              | 2,888.14              | 2,939.08              | 41.61            | 50.52         | 89.06                 | 1,172.50                            | 94.38        | 2,071.69               | 1,979.73                | 91.96                     | 22.528             |           |
| 4,100.00                     | 2,938.11              | 2,887.17              | 2,938.11              | 43.12            | 50.51         | 89.02                 | 1,172.50                            | 94.38        | 2,104.42               | 2,010.97                | 93.45                     | 22.519             |           |
| 4,150.00                     | 2,937.14              | 2,886.20              | 2,937.14              | 44.64            | 50.49         | 88.99                 | 1,172.50                            | 94.38        | 2,137.81               | 2,042.86                | 94.95                     | 22.514 SF          |           |
| 4,200.00                     | 2,936.17              | 2,885.24              | 2,936.17              | 46.15            | 50.47         | 88.95                 | 1,172.50                            | 94.38        | 2,171.85               | 2,075.39                | 96.45                     | 22.517             |           |
| 4,250.00                     | 2,935.20              | 2,884.27              | 2,935.20              | 47.67            | 50.46         | 88.92                 | 1,172.50                            | 94.38        | 2,206.49               | 2,108.53                | 97.96                     | 22.524             |           |
| 4,300.00                     | 2,934.23              | 2,883.30              | 2,934.23              | 49.20            | 50.44         | 88.88                 | 1,172.50                            | 94.38        | 2,241.71               | 2,142.24                | 99.47                     | 22.537             |           |
| 4,350.00                     | 2,933.27              | 2,882.33              | 2,933.27              | 50.72            | 50.42         | 88.85                 | 1,172.50                            | 94.38        | 2,277.48               | 2,176.50                | 100.98                    | 22.554             |           |
| 4,400.00                     | 2,932.30              | 2,881.36              | 2,932.30              | 52.25            | 50.41         | 88.81                 | 1,172.50                            | 94.38        | 2,313.78               | 2,211.29                | 102.49                    | 22.575             |           |
| 4,450.00                     | 2,931.33              | 2,880.39              | 2,931.33              | 53.79            | 50.39         | 88.78                 | 1,172.50                            | 94.38        | 2,350.58               | 2,246.57                | 104.01                    | 22.600             |           |
| 4,500.00                     | 2,930.36              | 2,879.42              | 2,930.36              | 55.32            | 50.37         | 88.74                 | 1,172.50                            | 94.38        | 2,387.87               | 2,282.34                | 105.53                    | 22.628             |           |
| 4,550.00                     | 2,929.39              | 2,878.45              | 2,929.39              | 56.85            | 50.35         | 88.70                 | 1,172.50                            | 94.38        | 2,425.60               | 2,318.56                | 107.05                    | 22.659             |           |
| 4,600.00                     | 2,928.42              | 2,877.49              | 2,928.42              | 58.39            | 50.34         | 88.67                 | 1,172.50                            | 94.38        | 2,463.78               | 2,355.21                | 108.57                    | 22.694             |           |
| 4,650.00                     | 2,927.45              | 2,876.52              | 2,927.45              | 59.93            | 50.32         | 88.63                 | 1,172.50                            | 94.38        | 2,502.37               | 2,392.28                | 110.09                    | 22.730             |           |
| 4,700.00                     | 2,926.48              | 2,875.55              | 2,926.48              | 61.47            | 50.30         | 88.60                 | 1,172.50                            | 94.38        | 2,541.36               | 2,429.75                | 111.61                    | 22.769             |           |
| 4,750.00                     | 2,925.52              | 2,874.58              | 2,925.52              | 63.01            | 50.29         | 88.56                 | 1,172.50                            | 94.38        | 2,580.73               | 2,467.59                | 113.14                    | 22.810             |           |
| 4,800.00                     | 2,924.55              | 2,873.61              | 2,924.55              | 64.56            | 50.27         | 88.53                 | 1,172.50                            | 94.38        | 2,620.46               | 2,505.80                | 114.67                    | 22.853             |           |
| 4,850.00                     | 2,923.58              | 2,872.64              | 2,923.58              | 66.10            | 50.25         | 88.49                 | 1,172.50                            | 94.38        | 2,660.54               | 2,544.34                | 116.19                    | 22.897             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

|                              |                              |                              |                              |                         |                      |                              |                                            |                     |                               |                                |                                  |                           |                |
|------------------------------|------------------------------|------------------------------|------------------------------|-------------------------|----------------------|------------------------------|--------------------------------------------|---------------------|-------------------------------|--------------------------------|----------------------------------|---------------------------|----------------|
| <b>Offset Design</b>         |                              |                              |                              |                         |                      |                              |                                            |                     |                               |                                |                                  | <b>Offset Site Error:</b> | 0.00 usft      |
| Survey Program: 310-INC-ONLY |                              |                              |                              |                         |                      |                              |                                            |                     |                               |                                |                                  | <b>Offset Well Error:</b> | 0.00 usft      |
| <b>Reference</b>             |                              | <b>Offset</b>                |                              | <b>Semi Major Axis</b>  |                      |                              | <b>Distance</b>                            |                     |                               |                                |                                  |                           | <b>Warning</b> |
| <b>Measured Depth (usft)</b> | <b>Vertical Depth (usft)</b> | <b>Measured Depth (usft)</b> | <b>Vertical Depth (usft)</b> | <b>Reference (usft)</b> | <b>Offset (usft)</b> | <b>Highside Toolface (°)</b> | <b>Offset Wellbore Centre +N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Between Centres (usft)</b> | <b>Between Ellipses (usft)</b> | <b>Minimum Separation (usft)</b> | <b>Separation Factor</b>  |                |
| 4,900.00                     | 2,922.61                     | 2,871.67                     | 2,922.61                     | 67.65                   | 50.24                | 88.46                        | 1,172.50                                   | 94.38               | 2,700.94                      | 2,583.22                       | 117.72                           | 22.944                    |                |
| 4,950.00                     | 2,921.64                     | 2,870.71                     | 2,921.64                     | 69.20                   | 50.22                | 88.42                        | 1,172.50                                   | 94.38               | 2,741.67                      | 2,622.42                       | 119.25                           | 22.991                    |                |
| 5,000.00                     | 2,920.67                     | 2,869.74                     | 2,920.67                     | 70.75                   | 50.20                | 88.39                        | 1,172.50                                   | 94.38               | 2,782.69                      | 2,661.91                       | 120.78                           | 23.039                    |                |
| 5,050.00                     | 2,919.70                     | 2,868.77                     | 2,919.70                     | 72.30                   | 50.19                | 88.35                        | 1,172.50                                   | 94.38               | 2,824.01                      | 2,701.69                       | 122.31                           | 23.088                    |                |
| 5,100.00                     | 2,918.73                     | 2,867.80                     | 2,918.73                     | 73.85                   | 50.17                | 88.32                        | 1,172.50                                   | 94.38               | 2,865.60                      | 2,741.75                       | 123.84                           | 23.139                    |                |
| 5,150.00                     | 2,917.77                     | 2,866.83                     | 2,917.77                     | 75.40                   | 50.15                | 88.28                        | 1,172.50                                   | 94.38               | 2,907.45                      | 2,782.08                       | 125.38                           | 23.189                    |                |
| 5,200.00                     | 2,916.80                     | 2,865.86                     | 2,916.80                     | 76.95                   | 50.14                | 88.25                        | 1,172.50                                   | 94.38               | 2,949.56                      | 2,822.65                       | 126.91                           | 23.241                    |                |
| 5,250.00                     | 2,915.83                     | 2,864.89                     | 2,915.83                     | 78.50                   | 50.12                | 88.21                        | 1,172.50                                   | 94.38               | 2,991.91                      | 2,863.47                       | 128.45                           | 23.293                    |                |

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





## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 305-INC-ONLY |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    |                       | Offset                |                       | Semi Major Axis  |               |                       | Distance                            |              |                        |                         |                           |                    | Warning   |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 0.00                         | 0.00                  | 0.00                  | 43.00                 | 0.00             | 0.00          | -64.72                | 1,202.56                            | -2,545.86    | 2,815.92               |                         |                           |                    |           |
| 50.00                        | 50.00                 | 7.00                  | 50.00                 | 0.05             | 0.07          | -64.72                | 1,202.56                            | -2,545.86    | 2,815.59               | 2,815.47                | 0.12                      | N/A                |           |
| 100.00                       | 100.00                | 57.00                 | 100.00                | 0.14             | 0.54          | -64.72                | 1,202.56                            | -2,545.86    | 2,815.59               | 2,814.91                | 0.68                      | 4,132.760          |           |
| 150.00                       | 150.00                | 107.00                | 150.00                | 0.32             | 1.01          | -64.72                | 1,202.56                            | -2,545.86    | 2,815.59               | 2,814.26                | 1.33                      | 2,113.234          |           |
| 200.00                       | 200.00                | 157.00                | 200.00                | 0.50             | 1.48          | -64.72                | 1,202.56                            | -2,545.86    | 2,815.59               | 2,813.61                | 1.98                      | 1,419.552          |           |
| 250.00                       | 250.00                | 207.00                | 250.00                | 0.68             | 1.95          | -64.72                | 1,202.56                            | -2,545.86    | 2,815.59               | 2,812.96                | 2.63                      | 1,068.734          |           |
| 300.00                       | 300.00                | 257.00                | 300.00                | 0.86             | 2.43          | -64.72                | 1,202.56                            | -2,545.86    | 2,815.59               | 2,812.31                | 3.29                      | 856.952            |           |
| 350.00                       | 350.00                | 305.00                | 348.00                | 1.03             | 2.88          | 148.77                | 1,202.56                            | -2,545.86    | 2,815.97               | 2,812.05                | 3.92                      | 718.913            |           |
| 400.00                       | 399.98                | 356.98                | 399.98                | 1.21             | 3.84          | 148.77                | 1,202.56                            | -2,545.86    | 2,817.08               | 2,812.03                | 5.06                      | 557.147            |           |
| 450.00                       | 449.93                | 406.93                | 449.93                | 1.38             | 4.76          | 148.77                | 1,202.56                            | -2,545.86    | 2,818.95               | 2,812.79                | 6.16                      | 457.830            |           |
| 500.00                       | 499.84                | 456.84                | 499.84                | 1.55             | 5.67          | 148.78                | 1,202.56                            | -2,545.86    | 2,821.56               | 2,814.31                | 7.25                      | 388.956            |           |
| 550.00                       | 549.68                | 506.68                | 549.68                | 1.73             | 6.59          | 148.78                | 1,202.56                            | -2,545.86    | 2,824.92               | 2,816.56                | 8.35                      | 338.145            |           |
| 600.00                       | 599.45                | 556.45                | 599.45                | 1.91             | 7.51          | 148.79                | 1,202.56                            | -2,545.86    | 2,829.02               | 2,819.58                | 9.45                      | 299.486            |           |
| 650.00                       | 649.13                | 606.13                | 649.13                | 2.10             | 8.42          | 148.80                | 1,202.56                            | -2,545.86    | 2,833.87               | 2,823.33                | 10.54                     | 268.882            |           |
| 700.00                       | 698.70                | 655.71                | 698.70                | 2.30             | 9.31          | 148.81                | 1,202.56                            | -2,545.86    | 2,839.47               | 2,827.87                | 11.60                     | 244.754            |           |
| 750.00                       | 748.15                | 705.16                | 748.15                | 2.51             | 10.20         | 148.82                | 1,202.56                            | -2,545.86    | 2,845.81               | 2,833.15                | 12.66                     | 224.749            |           |
| 800.00                       | 797.47                | 754.47                | 797.47                | 2.72             | 11.09         | 148.83                | 1,202.56                            | -2,545.86    | 2,852.89               | 2,839.18                | 13.71                     | 208.066            |           |
| 850.00                       | 846.63                | 803.64                | 846.63                | 2.94             | 11.97         | 148.84                | 1,202.56                            | -2,545.86    | 2,860.73               | 2,845.97                | 14.76                     | 193.806            |           |
| 900.00                       | 895.62                | 852.63                | 895.62                | 3.17             | 12.85         | 148.86                | 1,202.56                            | -2,545.86    | 2,869.30               | 2,853.51                | 15.80                     | 181.650            |           |
| 950.00                       | 944.44                | 901.45                | 944.44                | 3.42             | 13.72         | 148.87                | 1,202.56                            | -2,545.86    | 2,878.62               | 2,861.80                | 16.83                     | 171.049            |           |
| 1,000.00                     | 993.06                | 950.06                | 993.06                | 3.67             | 14.60         | 148.88                | 1,202.56                            | -2,545.86    | 2,888.69               | 2,870.84                | 17.85                     | 161.813            |           |
| 1,050.00                     | 1,041.46              | 998.47                | 1,041.46              | 3.93             | 15.47         | 148.89                | 1,202.56                            | -2,545.86    | 2,899.50               | 2,880.63                | 18.87                     | 153.666            |           |
| 1,051.64                     | 1,043.05              | 1,000.06              | 1,043.05              | 3.94             | 15.50         | 148.89                | 1,202.56                            | -2,545.86    | 2,899.87               | 2,880.97                | 18.90                     | 153.416            |           |
| 1,100.00                     | 1,089.75              | 1,046.76              | 1,089.75              | 4.21             | 16.34         | 149.02                | 1,202.56                            | -2,545.86    | 2,910.71               | 2,890.79                | 19.92                     | 146.148            |           |
| 1,150.00                     | 1,138.04              | 1,095.05              | 1,138.04              | 4.49             | 17.21         | 149.15                | 1,202.56                            | -2,545.86    | 2,921.94               | 2,900.97                | 20.97                     | 139.349            |           |
| 1,200.00                     | 1,186.33              | 1,143.34              | 1,186.33              | 4.77             | 18.10         | 149.28                | 1,202.56                            | -2,545.86    | 2,933.18               | 2,911.14                | 22.04                     | 133.085            |           |
| 1,250.00                     | 1,234.62              | 1,191.63              | 1,234.62              | 5.06             | 18.99         | 149.41                | 1,202.56                            | -2,545.86    | 2,944.43               | 2,921.31                | 23.12                     | 127.357            |           |
| 1,300.00                     | 1,282.91              | 1,239.92              | 1,282.91              | 5.34             | 19.88         | 149.53                | 1,202.56                            | -2,545.86    | 2,955.70               | 2,931.50                | 24.20                     | 122.139            |           |
| 1,350.00                     | 1,331.20              | 1,288.21              | 1,331.20              | 5.64             | 20.77         | 149.66                | 1,202.56                            | -2,545.86    | 2,966.98               | 2,941.70                | 25.28                     | 117.355            |           |
| 1,400.00                     | 1,379.48              | 1,336.50              | 1,379.48              | 5.93             | 21.67         | 149.78                | 1,202.56                            | -2,545.86    | 2,978.28               | 2,951.92                | 26.36                     | 112.964            |           |
| 1,450.00                     | 1,427.77              | 1,384.79              | 1,427.77              | 6.22             | 22.56         | 149.91                | 1,202.56                            | -2,545.86    | 2,989.59               | 2,962.14                | 27.45                     | 108.913            |           |
| 2,700.00                     | 2,599.72              | 2,556.77              | 2,599.72              | 11.60            | 46.60         | 46.80                 | 1,202.56                            | -2,545.86    | 2,999.74               | 2,949.32                | 50.42                     | 59.500             |           |
| 2,750.00                     | 2,636.24              | 2,593.28              | 2,636.24              | 11.70            | 47.45         | 47.23                 | 1,202.56                            | -2,545.86    | 2,972.84               | 2,922.17                | 50.67                     | 58.675             |           |
| 2,800.00                     | 2,670.69              | 2,627.73              | 2,670.69              | 11.82            | 48.24         | 48.04                 | 1,202.56                            | -2,545.86    | 2,943.92               | 2,892.86                | 51.06                     | 57.659             |           |
| 2,850.00                     | 2,702.95              | 2,659.99              | 2,702.95              | 12.05            | 48.98         | 49.24                 | 1,202.56                            | -2,545.86    | 2,913.10               | 2,861.44                | 51.66                     | 56.386             |           |
| 2,900.00                     | 2,732.90              | 2,689.94              | 2,732.90              | 12.48            | 49.67         | 50.81                 | 1,202.56                            | -2,545.86    | 2,880.52               | 2,827.96                | 52.56                     | 54.806             |           |
| 2,950.00                     | 2,760.43              | 2,717.47              | 2,760.43              | 13.15            | 50.31         | 52.77                 | 1,202.56                            | -2,545.86    | 2,846.31               | 2,792.50                | 53.81                     | 52.898             |           |
| 2,975.18                     | 2,773.35              | 2,726.00              | 2,768.93              | 13.54            | 50.50         | 53.81                 | 1,202.56                            | -2,545.86    | 2,828.51               | 2,774.05                | 54.46                     | 51.940             |           |
| 3,000.00                     | 2,785.76              | 2,726.00              | 2,768.93              | 13.96            | 50.50         | 53.81                 | 1,202.56                            | -2,545.86    | 2,810.85               | 2,756.00                | 54.85                     | 51.247             |           |
| 3,050.00                     | 2,810.76              | 2,726.00              | 2,768.93              | 14.86            | 50.50         | 53.81                 | 1,202.56                            | -2,545.86    | 2,775.62               | 2,719.94                | 55.68                     | 49.849             |           |
| 3,100.00                     | 2,835.76              | 2,792.82              | 2,835.76              | 15.79            | 52.06         | 55.19                 | 1,202.56                            | -2,545.86    | 2,740.04               | 2,681.51                | 58.52                     | 46.819             |           |
| 3,150.00                     | 2,860.76              | 2,817.82              | 2,860.76              | 16.79            | 52.65         | 55.71                 | 1,202.56                            | -2,545.86    | 2,705.00               | 2,644.82                | 60.18                     | 44.947             |           |
| 3,175.18                     | 2,873.35              | 2,830.41              | 2,873.35              | 17.30            | 52.94         | 55.98                 | 1,202.56                            | -2,545.86    | 2,687.44               | 2,626.42                | 61.02                     | 44.041             |           |
| 3,200.00                     | 2,885.29              | 2,842.35              | 2,885.29              | 17.82            | 53.22         | 58.31                 | 1,202.56                            | -2,545.86    | 2,669.99               | 2,607.54                | 62.45                     | 42.753             |           |
| 3,250.00                     | 2,906.43              | 2,863.49              | 2,906.43              | 18.94            | 53.72         | 63.39                 | 1,202.56                            | -2,545.86    | 2,633.87               | 2,568.11                | 65.75                     | 40.056             |           |
| 3,300.00                     | 2,923.54              | 2,880.60              | 2,923.54              | 20.14            | 54.12         | 68.95                 | 1,202.56                            | -2,545.86    | 2,596.71               | 2,527.34                | 69.38                     | 37.429             |           |
| 3,350.00                     | 2,936.49              | 2,893.55              | 2,936.49              | 21.42            | 54.42         | 74.86                 | 1,202.56                            | -2,545.86    | 2,558.86               | 2,485.92                | 72.94                     | 35.081             |           |
| 3,400.00                     | 2,945.18              | 2,902.25              | 2,945.18              | 22.74            | 54.62         | 80.95                 | 1,202.56                            | -2,545.86    | 2,520.63               | 2,444.56                | 76.06                     | 33.139             |           |
| 3,450.00                     | 2,949.55              | 2,906.62              | 2,949.55              | 24.11            | 54.72         | 87.02                 | 1,202.56                            | -2,545.86    | 2,482.35               | 2,403.90                | 78.45                     | 31.642             |           |
| 3,486.28                     | 2,950.00              | 2,907.07              | 2,950.00              | 25.12            | 54.74         | 91.29                 | 1,202.56                            | -2,545.86    | 2,454.72               | 2,375.07                | 79.65                     | 30.820             |           |
| 3,500.00                     | 2,949.73              | 2,906.80              | 2,949.73              | 25.50            | 54.73         | 91.28                 | 1,202.56                            | -2,545.86    | 2,444.33               | 2,364.31                | 80.03                     | 30.544             |           |
| 3,550.00                     | 2,948.77              | 2,905.83              | 2,948.77              | 26.91            | 54.71         | 91.25                 | 1,202.56                            | -2,545.86    | 2,406.76               | 2,325.33                | 81.42                     | 29.558             |           |

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





## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 305-INC-ONLY |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    | Offset                | Semi Major Axis       |                       | Distance         |               | Warning              |                                     |              |                        |                         |                           |                    |           |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Tooface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 3,600.00                     | 2,947.80              | 2,904.86              | 2,947.80              | 28.33            | 54.68         | 91.21                | 1,202.56                            | -2,545.86    | 2,369.64               | 2,286.81                | 82.82                     | 28.611             |           |
| 3,650.00                     | 2,946.83              | 2,903.90              | 2,946.83              | 29.77            | 54.66         | 91.18                | 1,202.56                            | -2,545.86    | 2,333.00               | 2,248.75                | 84.25                     | 27.691             |           |
| 3,700.00                     | 2,945.86              | 2,902.93              | 2,945.86              | 31.22            | 54.64         | 91.14                | 1,202.56                            | -2,545.86    | 2,296.87               | 2,211.19                | 85.68                     | 26.808             |           |
| 3,750.00                     | 2,944.89              | 2,901.96              | 2,944.89              | 32.68            | 54.62         | 91.11                | 1,202.56                            | -2,545.86    | 2,261.26               | 2,174.13                | 87.13                     | 25.953             |           |
| 3,800.00                     | 2,943.92              | 2,900.99              | 2,943.92              | 34.15            | 54.59         | 91.07                | 1,202.56                            | -2,545.86    | 2,226.21               | 2,137.63                | 88.58                     | 25.133             |           |
| 3,850.00                     | 2,942.95              | 2,900.02              | 2,942.95              | 35.63            | 54.57         | 91.04                | 1,202.56                            | -2,545.86    | 2,191.73               | 2,101.69                | 90.04                     | 24.341             |           |
| 3,900.00                     | 2,941.98              | 2,899.05              | 2,941.98              | 37.12            | 54.55         | 91.00                | 1,202.56                            | -2,545.86    | 2,157.87               | 2,066.36                | 91.51                     | 23.581             |           |
| 3,950.00                     | 2,941.02              | 2,898.08              | 2,941.02              | 38.61            | 54.53         | 90.97                | 1,202.56                            | -2,545.86    | 2,124.64               | 2,031.65                | 92.99                     | 22.849             |           |
| 4,000.00                     | 2,940.05              | 2,897.11              | 2,940.05              | 40.11            | 54.50         | 90.94                | 1,202.56                            | -2,545.86    | 2,092.08               | 1,997.61                | 94.46                     | 22.147             |           |
| 4,050.00                     | 2,939.08              | 2,896.15              | 2,939.08              | 41.61            | 54.48         | 90.90                | 1,202.56                            | -2,545.86    | 2,060.21               | 1,964.26                | 95.95                     | 21.471             |           |
| 4,100.00                     | 2,938.11              | 2,895.18              | 2,938.11              | 43.12            | 54.46         | 90.87                | 1,202.56                            | -2,545.86    | 2,029.08               | 1,931.64                | 97.44                     | 20.824             |           |
| 4,150.00                     | 2,937.14              | 2,894.21              | 2,937.14              | 44.64            | 54.43         | 90.83                | 1,202.56                            | -2,545.86    | 1,998.72               | 1,899.78                | 98.94                     | 20.202             |           |
| 4,200.00                     | 2,936.17              | 2,893.24              | 2,936.17              | 46.15            | 54.41         | 90.80                | 1,202.56                            | -2,545.86    | 1,969.15               | 1,868.72                | 100.43                    | 19.606             |           |
| 4,250.00                     | 2,935.20              | 2,892.27              | 2,935.20              | 47.67            | 54.39         | 90.76                | 1,202.56                            | -2,545.86    | 1,940.42               | 1,838.48                | 101.94                    | 19.035             |           |
| 4,300.00                     | 2,934.23              | 2,891.30              | 2,934.23              | 49.20            | 54.37         | 90.73                | 1,202.56                            | -2,545.86    | 1,912.57               | 1,809.13                | 103.44                    | 18.490             |           |
| 4,350.00                     | 2,933.27              | 2,890.33              | 2,933.27              | 50.72            | 54.34         | 90.69                | 1,202.56                            | -2,545.86    | 1,885.63               | 1,780.68                | 104.95                    | 17.967             |           |
| 4,400.00                     | 2,932.30              | 2,889.36              | 2,932.30              | 52.25            | 54.32         | 90.66                | 1,202.56                            | -2,545.86    | 1,859.65               | 1,753.19                | 106.46                    | 17.469             |           |
| 4,450.00                     | 2,931.33              | 2,888.40              | 2,931.33              | 53.79            | 54.30         | 90.62                | 1,202.56                            | -2,545.86    | 1,834.65               | 1,726.69                | 107.97                    | 16.992             |           |
| 4,500.00                     | 2,930.36              | 2,887.43              | 2,930.36              | 55.32            | 54.28         | 90.59                | 1,202.56                            | -2,545.86    | 1,810.70               | 1,701.22                | 109.48                    | 16.539             |           |
| 4,550.00                     | 2,929.39              | 2,886.46              | 2,929.39              | 56.85            | 54.25         | 90.55                | 1,202.56                            | -2,545.86    | 1,787.82               | 1,676.82                | 111.00                    | 16.107             |           |
| 4,600.00                     | 2,928.42              | 2,885.49              | 2,928.42              | 58.39            | 54.23         | 90.52                | 1,202.56                            | -2,545.86    | 1,766.06               | 1,653.55                | 112.52                    | 15.696             |           |
| 4,650.00                     | 2,927.45              | 2,884.52              | 2,927.45              | 59.93            | 54.21         | 90.48                | 1,202.56                            | -2,545.86    | 1,745.47               | 1,631.43                | 114.04                    | 15.306             |           |
| 4,700.00                     | 2,926.48              | 2,883.55              | 2,926.48              | 61.47            | 54.19         | 90.45                | 1,202.56                            | -2,545.86    | 1,726.07               | 1,610.51                | 115.56                    | 14.937             |           |
| 4,750.00                     | 2,925.52              | 2,882.58              | 2,925.52              | 63.01            | 54.16         | 90.42                | 1,202.56                            | -2,545.86    | 1,707.92               | 1,590.84                | 117.08                    | 14.588             |           |
| 4,800.00                     | 2,924.55              | 2,881.61              | 2,924.55              | 64.56            | 54.14         | 90.38                | 1,202.56                            | -2,545.86    | 1,691.05               | 1,572.45                | 118.60                    | 14.258             |           |
| 4,850.00                     | 2,923.58              | 2,880.65              | 2,923.58              | 66.10            | 54.12         | 90.35                | 1,202.56                            | -2,545.86    | 1,675.50               | 1,555.38                | 120.13                    | 13.948             |           |
| 4,900.00                     | 2,922.61              | 2,879.68              | 2,922.61              | 67.65            | 54.09         | 90.31                | 1,202.56                            | -2,545.86    | 1,661.32               | 1,539.67                | 121.65                    | 13.657             |           |
| 4,950.00                     | 2,921.64              | 2,878.71              | 2,921.64              | 69.20            | 54.07         | 90.28                | 1,202.56                            | -2,545.86    | 1,648.52               | 1,525.35                | 123.18                    | 13.383             |           |
| 5,000.00                     | 2,920.67              | 2,877.74              | 2,920.67              | 70.75            | 54.05         | 90.24                | 1,202.56                            | -2,545.86    | 1,637.16               | 1,512.45                | 124.70                    | 13.128             |           |
| 5,050.00                     | 2,919.70              | 2,876.77              | 2,919.70              | 72.30            | 54.03         | 90.21                | 1,202.56                            | -2,545.86    | 1,627.25               | 1,501.02                | 126.23                    | 12.891             |           |
| 5,100.00                     | 2,918.73              | 2,875.80              | 2,918.73              | 73.85            | 54.00         | 90.17                | 1,202.56                            | -2,545.86    | 1,618.83               | 1,491.06                | 127.76                    | 12.671             |           |
| 5,150.00                     | 2,917.77              | 2,874.83              | 2,917.77              | 75.40            | 53.98         | 90.14                | 1,202.56                            | -2,545.86    | 1,611.91               | 1,482.62                | 129.29                    | 12.467             |           |
| 5,200.00                     | 2,916.80              | 2,873.86              | 2,916.80              | 76.95            | 53.96         | 90.10                | 1,202.56                            | -2,545.86    | 1,606.52               | 1,475.70                | 130.82                    | 12.280             |           |
| 5,250.00                     | 2,915.83              | 2,872.90              | 2,915.83              | 78.50            | 53.94         | 90.07                | 1,202.56                            | -2,545.86    | 1,602.67               | 1,470.31                | 132.35                    | 12.109             |           |
| 5,300.00                     | 2,914.86              | 2,871.93              | 2,914.86              | 80.05            | 53.91         | 90.03                | 1,202.56                            | -2,545.86    | 1,600.37               | 1,466.49                | 133.88                    | 11.953             |           |
| 5,348.57                     | 2,913.92              | 2,870.99              | 2,913.92              | 81.56            | 53.89         | 90.00                | 1,202.56                            | -2,545.86    | 1,599.63               | 1,464.26                | 135.37                    | 11.816 CC          |           |
| 5,350.00                     | 2,913.89              | 2,870.96              | 2,913.89              | 81.61            | 53.89         | 90.00                | 1,202.56                            | -2,545.86    | 1,599.64               | 1,464.22                | 135.42                    | 11.813             |           |
| 5,400.00                     | 2,912.92              | 2,869.99              | 2,912.92              | 83.16            | 53.87         | 89.96                | 1,202.56                            | -2,545.86    | 1,600.46               | 1,463.51                | 136.95                    | 11.686 ES          |           |
| 5,450.00                     | 2,911.95              | 2,869.02              | 2,911.95              | 84.72            | 53.85         | 89.93                | 1,202.56                            | -2,545.86    | 1,602.85               | 1,464.36                | 138.48                    | 11.574             |           |
| 5,500.00                     | 2,910.99              | 2,868.05              | 2,910.99              | 86.27            | 53.82         | 89.89                | 1,202.56                            | -2,545.86    | 1,606.78               | 1,466.77                | 140.02                    | 11.476             |           |
| 5,550.00                     | 2,910.02              | 2,867.08              | 2,910.02              | 87.83            | 53.80         | 89.86                | 1,202.56                            | -2,545.86    | 1,612.26               | 1,470.71                | 141.55                    | 11.390             |           |
| 5,600.00                     | 2,909.05              | 2,866.11              | 2,909.05              | 89.39            | 53.78         | 89.83                | 1,202.56                            | -2,545.86    | 1,619.27               | 1,476.18                | 143.09                    | 11.317             |           |
| 5,650.00                     | 2,908.08              | 2,865.15              | 2,908.08              | 90.95            | 53.76         | 89.79                | 1,202.56                            | -2,545.86    | 1,627.78               | 1,483.16                | 144.62                    | 11.255             |           |
| 5,700.00                     | 2,907.11              | 2,864.18              | 2,907.11              | 92.50            | 53.73         | 89.76                | 1,202.56                            | -2,545.86    | 1,637.77               | 1,491.61                | 146.16                    | 11.206             |           |
| 5,750.00                     | 2,906.14              | 2,863.21              | 2,906.14              | 94.06            | 53.71         | 89.72                | 1,202.56                            | -2,545.86    | 1,649.22               | 1,501.52                | 147.69                    | 11.167             |           |
| 5,800.00                     | 2,905.17              | 2,862.24              | 2,905.17              | 95.62            | 53.69         | 89.69                | 1,202.56                            | -2,545.86    | 1,662.09               | 1,512.86                | 149.23                    | 11.138             |           |
| 5,850.00                     | 2,904.20              | 2,861.27              | 2,904.20              | 97.18            | 53.66         | 89.65                | 1,202.56                            | -2,545.86    | 1,676.36               | 1,525.59                | 150.77                    | 11.119             |           |
| 5,900.00                     | 2,903.24              | 2,860.30              | 2,903.24              | 98.74            | 53.64         | 89.62                | 1,202.56                            | -2,545.86    | 1,691.98               | 1,539.68                | 152.30                    | 11.109             |           |
| 5,950.00                     | 2,902.27              | 2,859.33              | 2,902.27              | 100.30           | 53.62         | 89.58                | 1,202.56                            | -2,545.86    | 1,708.92               | 1,555.08                | 153.84                    | 11.108 SF          |           |
| 6,000.00                     | 2,901.30              | 2,858.36              | 2,901.30              | 101.86           | 53.60         | 89.55                | 1,202.56                            | -2,545.86    | 1,727.15               | 1,571.77                | 155.38                    | 11.116             |           |
| 6,050.00                     | 2,900.33              | 2,857.40              | 2,900.33              | 103.42           | 53.57         | 89.51                | 1,202.56                            | -2,545.86    | 1,746.61               | 1,589.70                | 156.91                    | 11.131             |           |
| 6,100.00                     | 2,899.36              | 2,856.43              | 2,899.36              | 104.98           | 53.55         | 89.48                | 1,202.56                            | -2,545.86    | 1,767.28               | 1,608.82                | 158.45                    | 11.153             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 305-INC-ONLY |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    | Offset                | Semi Major Axis       |                       | Distance         |               |                       |                                     |              |                        |                         |                           |                    |           |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  | Warning   |
| 6,150.00                     | 2,898.39              | 2,855.46              | 2,898.39              | 106.54           | 53.53         | 89.44                 | 1,202.56                            | -2,545.86    | 1,789.10               | 1,629.11                | 159.99                    | 11.183             |           |
| 6,200.00                     | 2,897.42              | 2,854.49              | 2,897.42              | 108.10           | 53.51         | 89.41                 | 1,202.56                            | -2,545.86    | 1,812.04               | 1,650.51                | 161.53                    | 11.218             |           |
| 6,250.00                     | 2,896.45              | 2,853.52              | 2,896.45              | 109.66           | 53.48         | 89.37                 | 1,202.56                            | -2,545.86    | 1,836.06               | 1,672.99                | 163.07                    | 11.260             |           |
| 6,300.00                     | 2,895.49              | 2,852.55              | 2,895.49              | 111.23           | 53.46         | 89.34                 | 1,202.56                            | -2,545.86    | 1,861.10               | 1,696.50                | 164.61                    | 11.306             |           |
| 6,350.00                     | 2,894.52              | 2,851.58              | 2,894.52              | 112.79           | 53.44         | 89.31                 | 1,202.56                            | -2,545.86    | 1,887.15               | 1,721.00                | 166.14                    | 11.358             |           |
| 6,400.00                     | 2,893.55              | 2,850.61              | 2,893.55              | 114.35           | 53.42         | 89.27                 | 1,202.56                            | -2,545.86    | 1,914.14               | 1,746.45                | 167.68                    | 11.415             |           |
| 6,450.00                     | 2,892.58              | 2,849.65              | 2,892.58              | 115.91           | 53.39         | 89.24                 | 1,202.56                            | -2,545.86    | 1,942.04               | 1,772.82                | 169.22                    | 11.476             |           |
| 6,500.00                     | 2,891.61              | 2,848.68              | 2,891.61              | 117.48           | 53.37         | 89.20                 | 1,202.56                            | -2,545.86    | 1,970.82               | 1,800.06                | 170.76                    | 11.541             |           |
| 6,550.00                     | 2,890.64              | 2,847.71              | 2,890.64              | 119.04           | 53.35         | 89.17                 | 1,202.56                            | -2,545.86    | 2,000.43               | 1,828.13                | 172.30                    | 11.610             |           |
| 6,600.00                     | 2,889.67              | 2,846.74              | 2,889.67              | 120.60           | 53.33         | 89.13                 | 1,202.56                            | -2,545.86    | 2,030.84               | 1,857.00                | 173.84                    | 11.682             |           |
| 6,650.00                     | 2,888.70              | 2,845.77              | 2,888.70              | 122.17           | 53.30         | 89.10                 | 1,202.56                            | -2,545.86    | 2,062.02               | 1,886.64                | 175.38                    | 11.757             |           |
| 6,700.00                     | 2,887.74              | 2,844.80              | 2,887.74              | 123.73           | 53.28         | 89.06                 | 1,202.56                            | -2,545.86    | 2,093.92               | 1,917.00                | 176.92                    | 11.836             |           |
| 6,750.00                     | 2,886.77              | 2,843.83              | 2,886.77              | 125.29           | 53.26         | 89.03                 | 1,202.56                            | -2,545.86    | 2,126.52               | 1,948.06                | 178.46                    | 11.916             |           |
| 6,800.00                     | 2,885.80              | 2,842.87              | 2,885.80              | 126.86           | 53.23         | 88.99                 | 1,202.56                            | -2,545.86    | 2,159.79               | 1,979.79                | 180.00                    | 11.999             |           |
| 6,850.00                     | 2,884.83              | 2,841.90              | 2,884.83              | 128.42           | 53.21         | 88.96                 | 1,202.56                            | -2,545.86    | 2,193.69               | 2,012.15                | 181.54                    | 12.084             |           |
| 6,900.00                     | 2,883.86              | 2,840.93              | 2,883.86              | 129.99           | 53.19         | 88.92                 | 1,202.56                            | -2,545.86    | 2,228.20               | 2,045.12                | 183.08                    | 12.171             |           |
| 6,950.00                     | 2,882.89              | 2,839.96              | 2,882.89              | 131.55           | 53.17         | 88.89                 | 1,202.56                            | -2,545.86    | 2,263.28               | 2,078.66                | 184.62                    | 12.259             |           |
| 7,000.00                     | 2,881.92              | 2,838.99              | 2,881.92              | 133.12           | 53.14         | 88.85                 | 1,202.56                            | -2,545.86    | 2,298.92               | 2,112.76                | 186.16                    | 12.349             |           |
| 7,050.00                     | 2,880.95              | 2,838.02              | 2,880.95              | 134.68           | 53.12         | 88.82                 | 1,202.56                            | -2,545.86    | 2,335.08               | 2,147.38                | 187.70                    | 12.441             |           |
| 7,100.00                     | 2,879.99              | 2,837.05              | 2,879.99              | 136.25           | 53.10         | 88.78                 | 1,202.56                            | -2,545.86    | 2,371.75               | 2,182.51                | 189.24                    | 12.533             |           |
| 7,150.00                     | 2,879.02              | 2,836.08              | 2,879.02              | 137.81           | 53.08         | 88.75                 | 1,202.56                            | -2,545.86    | 2,408.89               | 2,218.12                | 190.78                    | 12.627             |           |
| 7,200.00                     | 2,878.05              | 2,835.12              | 2,878.05              | 139.38           | 53.05         | 88.72                 | 1,202.56                            | -2,545.86    | 2,446.49               | 2,254.18                | 192.32                    | 12.721             |           |
| 7,250.00                     | 2,877.08              | 2,834.15              | 2,877.08              | 140.94           | 53.03         | 88.68                 | 1,202.56                            | -2,545.86    | 2,484.53               | 2,290.68                | 193.86                    | 12.816             |           |
| 7,300.00                     | 2,876.11              | 2,833.18              | 2,876.11              | 142.51           | 53.01         | 88.65                 | 1,202.56                            | -2,545.86    | 2,522.99               | 2,327.59                | 195.40                    | 12.912             |           |
| 7,350.00                     | 2,875.14              | 2,832.21              | 2,875.14              | 144.07           | 52.99         | 88.61                 | 1,202.56                            | -2,545.86    | 2,561.84               | 2,364.91                | 196.94                    | 13.008             |           |
| 7,400.00                     | 2,874.17              | 2,831.24              | 2,874.17              | 145.64           | 52.96         | 88.58                 | 1,202.56                            | -2,545.86    | 2,601.08               | 2,402.60                | 198.48                    | 13.105             |           |
| 7,450.00                     | 2,873.20              | 2,830.27              | 2,873.20              | 147.21           | 52.94         | 88.54                 | 1,202.56                            | -2,545.86    | 2,640.68               | 2,440.66                | 200.02                    | 13.202             |           |
| 7,500.00                     | 2,872.24              | 2,829.30              | 2,872.24              | 148.77           | 52.92         | 88.51                 | 1,202.56                            | -2,545.86    | 2,680.62               | 2,479.07                | 201.56                    | 13.300             |           |
| 7,550.00                     | 2,871.27              | 2,828.33              | 2,871.27              | 150.34           | 52.89         | 88.47                 | 1,202.56                            | -2,545.86    | 2,720.90               | 2,517.80                | 203.10                    | 13.397             |           |
| 7,600.00                     | 2,870.30              | 2,827.37              | 2,870.30              | 151.90           | 52.87         | 88.44                 | 1,202.56                            | -2,545.86    | 2,761.50               | 2,556.86                | 204.64                    | 13.495             |           |
| 7,650.00                     | 2,869.33              | 2,826.40              | 2,869.33              | 153.47           | 52.85         | 88.40                 | 1,202.56                            | -2,545.86    | 2,802.40               | 2,596.22                | 206.18                    | 13.592             |           |
| 7,700.00                     | 2,868.36              | 2,825.43              | 2,868.36              | 155.04           | 52.83         | 88.37                 | 1,202.56                            | -2,545.86    | 2,843.59               | 2,635.87                | 207.72                    | 13.690             |           |
| 7,750.00                     | 2,867.39              | 2,824.46              | 2,867.39              | 156.60           | 52.80         | 88.33                 | 1,202.56                            | -2,545.86    | 2,885.05               | 2,675.80                | 209.26                    | 13.787             |           |
| 7,800.00                     | 2,866.42              | 2,823.49              | 2,866.42              | 158.17           | 52.78         | 88.30                 | 1,202.56                            | -2,545.86    | 2,926.79               | 2,715.99                | 210.80                    | 13.884             |           |
| 7,850.00                     | 2,865.45              | 2,822.52              | 2,865.45              | 159.74           | 52.76         | 88.26                 | 1,202.56                            | -2,545.86    | 2,968.78               | 2,756.44                | 212.34                    | 13.981             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 390-INC-ONLY |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    | Offset                | Semi Major Axis       |                       |                  |               |                      | Distance                            |              |                        |                         |                           | Warning            |           |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Tooface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 0.00                         | 0.00                  | 0.00                  | 46.00                 | 0.00             | 0.00          | -89.01               | 38.29                               | -2,207.05    | 2,207.86               |                         |                           |                    |           |
| 50.00                        | 50.00                 | 4.00                  | 50.00                 | 0.05             | 0.04          | -89.01               | 38.29                               | -2,207.05    | 2,207.38               | 2,207.29                | 0.09                      | N/A                |           |
| 100.00                       | 100.00                | 54.00                 | 100.00                | 0.14             | 0.48          | -89.01               | 38.29                               | -2,207.05    | 2,207.38               | 2,206.76                | 0.63                      | 3,526.722          |           |
| 150.00                       | 150.00                | 104.00                | 150.00                | 0.32             | 0.93          | -89.01               | 38.29                               | -2,207.05    | 2,207.38               | 2,206.13                | 1.25                      | 1,763.213          |           |
| 200.00                       | 200.00                | 154.00                | 200.00                | 0.50             | 1.38          | -89.01               | 38.29                               | -2,207.05    | 2,207.38               | 2,205.50                | 1.88                      | 1,175.442          |           |
| 250.00                       | 250.00                | 204.00                | 250.00                | 0.68             | 1.82          | -89.01               | 38.29                               | -2,207.05    | 2,207.38               | 2,204.88                | 2.50                      | 881.569            |           |
| 300.00                       | 300.00                | 254.00                | 300.00                | 0.86             | 2.27          | -89.01               | 38.29                               | -2,207.05    | 2,207.38               | 2,204.25                | 3.13                      | 705.250            |           |
| 350.00                       | 350.00                | 304.00                | 350.00                | 1.03             | 2.72          | 124.48               | 38.29                               | -2,207.05    | 2,207.63               | 2,203.88                | 3.75                      | 588.681            |           |
| 400.00                       | 399.98                | 353.98                | 399.98                | 1.21             | 3.16          | 124.50               | 38.29                               | -2,207.05    | 2,208.37               | 2,204.00                | 4.37                      | 504.979            |           |
| 450.00                       | 449.93                | 403.93                | 449.93                | 1.38             | 3.76          | 124.52               | 38.29                               | -2,207.05    | 2,209.61               | 2,204.46                | 5.15                      | 429.310            |           |
| 500.00                       | 499.84                | 453.84                | 499.84                | 1.55             | 4.74          | 124.56               | 38.29                               | -2,207.05    | 2,211.34               | 2,205.04                | 6.30                      | 350.899            |           |
| 550.00                       | 549.68                | 503.68                | 549.68                | 1.73             | 5.72          | 124.61               | 38.29                               | -2,207.05    | 2,213.57               | 2,206.11                | 7.46                      | 296.618            |           |
| 600.00                       | 599.45                | 553.45                | 599.45                | 1.91             | 6.70          | 124.66               | 38.29                               | -2,207.05    | 2,216.30               | 2,207.68                | 8.62                      | 257.117            |           |
| 650.00                       | 649.13                | 603.13                | 649.13                | 2.10             | 7.67          | 124.73               | 38.29                               | -2,207.05    | 2,219.54               | 2,209.76                | 9.78                      | 226.888            |           |
| 700.00                       | 698.70                | 652.70                | 698.70                | 2.30             | 8.64          | 124.80               | 38.29                               | -2,207.05    | 2,223.28               | 2,212.34                | 10.94                     | 203.221            |           |
| 750.00                       | 748.15                | 702.15                | 748.15                | 2.51             | 9.62          | 124.89               | 38.29                               | -2,207.05    | 2,227.54               | 2,215.43                | 12.10                     | 184.028            |           |
| 800.00                       | 797.47                | 751.47                | 797.47                | 2.72             | 10.58         | 124.98               | 38.29                               | -2,207.05    | 2,232.31               | 2,219.04                | 13.26                     | 168.322            |           |
| 850.00                       | 846.63                | 800.63                | 846.63                | 2.94             | 11.55         | 125.08               | 38.29                               | -2,207.05    | 2,237.60               | 2,223.17                | 14.43                     | 155.093            |           |
| 900.00                       | 895.62                | 849.62                | 895.62                | 3.17             | 12.51         | 125.19               | 38.29                               | -2,207.05    | 2,243.41               | 2,227.83                | 15.58                     | 143.950            |           |
| 950.00                       | 944.44                | 898.44                | 944.44                | 3.42             | 13.59         | 125.31               | 38.29                               | -2,207.05    | 2,249.76               | 2,232.89                | 16.86                     | 133.404            |           |
| 1,000.00                     | 993.06                | 947.06                | 993.06                | 3.67             | 14.68         | 125.44               | 38.29                               | -2,207.05    | 2,256.64               | 2,238.48                | 18.16                     | 124.248            |           |
| 1,050.00                     | 1,041.46              | 995.47                | 1,041.46              | 3.93             | 15.78         | 125.57               | 38.29                               | -2,207.05    | 2,264.07               | 2,244.60                | 19.46                     | 116.327            |           |
| 1,051.64                     | 1,043.05              | 997.06                | 1,043.05              | 3.94             | 15.81         | 125.57               | 38.29                               | -2,207.05    | 2,264.32               | 2,244.82                | 19.51                     | 116.086            |           |
| 1,100.00                     | 1,089.75              | 1,043.76              | 1,089.75              | 4.21             | 16.87         | 125.82               | 38.29                               | -2,207.05    | 2,271.81               | 2,251.03                | 20.78                     | 109.330            |           |
| 1,150.00                     | 1,138.04              | 1,092.05              | 1,138.04              | 4.49             | 17.96         | 126.08               | 38.29                               | -2,207.05    | 2,279.59               | 2,257.49                | 22.10                     | 103.147            |           |
| 1,200.00                     | 1,186.33              | 1,140.35              | 1,186.33              | 4.77             | 19.05         | 126.34               | 38.29                               | -2,207.05    | 2,287.43               | 2,264.00                | 23.43                     | 97.640             |           |
| 1,250.00                     | 1,234.62              | 1,188.64              | 1,234.62              | 5.06             | 20.20         | 126.59               | 38.29                               | -2,207.05    | 2,295.31               | 2,270.50                | 24.81                     | 92.517             |           |
| 1,300.00                     | 1,282.91              | 1,236.93              | 1,282.91              | 5.34             | 21.35         | 126.85               | 38.29                               | -2,207.05    | 2,303.24               | 2,277.05                | 26.19                     | 87.937             |           |
| 1,350.00                     | 1,331.20              | 1,285.22              | 1,331.20              | 5.64             | 22.50         | 127.10               | 38.29                               | -2,207.05    | 2,311.21               | 2,283.63                | 27.58                     | 83.811             |           |
| 1,400.00                     | 1,379.48              | 1,333.50              | 1,379.48              | 5.93             | 23.65         | 127.35               | 38.29                               | -2,207.05    | 2,319.23               | 2,290.27                | 28.96                     | 80.082             |           |
| 1,450.00                     | 1,427.77              | 1,381.79              | 1,427.77              | 6.22             | 24.80         | 127.60               | 38.29                               | -2,207.05    | 2,327.29               | 2,296.94                | 30.35                     | 76.691             |           |
| 1,500.00                     | 1,476.06              | 1,430.08              | 1,476.06              | 6.51             | 25.95         | 127.84               | 38.29                               | -2,207.05    | 2,335.40               | 2,303.67                | 31.73                     | 73.599             |           |
| 1,550.00                     | 1,524.35              | 1,478.37              | 1,524.35              | 6.81             | 27.09         | 128.09               | 38.29                               | -2,207.05    | 2,343.55               | 2,310.43                | 33.12                     | 70.765             |           |
| 1,600.00                     | 1,572.64              | 1,526.66              | 1,572.64              | 7.11             | 28.24         | 128.33               | 38.29                               | -2,207.05    | 2,351.74               | 2,317.24                | 34.50                     | 68.162             |           |
| 1,650.00                     | 1,620.93              | 1,574.95              | 1,620.93              | 7.41             | 29.39         | 128.57               | 38.29                               | -2,207.05    | 2,359.98               | 2,324.09                | 35.89                     | 65.760             |           |
| 1,700.00                     | 1,669.22              | 1,623.29              | 1,669.22              | 7.70             | 30.53         | 128.81               | 38.29                               | -2,207.05    | 2,368.26               | 2,331.00                | 37.26                     | 63.557             |           |
| 1,750.00                     | 1,717.51              | 1,671.58              | 1,717.51              | 8.00             | 31.64         | 129.05               | 38.29                               | -2,207.05    | 2,376.58               | 2,337.96                | 38.61                     | 61.548             |           |
| 1,800.00                     | 1,765.79              | 1,719.87              | 1,765.79              | 8.30             | 32.76         | 129.29               | 38.29                               | -2,207.05    | 2,384.94               | 2,344.98                | 39.96                     | 59.678             |           |
| 1,850.00                     | 1,814.08              | 1,768.16              | 1,814.08              | 8.60             | 33.87         | 129.52               | 38.29                               | -2,207.05    | 2,393.34               | 2,352.03                | 41.31                     | 57.930             |           |
| 1,900.00                     | 1,862.37              | 1,816.45              | 1,862.37              | 8.90             | 34.99         | 129.76               | 38.29                               | -2,207.05    | 2,401.79               | 2,359.12                | 42.66                     | 56.296             |           |
| 1,950.00                     | 1,910.66              | 1,864.74              | 1,910.66              | 9.20             | 36.10         | 129.99               | 38.29                               | -2,207.05    | 2,410.27               | 2,366.26                | 44.01                     | 54.763             |           |
| 1,989.45                     | 1,948.77              | 1,902.84              | 1,948.77              | 9.44             | 36.98         | 130.17               | 38.29                               | -2,207.05    | 2,416.99               | 2,371.92                | 45.08                     | 53.619             |           |
| 2,000.00                     | 1,958.96              | 1,913.03              | 1,958.96              | 9.51             | 37.22         | 128.03               | 38.29                               | -2,207.05    | 2,418.73               | 2,373.29                | 45.44                     | 53.232             |           |
| 2,050.00                     | 2,007.55              | 1,961.63              | 2,007.55              | 9.79             | 38.34         | 115.90               | 38.29                               | -2,207.05    | 2,425.15               | 2,378.08                | 47.07                     | 51.527             |           |
| 2,100.00                     | 2,056.43              | 2,010.51              | 2,056.43              | 10.04            | 39.47         | 100.65               | 38.29                               | -2,207.05    | 2,428.56               | 2,380.02                | 48.54                     | 50.028             |           |
| 2,150.00                     | 2,105.41              | 2,059.49              | 2,105.41              | 10.27            | 40.60         | 83.89                | 38.29                               | -2,207.05    | 2,428.97               | 2,379.12                | 49.85                     | 48.722             |           |
| 2,200.00                     | 2,154.31              | 2,108.42              | 2,154.31              | 10.47            | 41.70         | 68.37                | 38.29                               | -2,207.05    | 2,426.37               | 2,375.42                | 50.95                     | 47.622             |           |
| 2,250.00                     | 2,202.95              | 2,157.06              | 2,202.95              | 10.64            | 42.78         | 55.89                | 38.29                               | -2,207.05    | 2,420.77               | 2,368.94                | 51.83                     | 46.709             |           |
| 2,300.00                     | 2,251.14              | 2,205.25              | 2,251.14              | 10.79            | 43.85         | 46.57                | 38.29                               | -2,207.05    | 2,412.19               | 2,359.70                | 52.49                     | 45.956             |           |
| 2,350.00                     | 2,298.70              | 2,252.81              | 2,298.70              | 10.93            | 44.91         | 39.78                | 38.29                               | -2,207.05    | 2,400.66               | 2,347.74                | 52.93                     | 45.358             |           |
| 2,400.00                     | 2,345.46              | 2,299.58              | 2,345.46              | 11.05            | 45.94         | 34.81                | 38.29                               | -2,207.05    | 2,386.24               | 2,333.10                | 53.13                     | 44.910             |           |
| 2,450.00                     | 2,391.25              | 2,345.36              | 2,391.25              | 11.16            | 46.96         | 31.13                | 38.29                               | -2,207.05    | 2,368.96               | 2,315.86                | 53.10                     | 44.609             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 390-INC-ONLY |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    | Offset                | Semi Major Axis       |                       | Distance         |               | Warning              |                                     |              |                        |                         |                           |                    |           |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Tooface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 2,500.00                     | 2,435.89              | 2,390.00              | 2,435.89              | 11.26            | 47.95         | 28.39                | 38.29                               | -2,207.05    | 2,348.90               | 2,296.06                | 52.84                     | 44.455             |           |
| 2,550.00                     | 2,479.22              | 2,433.33              | 2,479.22              | 11.35            | 48.91         | 26.33                | 38.29                               | -2,207.05    | 2,326.13               | 2,273.79                | 52.34                     | 44.447             |           |
| 2,600.00                     | 2,521.07              | 2,475.18              | 2,521.07              | 11.43            | 49.84         | 24.79                | 38.29                               | -2,207.05    | 2,300.73               | 2,249.13                | 51.60                     | 44.584             |           |
| 2,650.00                     | 2,561.29              | 2,515.40              | 2,561.29              | 11.52            | 50.73         | 23.67                | 38.29                               | -2,207.05    | 2,272.81               | 2,222.15                | 50.66                     | 44.867             |           |
| 2,700.00                     | 2,599.72              | 2,553.84              | 2,599.72              | 11.60            | 51.58         | 22.89                | 38.29                               | -2,207.05    | 2,242.45               | 2,192.94                | 49.51                     | 45.291             |           |
| 2,750.00                     | 2,636.24              | 2,590.39              | 2,636.24              | 11.70            | 52.39         | 22.41                | 38.29                               | -2,207.05    | 2,209.78               | 2,161.59                | 48.19                     | 45.852             |           |
| 2,800.00                     | 2,670.69              | 2,624.84              | 2,670.69              | 11.82            | 53.12         | 22.21                | 38.29                               | -2,207.05    | 2,174.92               | 2,128.19                | 46.73                     | 46.538             |           |
| 2,850.00                     | 2,702.95              | 2,657.10              | 2,702.95              | 12.05            | 53.80         | 22.27                | 38.29                               | -2,207.05    | 2,137.99               | 2,092.78                | 45.21                     | 47.293             |           |
| 2,900.00                     | 2,732.90              | 2,687.05              | 2,732.90              | 12.48            | 54.44         | 22.60                | 38.29                               | -2,207.05    | 2,099.13               | 2,055.44                | 43.69                     | 48.041             |           |
| 2,950.00                     | 2,760.43              | 2,714.58              | 2,760.43              | 13.15            | 55.03         | 23.24                | 38.29                               | -2,207.05    | 2,058.49               | 2,016.18                | 42.30                     | 48.659             |           |
| 2,975.18                     | 2,773.35              | 2,727.50              | 2,773.35              | 13.54            | 55.30         | 23.69                | 38.29                               | -2,207.05    | 2,037.39               | 1,995.69                | 41.70                     | 48.861             |           |
| 3,000.00                     | 2,785.76              | 2,739.91              | 2,785.76              | 13.96            | 55.57         | 23.92                | 38.29                               | -2,207.05    | 2,016.40               | 1,974.19                | 42.20                     | 47.777             |           |
| 3,050.00                     | 2,810.76              | 2,764.91              | 2,810.76              | 14.86            | 56.10         | 24.39                | 38.29                               | -2,207.05    | 1,974.14               | 1,930.88                | 43.26                     | 45.631             |           |
| 3,100.00                     | 2,835.76              | 2,789.91              | 2,835.76              | 15.79            | 56.63         | 24.88                | 38.29                               | -2,207.05    | 1,931.94               | 1,887.57                | 44.36                     | 43.548             |           |
| 3,150.00                     | 2,860.76              | 2,814.91              | 2,860.76              | 16.79            | 57.16         | 25.40                | 38.29                               | -2,207.05    | 1,889.78               | 1,844.27                | 45.51                     | 41.520             |           |
| 3,175.18                     | 2,873.35              | 2,827.50              | 2,873.35              | 17.30            | 57.43         | 25.66                | 38.29                               | -2,207.05    | 1,868.57               | 1,822.46                | 46.11                     | 40.524             |           |
| 3,200.00                     | 2,885.29              | 2,839.44              | 2,885.29              | 17.82            | 57.68         | 27.76                | 38.29                               | -2,207.05    | 1,847.42               | 1,801.13                | 46.29                     | 39.909             |           |
| 3,250.00                     | 2,906.43              | 2,860.58              | 2,906.43              | 18.94            | 58.13         | 33.08                | 38.29                               | -2,207.05    | 1,803.44               | 1,754.98                | 48.47                     | 37.210             |           |
| 3,300.00                     | 2,923.54              | 2,877.69              | 2,923.54              | 20.14            | 58.50         | 40.42                | 38.29                               | -2,207.05    | 1,757.91               | 1,704.10                | 53.81                     | 32.671             |           |
| 3,350.00                     | 2,936.49              | 2,890.64              | 2,936.49              | 21.42            | 58.77         | 50.59                | 38.29                               | -2,207.05    | 1,711.19               | 1,648.60                | 62.59                     | 27.342             |           |
| 3,400.00                     | 2,945.18              | 2,899.33              | 2,945.18              | 22.74            | 58.96         | 64.30                | 38.29                               | -2,207.05    | 1,663.64               | 1,590.33                | 73.31                     | 22.693             |           |
| 3,450.00                     | 2,949.55              | 2,903.71              | 2,949.55              | 24.11            | 59.05         | 81.10                | 38.29                               | -2,207.05    | 1,615.65               | 1,533.86                | 81.78                     | 19.755             |           |
| 3,486.28                     | 2,950.00              | 2,904.15              | 2,950.00              | 25.12            | 59.06         | 93.86                | 38.29                               | -2,207.05    | 1,580.75               | 1,496.89                | 83.87                     | 18.849             |           |
| 3,500.00                     | 2,949.73              | 2,903.89              | 2,949.73              | 25.50            | 59.05         | 93.82                | 38.29                               | -2,207.05    | 1,567.58               | 1,483.33                | 84.25                     | 18.607             |           |
| 3,550.00                     | 2,948.77              | 2,902.92              | 2,948.77              | 26.91            | 59.03         | 93.70                | 38.29                               | -2,207.05    | 1,519.63               | 1,433.97                | 85.65                     | 17.742             |           |
| 3,600.00                     | 2,947.80              | 2,901.95              | 2,947.80              | 28.33            | 59.01         | 93.57                | 38.29                               | -2,207.05    | 1,471.81               | 1,384.75                | 87.06                     | 16.906             |           |
| 3,650.00                     | 2,946.83              | 2,900.98              | 2,946.83              | 29.77            | 58.99         | 93.44                | 38.29                               | -2,207.05    | 1,424.15               | 1,335.65                | 88.49                     | 16.093             |           |
| 3,700.00                     | 2,945.86              | 2,900.01              | 2,945.86              | 31.22            | 58.97         | 93.32                | 38.29                               | -2,207.05    | 1,376.65               | 1,286.72                | 89.93                     | 15.308             |           |
| 3,750.00                     | 2,944.89              | 2,899.04              | 2,944.89              | 32.68            | 58.95         | 93.19                | 38.29                               | -2,207.05    | 1,329.33               | 1,237.95                | 91.38                     | 14.547             |           |
| 3,800.00                     | 2,943.92              | 2,898.07              | 2,943.92              | 34.15            | 58.93         | 93.06                | 38.29                               | -2,207.05    | 1,282.22               | 1,189.38                | 92.84                     | 13.811             |           |
| 3,850.00                     | 2,942.95              | 2,897.10              | 2,942.95              | 35.63            | 58.91         | 92.94                | 38.29                               | -2,207.05    | 1,235.33               | 1,141.01                | 94.31                     | 13.098             |           |
| 3,900.00                     | 2,941.98              | 2,896.14              | 2,941.98              | 37.12            | 58.89         | 92.81                | 38.29                               | -2,207.05    | 1,188.69               | 1,092.91                | 95.79                     | 12.410             |           |
| 3,950.00                     | 2,941.02              | 2,895.17              | 2,941.02              | 38.61            | 58.87         | 92.68                | 38.29                               | -2,207.05    | 1,142.34               | 1,045.07                | 97.27                     | 11.744             |           |
| 4,000.00                     | 2,940.05              | 2,894.20              | 2,940.05              | 40.11            | 58.85         | 92.56                | 38.29                               | -2,207.05    | 1,096.31               | 997.55                  | 98.76                     | 11.101             |           |
| 4,050.00                     | 2,939.08              | 2,893.23              | 2,939.08              | 41.61            | 58.83         | 92.43                | 38.29                               | -2,207.05    | 1,050.64               | 950.39                  | 100.25                    | 10.480             |           |
| 4,100.00                     | 2,938.11              | 2,892.26              | 2,938.11              | 43.12            | 58.81         | 92.30                | 38.29                               | -2,207.05    | 1,005.39               | 903.64                  | 101.75                    | 9.881              |           |
| 4,150.00                     | 2,937.14              | 2,891.29              | 2,937.14              | 44.64            | 58.79         | 92.18                | 38.29                               | -2,207.05    | 960.60                 | 857.34                  | 103.25                    | 9.303              |           |
| 4,200.00                     | 2,936.17              | 2,890.32              | 2,936.17              | 46.15            | 58.77         | 92.05                | 38.29                               | -2,207.05    | 916.35                 | 811.59                  | 104.76                    | 8.747              |           |
| 4,250.00                     | 2,935.20              | 2,889.35              | 2,935.20              | 47.67            | 58.74         | 91.92                | 38.29                               | -2,207.05    | 872.72                 | 766.45                  | 106.26                    | 8.213              |           |
| 4,300.00                     | 2,934.23              | 2,888.39              | 2,934.23              | 49.20            | 58.72         | 91.79                | 38.29                               | -2,207.05    | 829.80                 | 722.03                  | 107.77                    | 7.699              |           |
| 4,350.00                     | 2,933.27              | 2,887.42              | 2,933.27              | 50.72            | 58.70         | 91.67                | 38.29                               | -2,207.05    | 787.73                 | 678.44                  | 109.29                    | 7.208              |           |
| 4,400.00                     | 2,932.30              | 2,886.45              | 2,932.30              | 52.25            | 58.68         | 91.54                | 38.29                               | -2,207.05    | 746.63                 | 635.83                  | 110.80                    | 6.738              |           |
| 4,450.00                     | 2,931.33              | 2,885.48              | 2,931.33              | 53.79            | 58.66         | 91.41                | 38.29                               | -2,207.05    | 706.67                 | 594.35                  | 112.32                    | 6.292              |           |
| 4,500.00                     | 2,930.36              | 2,884.51              | 2,930.36              | 55.32            | 58.64         | 91.29                | 38.29                               | -2,207.05    | 668.07                 | 554.23                  | 113.84                    | 5.869              |           |
| 4,550.00                     | 2,929.39              | 2,883.54              | 2,929.39              | 56.85            | 58.62         | 91.16                | 38.29                               | -2,207.05    | 631.07                 | 515.71                  | 115.36                    | 5.470              |           |
| 4,600.00                     | 2,928.42              | 2,882.57              | 2,928.42              | 58.39            | 58.60         | 91.03                | 38.29                               | -2,207.05    | 595.97                 | 479.09                  | 116.88                    | 5.099              |           |
| 4,650.00                     | 2,927.45              | 2,881.60              | 2,927.45              | 59.93            | 58.58         | 90.90                | 38.29                               | -2,207.05    | 563.13                 | 444.72                  | 118.40                    | 4.756              |           |
| 4,700.00                     | 2,926.48              | 2,880.64              | 2,926.48              | 61.47            | 58.56         | 90.78                | 38.29                               | -2,207.05    | 532.95                 | 413.02                  | 119.93                    | 4.444              |           |
| 4,750.00                     | 2,925.52              | 2,879.67              | 2,925.52              | 63.01            | 58.54         | 90.65                | 38.29                               | -2,207.05    | 505.93                 | 384.47                  | 121.45                    | 4.166              |           |
| 4,800.00                     | 2,924.55              | 2,878.70              | 2,924.55              | 64.56            | 58.52         | 90.52                | 38.29                               | -2,207.05    | 482.58                 | 359.60                  | 122.98                    | 3.924              |           |
| 4,850.00                     | 2,923.58              | 2,877.73              | 2,923.58              | 66.10            | 58.50         | 90.40                | 38.29                               | -2,207.05    | 463.47                 | 338.97                  | 124.51                    | 3.723              |           |
| 4,900.00                     | 2,922.61              | 2,876.76              | 2,922.61              | 67.65            | 58.48         | 90.27                | 38.29                               | -2,207.05    | 449.14                 | 323.11                  | 126.03                    | 3.564              |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 390-INC-ONLY |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    |                       | Offset                |                       | Semi Major Axis  |               |                       | Distance                            |              |                        |                         |                           |                    | Warning   |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 4,950.00                     | 2,921.64              | 2,875.79              | 2,921.64              | 69.20            | 58.46         | 90.14                 | 38.29                               | -2,207.05    | 440.05                 | 312.49                  | 127.56                    | 3.450              |           |
| 5,000.00                     | 2,920.67              | 2,874.82              | 2,920.67              | 70.75            | 58.44         | 90.01                 | 38.29                               | -2,207.05    | 436.53                 | 307.44                  | 129.09                    | 3.382              |           |
| 5,005.86                     | 2,920.56              | 2,874.71              | 2,920.56              | 70.93            | 58.43         | 90.00                 | 38.29                               | -2,207.05    | 436.49                 | 307.22                  | 129.27                    | 3.377 CC, ES       |           |
| 5,050.00                     | 2,919.70              | 2,873.85              | 2,919.70              | 72.30            | 58.41         | 89.89                 | 38.29                               | -2,207.05    | 438.71                 | 308.10                  | 130.62                    | 3.359 SF           |           |
| 5,100.00                     | 2,918.73              | 2,872.89              | 2,918.73              | 73.85            | 58.39         | 89.76                 | 38.29                               | -2,207.05    | 446.52                 | 314.38                  | 132.14                    | 3.379              |           |
| 5,150.00                     | 2,917.77              | 2,871.92              | 2,917.77              | 75.40            | 58.37         | 89.63                 | 38.29                               | -2,207.05    | 459.66                 | 325.99                  | 133.67                    | 3.439              |           |
| 5,200.00                     | 2,916.80              | 2,870.95              | 2,916.80              | 76.95            | 58.35         | 89.51                 | 38.29                               | -2,207.05    | 477.70                 | 342.50                  | 135.20                    | 3.533              |           |
| 5,250.00                     | 2,915.83              | 2,869.98              | 2,915.83              | 78.50            | 58.33         | 89.38                 | 38.29                               | -2,207.05    | 500.10                 | 363.37                  | 136.73                    | 3.658              |           |
| 5,300.00                     | 2,914.86              | 2,869.01              | 2,914.86              | 80.05            | 58.31         | 89.25                 | 38.29                               | -2,207.05    | 526.31                 | 388.05                  | 138.26                    | 3.807              |           |
| 5,350.00                     | 2,913.89              | 2,868.04              | 2,913.89              | 81.61            | 58.29         | 89.13                 | 38.29                               | -2,207.05    | 555.79                 | 416.01                  | 139.79                    | 3.976              |           |
| 5,400.00                     | 2,912.92              | 2,867.07              | 2,912.92              | 83.16            | 58.27         | 89.00                 | 38.29                               | -2,207.05    | 588.05                 | 446.74                  | 141.32                    | 4.161              |           |
| 5,450.00                     | 2,911.95              | 2,866.10              | 2,911.95              | 84.72            | 58.25         | 88.87                 | 38.29                               | -2,207.05    | 622.66                 | 479.82                  | 142.84                    | 4.359              |           |
| 5,500.00                     | 2,910.99              | 2,865.14              | 2,910.99              | 86.27            | 58.23         | 88.74                 | 38.29                               | -2,207.05    | 659.24                 | 514.87                  | 144.37                    | 4.566              |           |
| 5,550.00                     | 2,910.02              | 2,864.17              | 2,910.02              | 87.83            | 58.21         | 88.62                 | 38.29                               | -2,207.05    | 697.49                 | 551.59                  | 145.90                    | 4.781              |           |
| 5,600.00                     | 2,909.05              | 2,863.20              | 2,909.05              | 89.39            | 58.19         | 88.49                 | 38.29                               | -2,207.05    | 737.15                 | 589.72                  | 147.43                    | 5.000              |           |
| 5,650.00                     | 2,908.08              | 2,862.23              | 2,908.08              | 90.95            | 58.17         | 88.36                 | 38.29                               | -2,207.05    | 778.00                 | 629.04                  | 148.95                    | 5.223              |           |
| 5,700.00                     | 2,907.11              | 2,861.26              | 2,907.11              | 92.50            | 58.15         | 88.24                 | 38.29                               | -2,207.05    | 819.86                 | 669.38                  | 150.48                    | 5.448              |           |
| 5,750.00                     | 2,906.14              | 2,860.29              | 2,906.14              | 94.06            | 58.13         | 88.11                 | 38.29                               | -2,207.05    | 862.59                 | 710.58                  | 152.01                    | 5.675              |           |
| 5,800.00                     | 2,905.17              | 2,859.32              | 2,905.17              | 95.62            | 58.11         | 87.98                 | 38.29                               | -2,207.05    | 906.06                 | 752.52                  | 153.53                    | 5.901              |           |
| 5,850.00                     | 2,904.20              | 2,858.35              | 2,904.20              | 97.18            | 58.09         | 87.85                 | 38.29                               | -2,207.05    | 950.17                 | 795.11                  | 155.06                    | 6.128              |           |
| 5,900.00                     | 2,903.24              | 2,857.39              | 2,903.24              | 98.74            | 58.06         | 87.73                 | 38.29                               | -2,207.05    | 994.84                 | 838.26                  | 156.58                    | 6.353              |           |
| 5,950.00                     | 2,902.27              | 2,856.42              | 2,902.27              | 100.30           | 58.04         | 87.60                 | 38.29                               | -2,207.05    | 1,039.99               | 881.89                  | 158.11                    | 6.578              |           |
| 6,000.00                     | 2,901.30              | 2,855.45              | 2,901.30              | 101.86           | 58.02         | 87.47                 | 38.29                               | -2,207.05    | 1,085.57               | 925.94                  | 159.63                    | 6.801              |           |
| 6,050.00                     | 2,900.33              | 2,854.48              | 2,900.33              | 103.42           | 58.00         | 87.35                 | 38.29                               | -2,207.05    | 1,131.52               | 970.37                  | 161.15                    | 7.021              |           |
| 6,100.00                     | 2,899.36              | 2,853.51              | 2,899.36              | 104.98           | 57.98         | 87.22                 | 38.29                               | -2,207.05    | 1,177.80               | 1,015.13                | 162.67                    | 7.240              |           |
| 6,150.00                     | 2,898.39              | 2,852.54              | 2,898.39              | 106.54           | 57.96         | 87.09                 | 38.29                               | -2,207.05    | 1,224.37               | 1,060.18                | 164.19                    | 7.457              |           |
| 6,200.00                     | 2,897.42              | 2,851.57              | 2,897.42              | 108.10           | 57.94         | 86.97                 | 38.29                               | -2,207.05    | 1,271.20               | 1,105.49                | 165.71                    | 7.671              |           |
| 6,250.00                     | 2,896.45              | 2,850.61              | 2,896.45              | 109.66           | 57.92         | 86.84                 | 38.29                               | -2,207.05    | 1,318.26               | 1,151.03                | 167.23                    | 7.883              |           |
| 6,300.00                     | 2,895.49              | 2,849.64              | 2,895.49              | 111.23           | 57.90         | 86.71                 | 38.29                               | -2,207.05    | 1,365.53               | 1,196.78                | 168.75                    | 8.092              |           |
| 6,350.00                     | 2,894.52              | 2,848.67              | 2,894.52              | 112.79           | 57.88         | 86.59                 | 38.29                               | -2,207.05    | 1,412.99               | 1,242.72                | 170.27                    | 8.299              |           |
| 6,400.00                     | 2,893.55              | 2,847.70              | 2,893.55              | 114.35           | 57.86         | 86.46                 | 38.29                               | -2,207.05    | 1,460.62               | 1,288.84                | 171.78                    | 8.503              |           |
| 6,450.00                     | 2,892.58              | 2,846.73              | 2,892.58              | 115.91           | 57.84         | 86.33                 | 38.29                               | -2,207.05    | 1,508.40               | 1,335.10                | 173.30                    | 8.704              |           |
| 6,500.00                     | 2,891.61              | 2,845.76              | 2,891.61              | 117.48           | 57.82         | 86.21                 | 38.29                               | -2,207.05    | 1,556.32               | 1,381.51                | 174.81                    | 8.903              |           |
| 6,550.00                     | 2,890.64              | 2,844.79              | 2,890.64              | 119.04           | 57.80         | 86.08                 | 38.29                               | -2,207.05    | 1,604.37               | 1,428.04                | 176.33                    | 9.099              |           |
| 6,600.00                     | 2,889.67              | 2,843.82              | 2,889.67              | 120.60           | 57.78         | 85.95                 | 38.29                               | -2,207.05    | 1,652.53               | 1,474.69                | 177.84                    | 9.292              |           |
| 6,650.00                     | 2,888.70              | 2,842.86              | 2,888.70              | 122.17           | 57.76         | 85.83                 | 38.29                               | -2,207.05    | 1,700.79               | 1,521.44                | 179.35                    | 9.483              |           |
| 6,700.00                     | 2,887.74              | 2,841.89              | 2,887.74              | 123.73           | 57.73         | 85.70                 | 38.29                               | -2,207.05    | 1,749.16               | 1,568.29                | 180.86                    | 9.671              |           |
| 6,750.00                     | 2,886.77              | 2,840.92              | 2,886.77              | 125.29           | 57.71         | 85.57                 | 38.29                               | -2,207.05    | 1,797.61               | 1,615.24                | 182.37                    | 9.857              |           |
| 6,800.00                     | 2,885.80              | 2,839.95              | 2,885.80              | 126.86           | 57.69         | 85.45                 | 38.29                               | -2,207.05    | 1,846.14               | 1,662.26                | 183.88                    | 10.040             |           |
| 6,850.00                     | 2,884.83              | 2,838.98              | 2,884.83              | 128.42           | 57.67         | 85.32                 | 38.29                               | -2,207.05    | 1,894.75               | 1,709.37                | 185.39                    | 10.221             |           |
| 6,900.00                     | 2,883.86              | 2,838.01              | 2,883.86              | 129.99           | 57.65         | 85.19                 | 38.29                               | -2,207.05    | 1,943.43               | 1,756.54                | 186.89                    | 10.399             |           |
| 6,950.00                     | 2,882.89              | 2,837.04              | 2,882.89              | 131.55           | 57.63         | 85.07                 | 38.29                               | -2,207.05    | 1,992.18               | 1,803.78                | 188.40                    | 10.574             |           |
| 7,000.00                     | 2,881.92              | 2,836.07              | 2,881.92              | 133.12           | 57.61         | 84.94                 | 38.29                               | -2,207.05    | 2,040.98               | 1,851.09                | 189.90                    | 10.748             |           |
| 7,050.00                     | 2,880.95              | 2,835.11              | 2,880.95              | 134.68           | 57.59         | 84.82                 | 38.29                               | -2,207.05    | 2,089.84               | 1,898.44                | 191.40                    | 10.919             |           |
| 7,100.00                     | 2,879.99              | 2,834.14              | 2,879.99              | 136.25           | 57.57         | 84.69                 | 38.29                               | -2,207.05    | 2,138.76               | 1,945.86                | 192.90                    | 11.087             |           |
| 7,150.00                     | 2,879.02              | 2,833.17              | 2,879.02              | 137.81           | 57.55         | 84.56                 | 38.29                               | -2,207.05    | 2,187.72               | 1,993.32                | 194.40                    | 11.254             |           |
| 7,200.00                     | 2,878.05              | 2,832.20              | 2,878.05              | 139.38           | 57.53         | 84.44                 | 38.29                               | -2,207.05    | 2,236.73               | 2,040.83                | 195.90                    | 11.418             |           |
| 7,250.00                     | 2,877.08              | 2,831.23              | 2,877.08              | 140.94           | 57.51         | 84.31                 | 38.29                               | -2,207.05    | 2,285.78               | 2,088.38                | 197.39                    | 11.580             |           |
| 7,300.00                     | 2,876.11              | 2,830.26              | 2,876.11              | 142.51           | 57.49         | 84.19                 | 38.29                               | -2,207.05    | 2,334.87               | 2,135.98                | 198.89                    | 11.740             |           |
| 7,350.00                     | 2,875.14              | 2,829.29              | 2,875.14              | 144.07           | 57.47         | 84.06                 | 38.29                               | -2,207.05    | 2,384.00               | 2,183.61                | 200.38                    | 11.897             |           |
| 7,400.00                     | 2,874.17              | 2,828.32              | 2,874.17              | 145.64           | 57.45         | 83.94                 | 38.29                               | -2,207.05    | 2,433.16               | 2,231.28                | 201.87                    | 12.053             |           |
| 7,450.00                     | 2,873.20              | 2,827.36              | 2,873.20              | 147.21           | 57.43         | 83.81                 | 38.29                               | -2,207.05    | 2,482.36               | 2,278.99                | 203.37                    | 12.206             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| <b>Offset Design</b> LIVE OAK 27-28 STATE COM - OFFSET: SOUTH BOYD 27 05 - Wellbore #1 - Wellbore #1 |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | <b>Offset Site Error:</b> | 0.00 usft |
|------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|---------------------------|-----------|
| Survey Program: 390-INC-ONLY                                                                         |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | <b>Offset Well Error:</b> | 0.00 usft |
| Reference                                                                                            | Offset                | Semi Major Axis       |                       | Distance         |               |                       |                                     |              |                        |                         |                           |                           |           |
| Measured Depth (usft)                                                                                | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor         | Warning   |
| 7,500.00                                                                                             | 2,872.24              | 2,826.39              | 2,872.24              | 148.77           | 57.41         | 83.68                 | 38.29                               | -2,207.05    | 2,531.58               | 2,326.73                | 204.85                    | 12.358                    |           |
| 7,550.00                                                                                             | 2,871.27              | 2,825.42              | 2,871.27              | 150.34           | 57.38         | 83.56                 | 38.29                               | -2,207.05    | 2,580.84               | 2,374.50                | 206.34                    | 12.508                    |           |
| 7,600.00                                                                                             | 2,870.30              | 2,824.45              | 2,870.30              | 151.90           | 57.36         | 83.43                 | 38.29                               | -2,207.05    | 2,630.12               | 2,422.29                | 207.83                    | 12.655                    |           |
| 7,650.00                                                                                             | 2,869.33              | 2,823.48              | 2,869.33              | 153.47           | 57.34         | 83.31                 | 38.29                               | -2,207.05    | 2,679.43               | 2,470.12                | 209.31                    | 12.801                    |           |
| 7,700.00                                                                                             | 2,868.36              | 2,822.51              | 2,868.36              | 155.04           | 57.32         | 83.18                 | 38.29                               | -2,207.05    | 2,728.77               | 2,517.97                | 210.80                    | 12.945                    |           |
| 7,750.00                                                                                             | 2,867.39              | 2,821.54              | 2,867.39              | 156.60           | 57.30         | 83.06                 | 38.29                               | -2,207.05    | 2,778.13               | 2,565.85                | 212.28                    | 13.087                    |           |
| 7,800.00                                                                                             | 2,866.42              | 2,820.57              | 2,866.42              | 158.17           | 57.28         | 82.93                 | 38.29                               | -2,207.05    | 2,827.51               | 2,613.75                | 213.76                    | 13.228                    |           |
| 7,850.00                                                                                             | 2,865.45              | 2,819.61              | 2,865.45              | 159.74           | 57.26         | 82.81                 | 38.29                               | -2,207.05    | 2,876.91               | 2,661.67                | 215.24                    | 13.366                    |           |
| 7,900.00                                                                                             | 2,864.49              | 2,818.64              | 2,864.49              | 161.30           | 57.24         | 82.68                 | 38.29                               | -2,207.05    | 2,926.33               | 2,709.62                | 216.71                    | 13.503                    |           |
| 7,950.00                                                                                             | 2,863.52              | 2,817.67              | 2,863.52              | 162.87           | 57.22         | 82.56                 | 38.29                               | -2,207.05    | 2,975.77               | 2,757.58                | 218.19                    | 13.639                    |           |

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





## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 372-INC-ONLY |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    | Offset                | Semi Major Axis       |                       |                  |               |                      | Distance                            |              |                        |                         |                           | Warning            |           |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Tooface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 0.00                         | 0.00                  | 0.00                  | 64.00                 | 0.00             | 0.00          | -45.90               | 1,187.52                            | -1,225.29    | 1,707.52               |                         |                           |                    |           |
| 50.00                        | 50.00                 | 0.00                  | 64.00                 | 0.05             | 0.00          | -45.90               | 1,187.52                            | -1,225.29    | 1,706.38               | 1,706.33                | 0.05                      | N/A                |           |
| 73.15                        | 73.15                 | 9.15                  | 73.15                 | 0.10             | 0.08          | -45.90               | 1,187.52                            | -1,225.29    | 1,706.32               | 1,706.15                | 0.18                      | 9,726.259          |           |
| 100.00                       | 100.00                | 36.00                 | 100.00                | 0.14             | 0.32          | -45.90               | 1,187.52                            | -1,225.29    | 1,706.32               | 1,705.86                | 0.46                      | 3,718.375          |           |
| 150.00                       | 150.00                | 86.00                 | 150.00                | 0.32             | 0.75          | -45.90               | 1,187.52                            | -1,225.29    | 1,706.32               | 1,705.25                | 1.08                      | 1,585.330          |           |
| 200.00                       | 200.00                | 136.00                | 200.00                | 0.50             | 1.19          | -45.90               | 1,187.52                            | -1,225.29    | 1,706.32               | 1,704.63                | 1.69                      | 1,007.422          |           |
| 250.00                       | 250.00                | 186.00                | 250.00                | 0.68             | 1.63          | -45.90               | 1,187.52                            | -1,225.29    | 1,706.32               | 1,704.01                | 2.31                      | 738.290            |           |
| 300.00                       | 300.00                | 236.00                | 300.00                | 0.86             | 2.07          | -45.90               | 1,187.52                            | -1,225.29    | 1,706.32               | 1,703.39                | 2.93                      | 582.638            |           |
| 350.00                       | 350.00                | 286.00                | 350.00                | 1.03             | 2.51          | 167.59               | 1,187.52                            | -1,225.29    | 1,706.75               | 1,703.20                | 3.54                      | 481.454            |           |
| 400.00                       | 399.98                | 335.98                | 399.98                | 1.21             | 2.94          | 167.59               | 1,187.52                            | -1,225.29    | 1,708.03               | 1,703.86                | 4.17                      | 409.533            |           |
| 450.00                       | 449.93                | 385.93                | 449.93                | 1.38             | 3.52          | 167.60               | 1,187.52                            | -1,225.29    | 1,710.16               | 1,705.21                | 4.94                      | 345.934            |           |
| 500.00                       | 499.84                | 435.84                | 499.84                | 1.55             | 4.47          | 167.60               | 1,187.52                            | -1,225.29    | 1,713.14               | 1,707.07                | 6.07                      | 282.204            |           |
| 550.00                       | 549.68                | 485.68                | 549.68                | 1.73             | 5.41          | 167.62               | 1,187.52                            | -1,225.29    | 1,716.97               | 1,709.77                | 7.20                      | 238.511            |           |
| 600.00                       | 599.45                | 535.45                | 599.45                | 1.91             | 6.36          | 167.63               | 1,187.52                            | -1,225.29    | 1,721.65               | 1,713.34                | 8.32                      | 207.003            |           |
| 650.00                       | 649.13                | 585.13                | 649.13                | 2.10             | 7.30          | 167.65               | 1,187.52                            | -1,225.29    | 1,727.18               | 1,717.75                | 9.43                      | 183.088            |           |
| 700.00                       | 698.70                | 634.70                | 698.70                | 2.30             | 8.24          | 167.67               | 1,187.52                            | -1,225.29    | 1,733.56               | 1,723.02                | 10.54                     | 164.497            |           |
| 750.00                       | 748.15                | 684.15                | 748.15                | 2.51             | 9.17          | 167.69               | 1,187.52                            | -1,225.29    | 1,740.79               | 1,729.15                | 11.64                     | 149.563            |           |
| 800.00                       | 797.47                | 733.47                | 797.47                | 2.72             | 10.11         | 167.71               | 1,187.52                            | -1,225.29    | 1,748.85               | 1,736.13                | 12.73                     | 137.430            |           |
| 850.00                       | 846.63                | 782.63                | 846.63                | 2.94             | 11.04         | 167.73               | 1,187.52                            | -1,225.29    | 1,757.76               | 1,743.96                | 13.81                     | 127.316            |           |
| 900.00                       | 895.62                | 831.62                | 895.62                | 3.17             | 11.97         | 167.76               | 1,187.52                            | -1,225.29    | 1,767.51               | 1,752.64                | 14.87                     | 118.870            |           |
| 950.00                       | 944.44                | 880.44                | 944.44                | 3.42             | 12.89         | 167.79               | 1,187.52                            | -1,225.29    | 1,778.10               | 1,762.18                | 15.92                     | 111.661            |           |
| 1,000.00                     | 993.06                | 929.06                | 993.06                | 3.67             | 13.81         | 167.82               | 1,187.52                            | -1,225.29    | 1,789.52               | 1,772.56                | 16.96                     | 105.500            |           |
| 1,050.00                     | 1,041.46              | 977.46                | 1,041.46              | 3.93             | 14.73         | 167.85               | 1,187.52                            | -1,225.29    | 1,801.78               | 1,783.79                | 17.99                     | 100.169            |           |
| 1,051.64                     | 1,043.05              | 979.05                | 1,043.05              | 3.94             | 14.76         | 167.85               | 1,187.52                            | -1,225.29    | 1,802.20               | 1,784.17                | 18.02                     | 100.007            |           |
| 1,100.00                     | 1,089.75              | 1,025.75              | 1,089.75              | 4.21             | 15.65         | 167.93               | 1,187.52                            | -1,225.29    | 1,814.48               | 1,795.43                | 19.05                     | 95.258             |           |
| 1,150.00                     | 1,138.04              | 1,074.04              | 1,138.04              | 4.49             | 16.56         | 168.02               | 1,187.52                            | -1,225.29    | 1,827.18               | 1,807.07                | 20.11                     | 90.843             |           |
| 1,200.00                     | 1,186.33              | 1,122.33              | 1,186.33              | 4.77             | 17.48         | 168.10               | 1,187.52                            | -1,225.29    | 1,839.89               | 1,818.70                | 21.18                     | 86.865             |           |
| 1,250.00                     | 1,234.62              | 1,170.62              | 1,234.62              | 5.06             | 18.39         | 168.18               | 1,187.52                            | -1,225.29    | 1,852.60               | 1,830.34                | 22.25                     | 83.257             |           |
| 1,300.00                     | 1,282.91              | 1,218.91              | 1,282.91              | 5.34             | 19.31         | 168.27               | 1,187.52                            | -1,225.29    | 1,865.31               | 1,841.98                | 23.33                     | 79.967             |           |
| 1,350.00                     | 1,331.20              | 1,267.20              | 1,331.20              | 5.64             | 20.23         | 168.35               | 1,187.52                            | -1,225.29    | 1,878.03               | 1,853.62                | 24.40                     | 76.956             |           |
| 1,400.00                     | 1,379.48              | 1,315.48              | 1,379.48              | 5.93             | 21.15         | 168.43               | 1,187.52                            | -1,225.29    | 1,890.75               | 1,865.26                | 25.48                     | 74.199             |           |
| 1,450.00                     | 1,427.77              | 1,363.78              | 1,427.77              | 6.22             | 22.07         | 168.50               | 1,187.52                            | -1,225.29    | 1,903.47               | 1,876.91                | 26.56                     | 71.660             |           |
| 1,500.00                     | 1,476.06              | 1,412.06              | 1,476.06              | 6.51             | 22.98         | 168.58               | 1,187.52                            | -1,225.29    | 1,916.20               | 1,888.55                | 27.64                     | 69.319             |           |
| 1,550.00                     | 1,524.35              | 1,460.35              | 1,524.35              | 6.81             | 23.90         | 168.66               | 1,187.52                            | -1,225.29    | 1,928.93               | 1,900.20                | 28.73                     | 67.150             |           |
| 1,600.00                     | 1,572.64              | 1,508.64              | 1,572.64              | 7.11             | 24.82         | 168.73               | 1,187.52                            | -1,225.29    | 1,941.66               | 1,911.85                | 29.81                     | 65.138             |           |
| 1,650.00                     | 1,620.93              | 1,556.93              | 1,620.93              | 7.41             | 25.74         | 168.81               | 1,187.52                            | -1,225.29    | 1,954.40               | 1,923.51                | 30.89                     | 63.265             |           |
| 1,700.00                     | 1,669.22              | 1,605.22              | 1,669.22              | 7.70             | 26.66         | 168.88               | 1,187.52                            | -1,225.29    | 1,967.14               | 1,935.16                | 31.98                     | 61.519             |           |
| 1,750.00                     | 1,717.51              | 1,653.53              | 1,717.51              | 8.00             | 27.58         | 168.95               | 1,187.52                            | -1,225.29    | 1,979.88               | 1,946.82                | 33.06                     | 59.885             |           |
| 1,800.00                     | 1,765.79              | 1,701.82              | 1,765.79              | 8.30             | 28.50         | 169.02               | 1,187.52                            | -1,225.29    | 1,992.63               | 1,958.48                | 34.15                     | 58.354             |           |
| 1,850.00                     | 1,814.08              | 1,750.11              | 1,814.08              | 8.60             | 29.42         | 169.09               | 1,187.52                            | -1,225.29    | 2,005.37               | 1,970.14                | 35.23                     | 56.917             |           |
| 1,900.00                     | 1,862.37              | 1,798.40              | 1,862.37              | 8.90             | 30.34         | 169.16               | 1,187.52                            | -1,225.29    | 2,018.13               | 1,981.81                | 36.32                     | 55.566             |           |
| 1,950.00                     | 1,910.66              | 1,846.69              | 1,910.66              | 9.20             | 31.26         | 169.23               | 1,187.52                            | -1,225.29    | 2,030.88               | 1,993.47                | 37.41                     | 54.292             |           |
| 1,989.45                     | 1,948.77              | 1,884.79              | 1,948.77              | 9.44             | 31.98         | 169.29               | 1,187.52                            | -1,225.29    | 2,040.95               | 2,002.68                | 38.26                     | 53.338             |           |
| 2,000.00                     | 1,958.96              | 1,894.99              | 1,958.96              | 9.51             | 32.18         | 166.99               | 1,187.52                            | -1,225.29    | 2,043.59               | 2,005.01                | 38.58                     | 52.974             |           |
| 2,050.00                     | 2,007.55              | 1,943.58              | 2,007.55              | 9.79             | 33.10         | 154.23               | 1,187.52                            | -1,225.29    | 2,054.72               | 2,014.69                | 40.03                     | 51.333             |           |
| 2,100.00                     | 2,056.43              | 1,992.46              | 2,056.43              | 10.04            | 34.03         | 138.52               | 1,187.52                            | -1,225.29    | 2,063.55               | 2,022.14                | 41.41                     | 49.831             |           |
| 2,150.00                     | 2,105.41              | 2,041.44              | 2,105.41              | 10.27            | 34.96         | 121.45               | 1,187.52                            | -1,225.29    | 2,070.07               | 2,027.35                | 42.71                     | 48.466             |           |
| 2,200.00                     | 2,154.31              | 2,090.34              | 2,154.31              | 10.47            | 35.89         | 105.76               | 1,187.52                            | -1,225.29    | 2,074.25               | 2,030.33                | 43.92                     | 47.227             |           |
| 2,250.00                     | 2,202.95              | 2,138.97              | 2,202.95              | 10.64            | 36.82         | 93.26                | 1,187.52                            | -1,225.29    | 2,076.13               | 2,031.10                | 45.03                     | 46.105             |           |
| 2,300.00                     | 2,251.14              | 2,187.16              | 2,251.14              | 10.79            | 37.81         | 84.05                | 1,187.52                            | -1,225.29    | 2,075.72               | 2,029.60                | 46.12                     | 45.011             |           |
| 2,350.00                     | 2,298.70              | 2,234.73              | 2,298.70              | 10.93            | 38.81         | 77.50                | 1,187.52                            | -1,225.29    | 2,073.05               | 2,025.94                | 47.12                     | 43.999             |           |
| 2,400.00                     | 2,345.46              | 2,281.49              | 2,345.46              | 11.05            | 39.78         | 72.90                | 1,187.52                            | -1,225.29    | 2,068.19               | 2,020.16                | 48.03                     | 43.064             |           |

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





## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 372-INC-ONLY |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Tooface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  | Warning   |
| 2,450.00                     | 2,391.25              | 2,327.28              | 2,391.25              | 11.16            | 40.74         | 69.72                | 1,187.52                            | -1,225.29    | 2,061.18               | 2,012.32                | 48.86                     | 42.186             |           |
| 2,500.00                     | 2,435.89              | 2,371.92              | 2,435.89              | 11.26            | 41.67         | 67.58                | 1,187.52                            | -1,225.29    | 2,052.12               | 2,002.48                | 49.64                     | 41.344             |           |
| 2,550.00                     | 2,479.22              | 2,415.25              | 2,479.22              | 11.35            | 42.58         | 66.25                | 1,187.52                            | -1,225.29    | 2,041.07               | 1,990.70                | 50.38                     | 40.515             |           |
| 2,600.00                     | 2,521.07              | 2,457.10              | 2,521.07              | 11.43            | 43.45         | 65.55                | 1,187.52                            | -1,225.29    | 2,028.16               | 1,977.04                | 51.12                     | 39.676             |           |
| 2,650.00                     | 2,561.29              | 2,497.31              | 2,561.29              | 11.52            | 44.29         | 65.36                | 1,187.52                            | -1,225.29    | 2,013.47               | 1,961.58                | 51.89                     | 38.805             |           |
| 2,700.00                     | 2,599.72              | 2,535.75              | 2,599.72              | 11.60            | 45.09         | 65.60                | 1,187.52                            | -1,225.29    | 1,997.14               | 1,944.42                | 52.72                     | 37.883             |           |
| 2,750.00                     | 2,636.24              | 2,572.26              | 2,636.24              | 11.70            | 45.86         | 66.21                | 1,187.52                            | -1,225.29    | 1,979.28               | 1,925.64                | 53.65                     | 36.894             |           |
| 2,800.00                     | 2,670.69              | 2,606.72              | 2,670.69              | 11.82            | 46.58         | 67.14                | 1,187.52                            | -1,225.29    | 1,960.05               | 1,905.35                | 54.70                     | 35.832             |           |
| 2,850.00                     | 2,702.95              | 2,614.00              | 2,677.95              | 12.05            | 46.73         | 67.76                | 1,187.52                            | -1,225.29    | 1,939.74               | 1,884.48                | 55.26                     | 35.101             |           |
| 2,900.00                     | 2,732.90              | 2,668.95              | 2,732.90              | 12.48            | 47.88         | 69.79                | 1,187.52                            | -1,225.29    | 1,918.02               | 1,860.77                | 57.25                     | 33.501             |           |
| 2,950.00                     | 2,760.43              | 2,696.48              | 2,760.43              | 13.15            | 48.46         | 71.44                | 1,187.52                            | -1,225.29    | 1,895.54               | 1,836.79                | 58.75                     | 32.265             |           |
| 2,975.18                     | 2,773.35              | 2,709.40              | 2,773.35              | 13.54            | 48.73         | 72.33                | 1,187.52                            | -1,225.29    | 1,883.91               | 1,824.36                | 59.55                     | 31.634             |           |
| 3,000.00                     | 2,785.76              | 2,721.81              | 2,785.76              | 13.96            | 48.99         | 72.69                | 1,187.52                            | -1,225.29    | 1,872.45               | 1,812.12                | 60.33                     | 31.036             |           |
| 3,050.00                     | 2,810.76              | 2,746.81              | 2,810.76              | 14.86            | 49.52         | 73.40                | 1,187.52                            | -1,225.29    | 1,849.91               | 1,787.95                | 61.95                     | 29.859             |           |
| 3,100.00                     | 2,835.76              | 2,771.81              | 2,835.76              | 15.79            | 50.04         | 74.12                | 1,187.52                            | -1,225.29    | 1,828.11               | 1,764.53                | 63.58                     | 28.754             |           |
| 3,150.00                     | 2,860.76              | 2,796.81              | 2,860.76              | 16.79            | 50.57         | 74.85                | 1,187.52                            | -1,225.29    | 1,807.09               | 1,741.82                | 65.27                     | 27.688             |           |
| 3,175.18                     | 2,873.35              | 2,809.40              | 2,873.35              | 17.30            | 50.84         | 75.21                | 1,187.52                            | -1,225.29    | 1,796.81               | 1,730.69                | 66.12                     | 27.177             |           |
| 3,200.00                     | 2,885.29              | 2,821.34              | 2,885.29              | 17.82            | 51.09         | 76.63                | 1,187.52                            | -1,225.29    | 1,786.75               | 1,719.64                | 67.11                     | 26.623             |           |
| 3,250.00                     | 2,906.43              | 2,842.48              | 2,906.43              | 18.94            | 51.53         | 79.46                | 1,187.52                            | -1,225.29    | 1,766.50               | 1,697.37                | 69.13                     | 25.553             |           |
| 3,300.00                     | 2,923.54              | 2,859.59              | 2,923.54              | 20.14            | 51.89         | 82.18                | 1,187.52                            | -1,225.29    | 1,746.49               | 1,675.38                | 71.11                     | 24.562             |           |
| 3,350.00                     | 2,936.49              | 2,872.54              | 2,936.49              | 21.42            | 52.16         | 84.73                | 1,187.52                            | -1,225.29    | 1,727.01               | 1,654.03                | 72.98                     | 23.664             |           |
| 3,400.00                     | 2,945.18              | 2,881.23              | 2,945.18              | 22.74            | 52.35         | 87.04                | 1,187.52                            | -1,225.29    | 1,708.32               | 1,633.61                | 74.72                     | 22.864             |           |
| 3,450.00                     | 2,949.55              | 2,885.61              | 2,949.55              | 24.11            | 52.44         | 89.09                | 1,187.52                            | -1,225.29    | 1,690.67               | 1,614.37                | 76.30                     | 22.158             |           |
| 3,486.28                     | 2,950.00              | 2,886.05              | 2,950.00              | 25.12            | 52.45         | 90.38                | 1,187.52                            | -1,225.29    | 1,678.63               | 1,601.27                | 77.36                     | 21.700             |           |
| 3,500.00                     | 2,949.73              | 2,885.79              | 2,949.73              | 25.50            | 52.44         | 90.37                | 1,187.52                            | -1,225.29    | 1,674.25               | 1,596.52                | 77.73                     | 21.538             |           |
| 3,550.00                     | 2,948.77              | 2,884.82              | 2,948.77              | 26.91            | 52.42         | 90.33                | 1,187.52                            | -1,225.29    | 1,659.18               | 1,580.04                | 79.14                     | 20.966             |           |
| 3,600.00                     | 2,947.80              | 2,883.85              | 2,947.80              | 28.33            | 52.40         | 90.30                | 1,187.52                            | -1,225.29    | 1,645.48               | 1,564.95                | 80.54                     | 20.432             |           |
| 3,650.00                     | 2,946.83              | 2,882.88              | 2,946.83              | 29.77            | 52.38         | 90.26                | 1,187.52                            | -1,225.29    | 1,633.21               | 1,551.24                | 81.97                     | 19.925             |           |
| 3,700.00                     | 2,945.86              | 2,881.91              | 2,945.86              | 31.22            | 52.36         | 90.23                | 1,187.52                            | -1,225.29    | 1,622.38               | 1,538.98                | 83.40                     | 19.454             |           |
| 3,750.00                     | 2,944.89              | 2,880.94              | 2,944.89              | 32.68            | 52.34         | 90.19                | 1,187.52                            | -1,225.29    | 1,613.02               | 1,528.18                | 84.85                     | 19.011             |           |
| 3,800.00                     | 2,943.92              | 2,879.97              | 2,943.92              | 34.15            | 52.32         | 90.16                | 1,187.52                            | -1,225.29    | 1,605.17               | 1,518.87                | 86.30                     | 18.600             |           |
| 3,850.00                     | 2,942.95              | 2,879.00              | 2,942.95              | 35.63            | 52.30         | 90.12                | 1,187.52                            | -1,225.29    | 1,598.85               | 1,511.08                | 87.77                     | 18.217             |           |
| 3,900.00                     | 2,941.98              | 2,878.04              | 2,941.98              | 37.12            | 52.28         | 90.09                | 1,187.52                            | -1,225.29    | 1,594.07               | 1,504.83                | 89.23                     | 17.864             |           |
| 3,950.00                     | 2,941.02              | 2,877.07              | 2,941.02              | 38.61            | 52.26         | 90.05                | 1,187.52                            | -1,225.29    | 1,590.84               | 1,500.13                | 90.71                     | 17.537             |           |
| 4,000.00                     | 2,940.05              | 2,876.10              | 2,940.05              | 40.11            | 52.24         | 90.02                | 1,187.52                            | -1,225.29    | 1,589.19               | 1,496.99                | 92.19                     | 17.238             |           |
| 4,027.71                     | 2,939.51              | 2,875.56              | 2,939.51              | 40.94            | 52.23         | 90.00                | 1,187.52                            | -1,225.29    | 1,588.95               | 1,495.93                | 93.02                     | 17.082 CC          |           |
| 4,050.00                     | 2,939.08              | 2,875.13              | 2,939.08              | 41.61            | 52.22         | 89.98                | 1,187.52                            | -1,225.29    | 1,589.10               | 1,495.42                | 93.68                     | 16.962             |           |
| 4,100.00                     | 2,938.11              | 2,874.16              | 2,938.11              | 43.12            | 52.20         | 89.95                | 1,187.52                            | -1,225.29    | 1,590.59               | 1,495.41                | 95.17                     | 16.712 ES          |           |
| 4,150.00                     | 2,937.14              | 2,873.19              | 2,937.14              | 44.64            | 52.18         | 89.91                | 1,187.52                            | -1,225.29    | 1,593.64               | 1,496.97                | 96.67                     | 16.485             |           |
| 4,200.00                     | 2,936.17              | 2,872.22              | 2,936.17              | 46.15            | 52.16         | 89.88                | 1,187.52                            | -1,225.29    | 1,598.26               | 1,500.09                | 98.17                     | 16.281             |           |
| 4,250.00                     | 2,935.20              | 2,871.25              | 2,935.20              | 47.67            | 52.14         | 89.84                | 1,187.52                            | -1,225.29    | 1,604.41               | 1,504.74                | 99.67                     | 16.097             |           |
| 4,300.00                     | 2,934.23              | 2,870.29              | 2,934.23              | 49.20            | 52.12         | 89.81                | 1,187.52                            | -1,225.29    | 1,612.10               | 1,510.92                | 101.18                    | 15.933             |           |
| 4,350.00                     | 2,933.27              | 2,869.32              | 2,933.27              | 50.72            | 52.09         | 89.77                | 1,187.52                            | -1,225.29    | 1,621.29               | 1,518.60                | 102.69                    | 15.788             |           |
| 4,400.00                     | 2,932.30              | 2,868.35              | 2,932.30              | 52.25            | 52.07         | 89.74                | 1,187.52                            | -1,225.29    | 1,631.96               | 1,527.76                | 104.20                    | 15.662             |           |
| 4,450.00                     | 2,931.33              | 2,867.38              | 2,931.33              | 53.79            | 52.05         | 89.71                | 1,187.52                            | -1,225.29    | 1,644.08               | 1,538.37                | 105.71                    | 15.552             |           |
| 4,500.00                     | 2,930.36              | 2,866.41              | 2,930.36              | 55.32            | 52.03         | 89.67                | 1,187.52                            | -1,225.29    | 1,657.63               | 1,550.40                | 107.23                    | 15.459             |           |
| 4,550.00                     | 2,929.39              | 2,865.44              | 2,929.39              | 56.85            | 52.01         | 89.64                | 1,187.52                            | -1,225.29    | 1,672.55               | 1,563.81                | 108.75                    | 15.380             |           |
| 4,600.00                     | 2,928.42              | 2,864.47              | 2,928.42              | 58.39            | 51.99         | 89.60                | 1,187.52                            | -1,225.29    | 1,688.83               | 1,578.56                | 110.26                    | 15.316             |           |
| 4,650.00                     | 2,927.45              | 2,863.50              | 2,927.45              | 59.93            | 51.97         | 89.57                | 1,187.52                            | -1,225.29    | 1,706.41               | 1,594.63                | 111.78                    | 15.265             |           |
| 4,700.00                     | 2,926.48              | 2,862.54              | 2,926.48              | 61.47            | 51.95         | 89.53                | 1,187.52                            | -1,225.29    | 1,725.27               | 1,611.96                | 113.31                    | 15.227             |           |
| 4,750.00                     | 2,925.52              | 2,861.57              | 2,925.52              | 63.01            | 51.93         | 89.50                | 1,187.52                            | -1,225.29    | 1,745.35               | 1,630.52                | 114.83                    | 15.199             |           |
| 4,800.00                     | 2,924.55              | 2,860.60              | 2,924.55              | 64.56            | 51.91         | 89.46                | 1,187.52                            | -1,225.29    | 1,766.62               | 1,650.27                | 116.35                    | 15.183             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 372-INC-ONLY |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    |                       | Offset                |                       | Semi Major Axis  |               |                       | Distance                            |              |                        |                         |                           |                    | Warning   |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 4,850.00                     | 2,923.58              | 2,859.63              | 2,923.58              | 66.10            | 51.89         | 89.43                 | 1,187.52                            | -1,225.29    | 1,789.04               | 1,671.16                | 117.88                    | 15.177 SF          |           |
| 4,900.00                     | 2,922.61              | 2,858.66              | 2,922.61              | 67.65            | 51.87         | 89.39                 | 1,187.52                            | -1,225.29    | 1,812.55               | 1,693.15                | 119.41                    | 15.180             |           |
| 4,950.00                     | 2,921.64              | 2,857.69              | 2,921.64              | 69.20            | 51.85         | 89.36                 | 1,187.52                            | -1,225.29    | 1,837.13               | 1,716.20                | 120.93                    | 15.191             |           |
| 5,000.00                     | 2,920.67              | 2,856.72              | 2,920.67              | 70.75            | 51.83         | 89.32                 | 1,187.52                            | -1,225.29    | 1,862.72               | 1,740.26                | 122.46                    | 15.211             |           |
| 5,050.00                     | 2,919.70              | 2,855.75              | 2,919.70              | 72.30            | 51.81         | 89.29                 | 1,187.52                            | -1,225.29    | 1,889.29               | 1,765.30                | 123.99                    | 15.237             |           |
| 5,100.00                     | 2,918.73              | 2,854.79              | 2,918.73              | 73.85            | 51.79         | 89.25                 | 1,187.52                            | -1,225.29    | 1,916.80               | 1,791.28                | 125.52                    | 15.271             |           |
| 5,150.00                     | 2,917.77              | 2,853.82              | 2,917.77              | 75.40            | 51.77         | 89.22                 | 1,187.52                            | -1,225.29    | 1,945.20               | 1,818.15                | 127.05                    | 15.310             |           |
| 5,200.00                     | 2,916.80              | 2,852.85              | 2,916.80              | 76.95            | 51.75         | 89.18                 | 1,187.52                            | -1,225.29    | 1,974.46               | 1,845.88                | 128.58                    | 15.355             |           |
| 5,250.00                     | 2,915.83              | 2,851.88              | 2,915.83              | 78.50            | 51.73         | 89.15                 | 1,187.52                            | -1,225.29    | 2,004.54               | 1,874.42                | 130.12                    | 15.406             |           |
| 5,300.00                     | 2,914.86              | 2,850.91              | 2,914.86              | 80.05            | 51.71         | 89.11                 | 1,187.52                            | -1,225.29    | 2,035.40               | 1,903.75                | 131.65                    | 15.461             |           |
| 5,350.00                     | 2,913.89              | 2,849.94              | 2,913.89              | 81.61            | 51.69         | 89.08                 | 1,187.52                            | -1,225.29    | 2,067.01               | 1,933.83                | 133.18                    | 15.520             |           |
| 5,400.00                     | 2,912.92              | 2,848.97              | 2,912.92              | 83.16            | 51.67         | 89.04                 | 1,187.52                            | -1,225.29    | 2,099.34               | 1,964.62                | 134.72                    | 15.583             |           |
| 5,450.00                     | 2,911.95              | 2,848.01              | 2,911.95              | 84.72            | 51.65         | 89.01                 | 1,187.52                            | -1,225.29    | 2,132.35               | 1,996.10                | 136.25                    | 15.650             |           |
| 5,500.00                     | 2,910.99              | 2,847.04              | 2,910.99              | 86.27            | 51.63         | 88.97                 | 1,187.52                            | -1,225.29    | 2,166.00               | 2,028.22                | 137.78                    | 15.720             |           |
| 5,550.00                     | 2,910.02              | 2,846.07              | 2,910.02              | 87.83            | 51.61         | 88.94                 | 1,187.52                            | -1,225.29    | 2,200.28               | 2,060.96                | 139.32                    | 15.793             |           |
| 5,600.00                     | 2,909.05              | 2,845.10              | 2,909.05              | 89.39            | 51.59         | 88.90                 | 1,187.52                            | -1,225.29    | 2,235.15               | 2,094.30                | 140.86                    | 15.868             |           |
| 5,650.00                     | 2,908.08              | 2,844.13              | 2,908.08              | 90.95            | 51.57         | 88.87                 | 1,187.52                            | -1,225.29    | 2,270.59               | 2,128.20                | 142.39                    | 15.946             |           |
| 5,700.00                     | 2,907.11              | 2,843.16              | 2,907.11              | 92.50            | 51.54         | 88.83                 | 1,187.52                            | -1,225.29    | 2,306.57               | 2,162.64                | 143.93                    | 16.026             |           |
| 5,750.00                     | 2,906.14              | 2,842.19              | 2,906.14              | 94.06            | 51.52         | 88.80                 | 1,187.52                            | -1,225.29    | 2,343.06               | 2,197.59                | 145.46                    | 16.107             |           |
| 5,800.00                     | 2,905.17              | 2,841.22              | 2,905.17              | 95.62            | 51.50         | 88.76                 | 1,187.52                            | -1,225.29    | 2,380.04               | 2,233.04                | 147.00                    | 16.191             |           |
| 5,850.00                     | 2,904.20              | 2,840.26              | 2,904.20              | 97.18            | 51.48         | 88.73                 | 1,187.52                            | -1,225.29    | 2,417.49               | 2,268.95                | 148.54                    | 16.275             |           |
| 5,900.00                     | 2,903.24              | 2,839.29              | 2,903.24              | 98.74            | 51.46         | 88.69                 | 1,187.52                            | -1,225.29    | 2,455.38               | 2,305.31                | 150.08                    | 16.361             |           |
| 5,950.00                     | 2,902.27              | 2,838.32              | 2,902.27              | 100.30           | 51.44         | 88.66                 | 1,187.52                            | -1,225.29    | 2,493.70               | 2,342.09                | 151.61                    | 16.448             |           |
| 6,000.00                     | 2,901.30              | 2,837.35              | 2,901.30              | 101.86           | 51.42         | 88.62                 | 1,187.52                            | -1,225.29    | 2,532.43               | 2,379.28                | 153.15                    | 16.535             |           |
| 6,050.00                     | 2,900.33              | 2,836.38              | 2,900.33              | 103.42           | 51.40         | 88.59                 | 1,187.52                            | -1,225.29    | 2,571.55               | 2,416.86                | 154.69                    | 16.624             |           |
| 6,100.00                     | 2,899.36              | 2,835.41              | 2,899.36              | 104.98           | 51.38         | 88.55                 | 1,187.52                            | -1,225.29    | 2,611.04               | 2,454.81                | 156.23                    | 16.713             |           |
| 6,150.00                     | 2,898.39              | 2,834.44              | 2,898.39              | 106.54           | 51.36         | 88.52                 | 1,187.52                            | -1,225.29    | 2,650.88               | 2,493.11                | 157.77                    | 16.803             |           |
| 6,200.00                     | 2,897.42              | 2,833.47              | 2,897.42              | 108.10           | 51.34         | 88.48                 | 1,187.52                            | -1,225.29    | 2,691.06               | 2,531.76                | 159.30                    | 16.893             |           |
| 6,250.00                     | 2,896.45              | 2,832.51              | 2,896.45              | 109.66           | 51.32         | 88.45                 | 1,187.52                            | -1,225.29    | 2,731.57               | 2,570.72                | 160.84                    | 16.983             |           |
| 6,300.00                     | 2,895.49              | 2,831.54              | 2,895.49              | 111.23           | 51.30         | 88.41                 | 1,187.52                            | -1,225.29    | 2,772.38               | 2,610.00                | 162.38                    | 17.073             |           |
| 6,350.00                     | 2,894.52              | 2,830.57              | 2,894.52              | 112.79           | 51.28         | 88.38                 | 1,187.52                            | -1,225.29    | 2,813.49               | 2,649.57                | 163.92                    | 17.164             |           |
| 6,400.00                     | 2,893.55              | 2,829.60              | 2,893.55              | 114.35           | 51.26         | 88.34                 | 1,187.52                            | -1,225.29    | 2,854.89               | 2,689.43                | 165.46                    | 17.254             |           |
| 6,450.00                     | 2,892.58              | 2,828.63              | 2,892.58              | 115.91           | 51.24         | 88.31                 | 1,187.52                            | -1,225.29    | 2,896.56               | 2,729.56                | 167.00                    | 17.345             |           |
| 6,500.00                     | 2,891.61              | 2,827.66              | 2,891.61              | 117.48           | 51.22         | 88.27                 | 1,187.52                            | -1,225.29    | 2,938.48               | 2,769.94                | 168.54                    | 17.435             |           |
| 6,550.00                     | 2,890.64              | 2,826.69              | 2,890.64              | 119.04           | 51.20         | 88.24                 | 1,187.52                            | -1,225.29    | 2,980.66               | 2,810.58                | 170.08                    | 17.525             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 100-MWD+IGRF |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    |                       | Offset                |                       | Semi Major Axis  |               |                       | Distance                            |              |                        |                         |                           |                    | Warning   |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 0.00                         | 0.00                  | 0.00                  | 36.00                 | 0.00             | 0.00          | -80.81                | 197.09                              | -1,217.89    | 1,234.26               |                         |                           |                    |           |
| 50.00                        | 50.00                 | 14.40                 | 50.40                 | 0.05             | 0.02          | -80.81                | 197.09                              | -1,217.89    | 1,233.73               | 1,233.66                | 0.08                      | N/A                |           |
| 100.00                       | 100.00                | 65.83                 | 101.83                | 0.14             | 0.10          | -80.81                | 197.08                              | -1,217.84    | 1,233.69               | 1,233.44                | 0.24                      | 5,083.727          |           |
| 150.00                       | 150.00                | 115.99                | 151.99                | 0.32             | 0.21          | -80.81                | 197.05                              | -1,217.75    | 1,233.59               | 1,233.06                | 0.53                      | 2,332.001          |           |
| 192.24                       | 192.24                | 156.24                | 192.24                | 0.47             | 0.35          | -80.81                | 197.02                              | -1,217.72    | 1,233.56               | 1,232.74                | 0.82                      | 1,503.862          |           |
| 200.00                       | 200.00                | 163.63                | 199.63                | 0.50             | 0.37          | -80.81                | 197.02                              | -1,217.72    | 1,233.56               | 1,232.69                | 0.87                      | 1,411.797          |           |
| 250.00                       | 250.00                | 212.32                | 248.32                | 0.68             | 0.54          | -80.81                | 196.98                              | -1,217.79    | 1,233.62               | 1,232.39                | 1.22                      | 1,009.005          |           |
| 300.00                       | 300.00                | 264.36                | 300.36                | 0.86             | 0.72          | -80.82                | 196.92                              | -1,217.83    | 1,233.64               | 1,232.06                | 1.58                      | 778.530            |           |
| 301.42                       | 301.42                | 265.83                | 301.83                | 0.87             | 0.73          | 132.67                | 196.91                              | -1,217.83    | 1,233.64               | 1,232.05                | 1.59                      | 773.606            |           |
| 350.00                       | 350.00                | 315.58                | 351.58                | 1.03             | 0.90          | 132.67                | 196.84                              | -1,217.79    | 1,233.89               | 1,231.95                | 1.94                      | 636.573            |           |
| 400.00                       | 399.98                | 365.03                | 401.03                | 1.21             | 1.08          | 132.70                | 196.80                              | -1,217.74    | 1,234.72               | 1,232.44                | 2.29                      | 539.733            |           |
| 450.00                       | 449.93                | 414.45                | 450.45                | 1.38             | 1.25          | 132.76                | 196.83                              | -1,217.70    | 1,236.17               | 1,233.53                | 2.64                      | 468.768            |           |
| 500.00                       | 499.84                | 463.82                | 499.82                | 1.55             | 1.42          | 132.83                | 196.87                              | -1,217.69    | 1,238.24               | 1,235.25                | 2.98                      | 414.851            |           |
| 550.00                       | 549.68                | 513.58                | 549.58                | 1.73             | 1.59          | 132.93                | 196.88                              | -1,217.69    | 1,240.92               | 1,237.58                | 3.34                      | 371.292            |           |
| 600.00                       | 599.45                | 564.46                | 600.46                | 1.91             | 1.77          | 133.04                | 196.87                              | -1,217.68    | 1,244.18               | 1,240.47                | 3.70                      | 335.993            |           |
| 650.00                       | 649.13                | 615.01                | 651.01                | 2.10             | 1.95          | 133.18                | 196.84                              | -1,217.62    | 1,248.00               | 1,243.93                | 4.07                      | 306.540            |           |
| 700.00                       | 698.70                | 664.87                | 700.87                | 2.30             | 2.12          | 133.33                | 196.85                              | -1,217.53    | 1,252.41               | 1,247.97                | 4.44                      | 282.328            |           |
| 750.00                       | 748.15                | 714.34                | 750.34                | 2.51             | 2.29          | 133.51                | 196.93                              | -1,217.43    | 1,257.43               | 1,252.62                | 4.81                      | 261.481            |           |
| 800.00                       | 797.47                | 763.09                | 799.08                | 2.72             | 2.47          | 133.70                | 197.03                              | -1,217.34    | 1,263.09               | 1,257.91                | 5.18                      | 243.987            |           |
| 850.00                       | 846.63                | 812.32                | 848.32                | 2.94             | 2.64          | 133.91                | 197.15                              | -1,217.26    | 1,269.39               | 1,263.83                | 5.56                      | 228.396            |           |
| 900.00                       | 895.62                | 863.46                | 899.46                | 3.17             | 2.82          | 134.15                | 197.30                              | -1,217.11    | 1,276.28               | 1,270.34                | 5.94                      | 214.786            |           |
| 950.00                       | 944.44                | 913.47                | 949.47                | 3.42             | 3.00          | 134.40                | 197.49                              | -1,216.89    | 1,283.74               | 1,277.41                | 6.33                      | 202.669            |           |
| 1,000.00                     | 993.06                | 960.89                | 996.89                | 3.67             | 3.16          | 134.65                | 197.76                              | -1,216.66    | 1,291.87               | 1,285.16                | 6.72                      | 192.355            |           |
| 1,050.00                     | 1,041.46              | 1,008.50              | 1,044.49              | 3.93             | 3.33          | 134.92                | 198.12                              | -1,216.46    | 1,300.71               | 1,293.60                | 7.11                      | 183.027            |           |
| 1,051.64                     | 1,043.05              | 1,010.13              | 1,046.13              | 3.94             | 3.34          | 134.93                | 198.14                              | -1,216.45    | 1,301.01               | 1,293.89                | 7.12                      | 182.735            |           |
| 1,100.00                     | 1,089.75              | 1,058.10              | 1,094.10              | 4.21             | 3.51          | 135.35                | 198.62                              | -1,216.21    | 1,309.92               | 1,302.41                | 7.50                      | 174.540            |           |
| 1,150.00                     | 1,138.04              | 1,107.32              | 1,143.30              | 4.49             | 3.68          | 135.77                | 199.24                              | -1,215.87    | 1,319.15               | 1,311.24                | 7.91                      | 166.871            |           |
| 1,200.00                     | 1,186.33              | 1,154.58              | 1,190.56              | 4.77             | 3.85          | 136.18                | 199.85                              | -1,215.55    | 1,328.45               | 1,320.15                | 8.30                      | 160.076            |           |
| 1,250.00                     | 1,234.62              | 1,201.86              | 1,237.84              | 5.06             | 4.02          | 136.58                | 200.44                              | -1,215.27    | 1,337.85               | 1,329.15                | 8.70                      | 153.854            |           |
| 1,300.00                     | 1,282.91              | 1,249.53              | 1,285.51              | 5.34             | 4.19          | 136.97                | 201.05                              | -1,215.01    | 1,347.34               | 1,338.25                | 9.09                      | 148.172            |           |
| 1,350.00                     | 1,331.20              | 1,297.18              | 1,333.15              | 5.64             | 4.36          | 137.36                | 201.71                              | -1,214.75    | 1,356.92               | 1,347.43                | 9.49                      | 142.950            |           |
| 1,400.00                     | 1,379.48              | 1,346.45              | 1,382.41              | 5.93             | 4.53          | 137.77                | 202.41                              | -1,214.48    | 1,366.56               | 1,356.66                | 9.90                      | 138.092            |           |
| 1,450.00                     | 1,427.77              | 1,395.85              | 1,431.81              | 6.22             | 4.71          | 138.16                | 203.06                              | -1,214.17    | 1,376.21               | 1,365.91                | 10.30                     | 133.595            |           |
| 1,500.00                     | 1,476.06              | 1,444.28              | 1,480.24              | 6.51             | 4.88          | 138.54                | 203.69                              | -1,213.84    | 1,385.90               | 1,375.20                | 10.70                     | 129.490            |           |
| 1,550.00                     | 1,524.35              | 1,492.62              | 1,528.56              | 6.81             | 5.05          | 138.92                | 204.36                              | -1,213.49    | 1,395.64               | 1,384.54                | 11.10                     | 125.684            |           |
| 1,600.00                     | 1,572.64              | 1,541.35              | 1,577.29              | 7.11             | 5.23          | 139.30                | 205.07                              | -1,213.12    | 1,405.43               | 1,393.93                | 11.51                     | 122.143            |           |
| 1,650.00                     | 1,620.93              | 1,590.16              | 1,626.09              | 7.41             | 5.40          | 139.67                | 205.80                              | -1,212.72    | 1,415.26               | 1,403.36                | 11.91                     | 118.840            |           |
| 1,700.00                     | 1,669.22              | 1,638.83              | 1,674.75              | 7.70             | 5.58          | 140.04                | 206.53                              | -1,212.30    | 1,425.13               | 1,412.82                | 12.31                     | 115.769            |           |
| 1,750.00                     | 1,717.51              | 1,687.47              | 1,723.38              | 8.00             | 5.75          | 140.40                | 207.24                              | -1,211.87    | 1,435.04               | 1,422.33                | 12.71                     | 112.895            |           |
| 1,800.00                     | 1,765.79              | 1,735.90              | 1,771.81              | 8.30             | 5.92          | 140.76                | 207.95                              | -1,211.43    | 1,444.99               | 1,431.88                | 13.11                     | 110.214            |           |
| 1,850.00                     | 1,814.08              | 1,784.26              | 1,820.16              | 8.60             | 6.10          | 141.11                | 208.69                              | -1,210.97    | 1,454.99               | 1,441.48                | 13.51                     | 107.699            |           |
| 1,900.00                     | 1,862.37              | 1,831.84              | 1,867.74              | 8.90             | 6.27          | 141.46                | 209.46                              | -1,210.51    | 1,465.05               | 1,451.14                | 13.91                     | 105.359            |           |
| 1,950.00                     | 1,910.66              | 1,879.05              | 1,914.94              | 9.20             | 6.44          | 141.79                | 210.24                              | -1,210.07    | 1,475.19               | 1,460.89                | 14.30                     | 103.164            |           |
| 1,989.45                     | 1,948.77              | 1,917.05              | 1,952.92              | 9.44             | 6.57          | 142.06                | 210.87                              | -1,209.74    | 1,483.24               | 1,468.63                | 14.61                     | 101.509            |           |
| 2,000.00                     | 1,958.96              | 1,927.47              | 1,963.35              | 9.51             | 6.61          | 139.91                | 211.04                              | -1,209.65    | 1,485.33               | 1,470.62                | 14.71                     | 100.954            |           |
| 2,050.00                     | 2,007.55              | 1,977.15              | 2,013.01              | 9.79             | 6.79          | 127.79                | 211.85                              | -1,209.18    | 1,493.48               | 1,478.32                | 15.17                     | 98.478             |           |
| 2,100.00                     | 2,056.43              | 2,026.40              | 2,062.26              | 10.04            | 6.96          | 112.61                | 212.63                              | -1,208.69    | 1,498.71               | 1,483.14                | 15.57                     | 96.269             |           |
| 2,150.00                     | 2,105.41              | 2,075.13              | 2,110.98              | 10.27            | 7.14          | 95.98                 | 213.41                              | -1,208.21    | 1,501.04               | 1,485.12                | 15.91                     | 94.322             |           |
| 2,200.00                     | 2,154.31              | 2,123.67              | 2,159.51              | 10.47            | 7.31          | 80.65                 | 214.19                              | -1,207.72    | 1,500.48               | 1,484.28                | 16.20                     | 92.614             |           |
| 2,250.00                     | 2,202.95              | 2,171.85              | 2,207.69              | 10.64            | 7.49          | 68.42                 | 214.95                              | -1,207.25    | 1,497.06               | 1,480.63                | 16.43                     | 91.124             |           |
| 2,300.00                     | 2,251.14              | 2,219.12              | 2,254.94              | 10.79            | 7.66          | 59.42                 | 215.69                              | -1,206.80    | 1,490.81               | 1,474.22                | 16.60                     | 89.833             |           |
| 2,350.00                     | 2,298.70              | 2,265.10              | 2,300.91              | 10.93            | 7.82          | 53.01                 | 216.41                              | -1,206.41    | 1,481.80               | 1,465.10                | 16.70                     | 88.718             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 100-MWD+IGRF |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    |                       | Offset                |                       | Semi Major Axis  |               |                       | Distance                            |              |                        |                         |                           |                    | Warning   |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 2,400.00                     | 2,345.46              | 2,310.53              | 2,346.34              | 11.05            | 7.98          | 48.51                 | 217.13                              | -1,206.05    | 1,470.08               | 1,453.32                | 16.76                     | 87.730             |           |
| 2,450.00                     | 2,391.25              | 2,355.77              | 2,391.57              | 11.16            | 8.14          | 45.39                 | 217.84                              | -1,205.73    | 1,455.69               | 1,438.92                | 16.77                     | 86.821             |           |
| 2,500.00                     | 2,435.89              | 2,400.00              | 2,435.80              | 11.26            | 8.30          | 43.29                 | 218.50                              | -1,205.43    | 1,438.70               | 1,421.96                | 16.74                     | 85.952             |           |
| 2,550.00                     | 2,479.22              | 2,443.23              | 2,479.02              | 11.35            | 8.46          | 41.99                 | 219.14                              | -1,205.14    | 1,419.19               | 1,402.51                | 16.69                     | 85.056             |           |
| 2,600.00                     | 2,521.07              | 2,485.09              | 2,520.88              | 11.43            | 8.61          | 41.33                 | 219.74                              | -1,204.86    | 1,397.25               | 1,380.63                | 16.62                     | 84.054             |           |
| 2,650.00                     | 2,561.29              | 2,525.11              | 2,560.89              | 11.52            | 8.75          | 41.21                 | 220.31                              | -1,204.59    | 1,372.98               | 1,356.41                | 16.57                     | 82.844             |           |
| 2,700.00                     | 2,599.72              | 2,563.25              | 2,599.03              | 11.60            | 8.89          | 41.57                 | 220.83                              | -1,204.35    | 1,346.52               | 1,329.96                | 16.56                     | 81.296             |           |
| 2,750.00                     | 2,636.24              | 2,599.48              | 2,635.25              | 11.70            | 9.02          | 42.38                 | 221.32                              | -1,204.12    | 1,318.00               | 1,301.37                | 16.63                     | 79.262             |           |
| 2,800.00                     | 2,670.69              | 2,633.76              | 2,669.53              | 11.82            | 9.14          | 43.64                 | 221.79                              | -1,203.89    | 1,287.55               | 1,270.74                | 16.81                     | 76.595             |           |
| 2,850.00                     | 2,702.95              | 2,665.79              | 2,701.55              | 12.05            | 9.26          | 45.35                 | 222.27                              | -1,203.66    | 1,255.33               | 1,238.18                | 17.15                     | 73.195             |           |
| 2,900.00                     | 2,732.90              | 2,695.45              | 2,731.21              | 12.48            | 9.36          | 47.50                 | 222.73                              | -1,203.43    | 1,221.49               | 1,203.80                | 17.69                     | 69.041             |           |
| 2,950.00                     | 2,760.43              | 2,722.64              | 2,758.40              | 13.15            | 9.46          | 50.11                 | 223.17                              | -1,203.21    | 1,186.23               | 1,167.75                | 18.47                     | 64.223             |           |
| 2,975.18                     | 2,773.35              | 2,735.39              | 2,771.14              | 13.54            | 9.51          | 51.60                 | 223.38                              | -1,203.11    | 1,167.98               | 1,149.02                | 18.96                     | 61.604             |           |
| 3,000.00                     | 2,785.76              | 2,747.63              | 2,783.38              | 13.96            | 9.55          | 52.21                 | 223.57                              | -1,203.01    | 1,149.90               | 1,130.42                | 19.48                     | 59.019             |           |
| 3,050.00                     | 2,810.76              | 2,772.29              | 2,808.04              | 14.86            | 9.64          | 53.48                 | 223.97                              | -1,202.81    | 1,113.87               | 1,093.27                | 20.60                     | 54.071             |           |
| 3,100.00                     | 2,835.76              | 2,796.95              | 2,832.70              | 15.79            | 9.73          | 54.79                 | 224.37                              | -1,202.61    | 1,078.38               | 1,056.64                | 21.74                     | 49.594             |           |
| 3,150.00                     | 2,860.76              | 2,821.69              | 2,857.43              | 16.79            | 9.82          | 56.14                 | 224.77                              | -1,202.42    | 1,043.50               | 1,020.54                | 22.96                     | 45.446             |           |
| 3,175.18                     | 2,873.35              | 2,834.15              | 2,869.89              | 17.30            | 9.86          | 56.84                 | 224.97                              | -1,202.31    | 1,026.19               | 1,002.60                | 23.58                     | 43.511             |           |
| 3,200.00                     | 2,885.29              | 2,845.96              | 2,881.70              | 17.82            | 9.90          | 59.54                 | 225.15                              | -1,202.22    | 1,009.08               | 984.65                  | 24.44                     | 41.290             |           |
| 3,250.00                     | 2,906.43              | 2,866.81              | 2,902.54              | 18.94            | 9.98          | 65.25                 | 225.48                              | -1,202.05    | 974.07                 | 947.73                  | 26.34                     | 36.975             |           |
| 3,300.00                     | 2,923.54              | 2,883.60              | 2,919.33              | 20.14            | 10.04         | 71.14                 | 225.75                              | -1,201.91    | 938.70                 | 910.32                  | 28.37                     | 33.083             |           |
| 3,350.00                     | 2,936.49              | 2,896.21              | 2,931.93              | 21.42            | 10.08         | 76.96                 | 225.94                              | -1,201.81    | 903.42                 | 873.04                  | 30.38                     | 29.739             |           |
| 3,400.00                     | 2,945.18              | 2,904.57              | 2,940.29              | 22.74            | 10.11         | 82.43                 | 226.07                              | -1,201.74    | 868.73                 | 836.49                  | 32.25                     | 26.940             |           |
| 3,450.00                     | 2,949.55              | 2,908.58              | 2,944.31              | 24.11            | 10.13         | 87.31                 | 226.14                              | -1,201.71    | 835.11                 | 801.18                  | 33.93                     | 24.615             |           |
| 3,486.28                     | 2,950.00              | 2,908.73              | 2,944.46              | 25.12            | 10.13         | 90.40                 | 226.14                              | -1,201.71    | 811.64                 | 776.61                  | 35.03                     | 23.169             |           |
| 3,500.00                     | 2,949.73              | 2,908.35              | 2,944.08              | 25.50            | 10.13         | 90.37                 | 226.13                              | -1,201.71    | 803.01                 | 767.60                  | 35.41                     | 22.675             |           |
| 3,550.00                     | 2,948.77              | 2,906.96              | 2,942.69              | 26.91            | 10.12         | 90.24                 | 226.11                              | -1,201.72    | 772.81                 | 735.99                  | 36.83                     | 20.984             |           |
| 3,600.00                     | 2,947.80              | 2,905.57              | 2,941.30              | 28.33            | 10.12         | 90.12                 | 226.09                              | -1,201.73    | 744.75                 | 706.50                  | 38.24                     | 19.474             |           |
| 3,650.00                     | 2,946.83              | 2,904.18              | 2,939.90              | 29.77            | 10.11         | 89.99                 | 226.07                              | -1,201.75    | 719.06                 | 679.38                  | 39.69                     | 18.118             |           |
| 3,700.00                     | 2,945.86              | 2,902.79              | 2,938.51              | 31.22            | 10.11         | 89.86                 | 226.05                              | -1,201.76    | 696.02                 | 654.89                  | 41.13                     | 16.923             |           |
| 3,750.00                     | 2,944.89              | 2,901.40              | 2,937.12              | 32.68            | 10.10         | 89.74                 | 226.03                              | -1,201.77    | 675.90                 | 633.31                  | 42.59                     | 15.868             |           |
| 3,800.00                     | 2,943.92              | 2,900.01              | 2,935.74              | 34.15            | 10.10         | 89.61                 | 226.00                              | -1,201.78    | 658.96                 | 614.91                  | 44.06                     | 14.957             |           |
| 3,850.00                     | 2,942.95              | 2,898.63              | 2,934.36              | 35.63            | 10.09         | 89.48                 | 225.98                              | -1,201.79    | 645.46                 | 599.92                  | 45.54                     | 14.174             |           |
| 3,900.00                     | 2,941.98              | 2,897.25              | 2,932.98              | 37.12            | 10.09         | 89.36                 | 225.96                              | -1,201.80    | 635.61                 | 588.59                  | 47.02                     | 13.518             |           |
| 3,950.00                     | 2,941.02              | 2,895.87              | 2,931.60              | 38.61            | 10.08         | 89.23                 | 225.94                              | -1,201.81    | 629.59                 | 581.08                  | 48.51                     | 12.978             |           |
| 4,000.00                     | 2,940.05              | 2,894.49              | 2,930.22              | 40.11            | 10.08         | 89.10                 | 225.92                              | -1,201.82    | 627.50                 | 577.50                  | 50.00                     | 12.549             |           |
| 4,001.26                     | 2,940.02              | 2,894.46              | 2,930.19              | 40.15            | 10.08         | 89.10                 | 225.92                              | -1,201.82    | 627.50                 | 577.46                  | 50.04                     | 12.539 CC, ES      |           |
| 4,050.00                     | 2,939.08              | 2,893.12              | 2,928.84              | 41.61            | 10.07         | 88.98                 | 225.90                              | -1,201.84    | 629.39                 | 577.88                  | 51.51                     | 12.220             |           |
| 4,100.00                     | 2,938.11              | 2,891.74              | 2,927.47              | 43.12            | 10.07         | 88.85                 | 225.87                              | -1,201.85    | 635.22                 | 582.21                  | 53.01                     | 11.983             |           |
| 4,150.00                     | 2,937.14              | 2,890.36              | 2,926.09              | 44.64            | 10.06         | 88.73                 | 225.85                              | -1,201.86    | 644.88                 | 590.36                  | 54.52                     | 11.829             |           |
| 4,200.00                     | 2,936.17              | 2,888.98              | 2,924.71              | 46.15            | 10.06         | 88.60                 | 225.83                              | -1,201.87    | 658.20                 | 602.17                  | 56.03                     | 11.748             |           |
| 4,250.00                     | 2,935.20              | 2,887.60              | 2,923.33              | 47.67            | 10.05         | 88.48                 | 225.81                              | -1,201.88    | 674.97                 | 617.43                  | 57.54                     | 11.730 SF          |           |
| 4,300.00                     | 2,934.23              | 2,886.23              | 2,921.96              | 49.20            | 10.05         | 88.35                 | 225.79                              | -1,201.89    | 694.94                 | 635.88                  | 59.06                     | 11.767             |           |
| 4,350.00                     | 2,933.27              | 2,884.85              | 2,920.58              | 50.72            | 10.04         | 88.22                 | 225.77                              | -1,201.90    | 717.83                 | 657.25                  | 60.58                     | 11.850             |           |
| 4,400.00                     | 2,932.30              | 2,883.47              | 2,919.20              | 52.25            | 10.04         | 88.10                 | 225.75                              | -1,201.91    | 743.39                 | 681.29                  | 62.10                     | 11.971             |           |
| 4,450.00                     | 2,931.33              | 2,882.10              | 2,917.83              | 53.79            | 10.03         | 87.97                 | 225.72                              | -1,201.93    | 771.34                 | 707.72                  | 63.62                     | 12.124             |           |
| 4,500.00                     | 2,930.36              | 2,880.72              | 2,916.45              | 55.32            | 10.03         | 87.85                 | 225.70                              | -1,201.94    | 801.44                 | 736.30                  | 65.14                     | 12.302             |           |
| 4,550.00                     | 2,929.39              | 2,879.34              | 2,915.08              | 56.85            | 10.02         | 87.72                 | 225.68                              | -1,201.95    | 833.45                 | 766.78                  | 66.67                     | 12.501             |           |
| 4,600.00                     | 2,928.42              | 2,877.97              | 2,913.70              | 58.39            | 10.02         | 87.60                 | 225.66                              | -1,201.96    | 867.16                 | 798.97                  | 68.20                     | 12.716             |           |
| 4,650.00                     | 2,927.45              | 2,876.59              | 2,912.32              | 59.93            | 10.01         | 87.47                 | 225.64                              | -1,201.97    | 902.39                 | 832.66                  | 69.73                     | 12.942             |           |
| 4,700.00                     | 2,926.48              | 2,875.22              | 2,910.95              | 61.47            | 10.01         | 87.35                 | 225.62                              | -1,201.98    | 938.95                 | 867.69                  | 71.25                     | 13.177             |           |
| 4,750.00                     | 2,925.52              | 2,873.84              | 2,909.57              | 63.01            | 10.00         | 87.22                 | 225.59                              | -1,201.99    | 976.70                 | 903.92                  | 72.78                     | 13.419             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 100-MWD+IGRF |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    |                       | Offset                |                       | Semi Major Axis  |               |                       | Distance                            |              |                        |                         |                           |                    | Warning   |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 4,800.00                     | 2,924.55              | 2,872.47              | 2,908.20              | 64.56            | 10.00         | 87.10                 | 225.57                              | -1,202.00    | 1,015.51               | 941.19                  | 74.31                     | 13.665             |           |
| 4,850.00                     | 2,923.58              | 2,871.09              | 2,906.82              | 66.10            | 9.99          | 86.97                 | 225.55                              | -1,202.02    | 1,055.26               | 979.41                  | 75.85                     | 13.913             |           |
| 4,900.00                     | 2,922.61              | 2,869.72              | 2,905.45              | 67.65            | 9.99          | 86.84                 | 225.53                              | -1,202.03    | 1,095.85               | 1,018.47                | 77.38                     | 14.163             |           |
| 4,950.00                     | 2,921.64              | 2,868.34              | 2,904.07              | 69.20            | 9.98          | 86.72                 | 225.51                              | -1,202.04    | 1,137.18               | 1,058.27                | 78.91                     | 14.412             |           |
| 5,000.00                     | 2,920.67              | 2,866.97              | 2,902.70              | 70.75            | 9.98          | 86.59                 | 225.49                              | -1,202.05    | 1,179.19               | 1,098.75                | 80.44                     | 14.659             |           |
| 5,050.00                     | 2,919.70              | 2,865.59              | 2,901.33              | 72.30            | 9.97          | 86.47                 | 225.46                              | -1,202.06    | 1,221.79               | 1,139.82                | 81.97                     | 14.905             |           |
| 5,100.00                     | 2,918.73              | 2,864.22              | 2,899.95              | 73.85            | 9.97          | 86.34                 | 225.44                              | -1,202.07    | 1,264.94               | 1,181.44                | 83.50                     | 15.148             |           |
| 5,150.00                     | 2,917.77              | 2,862.84              | 2,898.58              | 75.40            | 9.96          | 86.22                 | 225.42                              | -1,202.08    | 1,308.57               | 1,223.54                | 85.04                     | 15.388             |           |
| 5,200.00                     | 2,916.80              | 2,861.47              | 2,897.20              | 76.95            | 9.96          | 86.09                 | 225.40                              | -1,202.09    | 1,352.64               | 1,266.08                | 86.57                     | 15.625             |           |
| 5,250.00                     | 2,915.83              | 2,860.10              | 2,895.83              | 78.50            | 9.95          | 85.97                 | 225.38                              | -1,202.10    | 1,397.11               | 1,309.01                | 88.10                     | 15.858             |           |
| 5,300.00                     | 2,914.86              | 2,858.72              | 2,894.46              | 80.05            | 9.95          | 85.84                 | 225.36                              | -1,202.12    | 1,441.94               | 1,352.31                | 89.63                     | 16.087             |           |
| 5,350.00                     | 2,913.89              | 2,857.35              | 2,893.08              | 81.61            | 9.94          | 85.72                 | 225.33                              | -1,202.13    | 1,487.10               | 1,395.94                | 91.16                     | 16.312             |           |
| 5,400.00                     | 2,912.92              | 2,855.97              | 2,891.71              | 83.16            | 9.94          | 85.59                 | 225.31                              | -1,202.14    | 1,532.56               | 1,439.87                | 92.69                     | 16.533             |           |
| 5,450.00                     | 2,911.95              | 2,854.60              | 2,890.34              | 84.72            | 9.93          | 85.47                 | 225.29                              | -1,202.15    | 1,578.29               | 1,484.07                | 94.23                     | 16.750             |           |
| 5,500.00                     | 2,910.99              | 2,853.23              | 2,888.96              | 86.27            | 9.93          | 85.34                 | 225.27                              | -1,202.16    | 1,624.28               | 1,528.52                | 95.76                     | 16.963             |           |
| 5,550.00                     | 2,910.02              | 2,851.86              | 2,887.59              | 87.83            | 9.92          | 85.22                 | 225.25                              | -1,202.17    | 1,670.49               | 1,573.20                | 97.29                     | 17.171             |           |
| 5,600.00                     | 2,909.05              | 2,850.48              | 2,886.22              | 89.39            | 9.92          | 85.09                 | 225.22                              | -1,202.18    | 1,716.91               | 1,618.10                | 98.82                     | 17.375             |           |
| 5,650.00                     | 2,908.08              | 2,849.11              | 2,884.85              | 90.95            | 9.91          | 84.97                 | 225.20                              | -1,202.19    | 1,763.53               | 1,663.18                | 100.35                    | 17.574             |           |
| 5,700.00                     | 2,907.11              | 2,847.74              | 2,883.48              | 92.50            | 9.91          | 84.85                 | 225.18                              | -1,202.20    | 1,810.33               | 1,708.45                | 101.87                    | 17.770             |           |
| 5,750.00                     | 2,906.14              | 2,846.37              | 2,882.10              | 94.06            | 9.90          | 84.72                 | 225.16                              | -1,202.22    | 1,857.29               | 1,753.89                | 103.40                    | 17.962             |           |
| 5,800.00                     | 2,905.17              | 2,844.99              | 2,880.73              | 95.62            | 9.90          | 84.60                 | 225.14                              | -1,202.23    | 1,904.41               | 1,799.48                | 104.93                    | 18.149             |           |
| 5,850.00                     | 2,904.20              | 2,843.62              | 2,879.36              | 97.18            | 9.89          | 84.47                 | 225.12                              | -1,202.24    | 1,951.67               | 1,845.21                | 106.46                    | 18.333             |           |
| 5,900.00                     | 2,903.24              | 2,842.25              | 2,877.99              | 98.74            | 9.89          | 84.35                 | 225.09                              | -1,202.25    | 1,999.06               | 1,891.08                | 107.98                    | 18.513             |           |
| 5,950.00                     | 2,902.27              | 2,840.88              | 2,876.62              | 100.30           | 9.88          | 84.22                 | 225.07                              | -1,202.26    | 2,046.57               | 1,937.07                | 109.51                    | 18.689             |           |
| 6,000.00                     | 2,901.30              | 2,839.51              | 2,875.25              | 101.86           | 9.88          | 84.10                 | 225.05                              | -1,202.27    | 2,094.20               | 1,983.17                | 111.03                    | 18.861             |           |
| 6,050.00                     | 2,900.33              | 2,838.14              | 2,873.88              | 103.42           | 9.87          | 83.97                 | 225.03                              | -1,202.28    | 2,141.94               | 2,029.38                | 112.56                    | 19.030             |           |
| 6,100.00                     | 2,899.36              | 2,836.77              | 2,872.51              | 104.98           | 9.87          | 83.85                 | 225.01                              | -1,202.29    | 2,189.78               | 2,075.70                | 114.08                    | 19.195             |           |
| 6,150.00                     | 2,898.39              | 2,835.40              | 2,871.13              | 106.54           | 9.86          | 83.73                 | 224.99                              | -1,202.30    | 2,237.71               | 2,122.11                | 115.60                    | 19.357             |           |
| 6,200.00                     | 2,897.42              | 2,834.03              | 2,869.76              | 108.10           | 9.86          | 83.60                 | 224.96                              | -1,202.32    | 2,285.73               | 2,168.60                | 117.12                    | 19.516             |           |
| 6,250.00                     | 2,896.45              | 2,832.66              | 2,868.39              | 109.66           | 9.85          | 83.48                 | 224.94                              | -1,202.33    | 2,333.83               | 2,215.19                | 118.64                    | 19.671             |           |
| 6,300.00                     | 2,895.49              | 2,831.29              | 2,867.02              | 111.23           | 9.85          | 83.36                 | 224.92                              | -1,202.34    | 2,382.01               | 2,261.85                | 120.16                    | 19.823             |           |
| 6,350.00                     | 2,894.52              | 2,829.92              | 2,865.65              | 112.79           | 9.84          | 83.23                 | 224.90                              | -1,202.35    | 2,430.26               | 2,308.58                | 121.68                    | 19.972             |           |
| 6,400.00                     | 2,893.55              | 2,828.55              | 2,864.29              | 114.35           | 9.84          | 83.11                 | 224.88                              | -1,202.36    | 2,478.58               | 2,355.38                | 123.20                    | 20.119             |           |
| 6,450.00                     | 2,892.58              | 2,827.18              | 2,862.92              | 115.91           | 9.83          | 82.98                 | 224.85                              | -1,202.37    | 2,526.96               | 2,402.25                | 124.71                    | 20.262             |           |
| 6,500.00                     | 2,891.61              | 2,825.81              | 2,861.55              | 117.48           | 9.83          | 82.86                 | 224.83                              | -1,202.38    | 2,575.41               | 2,449.18                | 126.23                    | 20.403             |           |
| 6,550.00                     | 2,890.64              | 2,824.44              | 2,860.18              | 119.04           | 9.83          | 82.74                 | 224.81                              | -1,202.39    | 2,623.91               | 2,496.17                | 127.74                    | 20.540             |           |
| 6,600.00                     | 2,889.67              | 2,823.07              | 2,858.81              | 120.60           | 9.82          | 82.61                 | 224.79                              | -1,202.40    | 2,672.47               | 2,543.21                | 129.26                    | 20.676             |           |
| 6,650.00                     | 2,888.70              | 2,821.70              | 2,857.44              | 122.17           | 9.82          | 82.49                 | 224.77                              | -1,202.42    | 2,721.08               | 2,590.31                | 130.77                    | 20.808             |           |
| 6,700.00                     | 2,887.74              | 2,820.33              | 2,856.07              | 123.73           | 9.81          | 82.37                 | 224.74                              | -1,202.43    | 2,769.74               | 2,637.46                | 132.28                    | 20.939             |           |
| 6,750.00                     | 2,886.77              | 2,818.96              | 2,854.70              | 125.29           | 9.81          | 82.24                 | 224.72                              | -1,202.44    | 2,818.44               | 2,684.65                | 133.79                    | 21.066             |           |
| 6,800.00                     | 2,885.80              | 2,817.59              | 2,853.33              | 126.86           | 9.80          | 82.12                 | 224.70                              | -1,202.45    | 2,867.19               | 2,731.89                | 135.30                    | 21.192             |           |
| 6,850.00                     | 2,884.83              | 2,816.23              | 2,851.97              | 128.42           | 9.80          | 82.00                 | 224.68                              | -1,202.46    | 2,915.98               | 2,779.18                | 136.80                    | 21.315             |           |
| 6,900.00                     | 2,883.86              | 2,814.86              | 2,850.60              | 129.99           | 9.79          | 81.87                 | 224.66                              | -1,202.47    | 2,964.81               | 2,826.50                | 138.31                    | 21.436             |           |

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





## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 470-INC-ONLY |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    | Offset                | Semi Major Axis       |                       |                  |               |                       | Distance                            |              |                        |                         |                           |                    | Warning   |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 5,500.00                     | 2,910.99              | 2,882.05              | 2,910.99              | 86.27            | 54.73         | 91.71                 | 1,229.53                            | -5,186.99    | 2,969.30               | 2,828.40                | 140.90                    | 21.074             |           |
| 5,550.00                     | 2,910.02              | 2,881.08              | 2,910.02              | 87.83            | 54.71         | 91.67                 | 1,229.53                            | -5,186.99    | 2,927.51               | 2,785.08                | 142.43                    | 20.554             |           |
| 5,600.00                     | 2,909.05              | 2,880.11              | 2,909.05              | 89.39            | 54.69         | 91.64                 | 1,229.53                            | -5,186.99    | 2,885.98               | 2,742.01                | 143.97                    | 20.046             |           |
| 5,650.00                     | 2,908.08              | 2,879.14              | 2,908.08              | 90.95            | 54.66         | 91.60                 | 1,229.53                            | -5,186.99    | 2,844.72               | 2,699.22                | 145.50                    | 19.551             |           |
| 5,700.00                     | 2,907.11              | 2,878.17              | 2,907.11              | 92.50            | 54.64         | 91.57                 | 1,229.53                            | -5,186.99    | 2,803.74               | 2,656.71                | 147.04                    | 19.068             |           |
| 5,750.00                     | 2,906.14              | 2,877.21              | 2,906.14              | 94.06            | 54.61         | 91.54                 | 1,229.53                            | -5,186.99    | 2,763.07               | 2,614.49                | 148.58                    | 18.597             |           |
| 5,800.00                     | 2,905.17              | 2,876.24              | 2,905.17              | 95.62            | 54.59         | 91.50                 | 1,229.53                            | -5,186.99    | 2,722.70               | 2,572.59                | 150.11                    | 18.138             |           |
| 5,850.00                     | 2,904.20              | 2,875.27              | 2,904.20              | 97.18            | 54.57         | 91.47                 | 1,229.53                            | -5,186.99    | 2,682.66               | 2,531.01                | 151.65                    | 17.690             |           |
| 5,900.00                     | 2,903.24              | 2,874.30              | 2,903.24              | 98.74            | 54.54         | 91.43                 | 1,229.53                            | -5,186.99    | 2,642.95               | 2,489.76                | 153.19                    | 17.253             |           |
| 5,950.00                     | 2,902.27              | 2,873.33              | 2,902.27              | 100.30           | 54.52         | 91.40                 | 1,229.53                            | -5,186.99    | 2,603.60               | 2,448.88                | 154.73                    | 16.827             |           |
| 6,000.00                     | 2,901.30              | 2,872.36              | 2,901.30              | 101.86           | 54.50         | 91.37                 | 1,229.53                            | -5,186.99    | 2,564.63               | 2,408.36                | 156.27                    | 16.412             |           |
| 6,050.00                     | 2,900.33              | 2,871.39              | 2,900.33              | 103.42           | 54.47         | 91.33                 | 1,229.53                            | -5,186.99    | 2,526.03               | 2,368.23                | 157.81                    | 16.007             |           |
| 6,100.00                     | 2,899.36              | 2,870.42              | 2,899.36              | 104.98           | 54.45         | 91.30                 | 1,229.53                            | -5,186.99    | 2,487.85               | 2,328.51                | 159.34                    | 15.613             |           |
| 6,150.00                     | 2,898.39              | 2,869.46              | 2,898.39              | 106.54           | 54.43         | 91.26                 | 1,229.53                            | -5,186.99    | 2,450.09               | 2,289.21                | 160.88                    | 15.229             |           |
| 6,200.00                     | 2,897.42              | 2,868.49              | 2,897.42              | 108.10           | 54.40         | 91.23                 | 1,229.53                            | -5,186.99    | 2,412.77               | 2,250.35                | 162.42                    | 14.855             |           |
| 6,250.00                     | 2,896.45              | 2,867.52              | 2,896.45              | 109.66           | 54.38         | 91.19                 | 1,229.53                            | -5,186.99    | 2,375.92               | 2,211.96                | 163.96                    | 14.491             |           |
| 6,300.00                     | 2,895.49              | 2,866.55              | 2,895.49              | 111.23           | 54.35         | 91.16                 | 1,229.53                            | -5,186.99    | 2,339.56               | 2,174.06                | 165.50                    | 14.136             |           |
| 6,350.00                     | 2,894.52              | 2,865.58              | 2,894.52              | 112.79           | 54.33         | 91.13                 | 1,229.53                            | -5,186.99    | 2,303.71               | 2,136.67                | 167.04                    | 13.791             |           |
| 6,400.00                     | 2,893.55              | 2,864.61              | 2,893.55              | 114.35           | 54.31         | 91.09                 | 1,229.53                            | -5,186.99    | 2,268.40               | 2,099.81                | 168.58                    | 13.456             |           |
| 6,450.00                     | 2,892.58              | 2,863.64              | 2,892.58              | 115.91           | 54.28         | 91.06                 | 1,229.53                            | -5,186.99    | 2,233.64               | 2,063.52                | 170.13                    | 13.129             |           |
| 6,500.00                     | 2,891.61              | 2,862.67              | 2,891.61              | 117.48           | 54.26         | 91.02                 | 1,229.53                            | -5,186.99    | 2,199.47               | 2,027.81                | 171.67                    | 12.812             |           |
| 6,550.00                     | 2,890.64              | 2,861.71              | 2,890.64              | 119.04           | 54.24         | 90.99                 | 1,229.53                            | -5,186.99    | 2,165.92               | 1,992.71                | 173.21                    | 12.505             |           |
| 6,600.00                     | 2,889.67              | 2,860.74              | 2,889.67              | 120.60           | 54.21         | 90.95                 | 1,229.53                            | -5,186.99    | 2,133.01               | 1,958.26                | 174.75                    | 12.206             |           |
| 6,650.00                     | 2,888.70              | 2,859.77              | 2,888.70              | 122.17           | 54.19         | 90.92                 | 1,229.53                            | -5,186.99    | 2,100.78               | 1,924.49                | 176.29                    | 11.917             |           |
| 6,700.00                     | 2,887.74              | 2,858.80              | 2,887.74              | 123.73           | 54.17         | 90.89                 | 1,229.53                            | -5,186.99    | 2,069.25               | 1,891.42                | 177.83                    | 11.636             |           |
| 6,750.00                     | 2,886.77              | 2,857.83              | 2,886.77              | 125.29           | 54.14         | 90.85                 | 1,229.53                            | -5,186.99    | 2,038.46               | 1,859.08                | 179.37                    | 11.364             |           |
| 6,800.00                     | 2,885.80              | 2,856.86              | 2,885.80              | 126.86           | 54.12         | 90.82                 | 1,229.53                            | -5,186.99    | 2,008.44               | 1,827.52                | 180.92                    | 11.102             |           |
| 6,850.00                     | 2,884.83              | 2,855.89              | 2,884.83              | 128.42           | 54.09         | 90.78                 | 1,229.53                            | -5,186.99    | 1,979.23               | 1,796.77                | 182.46                    | 10.848             |           |
| 6,900.00                     | 2,883.86              | 2,854.92              | 2,883.86              | 129.99           | 54.07         | 90.75                 | 1,229.53                            | -5,186.99    | 1,950.86               | 1,766.86                | 184.00                    | 10.602             |           |
| 6,950.00                     | 2,882.89              | 2,853.96              | 2,882.89              | 131.55           | 54.05         | 90.71                 | 1,229.53                            | -5,186.99    | 1,923.37               | 1,737.83                | 185.54                    | 10.366             |           |
| 7,000.00                     | 2,881.92              | 2,852.99              | 2,881.92              | 133.12           | 54.02         | 90.68                 | 1,229.53                            | -5,186.99    | 1,896.81               | 1,709.72                | 187.08                    | 10.139             |           |
| 7,050.00                     | 2,880.95              | 2,852.02              | 2,880.95              | 134.68           | 54.00         | 90.64                 | 1,229.53                            | -5,186.99    | 1,871.20               | 1,682.57                | 188.63                    | 9.920              |           |
| 7,100.00                     | 2,879.99              | 2,851.05              | 2,879.99              | 136.25           | 53.98         | 90.61                 | 1,229.53                            | -5,186.99    | 1,846.59               | 1,656.42                | 190.17                    | 9.710              |           |
| 7,150.00                     | 2,879.02              | 2,850.08              | 2,879.02              | 137.81           | 53.95         | 90.58                 | 1,229.53                            | -5,186.99    | 1,823.02               | 1,631.31                | 191.71                    | 9.509              |           |
| 7,200.00                     | 2,878.05              | 2,849.11              | 2,878.05              | 139.38           | 53.93         | 90.54                 | 1,229.53                            | -5,186.99    | 1,800.53               | 1,607.27                | 193.26                    | 9.317              |           |
| 7,250.00                     | 2,877.08              | 2,848.14              | 2,877.08              | 140.94           | 53.90         | 90.51                 | 1,229.53                            | -5,186.99    | 1,779.16               | 1,584.36                | 194.80                    | 9.133              |           |
| 7,300.00                     | 2,876.11              | 2,847.18              | 2,876.11              | 142.51           | 53.88         | 90.47                 | 1,229.53                            | -5,186.99    | 1,758.95               | 1,562.61                | 196.34                    | 8.959              |           |
| 7,350.00                     | 2,875.14              | 2,846.21              | 2,875.14              | 144.07           | 53.86         | 90.44                 | 1,229.53                            | -5,186.99    | 1,739.94               | 1,542.06                | 197.88                    | 8.793              |           |
| 7,400.00                     | 2,874.17              | 2,845.24              | 2,874.17              | 145.64           | 53.83         | 90.40                 | 1,229.53                            | -5,186.99    | 1,722.18               | 1,522.75                | 199.43                    | 8.636              |           |
| 7,450.00                     | 2,873.20              | 2,844.27              | 2,873.20              | 147.21           | 53.81         | 90.37                 | 1,229.53                            | -5,186.99    | 1,705.70               | 1,504.73                | 200.97                    | 8.487              |           |
| 7,500.00                     | 2,872.24              | 2,843.30              | 2,872.24              | 148.77           | 53.79         | 90.34                 | 1,229.53                            | -5,186.99    | 1,690.53               | 1,488.02                | 202.51                    | 8.348              |           |
| 7,550.00                     | 2,871.27              | 2,842.33              | 2,871.27              | 150.34           | 53.76         | 90.30                 | 1,229.53                            | -5,186.99    | 1,676.72               | 1,472.66                | 204.06                    | 8.217              |           |
| 7,600.00                     | 2,870.30              | 2,841.36              | 2,870.30              | 151.90           | 53.74         | 90.27                 | 1,229.53                            | -5,186.99    | 1,664.29               | 1,458.69                | 205.60                    | 8.095              |           |
| 7,650.00                     | 2,869.33              | 2,840.39              | 2,869.33              | 153.47           | 53.72         | 90.23                 | 1,229.53                            | -5,186.99    | 1,653.29               | 1,446.14                | 207.14                    | 7.981              |           |
| 7,700.00                     | 2,868.36              | 2,839.43              | 2,868.36              | 155.04           | 53.69         | 90.20                 | 1,229.53                            | -5,186.99    | 1,643.73               | 1,435.04                | 208.69                    | 7.877              |           |
| 7,750.00                     | 2,867.39              | 2,838.46              | 2,867.39              | 156.60           | 53.67         | 90.16                 | 1,229.53                            | -5,186.99    | 1,635.64               | 1,425.41                | 210.23                    | 7.780              |           |
| 7,800.00                     | 2,866.42              | 2,837.49              | 2,866.42              | 158.17           | 53.64         | 90.13                 | 1,229.53                            | -5,186.99    | 1,629.05               | 1,417.28                | 211.77                    | 7.692              |           |
| 7,850.00                     | 2,865.45              | 2,836.52              | 2,865.45              | 159.74           | 53.62         | 90.10                 | 1,229.53                            | -5,186.99    | 1,623.97               | 1,410.66                | 213.32                    | 7.613              |           |
| 7,900.00                     | 2,864.49              | 2,835.55              | 2,864.49              | 161.30           | 53.60         | 90.06                 | 1,229.53                            | -5,186.99    | 1,620.42               | 1,405.56                | 214.86                    | 7.542              |           |
| 7,950.00                     | 2,863.52              | 2,834.58              | 2,863.52              | 162.87           | 53.57         | 90.03                 | 1,229.53                            | -5,186.99    | 1,618.41               | 1,402.00                | 216.40                    | 7.479              |           |
| 7,990.27                     | 2,862.74              | 2,833.80              | 2,862.74              | 164.13           | 53.55         | 90.00                 | 1,229.53                            | -5,186.99    | 1,617.90               | 1,400.26                | 217.64                    | 7.434 CC           |           |
| 8,000.00                     | 2,862.55              | 2,833.61              | 2,862.55              | 164.44           | 53.55         | 89.99                 | 1,229.53                            | -5,186.99    | 1,617.93               | 1,399.99                | 217.94                    | 7.424              |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| <b>Offset Design</b> LIVE OAK 27-28 STATE COM - OFFSET: STATE 'K' 2 - Wellbore #1 - Wellbore #1 |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | <b>Offset Site Error:</b> | 0.00 usft |
|-------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|---------------------------|-----------|
| Survey Program: 470-INC-ONLY                                                                    |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | <b>Offset Well Error:</b> | 0.00 usft |
| Reference                                                                                       | Offset                | Semi Major Axis       |                       | Distance         |               |                       |                                     |              |                        |                         |                           |                           |           |
| Measured Depth (usft)                                                                           | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor         | Warning   |
| 8,050.00                                                                                        | 2,861.58              | 2,832.64              | 2,861.58              | 166.00           | 53.53         | 89.96                 | 1,229.53                            | -5,186.99    | 1,619.01               | 1,399.52                | 219.49                    | 7.376                     | ES        |
| 8,100.00                                                                                        | 2,860.61              | 2,831.68              | 2,860.61              | 167.57           | 53.50         | 89.92                 | 1,229.53                            | -5,186.99    | 1,621.62               | 1,400.59                | 221.03                    | 7.337                     |           |
| 8,150.00                                                                                        | 2,859.64              | 2,830.71              | 2,859.64              | 169.14           | 53.48         | 89.89                 | 1,229.53                            | -5,186.99    | 1,625.77               | 1,403.19                | 222.57                    | 7.304                     |           |
| 8,200.00                                                                                        | 2,858.67              | 2,829.74              | 2,858.67              | 170.71           | 53.46         | 89.86                 | 1,229.53                            | -5,186.99    | 1,631.44               | 1,407.32                | 224.12                    | 7.279                     |           |
| 8,250.00                                                                                        | 2,857.70              | 2,828.77              | 2,857.70              | 172.27           | 53.43         | 89.82                 | 1,229.53                            | -5,186.99    | 1,638.61               | 1,412.95                | 225.66                    | 7.261                     |           |
| 8,300.00                                                                                        | 2,856.74              | 2,827.80              | 2,856.74              | 173.84           | 53.41         | 89.79                 | 1,229.53                            | -5,186.99    | 1,647.27               | 1,420.07                | 227.20                    | 7.250                     |           |
| 8,350.00                                                                                        | 2,855.77              | 2,826.83              | 2,855.77              | 175.41           | 53.38         | 89.75                 | 1,229.53                            | -5,186.99    | 1,657.40               | 1,428.65                | 228.75                    | 7.246                     | SF        |
| 8,400.00                                                                                        | 2,854.80              | 2,825.86              | 2,854.80              | 176.98           | 53.36         | 89.72                 | 1,229.53                            | -5,186.99    | 1,668.96               | 1,438.67                | 230.29                    | 7.247                     |           |
| 8,450.00                                                                                        | 2,853.83              | 2,824.89              | 2,853.83              | 178.54           | 53.34         | 89.68                 | 1,229.53                            | -5,186.99    | 1,681.93               | 1,450.10                | 231.83                    | 7.255                     |           |
| 8,500.00                                                                                        | 2,852.86              | 2,823.93              | 2,852.86              | 180.11           | 53.31         | 89.65                 | 1,229.53                            | -5,186.99    | 1,696.27               | 1,462.90                | 233.38                    | 7.268                     |           |
| 8,550.00                                                                                        | 2,851.89              | 2,822.96              | 2,851.89              | 181.68           | 53.29         | 89.62                 | 1,229.53                            | -5,186.99    | 1,711.96               | 1,477.04                | 234.92                    | 7.287                     |           |
| 8,597.67                                                                                        | 2,850.97              | 2,822.03              | 2,850.97              | 183.17           | 53.27         | 89.58                 | 1,229.53                            | -5,186.99    | 1,728.12               | 1,491.73                | 236.39                    | 7.310                     |           |
| 8,600.00                                                                                        | 2,850.92              | 2,821.99              | 2,850.92              | 183.25           | 53.27         | 89.58                 | 1,229.53                            | -5,186.99    | 1,728.94               | 1,492.48                | 236.46                    | 7.312                     |           |
| 8,647.68                                                                                        | 2,850.00              | 2,821.06              | 2,850.00              | 184.74           | 53.24         | 89.55                 | 1,229.53                            | -5,186.99    | 1,746.32               | 1,508.39                | 237.93                    | 7.339                     |           |

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





## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 470-INC-ONLY |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    | Offset                | Semi Major Axis       |                       |                  |               |                      | Distance                            |              |                        |                         |                           |                    | Warning   |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Tooface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 4,300.00                     | 2,934.23              | 2,907.30              | 2,934.23              | 49.20            | 55.35         | 92.33                | 889.63                              | -4,194.12    | 2,984.61               | 2,880.23                | 104.38                    | 28.595             |           |
| 4,350.00                     | 2,933.27              | 2,906.33              | 2,933.27              | 50.72            | 55.33         | 92.29                | 889.63                              | -4,194.12    | 2,939.54               | 2,833.65                | 105.89                    | 27.762             |           |
| 4,400.00                     | 2,932.30              | 2,905.36              | 2,932.30              | 52.25            | 55.30         | 92.25                | 889.63                              | -4,194.12    | 2,894.63               | 2,787.24                | 107.39                    | 26.953             |           |
| 4,450.00                     | 2,931.33              | 2,904.39              | 2,931.33              | 53.79            | 55.28         | 92.20                | 889.63                              | -4,194.12    | 2,849.89               | 2,740.98                | 108.91                    | 26.168             |           |
| 4,500.00                     | 2,930.36              | 2,903.42              | 2,930.36              | 55.32            | 55.25         | 92.16                | 889.63                              | -4,194.12    | 2,805.32               | 2,694.91                | 110.42                    | 25.406             |           |
| 4,550.00                     | 2,929.39              | 2,902.46              | 2,929.39              | 56.85            | 55.23         | 92.12                | 889.63                              | -4,194.12    | 2,760.95               | 2,649.01                | 111.94                    | 24.665             |           |
| 4,600.00                     | 2,928.42              | 2,901.49              | 2,928.42              | 58.39            | 55.21         | 92.07                | 889.63                              | -4,194.12    | 2,716.76               | 2,603.31                | 113.45                    | 23.946             |           |
| 4,650.00                     | 2,927.45              | 2,900.52              | 2,927.45              | 59.93            | 55.18         | 92.03                | 889.63                              | -4,194.12    | 2,672.79               | 2,557.81                | 114.97                    | 23.247             |           |
| 4,700.00                     | 2,926.48              | 2,899.55              | 2,926.48              | 61.47            | 55.16         | 91.99                | 889.63                              | -4,194.12    | 2,629.02               | 2,512.53                | 116.49                    | 22.568             |           |
| 4,750.00                     | 2,925.52              | 2,898.58              | 2,925.52              | 63.01            | 55.14         | 91.94                | 889.63                              | -4,194.12    | 2,585.49               | 2,467.47                | 118.02                    | 21.908             |           |
| 4,800.00                     | 2,924.55              | 2,897.61              | 2,924.55              | 64.56            | 55.11         | 91.90                | 889.63                              | -4,194.12    | 2,542.19               | 2,422.65                | 119.54                    | 21.267             |           |
| 4,850.00                     | 2,923.58              | 2,896.64              | 2,923.58              | 66.10            | 55.09         | 91.86                | 889.63                              | -4,194.12    | 2,499.14               | 2,378.07                | 121.06                    | 20.643             |           |
| 4,900.00                     | 2,922.61              | 2,895.67              | 2,922.61              | 67.65            | 55.07         | 91.82                | 889.63                              | -4,194.12    | 2,456.35               | 2,333.76                | 122.59                    | 20.037             |           |
| 4,950.00                     | 2,921.64              | 2,894.71              | 2,921.64              | 69.20            | 55.04         | 91.77                | 889.63                              | -4,194.12    | 2,413.84               | 2,289.72                | 124.12                    | 19.448             |           |
| 5,000.00                     | 2,920.67              | 2,893.74              | 2,920.67              | 70.75            | 55.02         | 91.73                | 889.63                              | -4,194.12    | 2,371.62               | 2,245.98                | 125.64                    | 18.876             |           |
| 5,050.00                     | 2,919.70              | 2,892.77              | 2,919.70              | 72.30            | 54.99         | 91.69                | 889.63                              | -4,194.12    | 2,329.71               | 2,202.54                | 127.17                    | 18.319             |           |
| 5,100.00                     | 2,918.73              | 2,891.80              | 2,918.73              | 73.85            | 54.97         | 91.64                | 889.63                              | -4,194.12    | 2,288.12               | 2,159.42                | 128.70                    | 17.778             |           |
| 5,150.00                     | 2,917.77              | 2,890.83              | 2,917.77              | 75.40            | 54.95         | 91.60                | 889.63                              | -4,194.12    | 2,246.88               | 2,116.65                | 130.23                    | 17.253             |           |
| 5,200.00                     | 2,916.80              | 2,889.86              | 2,916.80              | 76.95            | 54.92         | 91.56                | 889.63                              | -4,194.12    | 2,206.00               | 2,074.24                | 131.76                    | 16.742             |           |
| 5,250.00                     | 2,915.83              | 2,888.89              | 2,915.83              | 78.50            | 54.90         | 91.51                | 889.63                              | -4,194.12    | 2,165.50               | 2,032.20                | 133.30                    | 16.246             |           |
| 5,300.00                     | 2,914.86              | 2,887.92              | 2,914.86              | 80.05            | 54.88         | 91.47                | 889.63                              | -4,194.12    | 2,125.40               | 1,990.58                | 134.83                    | 15.764             |           |
| 5,350.00                     | 2,913.89              | 2,886.96              | 2,913.89              | 81.61            | 54.85         | 91.43                | 889.63                              | -4,194.12    | 2,085.74               | 1,949.38                | 136.36                    | 15.296             |           |
| 5,400.00                     | 2,912.92              | 2,885.99              | 2,912.92              | 83.16            | 54.83         | 91.38                | 889.63                              | -4,194.12    | 2,046.52               | 1,908.63                | 137.89                    | 14.841             |           |
| 5,450.00                     | 2,911.95              | 2,885.02              | 2,911.95              | 84.72            | 54.81         | 91.34                | 889.63                              | -4,194.12    | 2,007.78               | 1,868.36                | 139.43                    | 14.400             |           |
| 5,500.00                     | 2,910.99              | 2,884.05              | 2,910.99              | 86.27            | 54.78         | 91.30                | 889.63                              | -4,194.12    | 1,969.55               | 1,828.59                | 140.96                    | 13.972             |           |
| 5,550.00                     | 2,910.02              | 2,883.08              | 2,910.02              | 87.83            | 54.76         | 91.25                | 889.63                              | -4,194.12    | 1,931.86               | 1,789.36                | 142.50                    | 13.557             |           |
| 5,600.00                     | 2,909.05              | 2,882.11              | 2,909.05              | 89.39            | 54.73         | 91.21                | 889.63                              | -4,194.12    | 1,894.74               | 1,750.70                | 144.03                    | 13.155             |           |
| 5,650.00                     | 2,908.08              | 2,881.14              | 2,908.08              | 90.95            | 54.71         | 91.17                | 889.63                              | -4,194.12    | 1,858.22               | 1,712.65                | 145.57                    | 12.765             |           |
| 5,700.00                     | 2,907.11              | 2,880.17              | 2,907.11              | 92.50            | 54.69         | 91.12                | 889.63                              | -4,194.12    | 1,822.34               | 1,675.23                | 147.11                    | 12.388             |           |
| 5,750.00                     | 2,906.14              | 2,879.21              | 2,906.14              | 94.06            | 54.66         | 91.08                | 889.63                              | -4,194.12    | 1,787.14               | 1,638.49                | 148.64                    | 12.023             |           |
| 5,800.00                     | 2,905.17              | 2,878.24              | 2,905.17              | 95.62            | 54.64         | 91.04                | 889.63                              | -4,194.12    | 1,752.65               | 1,602.47                | 150.18                    | 11.670             |           |
| 5,850.00                     | 2,904.20              | 2,877.27              | 2,904.20              | 97.18            | 54.62         | 90.99                | 889.63                              | -4,194.12    | 1,718.93               | 1,567.21                | 151.72                    | 11.330             |           |
| 5,900.00                     | 2,903.24              | 2,876.30              | 2,903.24              | 98.74            | 54.59         | 90.95                | 889.63                              | -4,194.12    | 1,686.02               | 1,532.76                | 153.26                    | 11.001             |           |
| 5,950.00                     | 2,902.27              | 2,875.33              | 2,902.27              | 100.30           | 54.57         | 90.91                | 889.63                              | -4,194.12    | 1,653.96               | 1,499.17                | 154.79                    | 10.685             |           |
| 6,000.00                     | 2,901.30              | 2,874.36              | 2,901.30              | 101.86           | 54.55         | 90.86                | 889.63                              | -4,194.12    | 1,622.81               | 1,466.48                | 156.33                    | 10.380             |           |
| 6,050.00                     | 2,900.33              | 2,873.39              | 2,900.33              | 103.42           | 54.52         | 90.82                | 889.63                              | -4,194.12    | 1,592.62               | 1,434.75                | 157.87                    | 10.088             |           |
| 6,100.00                     | 2,899.36              | 2,872.42              | 2,899.36              | 104.98           | 54.50         | 90.78                | 889.63                              | -4,194.12    | 1,563.45               | 1,404.04                | 159.41                    | 9.808              |           |
| 6,150.00                     | 2,898.39              | 2,871.46              | 2,898.39              | 106.54           | 54.47         | 90.73                | 889.63                              | -4,194.12    | 1,535.35               | 1,374.40                | 160.95                    | 9.539              |           |
| 6,200.00                     | 2,897.42              | 2,870.49              | 2,897.42              | 108.10           | 54.45         | 90.69                | 889.63                              | -4,194.12    | 1,508.38               | 1,345.89                | 162.49                    | 9.283              |           |
| 6,250.00                     | 2,896.45              | 2,869.52              | 2,896.45              | 109.66           | 54.43         | 90.65                | 889.63                              | -4,194.12    | 1,482.61               | 1,318.58                | 164.03                    | 9.039              |           |
| 6,300.00                     | 2,895.49              | 2,868.55              | 2,895.49              | 111.23           | 54.40         | 90.60                | 889.63                              | -4,194.12    | 1,458.10               | 1,292.53                | 165.57                    | 8.807              |           |
| 6,350.00                     | 2,894.52              | 2,867.58              | 2,894.52              | 112.79           | 54.38         | 90.56                | 889.63                              | -4,194.12    | 1,434.91               | 1,267.80                | 167.11                    | 8.587              |           |
| 6,400.00                     | 2,893.55              | 2,866.61              | 2,893.55              | 114.35           | 54.36         | 90.52                | 889.63                              | -4,194.12    | 1,413.11               | 1,244.46                | 168.65                    | 8.379              |           |
| 6,450.00                     | 2,892.58              | 2,865.64              | 2,892.58              | 115.91           | 54.33         | 90.47                | 889.63                              | -4,194.12    | 1,392.76               | 1,222.57                | 170.19                    | 8.184              |           |
| 6,500.00                     | 2,891.61              | 2,864.67              | 2,891.61              | 117.48           | 54.31         | 90.43                | 889.63                              | -4,194.12    | 1,373.93               | 1,202.20                | 171.73                    | 8.001              |           |
| 6,550.00                     | 2,890.64              | 2,863.71              | 2,890.64              | 119.04           | 54.28         | 90.39                | 889.63                              | -4,194.12    | 1,356.69               | 1,183.42                | 173.27                    | 7.830              |           |
| 6,600.00                     | 2,889.67              | 2,862.74              | 2,889.67              | 120.60           | 54.26         | 90.34                | 889.63                              | -4,194.12    | 1,341.08               | 1,166.27                | 174.81                    | 7.672              |           |
| 6,650.00                     | 2,888.70              | 2,861.77              | 2,888.70              | 122.17           | 54.24         | 90.30                | 889.63                              | -4,194.12    | 1,327.18               | 1,150.83                | 176.35                    | 7.526              |           |
| 6,700.00                     | 2,887.74              | 2,860.80              | 2,887.74              | 123.73           | 54.21         | 90.26                | 889.63                              | -4,194.12    | 1,315.03               | 1,137.14                | 177.89                    | 7.392              |           |
| 6,750.00                     | 2,886.77              | 2,859.83              | 2,886.77              | 125.29           | 54.19         | 90.21                | 889.63                              | -4,194.12    | 1,304.69               | 1,125.26                | 179.43                    | 7.271              |           |
| 6,800.00                     | 2,885.80              | 2,858.86              | 2,885.80              | 126.86           | 54.17         | 90.17                | 889.63                              | -4,194.12    | 1,296.19               | 1,115.22                | 180.97                    | 7.162              |           |
| 6,850.00                     | 2,884.83              | 2,857.89              | 2,884.83              | 128.42           | 54.14         | 90.13                | 889.63                              | -4,194.12    | 1,289.58               | 1,107.06                | 182.51                    | 7.066              |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 470-INC-ONLY |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    |                       | Offset                |                       | Semi Major Axis  |               |                      | Distance                            |              |                        |                         |                           |                    |           |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Tooface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  | Warning   |
| 6,900.00                     | 2,883.86              | 2,856.92              | 2,883.86              | 129.99           | 54.12         | 90.08                | 889.63                              | -4,194.12    | 1,284.87               | 1,100.82                | 184.05                    | 6.981              |           |
| 6,950.00                     | 2,882.89              | 2,855.96              | 2,882.89              | 131.55           | 54.10         | 90.04                | 889.63                              | -4,194.12    | 1,282.11               | 1,096.51                | 185.60                    | 6.908              |           |
| 6,996.10                     | 2,882.00              | 2,855.06              | 2,882.00              | 133.00           | 54.07         | 90.00                | 889.63                              | -4,194.12    | 1,281.28               | 1,094.26                | 187.02                    | 6.851 CC           |           |
| 7,000.00                     | 2,881.92              | 2,854.99              | 2,881.92              | 133.12           | 54.07         | 90.00                | 889.63                              | -4,194.12    | 1,281.28               | 1,094.15                | 187.14                    | 6.847              |           |
| 7,050.00                     | 2,880.95              | 2,854.02              | 2,880.95              | 134.68           | 54.05         | 89.95                | 889.63                              | -4,194.12    | 1,282.41               | 1,093.73                | 188.68                    | 6.797 ES           |           |
| 7,100.00                     | 2,879.99              | 2,853.05              | 2,879.99              | 136.25           | 54.02         | 89.91                | 889.63                              | -4,194.12    | 1,285.48               | 1,095.26                | 190.22                    | 6.758              |           |
| 7,150.00                     | 2,879.02              | 2,852.08              | 2,879.02              | 137.81           | 54.00         | 89.87                | 889.63                              | -4,194.12    | 1,290.48               | 1,098.72                | 191.76                    | 6.730              |           |
| 7,200.00                     | 2,878.05              | 2,851.11              | 2,878.05              | 139.38           | 53.98         | 89.82                | 889.63                              | -4,194.12    | 1,297.39               | 1,104.09                | 193.30                    | 6.712              |           |
| 7,250.00                     | 2,877.08              | 2,850.14              | 2,877.08              | 140.94           | 53.95         | 89.78                | 889.63                              | -4,194.12    | 1,306.18               | 1,111.34                | 194.84                    | 6.704 SF           |           |
| 7,300.00                     | 2,876.11              | 2,849.18              | 2,876.11              | 142.51           | 53.93         | 89.74                | 889.63                              | -4,194.12    | 1,316.81               | 1,120.43                | 196.38                    | 6.705              |           |
| 7,350.00                     | 2,875.14              | 2,848.21              | 2,875.14              | 144.07           | 53.91         | 89.69                | 889.63                              | -4,194.12    | 1,329.24               | 1,131.31                | 197.93                    | 6.716              |           |
| 7,400.00                     | 2,874.17              | 2,847.24              | 2,874.17              | 145.64           | 53.88         | 89.65                | 889.63                              | -4,194.12    | 1,343.41               | 1,143.94                | 199.47                    | 6.735              |           |
| 7,450.00                     | 2,873.20              | 2,846.27              | 2,873.20              | 147.21           | 53.86         | 89.61                | 889.63                              | -4,194.12    | 1,359.27               | 1,158.26                | 201.01                    | 6.762              |           |
| 7,500.00                     | 2,872.24              | 2,845.30              | 2,872.24              | 148.77           | 53.84         | 89.56                | 889.63                              | -4,194.12    | 1,376.77               | 1,174.22                | 202.55                    | 6.797              |           |
| 7,550.00                     | 2,871.27              | 2,844.33              | 2,871.27              | 150.34           | 53.81         | 89.52                | 889.63                              | -4,194.12    | 1,395.84               | 1,191.75                | 204.09                    | 6.839              |           |
| 7,600.00                     | 2,870.30              | 2,843.36              | 2,870.30              | 151.90           | 53.79         | 89.48                | 889.63                              | -4,194.12    | 1,416.41               | 1,210.78                | 205.63                    | 6.888              |           |
| 7,650.00                     | 2,869.33              | 2,842.39              | 2,869.33              | 153.47           | 53.76         | 89.43                | 889.63                              | -4,194.12    | 1,438.43               | 1,231.26                | 207.17                    | 6.943              |           |
| 7,700.00                     | 2,868.36              | 2,841.43              | 2,868.36              | 155.04           | 53.74         | 89.39                | 889.63                              | -4,194.12    | 1,461.83               | 1,253.12                | 208.71                    | 7.004              |           |
| 7,750.00                     | 2,867.39              | 2,840.46              | 2,867.39              | 156.60           | 53.72         | 89.35                | 889.63                              | -4,194.12    | 1,486.55               | 1,276.29                | 210.25                    | 7.070              |           |
| 7,800.00                     | 2,866.42              | 2,839.49              | 2,866.42              | 158.17           | 53.69         | 89.30                | 889.63                              | -4,194.12    | 1,512.51               | 1,300.71                | 211.80                    | 7.141              |           |
| 7,850.00                     | 2,865.45              | 2,838.52              | 2,865.45              | 159.74           | 53.67         | 89.26                | 889.63                              | -4,194.12    | 1,539.66               | 1,326.32                | 213.34                    | 7.217              |           |
| 7,900.00                     | 2,864.49              | 2,837.55              | 2,864.49              | 161.30           | 53.65         | 89.22                | 889.63                              | -4,194.12    | 1,567.93               | 1,353.05                | 214.88                    | 7.297              |           |
| 7,950.00                     | 2,863.52              | 2,836.58              | 2,863.52              | 162.87           | 53.62         | 89.17                | 889.63                              | -4,194.12    | 1,597.26               | 1,380.85                | 216.42                    | 7.380              |           |
| 8,000.00                     | 2,862.55              | 2,835.61              | 2,862.55              | 164.44           | 53.60         | 89.13                | 889.63                              | -4,194.12    | 1,627.61               | 1,409.65                | 217.96                    | 7.468              |           |
| 8,050.00                     | 2,861.58              | 2,834.64              | 2,861.58              | 166.00           | 53.58         | 89.09                | 889.63                              | -4,194.12    | 1,658.90               | 1,439.40                | 219.50                    | 7.558              |           |
| 8,100.00                     | 2,860.61              | 2,833.68              | 2,860.61              | 167.57           | 53.55         | 89.04                | 889.63                              | -4,194.12    | 1,691.10               | 1,470.06                | 221.04                    | 7.651              |           |
| 8,150.00                     | 2,859.64              | 2,832.71              | 2,859.64              | 169.14           | 53.53         | 89.00                | 889.63                              | -4,194.12    | 1,724.14               | 1,501.56                | 222.58                    | 7.746              |           |
| 8,200.00                     | 2,858.67              | 2,831.74              | 2,858.67              | 170.71           | 53.50         | 88.96                | 889.63                              | -4,194.12    | 1,757.98               | 1,533.86                | 224.12                    | 7.844              |           |
| 8,250.00                     | 2,857.70              | 2,830.77              | 2,857.70              | 172.27           | 53.48         | 88.91                | 889.63                              | -4,194.12    | 1,792.58               | 1,566.92                | 225.66                    | 7.944              |           |
| 8,300.00                     | 2,856.74              | 2,829.80              | 2,856.74              | 173.84           | 53.46         | 88.87                | 889.63                              | -4,194.12    | 1,827.89               | 1,600.69                | 227.20                    | 8.045              |           |
| 8,350.00                     | 2,855.77              | 2,828.83              | 2,855.77              | 175.41           | 53.43         | 88.83                | 889.63                              | -4,194.12    | 1,863.87               | 1,635.13                | 228.74                    | 8.148              |           |
| 8,400.00                     | 2,854.80              | 2,827.86              | 2,854.80              | 176.98           | 53.41         | 88.78                | 889.63                              | -4,194.12    | 1,900.49               | 1,670.21                | 230.28                    | 8.253              |           |
| 8,450.00                     | 2,853.83              | 2,826.89              | 2,853.83              | 178.54           | 53.39         | 88.74                | 889.63                              | -4,194.12    | 1,937.71               | 1,705.88                | 231.82                    | 8.359              |           |
| 8,500.00                     | 2,852.86              | 2,825.93              | 2,852.86              | 180.11           | 53.36         | 88.70                | 889.63                              | -4,194.12    | 1,975.48               | 1,742.12                | 233.36                    | 8.465              |           |
| 8,550.00                     | 2,851.89              | 2,824.96              | 2,851.89              | 181.68           | 53.34         | 88.65                | 889.63                              | -4,194.12    | 2,013.79               | 1,778.89                | 234.90                    | 8.573              |           |
| 8,597.67                     | 2,850.97              | 2,824.03              | 2,850.97              | 183.17           | 53.32         | 88.61                | 889.63                              | -4,194.12    | 2,050.79               | 1,814.42                | 236.37                    | 8.676              |           |
| 8,600.00                     | 2,850.92              | 2,823.99              | 2,850.92              | 183.25           | 53.32         | 88.61                | 889.63                              | -4,194.12    | 2,052.61               | 1,816.17                | 236.44                    | 8.681              |           |
| 8,647.68                     | 2,850.00              | 2,823.06              | 2,850.00              | 184.74           | 53.29         | 88.57                | 889.63                              | -4,194.12    | 2,090.06               | 1,852.15                | 237.91                    | 8.785              |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 250-INC-ONLY |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference                    | Offset                | Semi Major Axis       |                       |                  |               |                      | Distance                            |              |                        |                         |                           |                    | Warning   |
| Measured Depth (usft)        | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Tooface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 5,000.00                     | 2,920.67              | 2,902.83              | 2,920.67              | 70.75            | 58.62         | 100.97               | -91.03                              | -5,177.14    | 2,990.33               | 2,863.15                | 127.18                    | 23.512             |           |
| 5,050.00                     | 2,919.70              | 2,901.86              | 2,919.70              | 72.30            | 58.60         | 100.79               | -91.03                              | -5,177.14    | 2,940.59               | 2,811.84                | 128.76                    | 22.838             |           |
| 5,100.00                     | 2,918.73              | 2,900.89              | 2,918.73              | 73.85            | 58.58         | 100.61               | -91.03                              | -5,177.14    | 2,890.86               | 2,760.53                | 130.34                    | 22.180             |           |
| 5,150.00                     | 2,917.77              | 2,899.93              | 2,917.77              | 75.40            | 58.56         | 100.43               | -91.03                              | -5,177.14    | 2,841.14               | 2,709.23                | 131.92                    | 21.537             |           |
| 5,200.00                     | 2,916.80              | 2,898.96              | 2,916.80              | 76.95            | 58.55         | 100.25               | -91.03                              | -5,177.14    | 2,791.43               | 2,657.94                | 133.50                    | 20.910             |           |
| 5,250.00                     | 2,915.83              | 2,897.99              | 2,915.83              | 78.50            | 58.53         | 100.07               | -91.03                              | -5,177.14    | 2,741.73               | 2,606.65                | 135.08                    | 20.297             |           |
| 5,300.00                     | 2,914.86              | 2,897.02              | 2,914.86              | 80.05            | 58.51         | 99.89                | -91.03                              | -5,177.14    | 2,692.04               | 2,555.38                | 136.66                    | 19.699             |           |
| 5,350.00                     | 2,913.89              | 2,896.05              | 2,913.89              | 81.61            | 58.49         | 99.71                | -91.03                              | -5,177.14    | 2,642.36               | 2,504.12                | 138.25                    | 19.114             |           |
| 5,400.00                     | 2,912.92              | 2,895.08              | 2,912.92              | 83.16            | 58.47         | 99.53                | -91.03                              | -5,177.14    | 2,592.70               | 2,452.87                | 139.83                    | 18.542             |           |
| 5,450.00                     | 2,911.95              | 2,894.11              | 2,911.95              | 84.72            | 58.45         | 99.34                | -91.03                              | -5,177.14    | 2,543.04               | 2,401.63                | 141.42                    | 17.983             |           |
| 5,500.00                     | 2,910.99              | 2,893.14              | 2,910.99              | 86.27            | 58.43         | 99.16                | -91.03                              | -5,177.14    | 2,493.40               | 2,350.40                | 143.00                    | 17.436             |           |
| 5,550.00                     | 2,910.02              | 2,892.18              | 2,910.02              | 87.83            | 58.41         | 98.98                | -91.03                              | -5,177.14    | 2,443.77               | 2,299.19                | 144.59                    | 16.902             |           |
| 5,600.00                     | 2,909.05              | 2,891.21              | 2,909.05              | 89.39            | 58.39         | 98.80                | -91.03                              | -5,177.14    | 2,394.16               | 2,247.99                | 146.18                    | 16.379             |           |
| 5,650.00                     | 2,908.08              | 2,890.24              | 2,908.08              | 90.95            | 58.38         | 98.62                | -91.03                              | -5,177.14    | 2,344.57               | 2,196.80                | 147.76                    | 15.867             |           |
| 5,700.00                     | 2,907.11              | 2,889.27              | 2,907.11              | 92.50            | 58.36         | 98.43                | -91.03                              | -5,177.14    | 2,294.99               | 2,145.64                | 149.35                    | 15.366             |           |
| 5,750.00                     | 2,906.14              | 2,888.30              | 2,906.14              | 94.06            | 58.34         | 98.25                | -91.03                              | -5,177.14    | 2,245.43               | 2,094.49                | 150.94                    | 14.876             |           |
| 5,800.00                     | 2,905.17              | 2,887.33              | 2,905.17              | 95.62            | 58.32         | 98.07                | -91.03                              | -5,177.14    | 2,195.89               | 2,043.36                | 152.53                    | 14.396             |           |
| 5,850.00                     | 2,904.20              | 2,886.36              | 2,904.20              | 97.18            | 58.30         | 97.88                | -91.03                              | -5,177.14    | 2,146.37               | 1,992.25                | 154.12                    | 13.927             |           |
| 5,900.00                     | 2,903.24              | 2,885.39              | 2,903.24              | 98.74            | 58.28         | 97.70                | -91.03                              | -5,177.14    | 2,096.87               | 1,941.16                | 155.71                    | 13.466             |           |
| 5,950.00                     | 2,902.27              | 2,884.43              | 2,902.27              | 100.30           | 58.26         | 97.52                | -91.03                              | -5,177.14    | 2,047.40               | 1,890.10                | 157.30                    | 13.016             |           |
| 6,000.00                     | 2,901.30              | 2,883.46              | 2,901.30              | 101.86           | 58.24         | 97.33                | -91.03                              | -5,177.14    | 1,997.95               | 1,839.06                | 158.89                    | 12.574             |           |
| 6,050.00                     | 2,900.33              | 2,882.49              | 2,900.33              | 103.42           | 58.22         | 97.15                | -91.03                              | -5,177.14    | 1,948.53               | 1,788.05                | 160.48                    | 12.142             |           |
| 6,100.00                     | 2,899.36              | 2,881.52              | 2,899.36              | 104.98           | 58.20         | 96.97                | -91.03                              | -5,177.14    | 1,899.14               | 1,737.07                | 162.07                    | 11.718             |           |
| 6,150.00                     | 2,898.39              | 2,880.55              | 2,898.39              | 106.54           | 58.19         | 96.78                | -91.03                              | -5,177.14    | 1,849.79               | 1,686.13                | 163.66                    | 11.303             |           |
| 6,200.00                     | 2,897.42              | 2,879.58              | 2,897.42              | 108.10           | 58.17         | 96.60                | -91.03                              | -5,177.14    | 1,800.46               | 1,635.21                | 165.25                    | 10.895             |           |
| 6,250.00                     | 2,896.45              | 2,878.61              | 2,896.45              | 109.66           | 58.15         | 96.41                | -91.03                              | -5,177.14    | 1,751.18               | 1,584.34                | 166.84                    | 10.496             |           |
| 6,300.00                     | 2,895.49              | 2,877.64              | 2,895.49              | 111.23           | 58.13         | 96.23                | -91.03                              | -5,177.14    | 1,701.94               | 1,533.51                | 168.43                    | 10.105             |           |
| 6,350.00                     | 2,894.52              | 2,876.68              | 2,894.52              | 112.79           | 58.11         | 96.05                | -91.03                              | -5,177.14    | 1,652.74               | 1,482.72                | 170.02                    | 9.721              |           |
| 6,400.00                     | 2,893.55              | 2,875.71              | 2,893.55              | 114.35           | 58.09         | 95.86                | -91.03                              | -5,177.14    | 1,603.59               | 1,431.98                | 171.61                    | 9.345              |           |
| 6,450.00                     | 2,892.58              | 2,874.74              | 2,892.58              | 115.91           | 58.07         | 95.68                | -91.03                              | -5,177.14    | 1,554.49               | 1,381.30                | 173.19                    | 8.975              |           |
| 6,500.00                     | 2,891.61              | 2,873.77              | 2,891.61              | 117.48           | 58.05         | 95.49                | -91.03                              | -5,177.14    | 1,505.46               | 1,330.67                | 174.78                    | 8.613              |           |
| 6,550.00                     | 2,890.64              | 2,872.80              | 2,890.64              | 119.04           | 58.03         | 95.31                | -91.03                              | -5,177.14    | 1,456.48               | 1,280.12                | 176.37                    | 8.258              |           |
| 6,600.00                     | 2,889.67              | 2,871.83              | 2,889.67              | 120.60           | 58.02         | 95.12                | -91.03                              | -5,177.14    | 1,407.58               | 1,229.63                | 177.95                    | 7.910              |           |
| 6,650.00                     | 2,888.70              | 2,870.86              | 2,888.70              | 122.17           | 58.00         | 94.94                | -91.03                              | -5,177.14    | 1,358.76               | 1,179.22                | 179.54                    | 7.568              |           |
| 6,700.00                     | 2,887.74              | 2,869.89              | 2,887.74              | 123.73           | 57.98         | 94.75                | -91.03                              | -5,177.14    | 1,310.03               | 1,128.91                | 181.12                    | 7.233              |           |
| 6,750.00                     | 2,886.77              | 2,868.93              | 2,886.77              | 125.29           | 57.96         | 94.57                | -91.03                              | -5,177.14    | 1,261.39               | 1,078.69                | 182.71                    | 6.904              |           |
| 6,800.00                     | 2,885.80              | 2,867.96              | 2,885.80              | 126.86           | 57.94         | 94.38                | -91.03                              | -5,177.14    | 1,212.87               | 1,028.58                | 184.29                    | 6.581              |           |
| 6,850.00                     | 2,884.83              | 2,866.99              | 2,884.83              | 128.42           | 57.92         | 94.20                | -91.03                              | -5,177.14    | 1,164.47               | 978.60                  | 185.87                    | 6.265              |           |
| 6,900.00                     | 2,883.86              | 2,866.02              | 2,883.86              | 129.99           | 57.90         | 94.01                | -91.03                              | -5,177.14    | 1,116.21               | 928.76                  | 187.45                    | 5.955              |           |
| 6,950.00                     | 2,882.89              | 2,865.05              | 2,882.89              | 131.55           | 57.88         | 93.82                | -91.03                              | -5,177.14    | 1,068.11               | 879.08                  | 189.03                    | 5.650              |           |
| 7,000.00                     | 2,881.92              | 2,864.08              | 2,881.92              | 133.12           | 57.86         | 93.64                | -91.03                              | -5,177.14    | 1,020.19               | 829.58                  | 190.61                    | 5.352              |           |
| 7,050.00                     | 2,880.95              | 2,863.11              | 2,880.95              | 134.68           | 57.84         | 93.45                | -91.03                              | -5,177.14    | 972.48                 | 780.29                  | 192.19                    | 5.060              |           |
| 7,100.00                     | 2,879.99              | 2,862.14              | 2,879.99              | 136.25           | 57.83         | 93.27                | -91.03                              | -5,177.14    | 925.01                 | 731.24                  | 193.77                    | 4.774              |           |
| 7,150.00                     | 2,879.02              | 2,861.18              | 2,879.02              | 137.81           | 57.81         | 93.08                | -91.03                              | -5,177.14    | 877.82                 | 682.48                  | 195.34                    | 4.494              |           |
| 7,200.00                     | 2,878.05              | 2,860.21              | 2,878.05              | 139.38           | 57.79         | 92.89                | -91.03                              | -5,177.14    | 830.96                 | 634.04                  | 196.92                    | 4.220              |           |
| 7,250.00                     | 2,877.08              | 2,859.24              | 2,877.08              | 140.94           | 57.77         | 92.71                | -91.03                              | -5,177.14    | 784.48                 | 586.00                  | 198.49                    | 3.952              |           |
| 7,300.00                     | 2,876.11              | 2,858.27              | 2,876.11              | 142.51           | 57.75         | 92.52                | -91.03                              | -5,177.14    | 738.47                 | 538.41                  | 200.06                    | 3.691              |           |
| 7,350.00                     | 2,875.14              | 2,857.30              | 2,875.14              | 144.07           | 57.73         | 92.34                | -91.03                              | -5,177.14    | 693.00                 | 491.37                  | 201.63                    | 3.437              |           |
| 7,400.00                     | 2,874.17              | 2,856.33              | 2,874.17              | 145.64           | 57.71         | 92.15                | -91.03                              | -5,177.14    | 648.20                 | 445.01                  | 203.20                    | 3.190              |           |
| 7,450.00                     | 2,873.20              | 2,855.36              | 2,873.20              | 147.21           | 57.69         | 91.96                | -91.03                              | -5,177.14    | 604.22                 | 399.46                  | 204.76                    | 2.951              |           |
| 7,500.00                     | 2,872.24              | 2,854.40              | 2,872.24              | 148.77           | 57.67         | 91.78                | -91.03                              | -5,177.14    | 561.24                 | 354.91                  | 206.33                    | 2.720              |           |
| 7,550.00                     | 2,871.27              | 2,853.43              | 2,871.27              | 150.34           | 57.66         | 91.59                | -91.03                              | -5,177.14    | 519.52                 | 311.63                  | 207.89                    | 2.499              |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design                |                                 |                              |                                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Site Error: | 0.00 usft       |
|------------------------------|---------------------------------|------------------------------|----------------------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|-------------------|--------------------|-----------------|
| Survey Program: 250-INC-ONLY |                                 |                              |                                  |               |                       |                                     |              |                        |                         |                           |                   | Offset Well Error: | 0.00 usft       |
| Measured Depth (usft)        | Reference Vertical Depth (usft) | Offset Vertical Depth (usft) | Semi Major Axis Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor | Warning            |                 |
| 7,600.00                     | 2,870.30                        | 2,852.46                     | 2,870.30                         | 151.90        | 57.64                 | 91.40                               | -91.03       | -5,177.14              | 479.39                  | 269.93                    | 209.45            | 2.289              |                 |
| 7,650.00                     | 2,869.33                        | 2,851.49                     | 2,869.33                         | 153.47        | 57.62                 | 91.22                               | -91.03       | -5,177.14              | 441.27                  | 230.25                    | 211.01            | 2.091              |                 |
| 7,700.00                     | 2,868.36                        | 2,850.52                     | 2,868.36                         | 155.04        | 57.60                 | 91.03                               | -91.03       | -5,177.14              | 405.74                  | 193.16                    | 212.57            | 1.909              |                 |
| 7,750.00                     | 2,867.39                        | 2,849.55                     | 2,867.39                         | 156.60        | 57.58                 | 90.84                               | -91.03       | -5,177.14              | 373.53                  | 159.40                    | 214.13            | 1.744              |                 |
| 7,800.00                     | 2,866.42                        | 2,848.58                     | 2,866.42                         | 158.17        | 57.56                 | 90.66                               | -91.03       | -5,177.14              | 345.58                  | 129.90                    | 215.68            | 1.602              |                 |
| 7,850.00                     | 2,865.45                        | 2,847.61                     | 2,865.45                         | 159.74        | 57.54                 | 90.47                               | -91.03       | -5,177.14              | 322.99                  | 105.76                    | 217.23            | 1.487              | Level 3         |
| 7,900.00                     | 2,864.49                        | 2,846.65                     | 2,864.49                         | 161.30        | 57.52                 | 90.28                               | -91.03       | -5,177.14              | 306.95                  | 88.17                     | 218.78            | 1.403              | Level 3         |
| 7,950.00                     | 2,863.52                        | 2,845.68                     | 2,863.52                         | 162.87        | 57.50                 | 90.10                               | -91.03       | -5,177.14              | 298.52                  | 78.19                     | 220.33            | 1.355              | Level 3         |
| 7,976.07                     | 2,863.01                        | 2,845.17                     | 2,863.01                         | 163.69        | 57.49                 | 90.00                               | -91.03       | -5,177.14              | 297.38                  | 76.24                     | 221.14            | 1.345              | Level 3, CC, ES |
| 8,000.00                     | 2,862.55                        | 2,844.71                     | 2,862.55                         | 164.44        | 57.48                 | 89.91                               | -91.03       | -5,177.14              | 298.34                  | 76.47                     | 221.88            | 1.345              | Level 3, SF     |
| 8,050.00                     | 2,861.58                        | 2,843.74                     | 2,861.58                         | 166.00        | 57.47                 | 89.72                               | -91.03       | -5,177.14              | 306.43                  | 83.01                     | 223.42            | 1.372              | Level 3         |
| 8,100.00                     | 2,860.61                        | 2,842.77                     | 2,860.61                         | 167.57        | 57.45                 | 89.54                               | -91.03       | -5,177.14              | 322.17                  | 97.20                     | 224.96            | 1.432              | Level 3         |
| 8,150.00                     | 2,859.64                        | 2,841.80                     | 2,859.64                         | 169.14        | 57.43                 | 89.35                               | -91.03       | -5,177.14              | 344.50                  | 117.99                    | 226.50            | 1.521              |                 |
| 8,200.00                     | 2,858.67                        | 2,840.83                     | 2,858.67                         | 170.71        | 57.41                 | 89.16                               | -91.03       | -5,177.14              | 372.24                  | 144.20                    | 228.04            | 1.632              |                 |
| 8,250.00                     | 2,857.70                        | 2,839.86                     | 2,857.70                         | 172.27        | 57.39                 | 88.98                               | -91.03       | -5,177.14              | 404.29                  | 174.71                    | 229.58            | 1.761              |                 |
| 8,300.00                     | 2,856.74                        | 2,838.90                     | 2,856.74                         | 173.84        | 57.37                 | 88.79                               | -91.03       | -5,177.14              | 439.69                  | 208.59                    | 231.11            | 1.903              |                 |
| 8,350.00                     | 2,855.77                        | 2,837.93                     | 2,855.77                         | 175.41        | 57.35                 | 88.60                               | -91.03       | -5,177.14              | 477.71                  | 245.08                    | 232.64            | 2.053              |                 |
| 8,400.00                     | 2,854.80                        | 2,836.96                     | 2,854.80                         | 176.98        | 57.33                 | 88.42                               | -91.03       | -5,177.14              | 517.77                  | 283.61                    | 234.16            | 2.211              |                 |
| 8,450.00                     | 2,853.83                        | 2,835.99                     | 2,853.83                         | 178.54        | 57.31                 | 88.23                               | -91.03       | -5,177.14              | 559.43                  | 323.74                    | 235.69            | 2.374              |                 |
| 8,500.00                     | 2,852.86                        | 2,835.02                     | 2,852.86                         | 180.11        | 57.30                 | 88.05                               | -91.03       | -5,177.14              | 602.36                  | 365.15                    | 237.21            | 2.539              |                 |
| 8,550.00                     | 2,851.89                        | 2,834.05                     | 2,851.89                         | 181.68        | 57.28                 | 87.86                               | -91.03       | -5,177.14              | 646.31                  | 407.57                    | 238.73            | 2.707              |                 |
| 8,597.67                     | 2,850.97                        | 2,833.13                     | 2,850.97                         | 183.17        | 57.26                 | 87.68                               | -91.03       | -5,177.14              | 688.97                  | 448.79                    | 240.18            | 2.869              |                 |
| 8,600.00                     | 2,850.92                        | 2,833.08                     | 2,850.92                         | 183.25        | 57.26                 | 87.67                               | -91.03       | -5,177.14              | 691.07                  | 450.82                    | 240.25            | 2.876              |                 |
| 8,647.68                     | 2,850.00                        | 2,832.16                     | 2,850.00                         | 184.74        | 57.24                 | 87.50                               | -91.03       | -5,177.14              | 734.39                  | 492.70                    | 241.69            | 3.039              |                 |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design         |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 123-  |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference             |                       | Offset                |                       | Semi Major Axis  |               |                      | Distance                            |              |                        |                         |                           |                    | Warning   |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Tooface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 0.00                  | 0.00                  | 31.65                 | -1.35                 | 0.00             | 0.05          | 178.73               | -1,422.92                           | 31.54        | 1,423.27               |                         |                           |                    |           |
| 50.00                 | 50.00                 | 79.60                 | 46.60                 | 0.05             | 0.12          | 178.74               | -1,423.00                           | 31.22        | 1,423.35               | 1,423.17                | 0.18                      | 7,994.753          |           |
| 100.00                | 100.00                | 127.98                | 94.98                 | 0.14             | 0.21          | 178.77               | -1,423.17                           | 30.61        | 1,423.50               | 1,423.15                | 0.35                      | 4,030.879          |           |
| 150.00                | 150.00                | 180.55                | 147.54                | 0.32             | 0.40          | 178.80               | -1,423.32                           | 29.82        | 1,423.64               | 1,422.92                | 0.72                      | 1,975.871          |           |
| 200.00                | 200.00                | 233.12                | 200.10                | 0.50             | 0.59          | 178.83               | -1,423.38                           | 28.99        | 1,423.68               | 1,422.59                | 1.09                      | 1,308.492          |           |
| 250.00                | 250.00                | 285.69                | 252.66                | 0.68             | 0.78          | 178.87               | -1,423.35                           | 28.14        | 1,423.63               | 1,422.17                | 1.46                      | 978.178            |           |
| 300.00                | 300.00                | 340.06                | 307.03                | 0.86             | 0.97          | 178.90               | -1,423.19                           | 27.24        | 1,423.47               | 1,421.64                | 1.83                      | 778.236            |           |
| 350.00                | 350.00                | 395.57                | 362.53                | 1.03             | 1.17          | 32.44                | -1,422.83                           | 26.39        | 1,422.76               | 1,420.56                | 2.20                      | 645.494            |           |
| 400.00                | 399.98                | 446.73                | 413.68                | 1.21             | 1.35          | 32.51                | -1,422.37                           | 25.66        | 1,421.19               | 1,418.63                | 2.56                      | 554.434            |           |
| 450.00                | 449.93                | 497.55                | 464.49                | 1.38             | 1.53          | 32.61                | -1,421.87                           | 24.96        | 1,418.85               | 1,415.93                | 2.92                      | 485.666            |           |
| 500.00                | 499.84                | 547.71                | 514.65                | 1.55             | 1.71          | 32.74                | -1,421.36                           | 24.32        | 1,415.76               | 1,412.49                | 3.28                      | 432.167            |           |
| 550.00                | 549.68                | 597.78                | 564.71                | 1.73             | 1.89          | 32.89                | -1,420.84                           | 23.74        | 1,411.94               | 1,408.30                | 3.64                      | 388.314            |           |
| 600.00                | 599.45                | 647.69                | 614.62                | 1.91             | 2.07          | 33.07                | -1,420.31                           | 23.16        | 1,407.38               | 1,403.38                | 3.99                      | 352.357            |           |
| 650.00                | 649.13                | 698.68                | 665.60                | 2.10             | 2.25          | 33.28                | -1,419.75                           | 22.56        | 1,402.08               | 1,397.72                | 4.36                      | 321.486            |           |
| 700.00                | 698.70                | 750.87                | 717.78                | 2.30             | 2.44          | 33.53                | -1,419.09                           | 21.98        | 1,395.99               | 1,391.25                | 4.73                      | 295.085            |           |
| 750.00                | 748.15                | 801.37                | 768.27                | 2.51             | 2.62          | 33.80                | -1,418.38                           | 21.45        | 1,389.11               | 1,384.01                | 5.10                      | 272.370            |           |
| 800.00                | 797.47                | 851.09                | 817.98                | 2.72             | 2.80          | 34.10                | -1,417.65                           | 20.92        | 1,381.50               | 1,376.04                | 5.46                      | 252.811            |           |
| 850.00                | 846.63                | 899.94                | 866.83                | 2.94             | 2.97          | 34.43                | -1,416.92                           | 20.38        | 1,373.20               | 1,367.36                | 5.83                      | 235.399            |           |
| 900.00                | 895.62                | 948.51                | 915.39                | 3.17             | 3.14          | 34.79                | -1,416.21                           | 19.80        | 1,364.22               | 1,358.02                | 6.20                      | 220.071            |           |
| 950.00                | 944.44                | 996.08                | 962.95                | 3.42             | 3.31          | 35.18                | -1,415.53                           | 19.23        | 1,354.58               | 1,348.01                | 6.57                      | 206.178            |           |
| 1,000.00              | 993.06                | 1,043.49              | 1,010.35              | 3.67             | 3.48          | 35.60                | -1,414.89                           | 18.70        | 1,344.32               | 1,337.38                | 6.94                      | 193.725            |           |
| 1,050.00              | 1,041.46              | 1,091.83              | 1,058.69              | 3.93             | 3.66          | 36.07                | -1,414.26                           | 18.19        | 1,333.43               | 1,326.11                | 7.32                      | 182.171            |           |
| 1,051.64              | 1,043.05              | 1,093.42              | 1,060.28              | 3.94             | 3.66          | 36.08                | -1,414.24                           | 18.17        | 1,333.06               | 1,325.72                | 7.33                      | 181.810            |           |
| 1,100.00              | 1,089.75              | 1,140.05              | 1,106.90              | 4.21             | 3.83          | 36.42                | -1,413.62                           | 17.68        | 1,322.20               | 1,314.50                | 7.71                      | 171.552            |           |
| 1,150.00              | 1,138.04              | 1,186.73              | 1,153.57              | 4.49             | 4.00          | 36.77                | -1,413.02                           | 17.20        | 1,311.05               | 1,302.95                | 8.09                      | 161.975            |           |
| 1,200.00              | 1,186.33              | 1,233.45              | 1,200.29              | 4.77             | 4.17          | 37.12                | -1,412.47                           | 16.70        | 1,300.00               | 1,291.51                | 8.48                      | 153.215            |           |
| 1,250.00              | 1,234.62              | 1,280.66              | 1,247.49              | 5.06             | 4.34          | 37.48                | -1,411.95                           | 16.05        | 1,289.04               | 1,280.16                | 8.88                      | 145.137            |           |
| 1,300.00              | 1,282.91              | 1,327.82              | 1,294.64              | 5.34             | 4.51          | 37.87                | -1,411.45                           | 15.21        | 1,278.17               | 1,268.89                | 9.28                      | 137.722            |           |
| 1,350.00              | 1,331.20              | 1,435.27              | 1,401.92              | 5.64             | 4.90          | 38.88                | -1,407.90                           | 10.89        | 1,266.47               | 1,256.56                | 9.91                      | 127.743            |           |
| 1,400.00              | 1,379.48              | 1,508.63              | 1,474.90              | 5.93             | 5.17          | 39.71                | -1,402.66                           | 5.62         | 1,253.04               | 1,242.61                | 10.43                     | 120.102            |           |
| 1,450.00              | 1,427.77              | 1,566.02              | 1,531.86              | 6.22             | 5.39          | 40.41                | -1,397.59                           | 0.74         | 1,238.96               | 1,228.06                | 10.90                     | 113.704            |           |
| 1,500.00              | 1,476.06              | 1,617.72              | 1,583.12              | 6.51             | 5.59          | 41.08                | -1,392.72                           | -3.90        | 1,224.76               | 1,213.42                | 11.34                     | 107.998            |           |
| 1,550.00              | 1,524.35              | 1,654.98              | 1,620.03              | 6.81             | 5.73          | 41.59                | -1,389.20                           | -7.58        | 1,210.74               | 1,199.01                | 11.73                     | 103.182            |           |
| 1,600.00              | 1,572.64              | 1,690.44              | 1,655.11              | 7.11             | 5.87          | 42.11                | -1,386.09                           | -11.73       | 1,197.28               | 1,185.16                | 12.12                     | 98.756             |           |
| 1,650.00              | 1,620.93              | 1,718.00              | 1,682.33              | 7.41             | 5.98          | 42.54                | -1,383.85                           | -15.40       | 1,184.44               | 1,171.95                | 12.48                     | 94.876             |           |
| 1,700.00              | 1,669.22              | 1,760.14              | 1,723.96              | 7.70             | 6.15          | 43.21                | -1,380.80                           | -21.13       | 1,172.16               | 1,159.25                | 12.91                     | 90.774             |           |
| 1,750.00              | 1,717.51              | 1,795.10              | 1,758.56              | 8.00             | 6.29          | 43.76                | -1,378.68                           | -25.66       | 1,160.56               | 1,147.24                | 13.31                     | 87.169             |           |
| 1,800.00              | 1,765.79              | 1,835.59              | 1,798.69              | 8.30             | 6.46          | 44.39                | -1,376.61                           | -30.69       | 1,149.55               | 1,135.80                | 13.74                     | 83.647             |           |
| 1,850.00              | 1,814.08              | 1,881.53              | 1,844.21              | 8.60             | 6.64          | 45.12                | -1,374.34                           | -36.40       | 1,138.81               | 1,124.61                | 14.20                     | 80.190             |           |
| 1,900.00              | 1,862.37              | 1,928.11              | 1,890.37              | 8.90             | 6.83          | 45.88                | -1,372.03                           | -42.23       | 1,128.29               | 1,113.62                | 14.67                     | 76.921             |           |
| 1,950.00              | 1,910.66              | 1,975.57              | 1,937.39              | 9.20             | 7.02          | 46.66                | -1,369.65                           | -48.20       | 1,117.94               | 1,102.80                | 15.14                     | 73.817             |           |
| 1,989.45              | 1,948.77              | 2,012.80              | 1,974.28              | 9.44             | 7.17          | 47.28                | -1,367.74                           | -52.89       | 1,109.90               | 1,094.38                | 15.52                     | 71.499             |           |
| 2,000.00              | 1,958.96              | 2,022.63              | 1,984.01              | 9.51             | 7.21          | 45.11                | -1,367.24                           | -54.13       | 1,107.77               | 1,092.15                | 15.61                     | 70.944             |           |
| 2,050.00              | 2,007.55              | 2,069.68              | 2,030.62              | 9.79             | 7.41          | 32.73                | -1,364.80                           | -60.14       | 1,097.50               | 1,081.47                | 16.03                     | 68.485             |           |
| 2,100.00              | 2,056.43              | 2,116.97              | 2,077.45              | 10.04            | 7.60          | 17.08                | -1,362.34                           | -66.21       | 1,086.97               | 1,070.58                | 16.39                     | 66.303             |           |
| 2,150.00              | 2,105.41              | 2,164.32              | 2,124.40              | 10.27            | 7.79          | -0.28                | -1,360.01                           | -71.86       | 1,076.16               | 1,059.44                | 16.72                     | 64.365             |           |
| 2,200.00              | 2,154.31              | 2,212.07              | 2,171.83              | 10.47            | 7.99          | -16.61               | -1,357.84                           | -77.05       | 1,065.04               | 1,048.03                | 17.01                     | 62.625             |           |
| 2,250.00              | 2,202.95              | 2,259.92              | 2,219.35              | 10.64            | 8.18          | -30.10               | -1,355.72                           | -82.14       | 1,053.62               | 1,036.36                | 17.26                     | 61.040             |           |
| 2,300.00              | 2,251.14              | 2,308.25              | 2,267.37              | 10.79            | 8.38          | -40.62               | -1,353.62                           | -87.27       | 1,041.93               | 1,024.44                | 17.49                     | 59.559             |           |
| 2,350.00              | 2,298.70              | 2,357.12              | 2,315.92              | 10.93            | 8.58          | -48.85               | -1,351.48                           | -92.44       | 1,029.98               | 1,012.26                | 17.71                     | 58.143             |           |
| 2,400.00              | 2,345.46              | 2,405.48              | 2,363.96              | 11.05            | 8.77          | -55.46               | -1,349.34                           | -97.53       | 1,017.85               | 999.92                  | 17.93                     | 56.769             |           |
| 2,450.00              | 2,391.25              | 2,453.15              | 2,411.32              | 11.16            | 8.96          | -60.99               | -1,347.21                           | -102.53      | 1,005.66               | 987.51                  | 18.15                     | 55.404             |           |

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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| Offset Design         |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Site Error: | 0.00 usft |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|--------------------|-----------|
| Survey Program: 123-  |                       |                       |                       |                  |               |                      |                                     |              |                        |                         |                           | Offset Well Error: | 0.00 usft |
| Reference             |                       | Offset                |                       | Semi Major Axis  |               |                      | Distance                            |              |                        |                         |                           |                    | Warning   |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Tooface (") | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor  |           |
| 2,500.00              | 2,435.89              | 2,500.02              | 2,457.88              | 11.26            | 9.15          | -65.79               | -1,345.10                           | -107.43      | 993.56                 | 975.17                  | 18.39                     | 54.022             |           |
| 2,550.00              | 2,479.22              | 2,545.87              | 2,503.44              | 11.35            | 9.34          | -70.08               | -1,343.02                           | -112.12      | 981.74                 | 963.08                  | 18.66                     | 52.598             |           |
| 2,600.00              | 2,521.07              | 2,590.36              | 2,547.67              | 11.43            | 9.52          | -74.00               | -1,341.00                           | -116.58      | 970.40                 | 951.42                  | 18.98                     | 51.119             |           |
| 2,650.00              | 2,561.29              | 2,633.36              | 2,590.41              | 11.52            | 9.69          | -77.63               | -1,339.04                           | -120.84      | 959.80                 | 940.44                  | 19.36                     | 49.579             |           |
| 2,700.00              | 2,599.72              | 2,676.27              | 2,633.06              | 11.60            | 9.87          | -81.06               | -1,337.07                           | -125.07      | 950.19                 | 930.38                  | 19.81                     | 47.971             |           |
| 2,750.00              | 2,636.24              | 2,724.30              | 2,680.81              | 11.70            | 10.06         | -84.53               | -1,334.58                           | -129.67      | 941.62                 | 921.27                  | 20.35                     | 46.261             |           |
| 2,800.00              | 2,670.69              | 2,768.56              | 2,724.80              | 11.82            | 10.24         | -87.74               | -1,331.91                           | -133.73      | 934.32                 | 913.35                  | 20.97                     | 44.558             |           |
| 2,850.00              | 2,702.95              | 2,804.10              | 2,760.13              | 12.05            | 10.38         | -90.44               | -1,329.66                           | -136.96      | 928.80                 | 907.17                  | 21.63                     | 42.934             |           |
| 2,900.00              | 2,732.90              | 4,223.57              | 3,655.01              | 12.48            | 22.34         | -175.23              | -466.80                             | -166.60      | 924.31                 | 902.17                  | 22.14                     | 41.750             |           |
| 2,950.00              | 2,760.43              | 4,224.05              | 3,655.04              | 13.15            | 22.35         | -175.46              | -466.32                             | -166.59      | 897.24                 | 876.26                  | 20.98                     | 42.765             |           |
| 2,975.18              | 2,773.35              | 4,224.41              | 3,655.07              | 13.54            | 22.35         | -175.58              | -465.97                             | -166.59      | 885.36                 | 864.96                  | 20.40                     | 43.402             |           |
| 3,000.00              | 2,785.76              | 4,224.80              | 3,655.10              | 13.96            | 22.36         | -175.61              | -465.57                             | -166.58      | 874.55                 | 854.03                  | 20.52                     | 42.626             |           |
| 3,050.00              | 2,810.76              | 4,225.62              | 3,655.15              | 14.86            | 22.37         | -175.67              | -464.75                             | -166.58      | 854.54                 | 833.78                  | 20.76                     | 41.162             |           |
| 3,100.00              | 2,835.76              | 4,226.46              | 3,655.21              | 15.79            | 22.38         | -175.73              | -463.92                             | -166.57      | 837.04                 | 816.02                  | 21.02                     | 39.827             |           |
| 3,150.00              | 2,860.76              | 4,227.32              | 3,655.27              | 16.79            | 22.40         | -175.79              | -463.06                             | -166.56      | 822.21                 | 800.93                  | 21.28                     | 38.639             |           |
| 3,175.18              | 2,873.35              | 4,227.76              | 3,655.30              | 17.30            | 22.40         | -175.82              | -462.62                             | -166.55      | 815.80                 | 794.38                  | 21.42                     | 38.095 SF          |           |
| 3,200.00              | 2,885.29              | 4,228.18              | 3,655.33              | 17.82            | 22.41         | -175.89              | -462.20                             | -166.55      | 810.72                 | 790.14                  | 20.58                     | 39.389             |           |
| 3,250.00              | 2,906.43              | 4,228.91              | 3,655.39              | 18.94            | 22.42         | -175.98              | -461.47                             | -166.54      | 805.97                 | 787.03                  | 18.94                     | 42.557 ES          |           |
| 3,256.99              | 2,909.06              | 4,229.00              | 3,655.39              | 19.11            | 22.42         | -175.98              | -461.38                             | -166.54      | 805.90                 | 787.18                  | 18.72                     | 43.059 CC          |           |
| 3,300.00              | 2,923.54              | 4,229.46              | 3,655.43              | 20.14            | 22.43         | -176.00              | -460.92                             | -166.53      | 808.65                 | 791.25                  | 17.40                     | 46.467             |           |
| 3,350.00              | 2,936.49              | 4,229.83              | 3,655.45              | 21.42            | 22.43         | -175.95              | -460.56                             | -166.53      | 818.67                 | 802.60                  | 16.06                     | 50.962             |           |
| 3,400.00              | 2,945.18              | 4,229.99              | 3,655.46              | 22.74            | 22.44         | -175.83              | -460.40                             | -166.53      | 835.68                 | 820.65                  | 15.03                     | 55.586             |           |
| 3,450.00              | 2,949.55              | 4,229.95              | 3,655.46              | 24.11            | 22.44         | -175.63              | -460.43                             | -166.53      | 859.16                 | 844.73                  | 14.43                     | 59.539             |           |
| 3,486.28              | 2,950.00              | 4,229.79              | 3,655.45              | 25.12            | 22.43         | -175.42              | -460.59                             | -166.53      | 879.85                 | 865.54                  | 14.31                     | 61.466             |           |
| 3,500.00              | 2,949.73              | 4,229.71              | 3,655.44              | 25.50            | 22.43         | -175.42              | -460.67                             | -166.53      | 888.28                 | 873.86                  | 14.42                     | 61.582             |           |
| 3,550.00              | 2,948.77              | 4,229.42              | 3,655.42              | 26.91            | 22.43         | -175.39              | -460.96                             | -166.53      | 920.09                 | 905.26                  | 14.83                     | 62.055             |           |
| 3,600.00              | 2,947.80              | 4,229.13              | 3,655.40              | 28.33            | 22.42         | -175.37              | -461.25                             | -166.54      | 953.45                 | 938.22                  | 15.23                     | 62.608             |           |
| 3,650.00              | 2,946.83              | 4,228.84              | 3,655.38              | 29.77            | 22.42         | -175.34              | -461.55                             | -166.54      | 988.22                 | 972.59                  | 15.63                     | 63.208             |           |
| 3,700.00              | 2,945.86              | 4,228.54              | 3,655.36              | 31.22            | 22.41         | -175.32              | -461.84                             | -166.54      | 1,024.26               | 1,008.22                | 16.04                     | 63.858             |           |
| 3,750.00              | 2,944.89              | 4,228.25              | 3,655.34              | 32.68            | 22.41         | -175.29              | -462.13                             | -166.55      | 1,061.42               | 1,044.97                | 16.45                     | 64.533             |           |
| 3,800.00              | 2,943.92              | 4,227.96              | 3,655.32              | 34.15            | 22.41         | -175.27              | -462.43                             | -166.55      | 1,099.60               | 1,082.75                | 16.86                     | 65.237             |           |
| 3,850.00              | 2,942.95              | 4,227.66              | 3,655.30              | 35.63            | 22.40         | -175.25              | -462.72                             | -166.55      | 1,138.70               | 1,121.44                | 17.27                     | 65.952             |           |
| 3,900.00              | 2,941.98              | 4,227.36              | 3,655.28              | 37.12            | 22.40         | -175.22              | -463.02                             | -166.56      | 1,178.62               | 1,160.95                | 17.68                     | 66.681             |           |
| 3,950.00              | 2,941.02              | 4,227.07              | 3,655.25              | 38.61            | 22.39         | -175.20              | -463.31                             | -166.56      | 1,219.29               | 1,201.20                | 18.09                     | 67.411             |           |
| 4,000.00              | 2,940.05              | 4,226.77              | 3,655.23              | 40.11            | 22.39         | -175.17              | -463.61                             | -166.56      | 1,260.63               | 1,242.13                | 18.50                     | 68.145             |           |
| 4,050.00              | 2,939.08              | 4,226.47              | 3,655.21              | 41.61            | 22.38         | -175.15              | -463.91                             | -166.57      | 1,302.57               | 1,283.66                | 18.91                     | 68.873             |           |
| 4,100.00              | 2,938.11              | 4,226.17              | 3,655.19              | 43.12            | 22.38         | -175.12              | -464.20                             | -166.57      | 1,345.07               | 1,325.74                | 19.33                     | 69.598             |           |
| 4,150.00              | 2,937.14              | 4,225.87              | 3,655.17              | 44.64            | 22.37         | -175.10              | -464.50                             | -166.57      | 1,388.06               | 1,368.32                | 19.74                     | 70.313             |           |
| 4,200.00              | 2,936.17              | 4,225.57              | 3,655.15              | 46.15            | 22.37         | -175.07              | -464.80                             | -166.58      | 1,431.51               | 1,411.35                | 20.16                     | 71.021             |           |
| 4,250.00              | 2,935.20              | 4,225.27              | 3,655.13              | 47.67            | 22.36         | -175.05              | -465.10                             | -166.58      | 1,475.38               | 1,454.80                | 20.57                     | 71.716             |           |
| 4,300.00              | 2,934.23              | 4,224.97              | 3,655.11              | 49.20            | 22.36         | -175.03              | -465.40                             | -166.58      | 1,519.62               | 1,498.63                | 20.99                     | 72.400             |           |
| 4,350.00              | 2,933.27              | 4,224.67              | 3,655.09              | 50.72            | 22.35         | -175.00              | -465.70                             | -166.59      | 1,564.21               | 1,542.80                | 21.41                     | 73.071             |           |
| 4,400.00              | 2,932.30              | 4,224.37              | 3,655.07              | 52.25            | 22.35         | -174.98              | -466.00                             | -166.59      | 1,609.12               | 1,587.29                | 21.82                     | 73.730             |           |
| 4,450.00              | 2,931.33              | 4,224.06              | 3,655.05              | 53.79            | 22.35         | -174.95              | -466.31                             | -166.59      | 1,654.32               | 1,632.08                | 22.24                     | 74.373             |           |
| 4,500.00              | 2,930.36              | 4,223.76              | 3,655.02              | 55.32            | 22.34         | -174.93              | -466.61                             | -166.60      | 1,699.79               | 1,677.13                | 22.66                     | 75.004             |           |
| 4,550.00              | 2,929.39              | 4,223.46              | 3,655.00              | 56.85            | 22.34         | -174.90              | -466.91                             | -166.60      | 1,745.51               | 1,722.42                | 23.08                     | 75.619             |           |
| 4,600.00              | 2,928.42              | 4,223.15              | 3,654.98              | 58.39            | 22.33         | -174.88              | -467.22                             | -166.60      | 1,791.45               | 1,767.95                | 23.50                     | 76.221             |           |
| 4,650.00              | 2,927.45              | 4,222.84              | 3,654.96              | 59.93            | 22.33         | -174.85              | -467.52                             | -166.61      | 1,837.61               | 1,813.68                | 23.92                     | 76.808             |           |
| 4,700.00              | 2,926.48              | 4,222.54              | 3,654.94              | 61.47            | 22.32         | -174.83              | -467.83                             | -166.61      | 1,883.96               | 1,859.62                | 24.35                     | 77.381             |           |
| 4,750.00              | 2,925.52              | 4,222.23              | 3,654.92              | 63.01            | 22.32         | -174.80              | -468.14                             | -166.61      | 1,930.50               | 1,905.73                | 24.77                     | 77.940             |           |
| 4,800.00              | 2,924.55              | 4,221.92              | 3,654.90              | 64.56            | 22.31         | -174.78              | -468.44                             | -166.62      | 1,977.20               | 1,952.01                | 25.19                     | 78.486             |           |
| 4,850.00              | 2,923.58              | 4,221.61              | 3,654.88              | 66.10            | 22.31         | -174.75              | -468.75                             | -166.62      | 2,024.06               | 1,998.45                | 25.62                     | 79.016             |           |

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





## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

| <b>Offset Design</b> South Boyd - South Boyd 20H - OH - OH |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | <b>Offset Site Error:</b> | 0.00 usft |
|------------------------------------------------------------|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|-------------------------------------|--------------|------------------------|-------------------------|---------------------------|---------------------------|-----------|
| Survey Program: 123-                                       |                       |                       |                       |                  |               |                       |                                     |              |                        |                         |                           | <b>Offset Well Error:</b> | 0.00 usft |
| Reference                                                  | Offset                | Semi Major Axis       |                       | Distance         |               |                       |                                     |              |                        |                         |                           |                           |           |
| Measured Depth (usft)                                      | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor         | Warning   |
| 4,900.00                                                   | 2,922.61              | 4,221.30              | 3,654.86              | 67.65            | 22.30         | -174.72               | -469.06                             | -166.62      | 2,071.07               | 2,045.03                | 26.04                     | 79.535                    |           |
| 4,950.00                                                   | 2,921.64              | 4,220.99              | 3,654.84              | 69.20            | 22.30         | -174.70               | -469.37                             | -166.63      | 2,118.22               | 2,091.75                | 26.46                     | 80.039                    |           |
| 5,000.00                                                   | 2,920.67              | 4,220.68              | 3,654.82              | 70.75            | 22.29         | -174.67               | -469.68                             | -166.63      | 2,165.49               | 2,138.60                | 26.89                     | 80.531                    |           |
| 5,050.00                                                   | 2,919.70              | 4,220.37              | 3,654.80              | 72.30            | 22.29         | -174.65               | -469.99                             | -166.63      | 2,212.89               | 2,185.57                | 27.32                     | 81.010                    |           |
| 5,100.00                                                   | 2,918.73              | 4,220.06              | 3,654.78              | 73.85            | 22.28         | -174.62               | -470.30                             | -166.64      | 2,260.39               | 2,232.65                | 27.74                     | 81.477                    |           |
| 5,150.00                                                   | 2,917.77              | 4,219.75              | 3,654.76              | 75.40            | 22.28         | -174.60               | -470.61                             | -166.64      | 2,308.00               | 2,279.83                | 28.17                     | 81.931                    |           |
| 5,200.00                                                   | 2,916.80              | 4,219.43              | 3,654.74              | 76.95            | 22.27         | -174.57               | -470.93                             | -166.64      | 2,355.71               | 2,327.11                | 28.60                     | 82.374                    |           |
| 5,250.00                                                   | 2,915.83              | 4,219.12              | 3,654.72              | 78.50            | 22.27         | -174.54               | -471.24                             | -166.65      | 2,403.52               | 2,374.49                | 29.03                     | 82.804                    |           |
| 5,300.00                                                   | 2,914.86              | 4,218.80              | 3,654.70              | 80.05            | 22.26         | -174.52               | -471.55                             | -166.65      | 2,451.41               | 2,421.95                | 29.46                     | 83.224                    |           |
| 5,350.00                                                   | 2,913.89              | 4,218.49              | 3,654.68              | 81.61            | 22.26         | -174.49               | -471.87                             | -166.66      | 2,499.38               | 2,469.49                | 29.89                     | 83.633                    |           |
| 5,400.00                                                   | 2,912.92              | 4,218.17              | 3,654.66              | 83.16            | 22.25         | -174.47               | -472.19                             | -166.66      | 2,547.43               | 2,517.11                | 30.32                     | 84.031                    |           |
| 5,450.00                                                   | 2,911.95              | 4,217.86              | 3,654.64              | 84.72            | 22.25         | -174.44               | -472.50                             | -166.66      | 2,595.55               | 2,564.81                | 30.75                     | 84.419                    |           |
| 5,500.00                                                   | 2,910.99              | 4,217.54              | 3,654.62              | 86.27            | 22.24         | -174.42               | -472.82                             | -166.67      | 2,643.75               | 2,612.57                | 31.18                     | 84.796                    |           |
| 5,550.00                                                   | 2,910.02              | 4,217.22              | 3,654.60              | 87.83            | 22.24         | -174.39               | -473.14                             | -166.67      | 2,692.01               | 2,660.40                | 31.61                     | 85.164                    |           |
| 5,600.00                                                   | 2,909.05              | 4,216.90              | 3,654.58              | 89.39            | 22.23         | -174.36               | -473.45                             | -166.67      | 2,740.33               | 2,708.29                | 32.04                     | 85.522                    |           |
| 5,650.00                                                   | 2,908.08              | 4,216.58              | 3,654.56              | 90.95            | 22.23         | -174.34               | -473.77                             | -166.68      | 2,788.71               | 2,756.24                | 32.48                     | 85.870                    |           |
| 5,700.00                                                   | 2,907.11              | 4,216.26              | 3,654.54              | 92.50            | 22.22         | -174.31               | -474.09                             | -166.68      | 2,837.15               | 2,804.24                | 32.91                     | 86.210                    |           |
| 5,750.00                                                   | 2,906.14              | 4,215.94              | 3,654.52              | 94.06            | 22.22         | -174.28               | -474.41                             | -166.69      | 2,885.64               | 2,852.30                | 33.34                     | 86.540                    |           |
| 5,800.00                                                   | 2,905.17              | 4,215.62              | 3,654.50              | 95.62            | 22.21         | -174.26               | -474.74                             | -166.69      | 2,934.18               | 2,900.40                | 33.78                     | 86.863                    |           |
| 5,850.00                                                   | 2,904.20              | 4,215.29              | 3,654.48              | 97.18            | 22.21         | -174.23               | -475.06                             | -166.69      | 2,982.77               | 2,948.56                | 34.22                     | 87.176                    |           |

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





## Anticollision Report

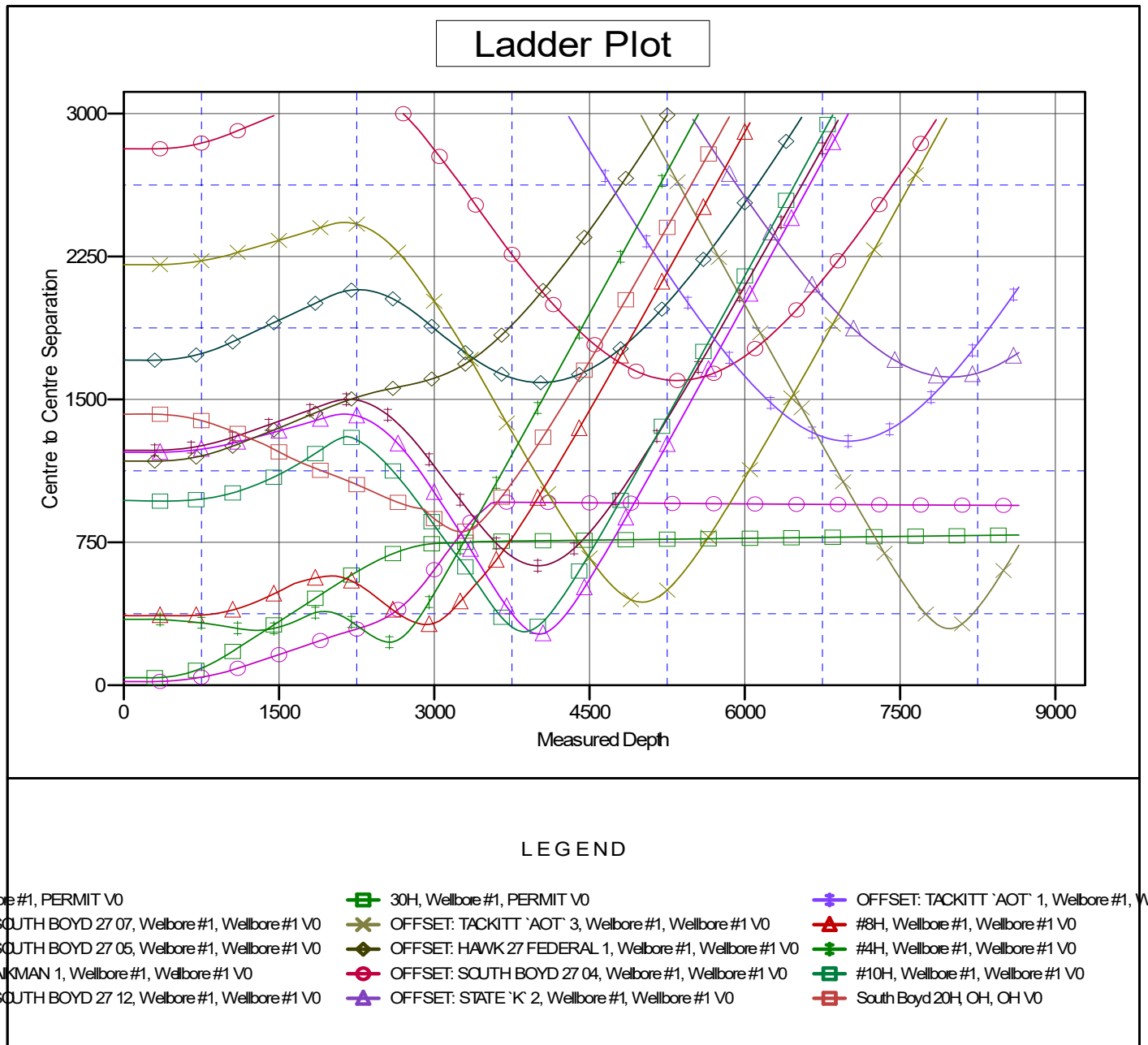
|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

Reference Depths are relative to RKB = 20' @ 3517.00usft (AKITA 57) Coordinates are relative to: 21H

Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Grid Convergence at Surface is: -0.07°



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



## Anticollision Report

|                           |                                |                                     |                                    |
|---------------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Company:</b>           | SPUR ENERGY PARTNERS, LLC      | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Project:</b>           | EDDY COUNTY, NM (NAD 83 - NME) | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Reference Site:</b>    | LIVE OAK 27-28 STATE COM       | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site Error:</b>        | 0.00 usft                      | <b>North Reference:</b>             | Grid                               |
| <b>Reference Well:</b>    | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Well Error:</b>        | 0.00 usft                      | <b>Output errors are at</b>         | 2.00 sigma                         |
| <b>Reference Wellbore</b> | Wellbore #1                    | <b>Database:</b>                    | EDM 5000.1.13 Single User Db       |
| <b>Reference Design:</b>  | PERMIT                         | <b>Offset TVD Reference:</b>        | Reference Datum                    |

Reference Depths are relative to RKB = 20' @ 3517.00usft (AKITA 57) Coordinates are relative to: 21H

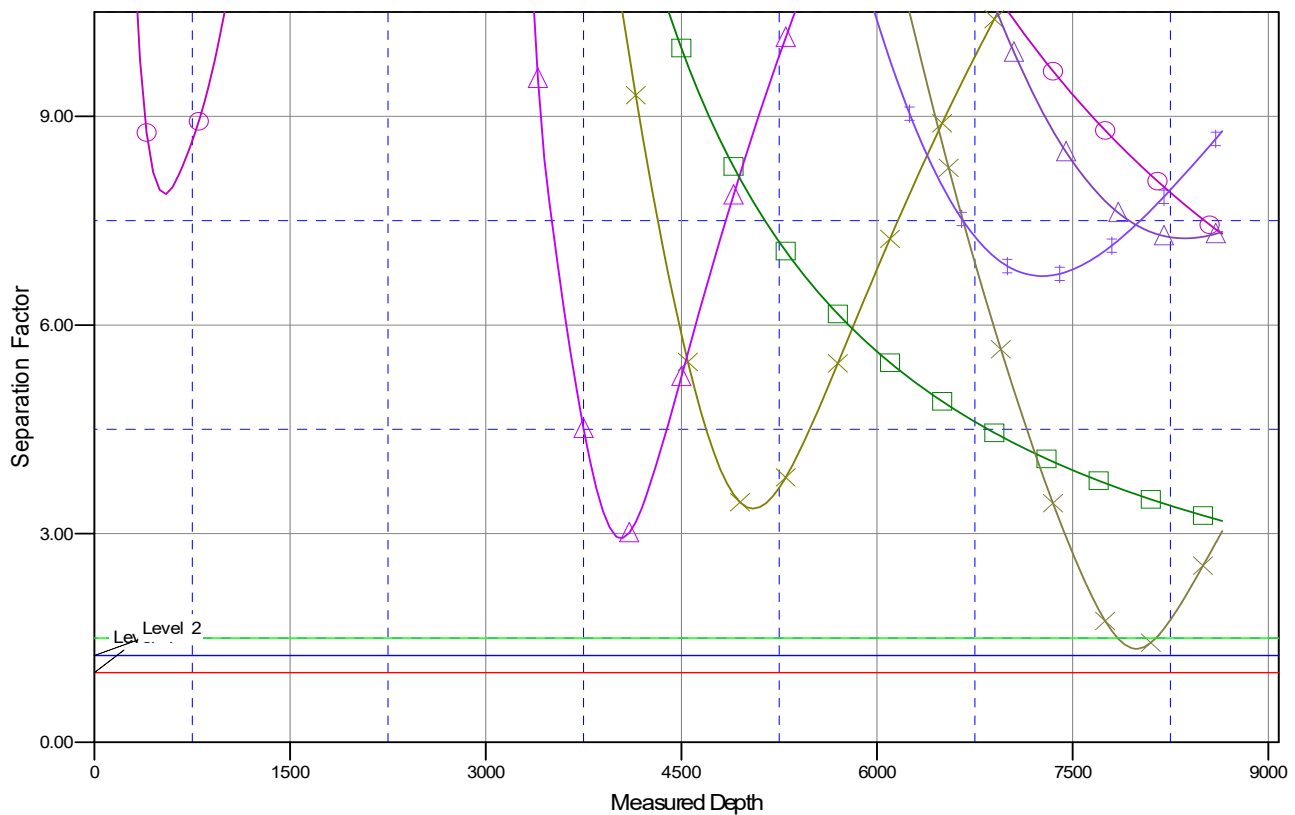
Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Central Meridian is -104.333333

Grid Convergence at Surface is: -0.07°

## Separation Factor Plot



## LEGEND

|                                               |                                                        |                                                      |
|-----------------------------------------------|--------------------------------------------------------|------------------------------------------------------|
| Wellbore #1, PERMIT V0                        | 30H, Wellbore #1, PERMIT V0                            | OFFSET: TACKITT 'AOT' 1, Wellbore #1, Wellbore #1 V0 |
| SOUTH BOYD 27 07, Wellbore #1, Wellbore #1 V0 | OFFSET: TACKITT 'AOT' 3, Wellbore #1, Wellbore #1 V0   | #8H, Wellbore #1, Wellbore #1 V0                     |
| SOUTH BOYD 27 05, Wellbore #1, Wellbore #1 V0 | OFFSET: HAWK 27 FEDERAL 1, Wellbore #1, Wellbore #1 V0 | #4H, Wellbore #1, Wellbore #1 V0                     |
| AKMAN 1, Wellbore #1, Wellbore #1 V0          | OFFSET: SOUTH BOYD 27 04, Wellbore #1, Wellbore #1 V0  | #10H, Wellbore #1, Wellbore #1 V0                    |
| SOUTH BOYD 27 12, Wellbore #1, Wellbore #1 V0 | OFFSET: STATE 'K' 2, Wellbore #1, Wellbore #1 V0       | South Boyd 20H, OH, OH V0                            |

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



# **SPUR ENERGY PARTNERS, LLC**

**EDDY COUNTY, NM (NAD 83 - NME)**

**LIVE OAK 27-28 STATE COM**

**21H**

**Wellbore #1**

**Plan: PERMIT**

## **Standard Planning Report**

**15 May, 2023**



Planning Report

|           |                                |                              |                                    |
|-----------|--------------------------------|------------------------------|------------------------------------|
| Database: | EDM 5000.1.13 Single User Db   | Local Co-ordinate Reference: | Well 21H                           |
| Company:  | SPUR ENERGY PARTNERS, LLC      | TVD Reference:               | RKB = 20' @ 3517.00usft (AKITA 57) |
| Project:  | EDDY COUNTY, NM (NAD 83 - NME) | MD Reference:                | RKB = 20' @ 3517.00usft (AKITA 57) |
| Site:     | LIVE OAK 27-28 STATE COM       | North Reference:             | Grid                               |
| Well:     | 21H                            | Survey Calculation Method:   | Minimum Curvature                  |
| Wellbore: | Wellbore #1                    |                              |                                    |
| Design:   | PERMIT                         |                              |                                    |

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

|                       |           |                          |                 |                   |              |
|-----------------------|-----------|--------------------------|-----------------|-------------------|--------------|
| Site                  |           | LIVE OAK 27-28 STATE COM |                 |                   |              |
| Site Position:        |           | Northing:                | 591,663.10 usft | Latitude:         | 32.6264568   |
| From:                 | Map       | Easting:                 | 499,076.20 usft | Longitude:        | -104.4706068 |
| Position Uncertainty: | 0.00 usft | Slot Radius:             | 13-3/16 "       | Grid Convergence: | -0.07 °      |

|                      |       |           |                     |                 |               |               |
|----------------------|-------|-----------|---------------------|-----------------|---------------|---------------|
| Well                 | 21H   |           |                     |                 |               |               |
| Well Position        | +N/-S | 0.00 usft | Northing:           | 591,663.10 usft | Latitude:     | 32.6264568    |
|                      | +E/-W | 0.00 usft | Easting:            | 499,076.20 usft | Longitude:    | -104.4706068  |
| Position Uncertainty |       | 0.00 usft | Wellhead Elevation: | 0.00 usft       | Ground Level: | 3,497.00 usft |

|           |             |             |                 |               |                     |
|-----------|-------------|-------------|-----------------|---------------|---------------------|
| Wellbore  | Wellbore #1 |             |                 |               |                     |
| Magnetics | Model Name  | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|           | IGRF2020    | 05/10/23    | 6.77            | 60.07         | 47,440              |

|                   |                         |              |               |               |
|-------------------|-------------------------|--------------|---------------|---------------|
| Design            | PERMIT                  |              |               |               |
| Audit Notes:      |                         |              |               |               |
| Version:          | Phase:                  | PLAN         | Tie On Depth: | 0.00          |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft)  | Direction (°) |
|                   | 0.00                    | 0.00         | 0.00          | 270.19        |

| Plan Sections         |                 |             |                       |              |              |                         |                        |                       |         |                  |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target           |
| 0.00                  | 0.00            | 0.00        | 0.00                  | 0.00         | 0.00         | 0.00                    | 0.00                   | 0.00                  | 0.00    |                  |
| 300.00                | 0.00            | 0.00        | 300.00                | 0.00         | 0.00         | 0.00                    | 0.00                   | 0.00                  | 0.00    |                  |
| 1,051.64              | 15.03           | 146.52      | 1,043.05              | -81.77       | 54.09        | 2.00                    | 2.00                   | 0.00                  | 146.52  |                  |
| 1,989.45              | 15.03           | 146.52      | 1,948.77              | -284.66      | 188.27       | 0.00                    | 0.00                   | 0.00                  | 0.00    |                  |
| 2,975.18              | 60.00           | 270.19      | 2,773.35              | -404.75      | -218.42      | 7.00                    | 4.56                   | 12.55                 | 129.46  |                  |
| 3,175.18              | 60.00           | 270.19      | 2,873.35              | -404.18      | -391.62      | 0.00                    | 0.00                   | 0.00                  | 0.00    |                  |
| 3,486.28              | 91.11           | 270.19      | 2,950.00              | -403.20      | -689.20      | 10.00                   | 10.00                  | 0.00                  | 0.00    | LIVE OAK 21H FTF |
| 8,597.67              | 91.11           | 270.19      | 2,850.97              | -386.36      | -5,799.60    | 0.00                    | 0.00                   | 0.00                  | 0.00    | LIVE OAK 21H LTP |
| 8,647.68              | 91.11           | 270.19      | 2,850.00              | -386.20      | -5,849.60    | 0.00                    | 0.00                   | 0.00                  | 0.00    | LIVE OAK 21H BHL |



## Planning Report

|                  |                                |                                     |                                    |
|------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Database:</b> | EDM 5000.1.13 Single User Db   | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Company:</b>  | SPUR ENERGY PARTNERS, LLC      | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Project:</b>  | EDDY COUNTY, NM (NAD 83 - NME) | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site:</b>     | LIVE OAK 27-28 STATE COM       | <b>North Reference:</b>             | Grid                               |
| <b>Well:</b>     | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Wellbore:</b> | Wellbore #1                    |                                     |                                    |
| <b>Design:</b>   | PERMIT                         |                                     |                                    |

| Planned Survey                               |                 |             |                       |              |              |                         |                         |                        |                       |
|----------------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)                        | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 0.00                                         | 0.00            | 0.00        | 0.00                  | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>LIVE OAK 21H SHL: 752' FSL, 2019' FEL</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 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                                       | 2.00            | 146.52      | 399.98                | -1.46        | 0.96         | -0.97                   | 2.00                    | 2.00                   | 0.00                  |
| 500.00                                       | 4.00            | 146.52      | 499.84                | -5.82        | 3.85         | -3.87                   | 2.00                    | 2.00                   | 0.00                  |
| 600.00                                       | 6.00            | 146.52      | 599.45                | -13.09       | 8.66         | -8.70                   | 2.00                    | 2.00                   | 0.00                  |
| 700.00                                       | 8.00            | 146.52      | 698.70                | -23.25       | 15.38        | -15.46                  | 2.00                    | 2.00                   | 0.00                  |
| 800.00                                       | 10.00           | 146.52      | 797.47                | -36.30       | 24.01        | -24.13                  | 2.00                    | 2.00                   | 0.00                  |
| 900.00                                       | 12.00           | 146.52      | 895.62                | -52.21       | 34.54        | -34.71                  | 2.00                    | 2.00                   | 0.00                  |
| 1,000.00                                     | 14.00           | 146.52      | 993.06                | -70.98       | 46.94        | -47.18                  | 2.00                    | 2.00                   | 0.00                  |
| 1,051.64                                     | 15.03           | 146.52      | 1,043.05              | -81.77       | 54.09        | -54.36                  | 2.00                    | 2.00                   | 0.00                  |
| 1,100.00                                     | 15.03           | 146.52      | 1,089.75              | -92.23       | 61.00        | -61.31                  | 0.00                    | 0.00                   | 0.00                  |
| 1,200.00                                     | 15.03           | 146.52      | 1,186.33              | -113.87      | 75.31        | -75.69                  | 0.00                    | 0.00                   | 0.00                  |
| 1,300.00                                     | 15.03           | 146.52      | 1,282.91              | -135.50      | 89.62        | -90.07                  | 0.00                    | 0.00                   | 0.00                  |
| 1,400.00                                     | 15.03           | 146.52      | 1,379.48              | -157.14      | 103.93       | -104.45                 | 0.00                    | 0.00                   | 0.00                  |
| 1,500.00                                     | 15.03           | 146.52      | 1,476.06              | -178.77      | 118.24       | -118.83                 | 0.00                    | 0.00                   | 0.00                  |
| 1,600.00                                     | 15.03           | 146.52      | 1,572.64              | -200.40      | 132.55       | -133.21                 | 0.00                    | 0.00                   | 0.00                  |
| 1,700.00                                     | 15.03           | 146.52      | 1,669.22              | -222.04      | 146.86       | -147.59                 | 0.00                    | 0.00                   | 0.00                  |
| 1,800.00                                     | 15.03           | 146.52      | 1,765.79              | -243.67      | 161.16       | -161.97                 | 0.00                    | 0.00                   | 0.00                  |
| 1,900.00                                     | 15.03           | 146.52      | 1,862.37              | -265.30      | 175.47       | -176.35                 | 0.00                    | 0.00                   | 0.00                  |
| 1,989.45                                     | 15.03           | 146.52      | 1,948.77              | -284.66      | 188.27       | -189.22                 | 0.00                    | 0.00                   | 0.00                  |
| <b>LIVE OAK 21H KOP: 1989.45' MD</b>         |                 |             |                       |              |              |                         |                         |                        |                       |
| 2,000.00                                     | 14.57           | 148.78      | 1,958.96              | -286.93      | 189.71       | -190.67                 | 7.00                    | -4.35                  | 21.48                 |
| 2,050.00                                     | 12.76           | 161.49      | 2,007.55              | -297.55      | 194.73       | -195.71                 | 7.00                    | -3.64                  | 25.42                 |
| 2,100.00                                     | 11.71           | 177.32      | 2,056.43              | -307.86      | 196.72       | -197.74                 | 7.00                    | -2.09                  | 31.65                 |
| 2,150.00                                     | 11.65           | 194.67      | 2,105.41              | -317.81      | 195.68       | -196.73                 | 7.00                    | -0.12                  | 34.69                 |
| 2,200.00                                     | 12.59           | 210.78      | 2,154.31              | -327.38      | 191.61       | -192.69                 | 7.00                    | 1.88                   | 32.23                 |
| 2,250.00                                     | 14.34           | 223.87      | 2,202.95              | -336.53      | 184.53       | -185.64                 | 7.00                    | 3.49                   | 26.17                 |
| 2,300.00                                     | 16.63           | 233.80      | 2,251.14              | -345.23      | 174.46       | -175.60                 | 7.00                    | 4.59                   | 19.86                 |
| 2,350.00                                     | 19.29           | 241.23      | 2,298.70              | -353.43      | 161.44       | -162.61                 | 7.00                    | 5.31                   | 14.86                 |
| 2,400.00                                     | 22.17           | 246.86      | 2,345.46              | -361.11      | 145.52       | -146.72                 | 7.00                    | 5.76                   | 11.26                 |
| 2,450.00                                     | 25.20           | 251.22      | 2,391.25              | -368.25      | 126.77       | -127.99                 | 7.00                    | 6.06                   | 8.73                  |
| 2,500.00                                     | 28.33           | 254.69      | 2,435.89              | -374.81      | 105.24       | -106.48                 | 7.00                    | 6.27                   | 6.94                  |
| 2,550.00                                     | 31.54           | 257.51      | 2,479.22              | -380.77      | 81.02        | -82.28                  | 7.00                    | 6.41                   | 5.65                  |
| 2,600.00                                     | 34.79           | 259.86      | 2,521.07              | -386.11      | 54.20        | -55.48                  | 7.00                    | 6.51                   | 4.69                  |
| 2,650.00                                     | 38.09           | 261.85      | 2,561.29              | -390.81      | 24.88        | -26.18                  | 7.00                    | 6.59                   | 3.98                  |
| 2,700.00                                     | 41.41           | 263.57      | 2,599.72              | -394.85      | -6.83        | 5.52                    | 7.00                    | 6.65                   | 3.43                  |
| 2,750.00                                     | 44.76           | 265.07      | 2,636.24              | -398.22      | -40.81       | 39.49                   | 7.00                    | 6.69                   | 3.01                  |
| 2,800.00                                     | 48.12           | 266.41      | 2,670.69              | -400.90      | -76.93       | 75.60                   | 7.00                    | 6.73                   | 2.67                  |
| 2,850.00                                     | 51.50           | 267.61      | 2,702.95              | -402.88      | -115.07      | 113.74                  | 7.00                    | 6.75                   | 2.40                  |
| 2,900.00                                     | 54.89           | 268.70      | 2,732.90              | -404.16      | -155.08      | 153.74                  | 7.00                    | 6.78                   | 2.19                  |
| 2,950.00                                     | 58.29           | 269.71      | 2,760.43              | -404.73      | -196.80      | 195.46                  | 7.00                    | 6.80                   | 2.01                  |
| 2,975.18                                     | 60.00           | 270.19      | 2,773.35              | -404.75      | -218.42      | 217.07                  | 7.00                    | 6.81                   | 1.90                  |
| 3,000.00                                     | 60.00           | 270.19      | 2,785.76              | -404.68      | -239.91      | 238.57                  | 0.00                    | 0.00                   | 0.00                  |
| 3,100.00                                     | 60.00           | 270.19      | 2,835.76              | -404.39      | -326.51      | 325.17                  | 0.00                    | 0.00                   | 0.00                  |
| 3,175.18                                     | 60.00           | 270.19      | 2,873.35              | -404.18      | -391.62      | 390.28                  | 0.00                    | 0.00                   | 0.00                  |
| 3,200.00                                     | 62.48           | 270.19      | 2,885.29              | -404.11      | -413.38      | 412.04                  | 10.00                   | 10.00                  | 0.00                  |
| 3,250.00                                     | 67.48           | 270.19      | 2,906.43              | -403.96      | -458.67      | 457.33                  | 10.00                   | 10.00                  | 0.00                  |
| 3,300.00                                     | 72.48           | 270.19      | 2,923.54              | -403.80      | -505.64      | 504.30                  | 10.00                   | 10.00                  | 0.00                  |
| 3,350.00                                     | 77.48           | 270.19      | 2,936.49              | -403.65      | -553.91      | 552.57                  | 10.00                   | 10.00                  | 0.00                  |
| 3,400.00                                     | 82.48           | 270.19      | 2,945.18              | -403.48      | -603.14      | 601.79                  | 10.00                   | 10.00                  | 0.00                  |
| 3,450.00                                     | 87.48           | 270.19      | 2,949.55              | -403.32      | -652.93      | 651.59                  | 10.00                   | 10.00                  | 0.00                  |



## Planning Report

|                  |                                |                                     |                                    |
|------------------|--------------------------------|-------------------------------------|------------------------------------|
| <b>Database:</b> | EDM 5000.1.13 Single User Db   | <b>Local Co-ordinate Reference:</b> | Well 21H                           |
| <b>Company:</b>  | SPUR ENERGY PARTNERS, LLC      | <b>TVD Reference:</b>               | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Project:</b>  | EDDY COUNTY, NM (NAD 83 - NME) | <b>MD Reference:</b>                | RKB = 20' @ 3517.00usft (AKITA 57) |
| <b>Site:</b>     | LIVE OAK 27-28 STATE COM       | <b>North Reference:</b>             | Grid                               |
| <b>Well:</b>     | 21H                            | <b>Survey Calculation Method:</b>   | Minimum Curvature                  |
| <b>Wellbore:</b> | Wellbore #1                    |                                     |                                    |
| <b>Design:</b>   | PERMIT                         |                                     |                                    |

| Planned Survey                               |                 |             |                       |              |              |                         |                         |                        |                       |  |
|----------------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft)                        | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 3,486.28                                     | 91.11           | 270.19      | 2,950.00              | -403.20      | -689.20      | 687.86                  | 10.00                   | 10.00                  | 0.00                  |  |
| <b>LIVE OAK 21H FTP: 330' FSL, 2548' FWL</b> |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 3,500.00                                     | 91.11           | 270.19      | 2,949.73              | -403.15      | -702.92      | 701.58                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,600.00                                     | 91.11           | 270.19      | 2,947.80              | -402.83      | -802.90      | 801.56                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,700.00                                     | 91.11           | 270.19      | 2,945.86              | -402.50      | -902.88      | 901.54                  | 0.00                    | 0.00                   | 0.00                  |  |
| 3,800.00                                     | 91.11           | 270.19      | 2,943.92              | -402.17      | -1,002.86    | 1,001.52                | 0.00                    | 0.00                   | 0.00                  |  |
| 3,900.00                                     | 91.11           | 270.19      | 2,941.98              | -401.84      | -1,102.84    | 1,101.50                | 0.00                    | 0.00                   | 0.00                  |  |
| 4,000.00                                     | 91.11           | 270.19      | 2,940.05              | -401.51      | -1,202.82    | 1,201.48                | 0.00                    | 0.00                   | 0.00                  |  |
| 4,100.00                                     | 91.11           | 270.19      | 2,938.11              | -401.18      | -1,302.80    | 1,301.46                | 0.00                    | 0.00                   | 0.00                  |  |
| 4,200.00                                     | 91.11           | 270.19      | 2,936.17              | -400.85      | -1,402.78    | 1,401.44                | 0.00                    | 0.00                   | 0.00                  |  |
| 4,300.00                                     | 91.11           | 270.19      | 2,934.23              | -400.52      | -1,502.76    | 1,501.43                | 0.00                    | 0.00                   | 0.00                  |  |
| 4,400.00                                     | 91.11           | 270.19      | 2,932.30              | -400.19      | -1,602.74    | 1,601.41                | 0.00                    | 0.00                   | 0.00                  |  |
| 4,500.00                                     | 91.11           | 270.19      | 2,930.36              | -399.86      | -1,702.72    | 1,701.39                | 0.00                    | 0.00                   | 0.00                  |  |
| 4,600.00                                     | 91.11           | 270.19      | 2,928.42              | -399.53      | -1,802.70    | 1,801.37                | 0.00                    | 0.00                   | 0.00                  |  |
| 4,700.00                                     | 91.11           | 270.19      | 2,926.48              | -399.20      | -1,902.68    | 1,901.35                | 0.00                    | 0.00                   | 0.00                  |  |
| 4,800.00                                     | 91.11           | 270.19      | 2,924.55              | -398.87      | -2,002.67    | 2,001.33                | 0.00                    | 0.00                   | 0.00                  |  |
| 4,900.00                                     | 91.11           | 270.19      | 2,922.61              | -398.54      | -2,102.65    | 2,101.31                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,000.00                                     | 91.11           | 270.19      | 2,920.67              | -398.21      | -2,202.63    | 2,201.29                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,100.00                                     | 91.11           | 270.19      | 2,918.73              | -397.88      | -2,302.61    | 2,301.28                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,200.00                                     | 91.11           | 270.19      | 2,916.80              | -397.56      | -2,402.59    | 2,401.26                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,300.00                                     | 91.11           | 270.19      | 2,914.86              | -397.23      | -2,502.57    | 2,501.24                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,400.00                                     | 91.11           | 270.19      | 2,912.92              | -396.90      | -2,602.55    | 2,601.22                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,500.00                                     | 91.11           | 270.19      | 2,910.99              | -396.57      | -2,702.53    | 2,701.20                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,600.00                                     | 91.11           | 270.19      | 2,909.05              | -396.24      | -2,802.51    | 2,801.18                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,700.00                                     | 91.11           | 270.19      | 2,907.11              | -395.91      | -2,902.49    | 2,901.16                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,800.00                                     | 91.11           | 270.19      | 2,905.17              | -395.58      | -3,002.47    | 3,001.14                | 0.00                    | 0.00                   | 0.00                  |  |
| 5,900.00                                     | 91.11           | 270.19      | 2,903.24              | -395.25      | -3,102.45    | 3,101.13                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,000.00                                     | 91.11           | 270.19      | 2,901.30              | -394.92      | -3,202.43    | 3,201.11                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,100.00                                     | 91.11           | 270.19      | 2,899.36              | -394.59      | -3,302.41    | 3,301.09                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,200.00                                     | 91.11           | 270.19      | 2,897.42              | -394.26      | -3,402.39    | 3,401.07                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,300.00                                     | 91.11           | 270.19      | 2,895.49              | -393.93      | -3,502.38    | 3,501.05                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,400.00                                     | 91.11           | 270.19      | 2,893.55              | -393.60      | -3,602.36    | 3,601.03                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,500.00                                     | 91.11           | 270.19      | 2,891.61              | -393.27      | -3,702.34    | 3,701.01                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,600.00                                     | 91.11           | 270.19      | 2,889.67              | -392.94      | -3,802.32    | 3,800.99                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,700.00                                     | 91.11           | 270.19      | 2,887.74              | -392.62      | -3,902.30    | 3,900.98                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,800.00                                     | 91.11           | 270.19      | 2,885.80              | -392.29      | -4,002.28    | 4,000.96                | 0.00                    | 0.00                   | 0.00                  |  |
| 6,900.00                                     | 91.11           | 270.19      | 2,883.86              | -391.96      | -4,102.26    | 4,100.94                | 0.00                    | 0.00                   | 0.00                  |  |
| 7,000.00                                     | 91.11           | 270.19      | 2,881.92              | -391.63      | -4,202.24    | 4,200.92                | 0.00                    | 0.00                   | 0.00                  |  |
| 7,100.00                                     | 91.11           | 270.19      | 2,879.99              | -391.30      | -4,302.22    | 4,300.90                | 0.00                    | 0.00                   | 0.00                  |  |
| 7,200.00                                     | 91.11           | 270.19      | 2,878.05              | -390.97      | -4,402.20    | 4,400.88                | 0.00                    | 0.00                   | 0.00                  |  |
| 7,300.00                                     | 91.11           | 270.19      | 2,876.11              | -390.64      | -4,502.18    | 4,500.86                | 0.00                    | 0.00                   | 0.00                  |  |
| 7,400.00                                     | 91.11           | 270.19      | 2,874.17              | -390.31      | -4,602.16    | 4,600.84                | 0.00                    | 0.00                   | 0.00                  |  |
| 7,500.00                                     | 91.11           | 270.19      | 2,872.24              | -389.98      | -4,702.14    | 4,700.82                | 0.00                    | 0.00                   | 0.00                  |  |
| 7,600.00                                     | 91.11           | 270.19      | 2,870.30              | -389.65      | -4,802.12    | 4,800.81                | 0.00                    | 0.00                   | 0.00                  |  |
| 7,700.00                                     | 91.11           | 270.19      | 2,868.36              | -389.32      | -4,902.11    | 4,900.79                | 0.00                    | 0.00                   | 0.00                  |  |
| 7,800.00                                     | 91.11           | 270.19      | 2,866.42              | -388.99      | -5,002.09    | 5,000.77                | 0.00                    | 0.00                   | 0.00                  |  |
| 7,900.00                                     | 91.11           | 270.19      | 2,864.49              | -388.66      | -5,102.07    | 5,100.75                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,000.00                                     | 91.11           | 270.19      | 2,862.55              | -388.33      | -5,202.05    | 5,200.73                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,100.00                                     | 91.11           | 270.19      | 2,860.61              | -388.00      | -5,302.03    | 5,300.71                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,200.00                                     | 91.11           | 270.19      | 2,858.67              | -387.67      | -5,402.01    | 5,400.69                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,300.00                                     | 91.11           | 270.19      | 2,856.74              | -387.35      | -5,501.99    | 5,500.67                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,400.00                                     | 91.11           | 270.19      | 2,854.80              | -387.02      | -5,601.97    | 5,600.66                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,500.00                                     | 91.11           | 270.19      | 2,852.86              | -386.69      | -5,701.95    | 5,700.64                | 0.00                    | 0.00                   | 0.00                  |  |
| 8,597.67                                     | 91.11           | 270.19      | 2,850.97              | -386.36      | -5,799.60    | 5,798.29                | 0.00                    | 0.00                   | 0.00                  |  |





Planning Report

|           |                                |                              |                                    |
|-----------|--------------------------------|------------------------------|------------------------------------|
| Database: | EDM 5000.1.13 Single User Db   | Local Co-ordinate Reference: | Well 21H                           |
| Company:  | SPUR ENERGY PARTNERS, LLC      | TVD Reference:               | RKB = 20' @ 3517.00usft (AKITA 57) |
| Project:  | EDDY COUNTY, NM (NAD 83 - NME) | MD Reference:                | RKB = 20' @ 3517.00usft (AKITA 57) |
| Site:     | LIVE OAK 27-28 STATE COM       | North Reference:             | Grid                               |
| Well:     | 21H                            | Survey Calculation Method:   | Minimum Curvature                  |
| Wellbore: | Wellbore #1                    |                              |                                    |
| Design:   | PERMIT                         |                              |                                    |

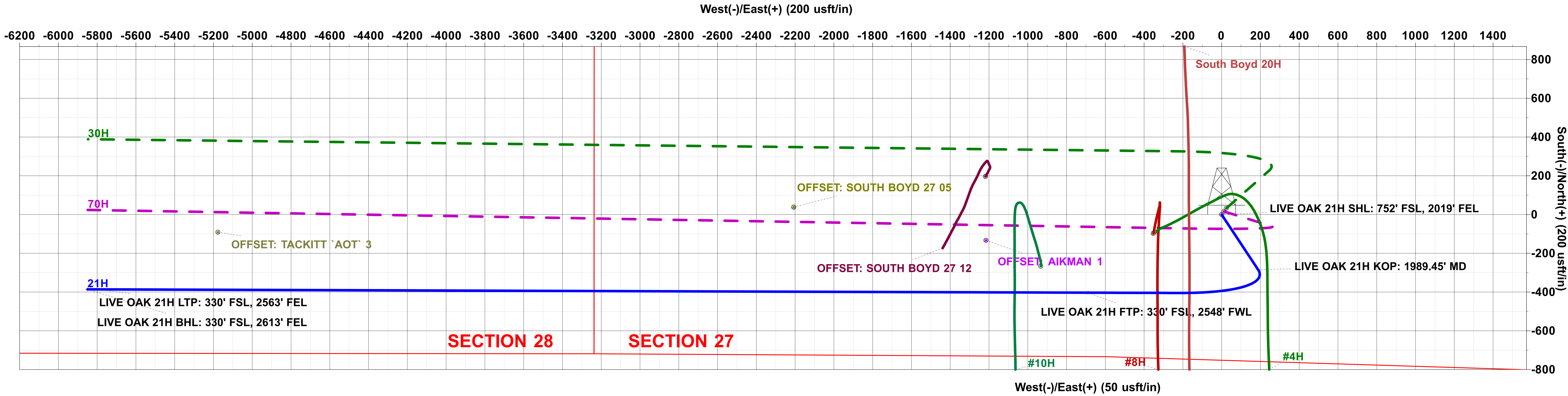
| Planned Survey                        |                 |             |                       |              |              |                         |                         |                        |                       |
|---------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 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) |
| LIVE OAK 21H LTP: 330' FSL, 2563' FEL |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,600.00                              | 91.11           | 270.19      | 2,850.92              | -386.36      | -5,801.93    | 5,800.62                | 0.00                    | 0.00                   | 0.00                  |
| 8,647.68                              | 91.11           | 270.19      | 2,850.00              | -386.20      | -5,849.60    | 5,848.29                | 0.00                    | 0.00                   | 0.00                  |
| LIVE OAK 21H BHL: 330' FSL, 2613' FEL |                 |             |                       |              |              |                         |                         |                        |                       |

| Design Targets                                                                                                                   |               |              |            |              |              |                 |                |            |              |
|----------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|------------|--------------|
| Target Name<br>- hit/miss target<br>- Shape                                                                                      | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude   | Longitude    |
| LIVE OAK 21H SHL: 1<br>- plan hits target center<br>- Point                                                                      | 0.00          | 0.00         | 0.00       | 0.00         | 0.00         | 591,663.10      | 499,076.20     | 32.6264568 | -104.4706068 |
| LIVE OAK 21H KOP: 1<br>- plan hits target center<br>- Point                                                                      | 0.00          | 360.00       | 1,948.77   | -284.66      | 188.27       | 591,378.45      | 499,264.47     | 32.6256750 | -104.4699941 |
| LIVE OAK 21H BHL: 1<br>- plan hits target center<br>- Point                                                                      | 0.00          | 360.00       | 2,850.00   | -386.20      | -5,849.60    | 591,276.90      | 493,226.60     | 32.6253730 | -104.4896056 |
| LIVE OAK 21H LTP: 3<br>- plan misses target center by 0.16usft at 8597.67usft MD (2850.97 TVD, -386.36 N, -5799.60 E)<br>- Point | 0.00          | 0.00         | 2,850.97   | -386.20      | -5,799.60    | 591,276.90      | 493,276.60     | 32.6253732 | -104.4894432 |
| LIVE OAK 21H FTP: 1<br>- plan hits target center<br>- Point                                                                      | 0.00          | 360.00       | 2,950.00   | -403.20      | -689.20      | 591,259.90      | 498,387.00     | 32.6253460 | -104.4728438 |





Project: EDDY COUNTY, NM (NAD 83 - NME)  
Site: LIVE OAK 27-28 STATE COM  
Well: 21H  
Wellbore: Wellbore #1  
Design: PERMIT



WELL DETAILS: 21H

|           |       |               |           |                                    |              |
|-----------|-------|---------------|-----------|------------------------------------|--------------|
| Rig Name: |       | AKITA 57      |           | RKB = 20' @ 3517.00usft (AKITA 57) |              |
|           |       | Ground Level: |           | 3497.00                            |              |
| +N/-S     | +E/-W | Northing      | Easting   | Latitude                           | Longitude    |
| 0.00      | 0.00  | 591663.10     | 499076.20 | 32.6264568                         | -104.4706068 |

SECTION DETAILS

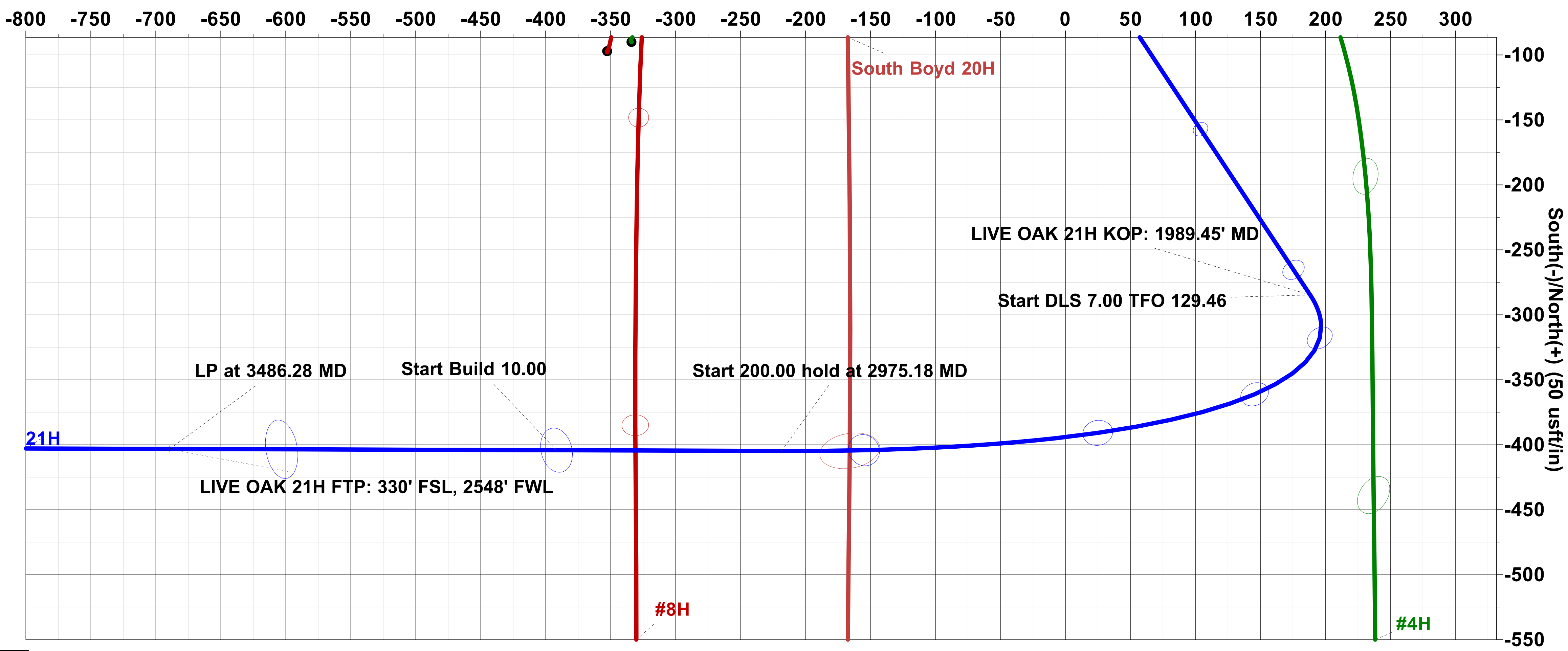
| Sec | MD      | Inc   | Azi    | TVD     | +N/-S   | +E/-W    | Dleg  | VSect   | Target                                                                         |
|-----|---------|-------|--------|---------|---------|----------|-------|---------|--------------------------------------------------------------------------------|
| 1   | 0.00    | 0.00  | 0.00   | 0.00    | 0.00    | 0.00     | 0.00  | 0.00    |                                                                                |
| 2   | 300.00  | 0.00  | 0.00   | 300.00  | 0.00    | 0.00     | 0.00  | 0.00    |                                                                                |
| 3   | 1051.64 | 15.03 | 146.52 | 1043.05 | -81.77  | 54.09    | 2.00  | -54.36  |                                                                                |
| 4   | 1989.45 | 15.03 | 146.52 | 1948.77 | -284.66 | 188.27   | 0.00  | -189.22 |                                                                                |
| 5   | 2975.18 | 60.00 | 270.19 | 2773.35 | -404.75 | -218.42  | 7.00  | 217.07  |                                                                                |
| 6   | 3175.18 | 60.00 | 270.19 | 2873.35 | -404.18 | -391.62  | 0.00  | 390.28  |                                                                                |
| 7   | 3486.28 | 91.11 | 270.19 | 2950.00 | -403.20 | -689.20  | 10.00 | 687.86  |                                                                                |
| 8   | 8597.67 | 91.11 | 270.19 | 2850.97 | -386.36 | -5799.60 | 0.00  | 5798.29 | LIVE OAK 21H FTP: 330' FSL, 2548' FWL                                          |
| 9   | 8647.68 | 91.11 | 270.19 | 2850.00 | -386.20 | -5849.60 | 0.00  | 5848.29 | LIVE OAK 21H LTP: 330' FSL, 2563' FEL<br>LIVE OAK 21H BHL: 330' FSL, 2613' FEL |

DESIGN TARGET DETAILS

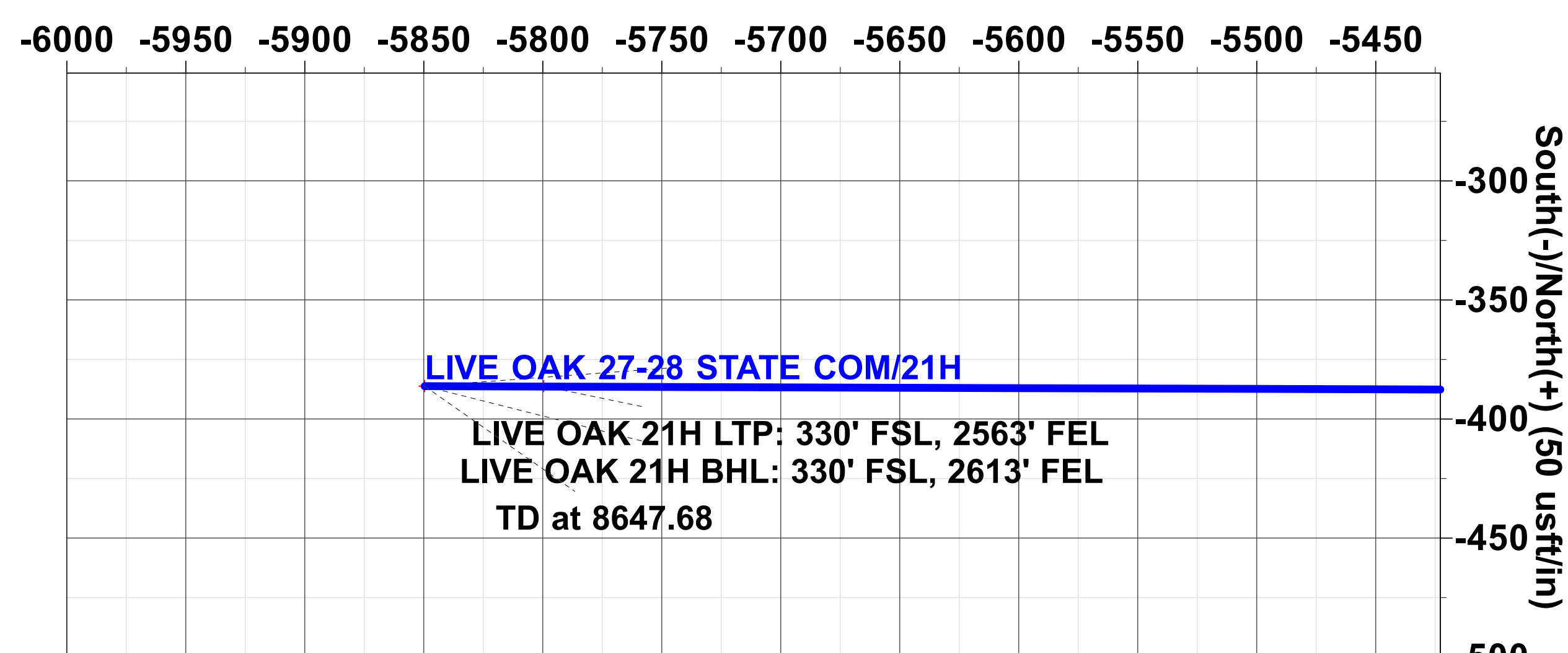
| Name                                  | TVD     | +N/-S   | +E/-W    | Northing  | Easting   | Latitude   | Longitude    |
|---------------------------------------|---------|---------|----------|-----------|-----------|------------|--------------|
| LIVE OAK 21H SHL: 752' FSL, 2019' FEL | 0.00    | 0.00    | 0.00     | 591663.10 | 499076.20 | 32.6264568 | -104.4706068 |
| LIVE OAK 21H KOP: 1989.45' MD         | 1948.77 | -284.66 | 188.27   | 591378.44 | 499264.47 | 32.6256750 | -104.4699941 |
| LIVE OAK 21H BHL: 330' FSL, 2613' FEL | 2850.00 | -386.20 | -5849.60 | 591276.90 | 493226.60 | 32.6253730 | -104.4896057 |
| LIVE OAK 21H LTP: 330' FSL, 2563' FEL | 2850.97 | -386.20 | -5799.60 | 591276.90 | 493276.60 | 32.6253732 | -104.4894433 |
| LIVE OAK 21H FTP: 330' FSL, 2548' FWL | 2950.00 | -403.20 | -689.20  | 591259.90 | 498387.00 | 32.6253460 | -104.4728438 |

PROJECT DETAILS: EDDY COUNTY, NM (NAD 83 - NME)

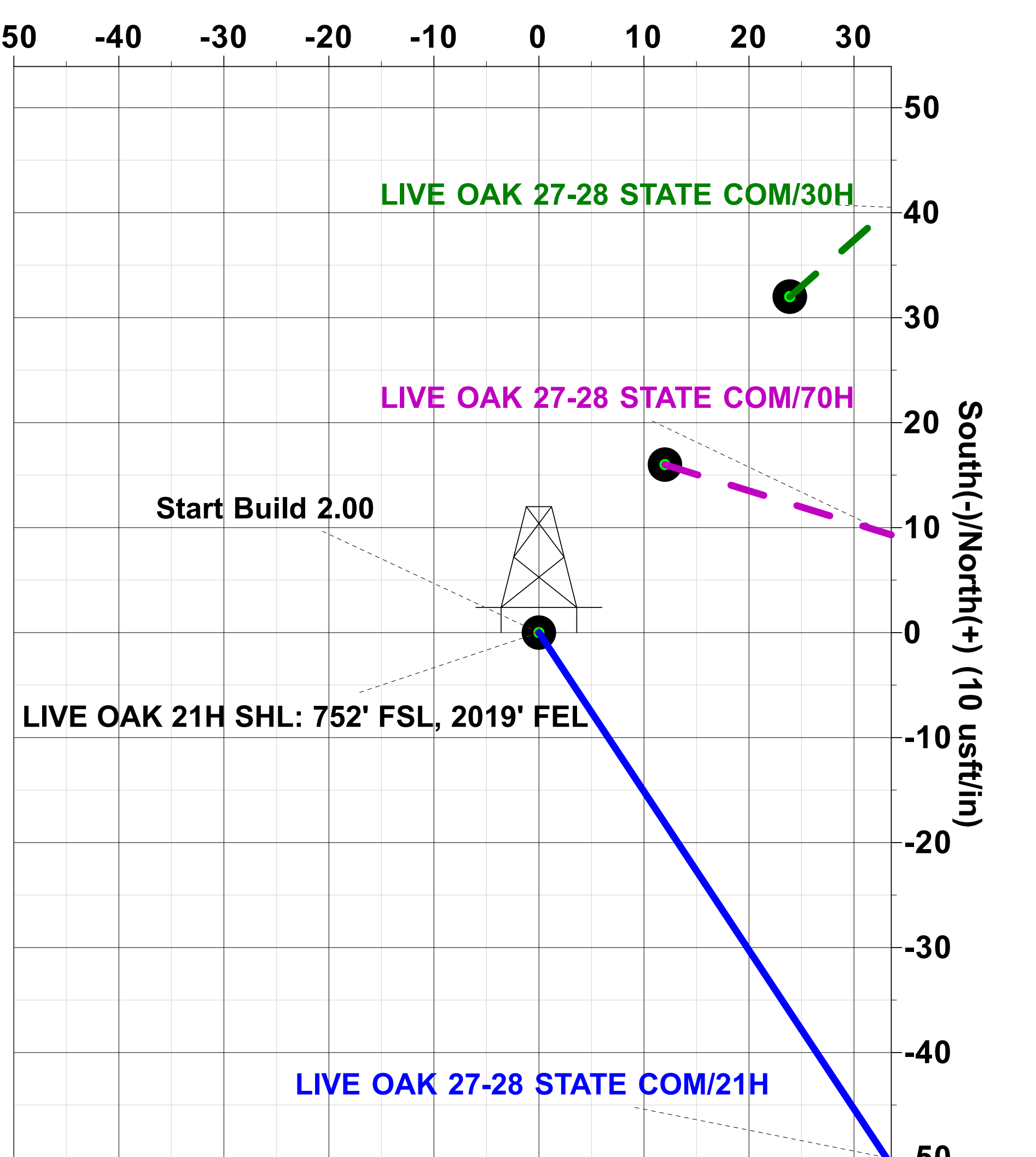
Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: New Mexico Eastern Zone  
System Datum: Mean Sea Level



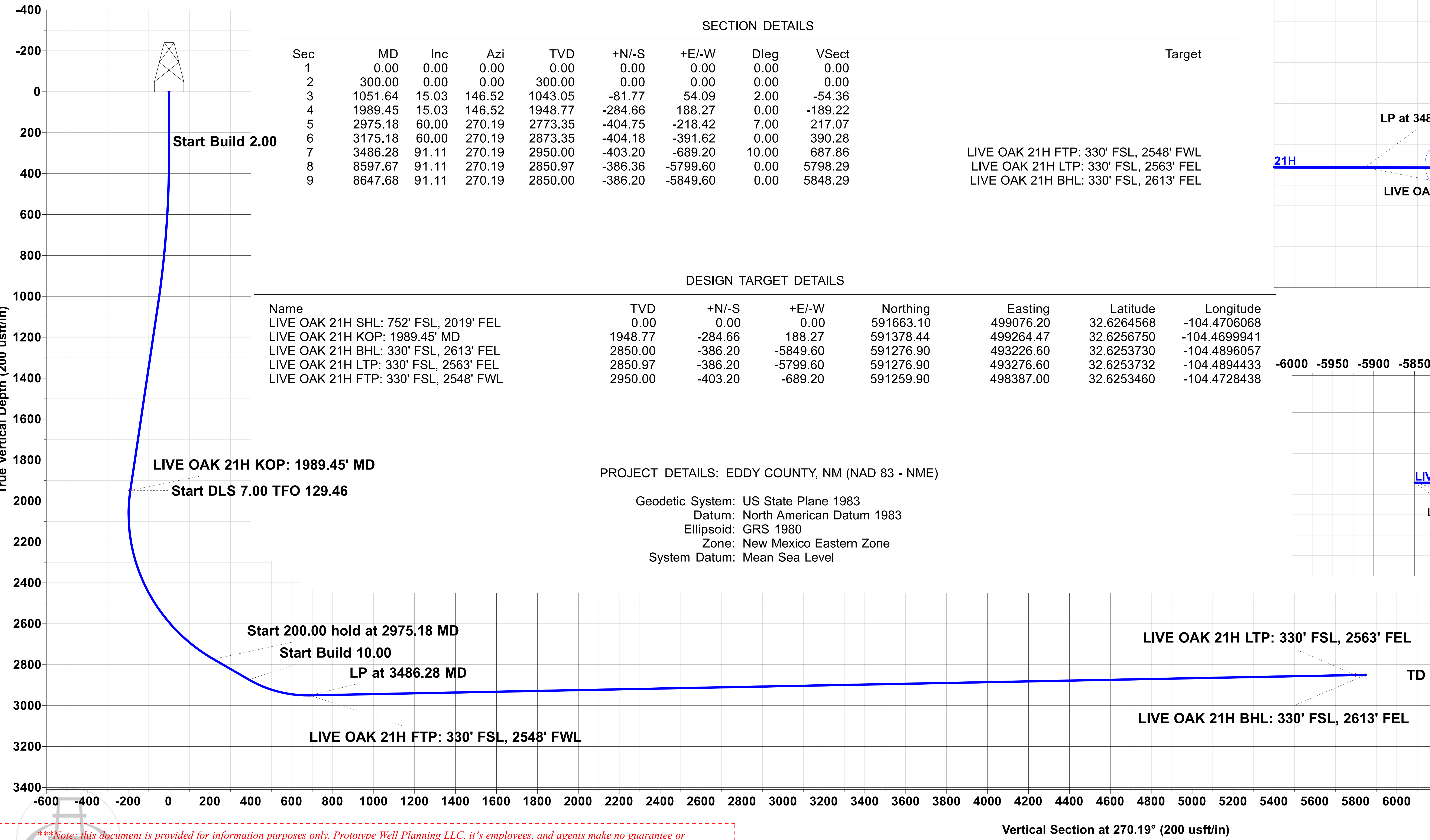
West(-)/East(+) (50 usft/in)



West(-)/East(+) (10 usft/in)



Plan: PERMIT (21H/Wellbore #1)



Vertical Section at 270.19° (200 usft/in)

\*\*\*Note: this document is provided for information purposes only. Prototype Well Planning LLC, it's employees, and agents make no guarantee or warranty, expressed or implied, as to the accuracy of this electronic file. The data included here and may be subject to error, while corruption, change, alteration, or update without any notice to the user. Prototype Well Planning LLC, it's employees, and it's agents assume no responsibility, expressed or implied, for any damages incurred either directly or indirectly by the use of this document. The users agree to the above specified terms of this document and agrees to verify the data enclosed to ascertain its accuracy for their intended use. If these conditions are unacceptable, user shall discard this document.\*\*\*



## Pecos District

### Application for Permit to Drill

### Conditions of Approval

#### Geology Concerns

|            |                                            |                                        |                                                   |
|------------|--------------------------------------------|----------------------------------------|---------------------------------------------------|
| Potash     | <input checked="" type="checkbox"/> None   | <input type="checkbox"/> Secretary     | <input type="checkbox"/> R-111-P                  |
| Cave/Karst | <input checked="" type="checkbox"/> Medium | <input type="checkbox"/> High          | <input type="checkbox"/> Critical                 |
| H2S        | <input type="checkbox"/> None              | <input type="checkbox"/> Below 100 PPM | <input checked="" type="checkbox"/> Above 100 PPM |
| Other      | <input type="checkbox"/> 4 String Area     | <input type="checkbox"/> Capitan Reef  | <input type="checkbox"/> SWD Well                 |

Note: The geology of the area where the well is being drilled determines the COAs that apply, not the above table.

#### Additional Engineering Requirements

Surface casing must be set at: 1,186 feet

Intermediate casing must be set at: N/A

#### General Requirements

1. Changes to the approved APD casing program need prior approval.
2. The Bureau of Land Management (BLM) will be notified in advance for a representative to witness:
  - a. Well spudding (minimum of 24 hours notice)
  - b. Setting and/or cementing of all casing strings (minimum of 4 hours notice)
  - c. BOPE tests (minimum of 4 hours notice)

#### Eddy County

620 East Greene Street, Carlsbad, NM 88220

(575) 361-2822

BLM\_NM\_CFO\_DrillingNotifications@BLM.GOV

#### Lea County

414 West Taylor, Hobbs, NM 88240

(575) 689-5981

3. The initial wellhead installed on the well will remain on the well with spools used as needed.
4. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

- a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig:
    - i. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with a Spudder Rig:
    - i. Notify the BLM when moving in and removing the Spudder Rig.
    - ii. Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - iii. BOP/BOPE test to be conducted per 43 CFR 3172.6 as soon as 2nd Rig is rigged up on well.
5. Floor controls are required for 3M or greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller, and will always be operational during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table or the area immediately above the substructure on which the draw works are located (this does not include the doghouse or stairway area).
6. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

### **Pressure Control**

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR 3172.6 and API STD 53 Sec. 5.3.
2. 5M or higher systems require an HCR valve, remote kill line, and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE, and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
  - b. The results of the test shall be reported to the appropriate BLM office.
  - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

- d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
  - e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR 3172.6(b)(9).
  - f. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - g. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, no tests shall commence until the cement has had a minimum of 24 hours setup time.
  - h. The tests shall be done by an independent service company utilizing a test plug, not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to 43 CFR 3172 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
4. If the operator has proposed using a 5,000 (5M) Annular on a 10M BOP:
- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 10,000 (10M) psi.
5. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
- a. Wellhead shall be installed by manufacturer's representatives (submit documentation with subsequent sundry).

- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed, and another wellhead installed.
6. If a variance is approved for break testing the BOPE, the following requirements apply:
- a. BOPE break testing is only approved for a BOP rated at 5M or less.
  - b. Approval is only for the intermediate hole sections, so long as those sections do not go deeper than the Bone Springs formation.
  - c. The Annular Preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.
  - d. A full BOP test shall be performed every 21 days (at a minimum).
  - e. A full BOP test is required prior to drilling the first intermediate hole section (if applicable). If any subsequent intermediate hole interval is deeper than the first, a full BOP test shall be required (a maximum 200 foot difference in true vertical depth (TVD) is allowed).
  - f. BOPE break testing is not permitted for drilling the production hole section.
  - g. While in transfer, the BOP shall be secured by the hydraulic carrier or cradle.
  - h. If any repairs or replacements of the BOPE is required, the BOPE shall be tested as required by 43 CFR 3172.
  - i. Pressure tests shall be performed on any BOPE components that have been disconnected. A low pressure (250-300 psi) and a high pressure (BOP max pressure rating) test are required.
  - j. If a testing plug is used, pressure shall be maintained for at least 10 minutes. If there is any bleed off in pressure, the test shall be considered to have failed.
  - k. If no testing plug is used, pressure shall be maintained for at least 30 minutes. If there is a decline in pressure of more than 10 percent, the test shall be considered to have failed.
  - l. The appropriate Bureau of Land Management (BLM) office shall be notified a minimum of 4 hours before testing occurs.
  - m. Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
  - n. If break testing is not used, then a full BOPE test shall be conducted.
7. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply:
- a. The flex line must meet the requirements of API 16C.

- b. Check condition of flexible line from BOP to choke manifold (replace if exterior is damaged or if line fails test).
- c. Line is to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements.
- d. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating.
- e. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, shall be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

### **Casing and Cement**

1. Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).
2. On any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. The formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
3. Provide compressive strengths (including hours to reach required 500 pounds compressive strength) prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
4. The surface casing shall be set at a minimum of 25 feet into the Rustler Anhydrite and 80 feet above the salt and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of 8 hours (or 24 hours in the Potash Area) or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.



5. Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.
6. Intermediate casing must be cemented to surface. For medium/high cave/karst, potash, and Capitan Reef, wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
7. The production cement should tie-back at least 200 feet (500 feet in Secretary Potash, surface in R-111-P potash) into previous casing string. Operator shall provide method of verification.
8. Production liner cement should tie-back at least 100 feet into previous casing string. Operator shall provide verification of cement top.
9. In WIPP Areas, cement must come to surface on the first three casing strings.
10. If cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
11. No pea gravel permitted for remedial cement or fall back remedial cement without prior authorization from a BLM petroleum engineer.
12. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
13. DV tools:
  - a. First stage to DV tool (The DV tool may be cancelled if cement circulates to surface on the first stage):
    - i. Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
  - b. Second stage above DV tool:
    - i. For intermediate casing, cement to surface.
    - ii. For production casing, cement should tie-back at least 200 feet (500 feet in Secretary Potash, surface in R-111-P potash) into previous casing string. Operator shall provide method of verification.
    - iii. If cement does not circulate, contact the appropriate BLM office.

14. Potash Areas:

- a. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
- b. After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met:
  - i. Cement reaches a minimum compressive strength of 500 psi for all cement blends
  - ii. Until cement has been in place at least 24 hours.
- c. WOC time will be recorded in the driller's log.
- d. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.
- e. In R111 Potash Areas, if cement does not circulate to surface on the first two salt protection casing strings, the cement on the 3rd casing salt string must come to surface.
- f. In Secretary Potash Areas, if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

15. Wait on cement (WOC) for Water Basin:

- a. After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met:
  - i. Cement reaches a minimum compressive strength of 500 psi at the shoe
  - ii. Until cement has been in place at least 8 hours.
- b. WOC time will be recorded in the driller's log.

16. Medium/High/Critical Cave/Karst Areas:

- a. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
- b. In Critical Cave/Karst Areas cement must come to surface on the first three casing strings.
- c. In Medium and High Cave/Karst Areas, if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- d. In Critical Cave/Karst Areas, if cement does not circulate to surface on the first three casing strings, the cement on the 4th casing string must come to surface.

### **Drilling Mud**

1. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation and shall be used until production casing is run and cemented.

### **Waste Material and Fluids**

1. All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and

disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

2. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

### **Special Requirements**

#### **1. Communitization Agreement**

- a. The operator will submit a Communitization Agreement to the Santa Fe Office (301 Dinosaur Trail, Santa Fe, NM 87508), at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division.
- b. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
  - i. The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
  - ii. If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- c. In addition, the well sign shall include the surface and bottom hole lease numbers.
  - i. When the Communitization Agreement number is known, it shall also be on the sign.

#### **2. Unit Wells**

- a. The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers.
  - i. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.
- b. Commercial Well Determination
  - i. A commercial well determination shall be submitted after production has been established for at least six months (this is not necessary for secondary recovery unit wells).

#### **3. Hydrogen Sulfide (H<sub>2</sub>S)**

- a. If H<sub>2</sub>S is encountered, provide measured values and formations to the BLM.
- b. An H<sub>2</sub>S area must meet 43 CFR 3176 requirements, which includes equipment and personnel/public protection items.

- c. An H2S Drilling Plan shall be activated 500 feet prior to drilling into any formation designated as having H2S.
  - d. Hydrogen Sulfide monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet 43 CFR 3176 requirements, which includes equipment and personnel/public protection items.
- 4. Capitan Reef
  - a. If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following (Use this for 3 string wells in the Capitan Reef, if it is a 4 string well ensure fresh water based mud is used across the Capitan interval):
    - i. Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
    - ii. Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports.
    - iii. The daily drilling report should show mud volume per shift/tour.
    - iv. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval.
    - v. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.
- 5. Salt Water Disposal Wells
  - a. The operator shall supply the BLM with a copy of a mudlog over the permitted disposal interval and estimated in situ water salinity based on open-hole logs.
  - b. If hydrocarbons are encountered while drilling, the operator shall notify the BLM.
  - c. The operator shall provide to the BLM a summary of formation depth picks based on mudlog and geophysical logs along with a copy of the mudlog and open-hole logs from total depth to top of Devonian.
  - d. An NOI sundry with the completion procedure for this well shall be submitted and approved prior to commencing completion work. The procedure will be reviewed to verify that the completion proposal will allow the operator to:
    - i. Properly evaluate the injection zone utilizing open-hole logs, swab testing and/or any other method to confirm that hydrocarbons cannot be produced in paying quantities. This evaluation shall be reviewed by the BLM prior to injection commencing.
    - ii. Restrict the injection fluid to the approved formation.
    - iii. If a step rate test will be run, an NOI sundry shall be submitted to the BLM for approval.

- e. If off-lease water will be disposed in this well, the operator shall provide proof of right-of-way approval.
6. WIPP Requirements
- a. If the proposed surface well or bottom hole is located within 330 feet of the WIPP Land Withdrawal Area boundary:
    - i. Daily drilling reports, logs, and deviation survey information are required to be submitted to the Bureau of Land Management Engineering Department and the U.S. Department of Energy (per requirements of the Joint Powers Agreement) until a total vertical depth of 7,000 feet is reached. These reports will have at a minimum the rate of penetration and a clearly marked section showing the deviation for each 500-foot interval. Operator may be required to do more frequent deviation surveys based on the daily information submitted and may be required to take other corrective measures.
    - ii. Information will also be provided to the New Mexico Oil Conservation Division after drilling activities have been completed.
    - iii. Upon completion of the well, the operator shall submit a complete directional survey.
    - iv. Any future entry into the well for purposes of completing additional drilling will require supplemental information.
  - b. Required information shall be emailed to OilGasReports@wipp.ws.
    - i. Attached files must not be greater than 20 MB.
    - ii. Call WIPP Tech Support at 575-234-7422, during the hours of 7:00am to 4:30pm, if there are any issues sending to this address.



U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

# Operator Certification Data Report

03/19/2024

## Operator

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

**NAME:** BRIAN WOOD

**Signed on:** 07/26/2023

**Title:** Permitting Agent

**Street Address:** 37 VERANO LOOP

**City:** SANTA FE

**State:** NM

**Zip:** 87508

**Phone:** (505)466-8120

**Email address:** AFMSS@PERMITSWEST.COM

## Field

**Representative Name:**

**Street Address:**

**City:**

**State:**

**Zip:**

**Phone:**

**Email address:**





**Permian Drilling**  
**Hydrogen Sulfide Drilling Operations Plan**  
**Live Oak Development**

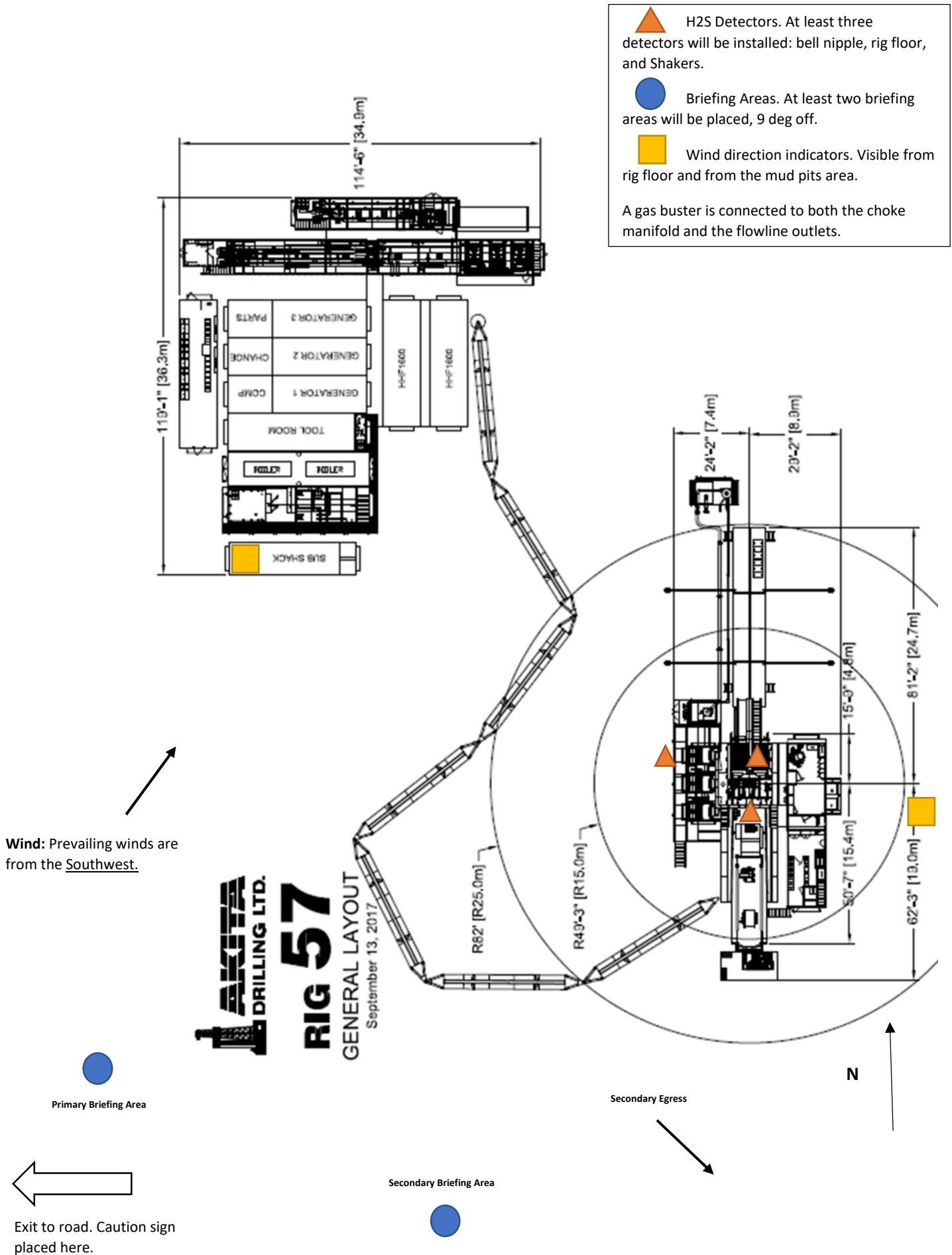
Open drill site. No homes or buildings are near the proposed location.

1. Escape

Personnel shall escape upwind of wellbore in the even of an emergency gas release.

Escape can take place through the lease road on the Southeast side of the location.

Personnel need to move to a safe distance and block the entrance to location. If the primary route is not an option due to the wind direction, then secondary egress route should be taken.





# RIG # 57<sub>1,150 HP Double Mast Drilling Rig</sub>

## SUBSTRUCTURE

One Piece Step Down

Floor Height: 18' 9" (on 4' pony sub moving system)

Clear Height (beneath rotary beams): 15' 5"

Rotary Capacity: 400,000 lbf

Max Pipe Setback: 400,000 lbf

Note: All floor heights above are based on the substructure sitting on 6" mats & 4' pony sub moving system

## MAST

106' telescoping, Drill Line: 1-1/8"

Static Hook Load: 440,000 lbf

Racking Capacity: 18,000' of 4" DP, 12,500' of 5" DP

## DRAWWORKS

TSM 850 425,000lbs w/ 10 Lines

Input Power: 1,150 hp AC traction motor

Main Brake: 1,150 hp AC traction motor (Dynamic)

Aux Parking Brake: Eaton brake & drum / band brake system

## TOP DRIVE

Tesco EXI 600 AC 350 Ton: Max speed 220 rpm,

Continuous Drill Torque: 30,000 ft-lbs

Max Torque (Make / Break): 45,000 ft-lbs

600 hp AC induction motor & drive system with PLC

250 Ton 5 x 36" Becket Block Assembly

## IRON ROUGHNECK

NOV ST-90C Conn Range: 4 1/4" to 8 1/2"

Spin Speed: 75 rpm nominal on 5" drill pipe

Spin Torque: 1,750 ft-lbs

Maximum Make-up torque: 60,000 ft-lbs

Maximum Break-out torque: 80,000 ft-lbs

## ROTARY TABLE

National 27 1/2" 500 Ton with hydraulic drive to position tools only

27 1/2" Diameter opening

## POWER SYSTEM

VFD, MCC, Eaton Drives, Current Power Systems Controls, three Caterpillar C32 gen sets, 1220 BHP.

## MUD PUMP #1

HHF1600 Triplex Rated Power: 1600 hp

Stroke: 12"

Input Power: 1500 hp AC traction motor

Pressure Rating: 5000 psi

## MUD PUMP #2

HHF1600 Triplex Rated Power: 1600 hp

Stroke: 12"

Input Power: 1500 hp AC traction motor

Pressure Rating: 5000 psi

## MUD TANKS

Two Tank system w/ 1200 bbls total capacity

Shakers: Three MI Swaco Mongoose 4 panel dual motion

Mud Gas Separator: MI Swaco 4' OD x 12' tall

Pill Tank: 54 bbls

## MUD SYSTEM

5000 psi Max Pressure

5" Main plumbing and standpipe

## SCALPING TANK

Main Tank: 186 bbls capacity

Trip Tank: 24 bbls capacity

Shakers: Three NOV Venom shakers dual motion

## BOP (NACE)

11" x 5000 psi WP Spherical Annular

11" x 5000 psi WP Double Ram

11" x 5000 psi WP Single Ram (Optional)

## MANIFOLD

3-1/8" 5,000 psi c/w two 3 1/8" manual chokes

## ACCUMULATOR

CTI: 160 gal 6 station 3000 psi, c/w N2 Backup & electric triplex pump

## CATWALK

Ja-co Power Catwalk, tubular max length 47' 6", max OD 13 5/8", max weight 10,000lbs

## TUBULARS

Drill Pipe: Supplied as needed, per availability

Drill Collars & heavywate: Supplied as needed, per availability

## MISC.

Water Tank: 409 bbls; Fuel Tank 189 bbls; Screw Compressor

Boiler: 125 hp with Full Winterization

## MOVING SYSTEM:

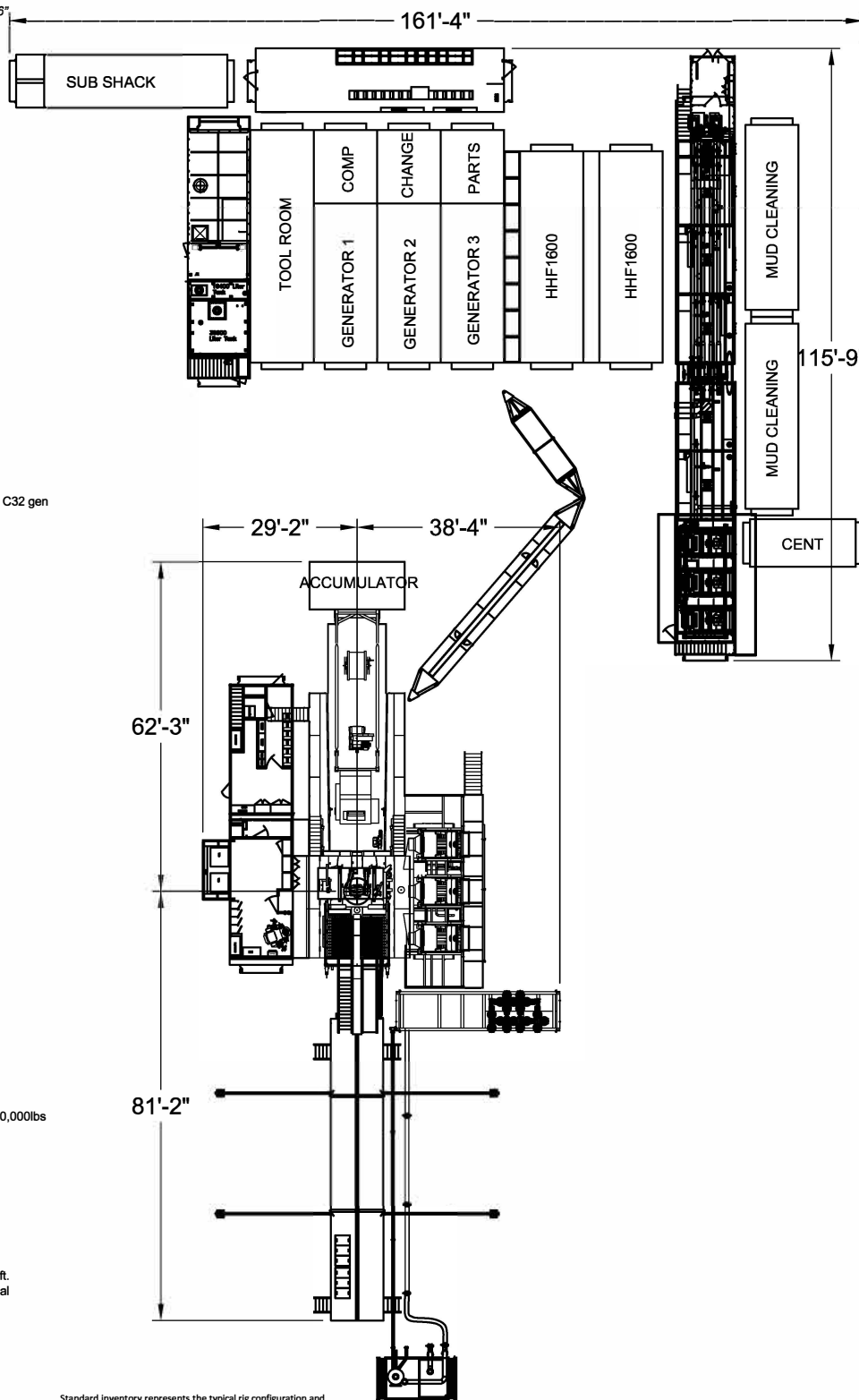
Walking beam hydraulic pony sub moving system for linear motion & side shift.

350' of Utility Suitcase style [50' lengths] connection for hydraulic and electrical supply.

## TOOL/ STORAGE/ CAMP

Parts Storage Room and Tool House Room

Rig Manage Trailer: 14' x 44' skid mounted

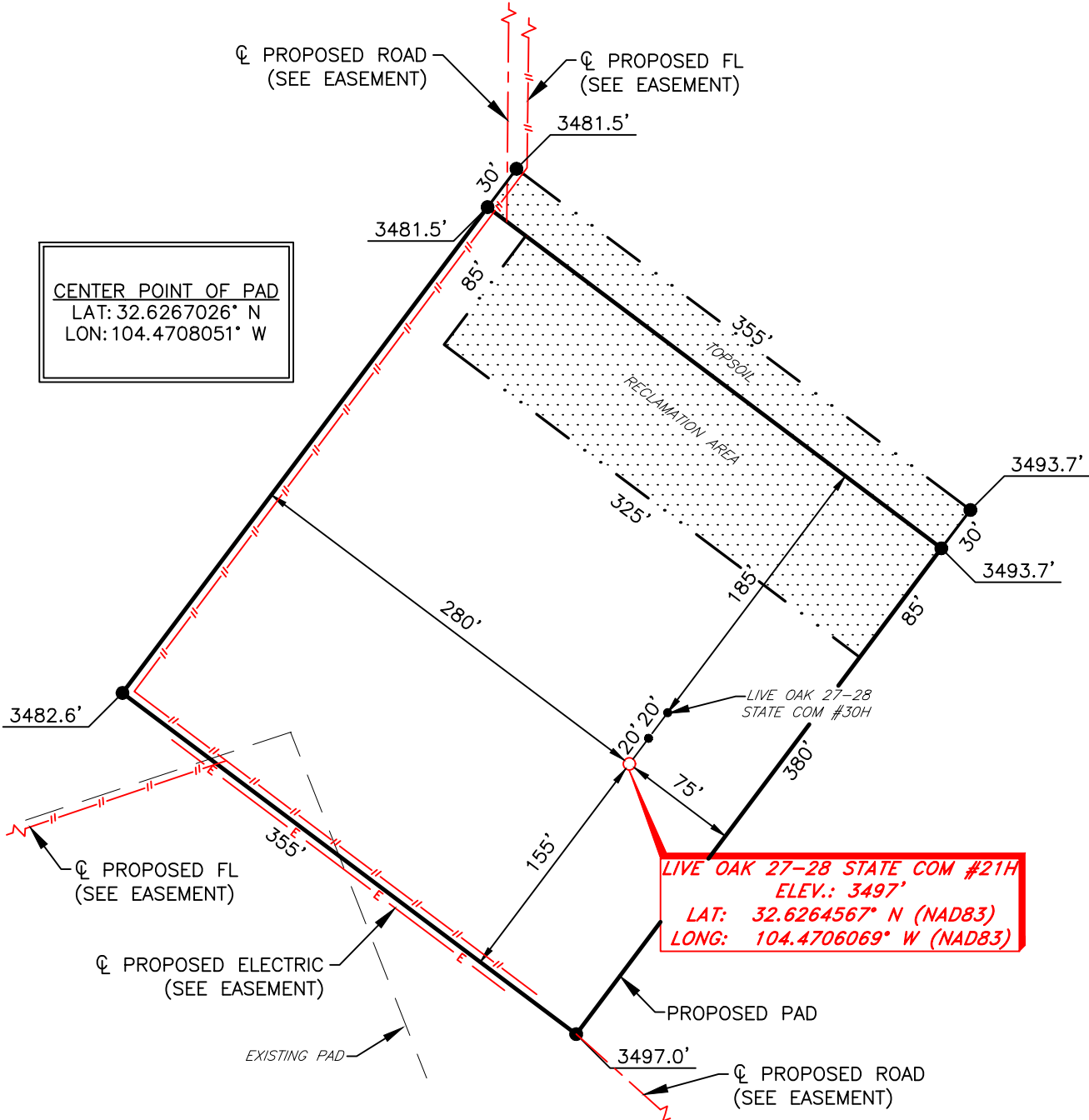


Standard inventory represents the typical rig configuration and inventory available, but specifications are subject to slight modifications from time to time due to customer requirements.

All ratings quoted herein are manufacturer specifications. AKITA's normal operating parameters are 90% of manufacturer mast ratings and 80% of mud pump manufacturer pressure rating. Operation of rig equipment beyond these parameters requires approval from AKITA field office management.

© AKITA DRILLING August, 2020

SPUR ENERGY PARTNERS LLC.  
LIVE OAK 27-28 STATE COM #21H  
(752' FSL & 2019' FEL)  
SECTION 27, T19S, R25E  
N. M. P. M., EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

From the intersection of U.S. Hwy. 285 and CR #23 (Rock Daisy Rd.);  
Go West on CR #23 approx. 3.1 miles to a lease road on the right;  
Turn right and go Northwest approx. 0.4 miles to an existing pad on the right;  
Turn right into existing pad to location on the right.



SCALE: 1" = 100'  
0 50 100  
BEARINGS ARE  
NAD 83 GRID - NM EAST  
DISTANCES ARE GROUND

I, Dale E. Bell, New Mexico Professional Surveyor No. 14400, do hereby certify that this Plat and the actual survey on the ground upon which it is based were performed by me or under my direct supervision; that I am responsible for this survey, said survey and plat meets the Minimum Standards for Land Surveying in the State of New Mexico and that it is true and correct to the best of my knowledge and belief.

Dale E. Bell NM PS 14400



Copyright 2016 - All Rights Reserved

|                       |          |      |
|-----------------------|----------|------|
|                       |          |      |
|                       |          |      |
|                       |          |      |
| NO.                   | REVISION | DATE |
| JOB NO.: LS23020241R  |          |      |
| DWG. NO.: 23020241R-4 |          |      |

**RRC**  
ENERGY SERVICES LLC.  
701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

|                    |
|--------------------|
| SCALE: 1" = 100'   |
| DATE: 02/28/2023   |
| SURVEYED BY: JF/EU |
| DRAWN BY: RQ       |
| APPROVED BY: DEB   |
| SHEET: 1 OF 1      |

|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>TRANSCEND RIG 4</b>            | Contractor Specification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Make                              | Schram                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Model                             | TXD 130                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Year of Manufacture               | 2006                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Truck Mounted                     | YES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Rated Drilling Depth              | 130,000# hook load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Rated Depth with Tubing           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Derrick Height                    | 69' 9"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Derrick Type                      | Telescoping Hydraulic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Derrick Capacity                  | 130,000#                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Elevators                         | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Drawworks                         | 760 HP Detroit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Wire Diameter                     | Hydraulic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Workfloor Max Height              | 8'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Tongs                             | Hydraulic Iron Roughneck                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Slips                             | Manual Slips                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Included Tubing Handling Tools    | <ul style="list-style-type: none"> <li>• 13 3/8" handling tools</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Included Rod Handling Tools       | 85jts of 4.5" drill pipe                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| BOP Class Compatibility           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Weight Indicator                  | Hydraulic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Rig Safety Equipment              | Eye wash station, fire extengushers, wind sock                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Pad Size Requirements/Limitations | 60' x 60'                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Guy Line Spacing                  | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Other Supplied Rig Equipment      | <p>Standard Rig Hand Tools:</p> <ul style="list-style-type: none"> <li>• (2) 36" pipe wrenches</li> <li>• (2) 24" pipe wrenches</li> <li>• (2) 18" pipe wrenches</li> <li>• (1) 24" crescent wrench</li> <li>• (2) 12" crescent wrenches</li> <li>• (1) 4 lb shop hammer</li> <li>• (1) 12 lb sledge hammer</li> <li>• (1) 4 foot pry bar</li> <li>• Vehicles for Contractor personnel</li> <li>• Air Impact Wrench with Sockets</li> <li>• Mud Scales (as needed)</li> </ul> <p>1- F800 pump<br/> 1- Pill pit 80bbl<br/> 1- 400 bbl mud mix<br/> 1- Shaker 150mesh<br/> 1- 500 bbl fresh water frac tank</p> |

Intent ☐ As Drilled ☐

|                |                |             |
|----------------|----------------|-------------|
| API #          |                |             |
| Operator Name: | Property Name: | Well Number |

## Kick Off Point (KOP)

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

## First Take Point (FTP)

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

## Last Take Point (LTP)

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

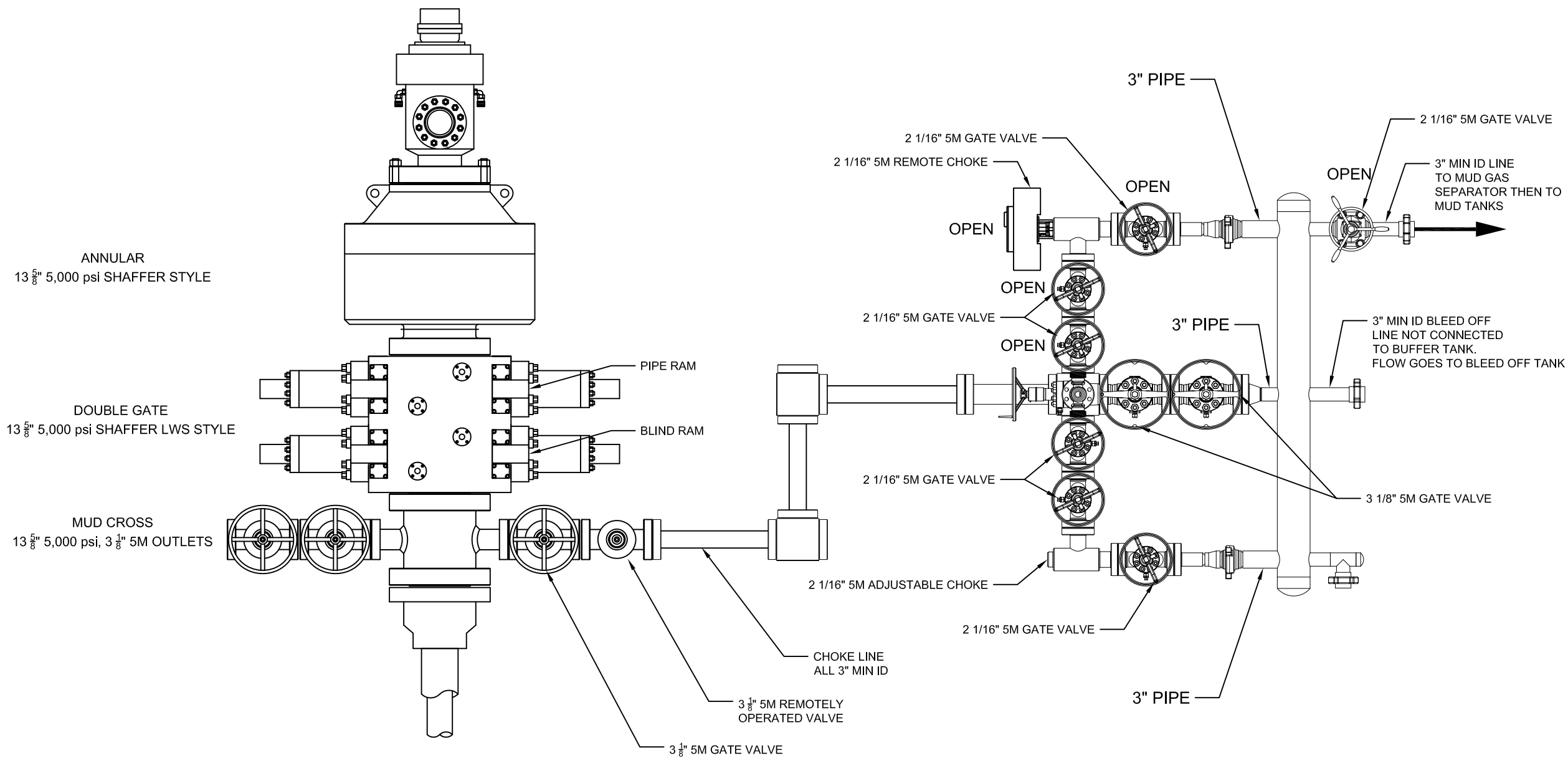
Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

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

|                |                |             |
|----------------|----------------|-------------|
| API #          |                |             |
| Operator Name: | Property Name: | Well Number |

KZ 06/29/2018





Notes

| No. | Revision | Date |
|-----|----------|------|
|     |          |      |



**AKITA**  
DRILLING LTD.  
2302 8th Street, Nisku Alberta  
T9E 7Z2 Tel: (780) 955-6700

The information contained in this drawing is the sole property of AKITA Drilling Ltd. Any reproduction in whole or part without the express written consent of AKITA Drilling Ltd. is prohibited.

| Date     | Scale |
|----------|-------|
| 5-6-2021 | NTS   |

| Des / Chk'd By | File Name       |
|----------------|-----------------|
| BG             | R57 13 5M dou.. |

| Project |
|---------|
| R57     |

RIG 57 BOP SCHEMATIC

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS  
  
Action 324781

CONDITIONS

|                                                                                 |                |
|---------------------------------------------------------------------------------|----------------|
| Operator:<br>Spur Energy Partners LLC<br>9655 Katy Freeway<br>Houston, TX 77024 | OGRID:         |
|                                                                                 | 328947         |
|                                                                                 | Action Number: |
|                                                                                 | 324781         |
| Action Type:                                                                    |                |
| [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)                           |                |

CONDITIONS

| Created By  | Condition                                                                                                                                                                                                                                                            | Condition Date |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| ward.rikala | Notify OCD 24 hours prior to casing & cement                                                                                                                                                                                                                         | 4/8/2024       |
| ward.rikala | Will require a File As Drilled C-102 and a Directional Survey with the C-104                                                                                                                                                                                         | 4/8/2024       |
| ward.rikala | Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string | 4/8/2024       |
| ward.rikala | Cement is required to circulate on both surface and intermediate1 strings of casing                                                                                                                                                                                  | 4/8/2024       |
| ward.rikala | If cement does not circulate on any string, a CBL is required for that string of casing                                                                                                                                                                              | 4/8/2024       |
| ward.rikala | Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system                  | 4/8/2024       |